SUPREME COURT OF NEW JERSEY

CASE NUMBER A- 101

CITY OF NEWARK

PLAINTIFF

VS.

NATURAL RESOURCE COUNCIL

DEFENDANT

CONTROL DATE	**CODE**
REMARKS SEP 1979 TERM	**IMAGES** 79

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SUPREME COURT OF NEW JERSEY
DOCKET NO.

CITY OF NEWARK; CITY OF ELIZABETH; ESTHER G. BERTONI, et al., and NEW JERSEY LAND TITLE INSURANCE ASSOCIATION,

Appellants/Petitioners,

vs.

NATURAL RESOURCE COUNCIL, in the DEPARTMENT OF ENVIRONMENTAL PROTECTION, et al.,

Respondents/Respondents.

Civil Action

On Petition for Certification to the Superior Court of New Jersey, Appellate Division

Sat Below:
Lora, Michels and Larner, J.J.A.D.

PETITION FOR CERTIFICATION AND SUPPLEMENTAL APPENDIX

JOHN R. WEIGEL
Attorney for or Special Counsel to City of Newark; City of Elizabeth; Esther G. Bertoni, et al.; New Jersey Land Title Insurance Association, and various other appellants
264 Fisher Place
Princeton, New Jersey 08540
(609) 452-1166

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SUPPLEMENTAL APPENDIX

TO THE HONORABLE THE CHIEF JUSTICE AND THE ASSOCIATE JUSTICES OF THE SUPREME COURT OF NEW JERSEY:

Appellants/Petitioners, City of Newark, City of Elizabeth, Esther G. Bertoni, et al., and New Jersey Land Title Insurance Association, hereby seek a review of the final judgment of the Appellate Division in favor of the respondents entered on May 24, 1979.

PROCEDURAL HISTORY

This case involves the second attempt by the State of New Jersey to comply with N.J.S.A. 13:1B-13.1 et seq. requiring the mapping by the State of New Jersey of its land ownership claims which arise as an incident of state sovereignty. In addition to a testing of whether or not the State has complied with N.J.S.A. 13:1B-13.1 et seq. in the mapping of its ownership claims in the meadowlands, the Trial Court (Honorable Theodore W. Trautwein) permitted petitioners to raise and brief fundamental constitutional and legal issues relating to the basis of the land ownership claims which can be asserted as an incident of state sovereignty and to whether or not today the State can assert expansive ownership claims over interior meadowlands (those meadowlands lying beyond the traditional banks of well-defined tidal waterways) in light of the experience and practice of 300 years during which interior meadowlands have been recognized as the subject of private ownership.

On June 13, 1973 the Natural Resource Council accepted and approved for filing, pursuant to N.J.S.A. 13:1B-13.4, seven so-called base photomaps and claims overlays. These base photomaps and claims overlays purported to represent that determination and certification of State-owned lands required by N.J.S.A. 13:1B-13.2, and further purported to have been prepared in accordance with the criteria of N.J.S.A. 13:1B-13.3. The action of the Natural Resource Council was approved by the Commissioner of Environmental Protection on July 10, 1973.

Since no record of any kind was made before the Natural Resource Council which would indicate the manner in which the State attempted to comply with N.J.S.A. 13:1B-13.1 et seq. in the preparation of its claims maps, these petitioners filed simultaneously with the Clerk of the Appellate Division a notice of appeal under Rule 2:2-3(a)(2) (Aa1) and a motion for supplementation of the administrative record under Rule 2:5-5(b) (Aa5). Thereafter, the State of New Jersey filed a motion for consolidation seeking to join in the appeal all of the condemnation actions involving the New Jersey Sports and Exposition Authority (the New Jersey Sports and Exposition Authority acquired a 750-acre tract of land in East Rutherford for the construction of a sports complex, including a football stadium and a race track) in which there had been raised the issue of the State's sovereign ownership claims. The Appellate Division, on August 24, 1973, granted the motion for consolidation (Aa9). On August 26, 1973 the Appellate Division granted the motion for supplementation of the administrative record and remanded the consolidated appeal to the Law Division for the purpose of supplementing the administrative record for appellate review (Aa10). On May 8, 1974 the Appellate Division entered a second order of consolidation (Aa11), which had the effect of joining with this appeal all of the remaining condemnation cases involving the New Jersey Sports and Exposition Authority but in which no issue of sovereign ownership was involved (apparently the purpose of this second order was to ensure that the mapping issues were concluded as to areas that were mapped as privately owned).

After consultation with the Assignment Judge of Bergen County, Honorable Theodore W. Trautwein, it was determined to take the depositions of the State's employees and contractors who had been involved in the mapping project and the depositions of certain of petitioners' experts and witnesses. The Assignment Judge of Bergen County, rather than a designee, acted for the Law Division pursuant to the Appellate Division remand. During the period from 1973 to 1975 depositions were taken in various parts of the United States as a part of the discovery effort.

Petitioners brought two important preliminary problems related to the published maps before Judge Trautwein and obtained various partial summary judgment orders (Aa12, Aa26, Aa33 and Aa36). The reported aspects of these matters are found in <u>City of Newark v. Natural Resource Council</u> , 133 N.J. Super. 245 (Law Div. 1974); affirmed 148 N.J. Super. 297 (App. Div. 1977); Petition for Certification granted and the matter summarily remanded to the Appellate Division for "clarification of that portion of its opinion dealing with the Trial Court's order of October 15, 1975", 75 N.J. 32 (1977); clarified and affirmed 152 N.J. Super. 458 (App. Div. 1977).

On December 18, 1975 Judge Trautwein entered a pretrial order (Aa39). A trial-type hearing commenced before Judge Trautwein on March 8, 1976 and continued on various dates thereafter until October 26, 1976. The trial transcript consists of 37 volumes, the numbers and dates of which are set forth at Aa138. During the course of the trial, a total of 591 exhibits were received of which 299 were petitioners' exhibits and 292 were respondents' exhibits (a copy of the list of exhibits is at Aa98).

It was agreed between the Trial Court and the respective attorneys that each side would submit to the Trial Court its Proposed Findings of Fact and Conclusions of Law. The petitioners provided the Trial Court with their Proposed Findings and Conclusion (Aa280) and with a reply to the State's Proposed Findings and Conclusions (Aa434). The State submitted to the Trial Court its Proposed Findings and Conclusions (Aa467), and it filed Supplementary Findings and Conclusions (Aa531).

On August 23, 1978 the Trial Court filed its Proposed Findings of Fact and Conclusions of Law (Aa59). These Proposed Findings of Fact and Conclusions of Law of the Trial Court, in large part, are copied verbatim* from the State's position paper (Aa467-530). Virtually every proposed finding, together with virtually every transcript and case citation, was simply copied by the Trial Court from the State's position paper.

On August 5, 1978 a conference was held between the respective attorneys and Honorable Eugene L. Lora, Honorable Herman D. Michels and Honorable Samuel A. Larner. At this conference it was determined that the appeal would proceed by the filing of briefs and appendices rather than by the filing of exceptions to the Trial Court's Proposed Findings

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Trial Court's Proposals		State's Position Paper
Aa67 to 77	are	Aa475 to 488
Aa77 to 79	are	Aa472 to 474
Aa84 to 88	are	Aa499 to 504
Aa89 to 91	are	Aa495 to 497
Aa91 to 93	are	Aa493 to 494

of Fact and Conclusions of Law. Thereafter, petitioners filed a brief and a four-volume appendix, respondents filed a brief and appendix, and petitioners filed a reply brief. While the matter was pending unheard by the Appellate Division, the petitioners and respondents separately filed with the Supreme Court motions for certification under Rule 2:12-2(a). On April 10, 1979 the Supreme Court denied the motion for direct certification (Psal). Oral argument was heard by the Appellate Division on May 8, 1979, and on May 24, 1979 the Appellate Division adopted Judge Trautwein's "Proposed Findings of Fact and Conclusions of Law" as "our own in supplementing the basis of our review of the administrative determination of the Council", and affirmed (Psa2). On June 12, 1979 appellants filed a notice of petition for certification (Psa9).

STATEMENT OF FACTS

In response to the Supreme Court's suggestion in O'Neill v. State Highway Department, 50 N.J. 307, 320 (1967) that

> "[a]s a matter of good housekeeping the appropriate officers of the State should do what is feasible to catalogue the State's far-flung holdings",

N.J.S.A. 13:1B-13.1 et seq. was enacted into law, effective January 13, 1969. This statute had as its purpose the mapping of state sovereign ownership claims in our coastal meadowlands. The first attempt by the State to comply with the mapping statute produced a two-part map known as the "Block and Lot Subdivision in the Hackensack Meadows" published on January 14, 1970. This map became known as the "gray and white map", a reference to the fact that the State's claims were shown in gray while those lands acknowledged to be privately-owned were shown in white. The "gray and white map" asserted State ownership to approximately one-half of the entire Hackensack Meadowlands, including a State claim of ownership to virtually the entire Town of Kearny. After several months of discovery conducted by the record property owners, a motion for summary judgment was brought before Judge Trautwein and resulted in his order of September 8, 1971 (Aa141) which suppressed the "gray and white map" for evidentiary purposes. Although the the State appealed another portion of the September 8, 1971 order (see State v. Council, 60 N.J. 199 (1972)), the suppression of the "gray and white map" was not appealed by the State.

After the entry of the September 8, 1971 order, the State was compelled to seek another means of attempting to comply with the mapping statute. On June 13, 1973 the Natural Resource Council accepted and approved for filing seven so-called base photomaps and claims overlays (more particularly known as the maps of North Arlington (707-2148), Lyndhurst (714-2148), Jersey City Northeast (693-2166), Hoboken North (700-2172), Walden Swamp (721-2160), Teterboro (735-2166), and the Newark/Elizabeth Meadowlands). After the initial group of base photomaps and claims overlays were accepted, additional base photomaps and claims overlays of the Hackensack Meadows were approved on various dates in 1973 and 1974. To date, the Natural Resource Council has accepted and approved 36 base photomaps and claims overlays covering the Hackensack Meadows and a single base photomap and claims overlay covering the Newark/Elizabeth Meadows. The 36 base photomaps and claims overlays of the Hackensack Meadows are each on a scale of 1:2,400, i.e. 1 inch = 200 feet and the single Newark/Elizabeth base photomap and claims overlay is on a scale 1:9,600, i.e. 1 inch = 800 feet. The so-called "base photomaps" are high-quality aerial photographs which, in the case of the 36 Hackensack maps, were prepared by Mark Hurd Aerial Surveys, Inc. from 1:12,000 scale color infrared photography taken on August 20, 1972, and, in the case of the Newark/Elizabeth map, was prepared by Mark Hurd Aerial Surveys, Inc. from 1:80,000 scale color infrared photography taken on March 25, 1972. None of this photography was tide-controlled. The aerial photographs (base photomaps) do not contain the claims directly on the photographs. The claims have been printed on stable-base chromopaque overlays. These overlays are transparent except for the claim lines and except for certain tick marks which enable one to line up the claims overlays with grid lines that have been printed on the aerial photographs (base photomaps) themselves. The overlays also have printed directly on them information in the nature of a legend and a printed description of the area covered by the overlay. As of the date of this petition for certification, the State has not mapped its ownership claims in any of the meadowlands of the State outside of those of the Newark/ Elizabeth Meadows and the Hackensack Meadows.

The history of man-made changes in land and water elevations during the last 300 years is relevant to this appeal because O'Neill v. State Highway Department, supra, held that the State "cannot acquire interior land" by such activity "which enables the tide to ebb and flow on lands otherwise beyond it." The Hackensack Meadowland Development Commission (HMDC) prepared a comprehensive, well-researched Historical Report (R240) which describes in detail the 300-year history of the Hackensack Meadowlands. It describes the plantation life which existed in the Hackensack Meadows in colonial times; early development; construction of the first roadways; early mining efforts; the cedar forests that covered much of the area; farming activity; commercial and industrial activity and development; railroad and canal construction and operation; haying of spartina patents (salt hay); burning over of the meadows by the farmers of "salt hay"; military interest and activity in the meadowlands going back to the Revolutionary War; mosquito extermination efforts including the digging or construction of enormous networks of ditches and dikes to drain the meadows; subsidence of the meadows by dewatering the meadows and pyrolysis, etc.

The exhibits which form a portion of the record in this case contain virtually every known historic and scientific document that pertains to the Newark/Elizabeth Meadows and the Hackensack Meadows, and it contains in the oral history of the late Jacob Kraft what is, unquestionably, the most detailed observations ever recorded of the transition of the Hackensack Meadowlands during the Twentieth Century. Among the more significant man-made changes in land and water elevation which have affected the general area are the following:

1. the digging of hundreds of miles of 10" x 30" ditches and the construction of tens of thousands of feet of dikes in connection with the mosquito extermination efforts of the State and counties;
2. construction of Berry's Creek Canal in 1915;
3. dredging of Newark Bay and the Hackensack River;
4. opening up and widening the Kill von Kull;
5. construction of Oradell Dam;
6. industrialization and urbanization of the area;
7. construction of railroad embankments and roads and highways; and
8. construction of Newark Airport and the Port Newark/ Port Elizabeth Complex.

Through the preserved testimony of the late Peter J. Gannon, Chief of the Bureau of Navigation, and the testimony of the late Fred C. Freeman, Supervisor of Grants and Leases in the Bureau of Navigation, the appellants have produced the history of the State's administration of its riparian affairs from 1869 until the 1960s. Petitioners have shown that many of the claims asserted by the State in the 1973 and 1974 base photomaps and claims overlays are at variance with 100 years of the State's riparian administration. There is a virtual continuous series of riparian grants along Newark Bay and numerous riparian grants along the Hackensack River. Substantial ownership claims on the maps under challenge are interior of the mean high water line on which the various riparian grants are based. The present State ownership claims are in conflict with the Riparian Atlas Sheets of the State. These Riparian Atlas Sheets are the State's principal working records depicting the waterways of the State and the mean high water line upon which all riparian grants and leases are based. The record in this case discloses that until the 1960s the State did not assert an ownership claim to interior meadowlands (those meadowlands which lie beyond the traditional beds of well-defined tidal waterways). It was only in the 1960s and thereafter that the State has attempted to assert expansive ownership claims to interior meadowlands which never before had been perceived as within the State's sovereign ownership.

The record in this case also discloses that interior meadowlands have been the subject of private ownership and these properties have been assessed and taxed to support government. The "top of the bank" of well-defined tidal waterways was always used prior to the 1960s (it was in the 1960s that the State dramatically shifted its claims and expanded them to include these interior meadowlands) as the boundary between public and private lands by the State itself in the administration of its riparian affairs, by New Jersey licensed land surveyors, and by private parties during 300 years of land conveyancing and recordation.

In connection with its current mapping project, the State of New Jersey did not establish the mean high water line throughout the Newark/Elizabeth Meadows and the Hackensack Meadows. Rather, it based many of its claims in the Hackensack Meadows on a type-of-vegetation line using the pandemic weed <u>phragmites communis</u> which is not a halophyte or true salt marsh plant and which never previously was used anywhere in the world as the boundary between public and private lands. In the Newark/Elizabeth Meadows the State used other techniques than were used in the Hackensack Meadows and based many of its claims upon the so-called 1890 Vermeule map and on certain statistical data drawn from another meadow area in Little Egg Harbor and simply extrapolated to assert a 10-foot claim on either bank (for a total of 20 feet) of filled-in creeks and streams.

The parties to this action stipulated that the National Ocean Survey (formerly the United States Coast and Geodetic Survey) is "the acknowledged authority with respect to mean high tide measurement" (Aa40). The National Ocean Survey uses traditional engineering and land surveying techniques for the demarcation of the mean high tide on the land. It has never adopted the use of any species of vegetation for demarcating any tidal datum plane. The State's published claims maps are not prepared in accordance with these traditional engineering and land surveying techniques utilized by the National Ocean Survey.

THE PETITION FOR CERTIFICATION SHOULD BE GRANTED BECAUSE THIS MATTER PRESENTS ISSUES OF PUBLIC IMPORTANCE WHICH SHOULD BE SETTLED BY THE NEW JERSEY SUPREME COURT

Petitioners respectfully submit that this petition for certification should be granted for the following reasons:

1. Controlling Federal Constitutional Law Limits State Sovereign Ownership to the Beds of Navigable Waterways.

The Supreme Court of New Jersey has never considered the impact on this area of the law of the recent United States Supreme Court decision in Oregon ex rel. State Land Board v. Corvallis Sand and Gravel Company, 429 U.S. 363, 97 S.Ct. 582, 50 L. Ed. 2d 550 (1977). Corvallis holds that the ownership of land derived as an incident of State sovereignty was originally fixed at the time of the State's admission into the Union at the beds of the navigable waterways within its boundaries. Only after such ownership was initially fixed under controlling federal constitutional principles do state law principles take over to determine property rights as they are thereafter affected by changes or movements in the beds of those navigable waterways. The Trial Court misread Corvallis as holding simply that state law concepts controlled title to real property within its boundaries. The Appellate Division did not even address the question. The United States Supreme Court found the result that it reached in Corvallis to be dictated by the Equal Footing Doctrine as enunciated in 1845 in Pollard's Lessee v. Hagan, 3 Howard 212 (1845). It stated at page 558:

> "Pollard's Lessee held that under the equal-footing doctrine new States, upon their admission to the Union, acquired title to the lands underlying navigable waters within their boundaries." (Emphasis added)

The Corvallis Court held that, once the Equal Footing Doctrine "had vested title to the riverbed" in the state as of the time of its admission into the Union, "the force of that doctrine was spent," and "it did not operate after that date to determine what effect on titles the movement of the river might have." Most importantly, the Supreme Court notes:

> "Thus under Pollard's Lessee the State's title to land underlying navigable waters within its boundaries is conferred not by Congress but by the Constitution itself." (Emphasis added) (page 560)

And, further, at page 565:

> "...we are not dealing with substantive property law as such, but rather with an issue substantially related to the constitutional sovereignty of the States." (Emphasis added)

Corvallis overruled a three-year old decision by the United States Supreme Court in Bonelli Cattle Company v. Arizona, 414 U.S. 313, 38 L. Ed. 2d 526, 94 S. Ct. 517 (1973), which had held that the post-statehood shifting of the bed of a waterway was controlled by federal common law principles.

Although Corvallis involved a navigable waterway in Oregon, it was decided on the basis of the Equal Footing Doctrine and controlling federal constitutional principles which define the concept of state sovereignty and the land ownership which is incident thereto. Under the Corvallis holding, New Jersey owns as an incident of its state sovereignty the beds of the navigable waterways within its boundaries as those beds existed on December 18, 1787 (on which date New Jersey ratified the United States Constitution), except insofar as subsequently modified under New Jersey law concepts to the extent of any changes or

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* To the same effect, as to one of the original thirteen states (Virginia) see Moore v. Hampton Roads Sanitation District Commission, 557 F. 2d 1030 (Fourth Circuit 1967).

movements in the beds of those navigable waterways, and, further, except insofar as New Jersey has resigned or conveyed to riparian proprietors or others certain of its sovereign-owned lands. Contrary to the Trial Court's view, Corvallis does not stand for the proposition that state property law concepts totally control and determine what land a state owns as an incident of its sovereignty.

The courts of New Jersey are required to respect and apply the law as enunciated by the Supreme Court of the United States in a matter involving a federal constitutional question. In Corvallis it was specifically held that the matter at issue was not one which dealt with "substantive property law as such" but rather with "an issue substantially related to the constitutional sovereignty of the states." All 50 states in the Union are on an equal footing with respect to state sovereignty. The land which one state owns as an incident of its state's sovereignty cannot differ in character from that owned by any other state as an incident of its state sovereignty.

The holding in Corvallis is totally consistent with other cases decided by the United States Supreme Court and involving questions of state sovereignty. See, United States v. Texas, 339 U.S. 707, 94 L. Ed. 1221, 70 S. Ct. 918 (1950); United States v. Maine, 420 U.S. 515, 43 L. Ed. 2d 363, 95 S. Ct. 1155 (1975)[*]; United States v. California, 332 U.S. 19, 91 L. Ed. 1889, 67 S. Ct. 1658 (1947).

It is important that this case be accepted by the New Jersey Supreme Court so that our law can be clarified consistent with the Corvallis decision.

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[*] New Jersey was one of the defendant states in this litigation which dealt with the issue of whether the United States or the various Atlantic coast states were to exercise sovereignty rights over the seabed and subsoil under the Atlantic Ocean more than three miles (continued)

2. The State's Maps Substitute a Type-of-Vegetation Test for the Mean High Tide Line Contrary to O'Neill v. State Highway Department, 50 N.J. 307 (1967), and Without Adequate Scientific Basis.

O'Neill v. State Highway Department, 50 N.J. 307, 323 (1967) holds that:

> "The State owns in fee simple all lands that are flowed by the tide up to the high-water line or mark. The high-water line or mark is the line formed by the intersection of the tidal plane of mean high tide with the shore." (Emphasis added)

The Court goes on to state that the United States Coast and Geodetic Survey (now the National Ocean Survey) is "the acknowledged authority with respect to mean high tide readings." The Court accepts as "more precise" the National Ocean Survey definition that the "mean high tide" to be used is "the average of all the high tides over a period of 18.6 years" (p. 323-324). The boundary between public and private lands is stated by the Court to be "the line of the mean high tide upon the land" (p. 324). O'Neill also holds that neither the State nor a

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* (Continued) from the ordinary low water mark and extending seaward to the edge of the Continental Shelf for exploring and exploiting its natural resources. New Jersey and every other defendant state (except Florida) "claimed for itself, as successor in title to certain grantees of the Crown of England...the exclusive right of dominion and control over the seabed underlying the Atlantic Ocean" (page 366). New Jersey's contention and that of the other defendant states was that "they acquired dominion over the offshore seabed prior to the adoption of the Constitution and at no time relinquished it to the United States" (page 367). The United States Supreme Court held that:

> "...paramount rights to the offshore seabed inhere in the Federal Government as an incident of national sovereignty." (page 370)

Although its meaning is frequently misstated, the Submerged Land Act, 43 U.S.C.A. 1301 et seq., which was enacted on May 22, 1953, merely confirmed the state's pre-existing rights in the beds of the navigable waterways within their boundaries by, in effect, quit-claiming all federal claims thereto.

private party can benefit from the deliberate alteration of the natural scene. To petitioners the *O'Neill* test is clear: the boundary between public and private lands lies at the natural interface of the mean high tide with the land. The maps promulgated by the State, and approved by the Trial Court and the Appellate Division, represent a radical and legally unauthorized departure from the basic tidal test enunciated in *O'Neill*. The practical consequence of the Appellate Division judgment is to substitute a type-of-vegetation line for the mean high water line, without legal authority and without scientific basis.

The Appellate Division sought to justify this radical departure from *O'Neill* with the following conclusion:

> "It is manifest that the major problem relating to the techniques utilized by the Council in the preparation of the maps in question is a matter subject to differing expert opinions; and the record amply demonstrates this divergence of view on the part of the experts produced by the opposing litigants. It is also apparent that the *conventional method of land surveying is wholly unreliable and inappropriate for the purpose of identifying whether lands are now or were formerly flowed by mean high tide as a basis for the State's claims of ownership.*" (Emphasis added) (Psa6)

This conclusion, however, is erroneous and requires review and reversal by the Supreme Court.

The parties to this proceeding stipulated that:

> "The National Ocean Survey (Coast and Geodetic Survey of the United States Department of Commerce) is the acknowledged authority with respect to mean high tide measurement." (Aa40)

The National Ocean Survey bases its measurement of the mean high tide on an engineering and survey process by which tidal data is collected, interpreted, and engineered onto the ground to survey standards. Indeed, the mean high water line as defined in *O'Neill* can *only* be ascertained through conventional survey techniques -- i.e., the establishment of a mean high water elevation through the use of tide gage data, and the transfer of this elevation plane into a line on the ground through survey techniques. By defintion under O'Neill, the mean high water line cannot be ascertained otherwise.

The National Ocean Survey does not utilize or recognize a type-of-vegetation test as the basis for establishing a tidal boundary line, and for good reason. The record amply demonstrates that the type-of-vegetation line used by the State is an ephemeral line that may change from growing season to growing season, or with any of a number of variables including air and water pollution.* Dr. Anderson, the State's own "expert" in this field, would go no further than to say that the particular vegetation line which the State chose represented only a line of "relative tidal inundation." He could not relate this line to any mean high water datum. Neither Dr. Anderson nor anyone else for the State ever established a line of mean high tide throughout the Hackensack Meadows. Accordingly, it was impossible to make any correlation or comparison between the mean high water line and the "type-of-vegetation" line which the State utilized in its mapping.

The National Ocean Survey has studied the prospects of using one type-of-vegetation, spartina alterniflora, as an indicator of the mean high water line. Spartina alterniflora is recognized in scientific literature as a true halophyte, or salt marsh grass. The National Ocean

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* Indeed the unchallenged testimony in the record indicates that the entire Hackensack Meadows has undergone a total botanical transformation during this century largely as a result of man's intervention.

Survey concluded that this particular vegetative line held some promise of being useful in establishing a mean high water line, "provided that adequately established local tidal datums are available and that the interpretive keys have been selected relative to those datums during a thorough field inspection" (Aa248) (Emphasis added). The National Ocean Survey further concluded that their investigation "did not disclose any practical technique not already known to accurately identify, delineate, or demarcate the mean high water line in a tidal marsh" (Aa230).

The State's botanical mapping in the Hackensack Meadows was based upon a pandemic weed, phragmites communis, which is not a true salt marsh grass.* Phragmites communis has colonized the Hackensack Meadows largely as a consequence of man's destruction of the natural estuarine environment. Phragmites communis has never been used before anywhere in the world for demarcating sovereign-owned lands. Its use for this purpose in New Jersey does not enjoy the acknowledgement or support of the National Ocean Survey or any other authority in the field of tidal boundaries. See Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923), pointing out that:

> "Just when a scientific principle of discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained acceptance in the particular field in which it belongs." (Emphasis added)

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* The Wetlands Act of 1970, N.J.S.A. 13:19A-1 et seq., does not list phragmites communis among those types of vegetation found in the protected and ecological sensitive estuarine zone.

To abandon the mean high tide test and the survey techniques it implies also represents a radical departure from established legislative standards and administrative practices. The Legislature of New Jersey has enacted an entire system for licensing and regulating the practice of land surveying and has also established requirements for documents and instruments connected with our State's historic system of land conveyancing and land recordation. Deeds and surveys are important documents in this system and they serve the broad purpose of permitting the identification of a particular piece of property by its finite boundaries to the exclusion of all other property. A New Jersey licensed land surveyor under controlling State statutes is the person who is responsible for the proper establishment of these finite boundaries. In New York, the Court of Appeals has recognized that "long time surveying practice," rather than vegetation lines, is the appropriate method of locating the high water line. Dolphin Lane Associates, Ltd. v. Town of Southampton, 37 N.Y. 2d 292 (Ct.App.1975).

Moreover, since 1869 every riparian grant that has ever been issued by the State of New Jersey has been based upon a mean high water line as an essential constituent of the property described in the conveyance, and this mean high water line is established by New Jersey licensed land surveyors under the "conventional method of land surveying" which the Appellate Division dismissed so easily. To accept the Appellate Division characterization of land surveying practices as "wholly unreliable and inappropriate" is to put into challenge the mean high water line of every riparian grant ever issued by the State.

Certification should be granted, because the Appellate Division opinion substitutes a type-of-vegetation line for the mean high water line. This result is contrary to O'Neill v. State Highway Department, *supra*, without acceptance by the National Ocean Survey or any other acknowledged authority in the field, and contrary to years of established practice in both private conveyancing and State adminstration of its tidelands.

3. The Consequences of the State Mapping Program are so Severe that the State Should be Held to a High Standard of Accuracy and Reliability in the Preparation of Its Maps.

Both the Trial Court and the Appellate Division resorted to the usual standard for appellate review of agency actions and the presumption of reasonableness in passing upon the State's mapping techniques. Judge Trautwein, however, candidly noted that while the testimony of appellants was, in his view, insufficient to rebut the presumption of validity of the agency action, in the context of a quiet title suit appellant's testimony "might carry the day" (Aa88-89). Appellants submit that there are compelling and overriding public policy considerations which should subject the State action here under review to a higher standard than that normally utilized in the review of agency actions. The State's claims maps should employ mapping techniques which possess a high degree of accuracy and reliability for demarcating on the ground the boundary between public and private lands, i.e., the intersection of the tidal datum plane of mean high tide upon the land. Unless they do so, the "economic blight" which *O'Neill* sought to eliminate will be perpetuated; meadowland titles will be rendered unmarketable without basis and private record owners will be left without viable administrative relief and without a right to any damages through a slander of title suit; and the State will be permitted to inflict upon its citizens an ultimate indignity -- many citizens will lose their property not because the State has a superior title but because most title holders simply do not have the financial resources to mount a title defense based on the type of testimony and proofs constituting the record under review. Such a future, after the *City of Newark* case, requires a property owner to mount a defense involving hundreds of thousands of dollars and experts from a number of specialties or, as the frightening alternative, to submit to the expansive title claims of the State. To state this Hobson's choice is to expose the manifest unfairness and injustice that would be produced if this case were not certified and reversed.

4. *The Appellate Division Had a Most Incomplete Understanding of the Substantial Record in this Case and of the Various Mapping Techniques Employed by the State in Asserting Its Sovereign Ownership Claims*.

The Appellate Division in its May 24, 1979 opinion makes the following erroneous statement:

> "This case is before the court as an appeal from the administrative determination of the Natural Resource Council in the Department of Environmental Protection (Council) certifying *the areas of the Hackensack Meadowlands* which it claims to be owned by the State." (Emphasis added) (Psa2)

The Appellate Division had such an incomplete understanding of the record in this case that it apparently did not realize that this appeal involves not only the mapping of the Hackensack Meadows but also the mapping of the Newark/Elizabeth Meadows. Petitioners, therefore, must assume that the Appellate Division decided this important case without realizing that the State employed significantly different techniques in mapping its ownership claims in the Newark/Elizabeth Meadows from those techniques used in the Hackensack Meadows. The principal mapping technique under challenge in the Hackensack Meadows is the use of the pandemic weed *phragmites communis* as a substitute for the physical mean high water line. The principal mapping technique under challenge in the Newark/Elizabeth Meadows is the use of statistical data extrapolated from the Little Egg Harbor Meadow to assert an additional 10-foot claim (for a total of 20 feet) to the banks of filled-in creeks and streams of the said Newark/Elizabeth Meadows. Neither the Trial Court nor the Appellate Division struck down the patently illegal 10-foot added claims to the banks of filled-in creeks and streams in the Newark/Elizabeth Meadows. This statistical technique is indisguishable from the "hatching" technique which the Trial Court found to be interdicted in its opinion at 133 N.J. Super. 245 and the various partial summary judgment orders which effectuated that 1974 decision.

CONCLUSION

Petitioners respectfully submit that certification should be granted because of the enormous importance of the issues raised in this litigation to the State, its citizens, and its coastal municipalities. While O'Neill v. State Highway Department, 50 N.J. 307 (1967) affords a more precise definition of the mean high tide as a basis for State ownership claims, it provides inadequate guidance to the State in the difficult job of translating that verbalization into the demarcation on the ground of the boundary between public and private lands in low-lying coastal and estuarine meadowlands. The published claims maps under challenge are at variance with the United States Supreme Court decision in Oregon ex rel. State Land Board v. Corvallis Sand and Gravel Company, 429 U.S. 363, 97 S.Ct. 582, 50 L. Ed. 2d 550 (1977). Additionally, the published claims maps under challenge are at variance with the administration by the State of its riparian affairs from 1869 until the 1960s and are at variance with the techniques used by the National Ocean Survey and by New Jersey licensed surveyors in demarcating the mean high tide upon the land.

Respectfully submitted,

John R. Weigel

John R. Weigel

Pursuant to Rule 2:12-7(a), I hereby certify that the within petition for certification presents substantial questions and is filed in good faith and not for the purposes of delay.

John R. Weigel

John R. Weigel

Dated: June 22, 1979

SUPREME COURT OF NEW JERSEY
M-900 SEPTEMBER TERM 1978

CITY OF NEWARK, etc., et al.,

Appellants,

v.

NATURAL RESOURCE COUNCIL, in the DEPARTMENT OF ENVIRONMENTAL PROTECTION, STATE OF NEW JERSEY, et al.,

O R D E R

This matter having been duly presented to the Court, it is ORDERED that the motion for direct certification is denied.

WITNESS, the Honorable Richard J. Hughes, Chief Justice, at Trenton, this 10th day of April, 1979.

Stephen W. Townsend
Clerk

RECEIVED
APR 19 1979
JOHN R. WEIGEL

NOT FOR PUBLICATION WITHOUT THE
APPROVAL OF THE COMMITTEE ON OPINIONS

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
A-3311-72

CITY OF NEWARK, a municipal corporation; CITY OF ELIZABETH, a municipal corporation; ESTHER G. BERTONI, et al; and NEW JERSEY LAND TITLE INSURANCE ASSOCIATION,

Appellants,

v.

NATURAL RESOURCE COUNCIL in the DEPARTMENT OF ENVIRONMENTAL PROTECTION, STATE OF NEW JERSEY, et al.,

Respondents.

N/A

Argued May 8, 1979 - Decided MAY 24 1979

Before Judges Lora, Michels and Larner

On appeal from the Natural Resource Council in the Department of Environmental Protection of the State of New Jersey

Mr. John R. Weigel argued the cause for the appellants.

Mr. Elias Abelson, Assistant Attorney General, argued the cause for the respondents (Mr. John J. Degnan, Attorney General of New Jersey, attorney; Mr. Stephen Skillman, Assistant Attorney General, of counsel).

PER CURIAM:

This case is before the court as an appeal from the administrative determination of the Natural Resource Council in the Department of Environmental Protection (Council) certifying the areas of the Hackensack Meadowlands which it claims to be owned by the State. This was accomplished by the preparation of a series of photo maps with overlays pursuant to the directive of the Legislature in N.J.S.A. 13:1B-13.1 et seq., which apparently represented a response to the suggestion of the Supreme Court opinion of O'Neill v. State Highway Dept., 50 N.J. 307, 320 (1967), that

> As a matter of good housekeeping, the appropriate officers of the State should do what is feasible to catalogue the State's far-flung holdings . . . .

On the application of appellants to supplement the administrative record pursuant to the provisions of R. 2:5-5(b), this court entered an order directing the Assignment Judge of Bergen County or his designate:

> to conduct such proceedings and to make appropriate findings of fact and conclusions of law to be submitted to this court for determination of the following issues:
>
> (1) whether the maps published by respondent were prepared in accordance with the requirements of N.J.S.A. 13:1B-13.1 et seq. and specifically N.J.S.A. 13:1B-13.3, and were promulgated and adopted in accordance with the provisions of N.J.S.A. 13:1B-13.4.

This mandate was carried out by Judge Trautwein, Assignment Judge of Bergen County, who undertook to supervise and conduct extensive hearings and motions in the procedural context of a trial-type proceeding.

The first determination made by him related to a finding by way of partial summary judgment dated March 6, 1975, that the initial mapping procedure utilized by the Council in designating as "hatched areas" those lands subject to a *possible* claim by the State, without a clear claim of ownership, was invalid because it failed to comport with the legislative mandate of *N.J.S.A.* 13:1B-13.4. See *Newark v. Nat.Resource Council in Dept. of Environmental Protection*, 133 *N.J. Super*. 245 (Law Div. 1974), aff'd 148 *N.J. Super*. 297 (App.Div. 1977), as modified by 152 *N.J. Super*. 458 (App.Div. 1977) pursuant to remand of the Supreme Court at 75 *N.J*. 32 (1977).

Thereafter, in purported compliance with the order for summary judgment, the Council proceeded to prepare new overlays depicting, among other data, all areas to which it claimed ownership on behalf of the State, including 100% ownership of the prior "hatched areas" and such lands as it acknowledged to be free of such ownership claims. On December 23, 1975 the court rejected this assertion of clear ownership of the "hatched areas" as depicted on the overlays as "arbitrary, capricious and unreasonable" and declared such claims to be null and void. The order of that date reiterated the duty of the Council to "demarcate the former mean high tide in the filled meadowlands of the State before it asserts an ownership claim to the said filled meadowlands" in accordance with the rule set down by the Supreme Court in *O'Neill v. State Highway Dept.*, *supra*.

Ultimately, plenary hearings were held between March 8 and October 26, 1976 before the Assignment Judge wherein the Council presented extensive proofs through expert testimony and reports as to the steps taken in the preparation of the maps attacked by appellants and the basis for the final claims to State-owned property reflected by those maps. Appellants in turn presented evidence relevant to their contention that the administrative decision on appeal was not in accord with the legislative mandate of *N.J.S.A.* 13:1B-13.1 *et seq.* and was arbitrary, capricious and unreasonable.

On August 23, 1978, the Assignment Judge, pursuant to the directive of this court, filed detailed and comprehensive "Proposed Findings of Fact and Conclusions of Law" in which he concluded that the maps certified by the Council were promulgated and published in accordance with *N.J.S.A.* 13:1B-13.4 and represented a reasonable implementation of the mandated duty of the Council to prepare such maps in accordance with *N.J.S.A.* 13:1B-13.2 and 13.3. Inherent in this conclusion is the finding that the mapping methodology and the cataloguing of the State's claims of ownership conform with the foregoing legislative directives and the criteria established in *O'Neill v. State Highway Dept.*, *supra*. The judge also rejected appellants' assertion of estoppel on the part of the State as untenable factually and legally. See *O'Neill*, *supra*, 50 *N.J.* at 319-321.

We are satisfied that the "Proposed Findings of Fact and Conclusions of Law" filed by Judge Trautwein are fully warranted on the record before him. We therefore adopt the same as our own in supplementing the basis of our review of the administrative determination of the Council.

It is manifest that the major problem relating to the techniques utilized by the Council in the preparation of the maps in question is a matter subject to differing expert opinions; and the record amply demonstrates this divergence of views on the part of the experts produced by the opposing litigants. It is also apparent that the conventional method of land surveying is wholly unreliable and inappropriate for the purpose of identifying whether lands are now or were formerly flowed by mean high tide as a basis for the State's claims of ownership.

Under such circumstances, we cannot say that the biological and other corroborating methods adopted by the experts retained by the Council are arbitrary or unreasonable. These are techniques found to be preferable and most practical and reliable by well-qualified experts is the field. While other qualified experts hold contrary opinions, this court cannot undertake to determine which method is better or preferable. As long as the means and method selected by the administrative agency charged with the responsibility in this highly technical field of endeavor is reasonably supported

Psa 6

by the record, our scope of review mandates the acceptance of its determination despite the conflict of expert opinions.

As pointed out by the Supreme Court in United Hunters Assn. of N.J., Inc. v. Adams, 36 N.J. 288 (1962):

> There was division of opinion within the agency's staff itself. The Council of necessity had to choose between contending views. The issue before us is not whether one theme has greater appeal than the other. If a subject is debatable, the agency determination must be upheld. Quite obviously, if we were to decide the underlying merits, we would thereby perform the administrative function itself. Upon that approach the court would become the legislative body. The judiciary can interfere with such a determination only when it is plainly demonstrated to be arbitrary. The most that here is revealed is that men can earnestly disagree. This being so, the Council alone bears the responsibility for decision. It is not for the judiciary to agree or disagree. See In re Public Service Electric & Gas Co., 35 N.J. 358, 376 (1961); Two Guys from Harrison, Inc. v. Furman, 32 N.J. 199, 229 (1960); Kozesnik v. Township of Montgomery, 24 N.J. 154, 167 (1957). 36 N.J. at 292.

Our function in fact is more circumscribed in the context of the subject matter involved herein. The highly specialized and technical nature of surveying and mapping techniques applied to measurements of tides in marshlands demands that we defer to the agency which has far greater expertise, knowledge and resources to decide such difficult questions. The presumption of reasonableness must be accorded to the determination of the Council which has been granted broad discretion by the Legislature in carrying out its task. Appellants have failed to carry the heavy burden of showing that the Council's action herein was arbitrary or unreasonable.

We hasten to add, as did Judge Trautwein, that our decision merely affirms that the maps prepared by the Council in order to delineate the State's claims reasonably conform with the legislative directives of N.J.S.A. 13:1B-13.1 et seq. and the criteria of O'Neill v. State Highway Dept., supra. This decision, however, is not to be construed as a definitive finding that the State's claims are legally warranted in part or in whole as against other parties who may claim ownership. Such title contests will have to be determined in existing or future quiet title actions wherein adverse claims will be appropriately adjudicated on the basis of evidence produced in those proceedings.

Affirmed.

A TRUE COPY

Elizabeth McLaughlin

Clerk

JOHN R. WEIGEL
264 Fisher Place
Princeton, New Jersey 08540
(609) 452-1166
Attorney for Appellants

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET No. A-3311-72

CITY OF NEWARK, a municipal corporation; CITY OF ELIZABETH, a municipal corporation; ESTHER G. BERTONI, et al.; and NEW JERSEY LAND TITLE INSURANCE ASSOCIATION,

Appellants,

vs.

NATURAL RESOURCE COUNCIL, in the DEPARTMENT OF ENVIRONMENTAL PROTECTION, STATE OF NEW JERSEY, et al.,

Respondents.

Civil Action

NOTICE OF PETITION FOR CERTIFICATION

TO: CLERK OF THE COURT

Elias Abelson, Esq.
Assistant Attorney General
Attorney for Respondents
Department of Law and Public Safety
36 West State Street
Trenton, New Jersey 08625

SIRS:

NOTICE is hereby given that appellants, City of Newark, City of Elizabeth, Esther G. Bertoni, et al. and New Jersey Land

Title Insurance Association, will petition the Supreme Court of New Jersey for certification to the Appellate Division to review the final judgment of the Appellate Division in favor of the respondents in this action dated May 24, 1979.

John R. Weigel

John R. Weigel
Attorney for Appellants

DATED: June 12, 1979

C 5 SEP 1979

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FILED
JUL 10 1979

SUPREME COURT OF NEW JERSEY
DOCKET NO.

CITY OF NEWARK, a municipal)
corporation; CITY OF ELIZABETH,)
a municipal corporation;)
ESTHER G. BERTONI, et al; and)
NEW JERSEY LAND TITLE INSURANCE)
ASSOCIATION,)

Appellants/Petitioners,)

v.)

NATURAL RESOURCE COUNCIL in the)
DEPARTMENT OF ENVIRONMENTAL)
PROTECTION, STATE OF NEW JERSEY,)
et al,)

Respondents/Respondents.)

Civil Action

On Petition for Certification
to the Superior Court of
New Jersey, Appellate Division

Sat Below:
Lora, Michels and Larner,
J.J.A.D.

BRIEF ON BEHALF OF RESPONDENTS
TO PETITION FOR CERTIFICATION

JOHN J. DEGNAN
ATTORNEY GENERAL OF NEW JERSEY
Attorney for the State of New Jersey
State House Annex
Trenton, New Jersey 08625

STEPHEN SKILLMAN
Assistant Attorney General
& ELIAS ABELSON
Assistant Attorney General
Of Counsel

ELIAS ABELSON
Assistant Attorney General
On the Brief

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PROCEDURAL HISTORY

In November, 1967, the New Jersey Supreme Court decided O'Neill v. State Highway Department, 50 N.J. 307 (1967) involving title to lands along the Hackensack River in East Rutherford, ownership to which was claimed by the State. In its opinion, the court restated the law regarding ownership, dedication and status of land now or formerly flowed by the tide. It also expressed concern that the absence of clear documentation made it difficult for the public to be in a position to ascertain the extent of the State's riparian interests. Accordingly:

> "[A]s a matter of good housekeeping, the appropriate officials of the State should do what is feasible to catalog the State's far-flung holdings, but we cannot be indifferent to the difficulties involved, especially in ascertaining all the tide-lands to which the State has clear or colorable title." 50 N.J. at 320.

The Legislature responded by enacting N.J.S.A. 13:1B-13.1, et seq. which directed the Natural Resource Council (hereafter sometimes referred to as N.R.C. or Council):

> "...to undertake tidal studies and surveys of meadowlands throughout the State and to determine and certify those lands which it finds are State owned lands.
>
> In undertaking its studies and surveys, the council shall divide its work into such a number of surveys as it shall determine is advisable and it shall establish the priority in which such surveys shall be undertaken." N.J.S.A. 13:1B-13.2.

The Legislature required that the Council initiate its study with the Hackensack Meadowlands and declared further:

> "These studies and surveys shall be performed on behalf of the council by the Navigation Bureau of the Department of Conservation and Economic Development." N.J.S.A. 13:1B-13.2.

As to standards, the law contained only broad directions:

> "In making a thorough study of all such lands to determine which are State owned lands and in making its determination, the council shall take into account the mean high water line as established by the U. S. Coast and Geodetic Survey, the nature of the vegetation thereon, artificial changes in land or water elevations, and such other historical or scientific data, which, in the opinion of the council, are relevant in determining whether a parcel of land is now or was formerly flowed by the mean high tide." N.J.S.A. 13:1B-13.3.

The Council was enjoined to:

> "...publish a map portraying the results of its study and clearly indicating those lands designated by the council as State-owned lands." N.J.S.A. 13:1B-13.4.

On June 13, 1973, the N.R.C. accepted and approved for filing certain photomaps and overlays constituting the determination and certification of State-owned lands required by N.J.S.A. 13:1B-13.2 in accordance with the criteria established. On July 18, 1973, a notice of appeal from the Council's determination and certification was filed by the appellants herein, among others, seeking review of the Council's administrative action (Aa1).

Appellants moved the court to supplement the administrative record by designating a judge of the Superior Court to:

> "...schedule and control discovery and hear such necessary evidence as the parties may wish to adduce and make findings of fact." (Aa8).

The motion was granted and in Orders dated August 26, 1973 and May 8, 1974, the Appellate Division remanded the matter to the Law Division for the purpose of supplementing the administrative record for appellate review.

Following extended hearings (encompassed in a trial transcript of thirty-seven volumes and almost six-hundred exhibits) and a series of rulings, the trial court filed its proposed Findings of Fact and Conclusions of Law on August 23, 1978 (Aa50).

After briefing and argument, the Appellate Division rendered its opinion on May 24, 1979 affirming per curiam the Council's promulgation. In so doing, it indicated its satisfaction with Judge Trautwein's Findings and Conclusions and stated they were

> "...fully warranted on the record before him. We, therefore, adopt the same as our own in supplementing the basis of our review of the administrative determination of the Council." Psa6.

ARGUMENT

THE PETITION FOR CERTIFICATION SHOULD BE GRANTED TO PERMIT THE SUPREME COURT OF NEW JERSEY TO INDICATE ITS APPROVAL OF THE MAPPING METHODOLOGY UNDERTAKEN IN RESPONSE TO THE DIRECTION OF THE LEGISLATURE, AT THE URGING OF THE SUPREME COURT IN O'NEILL v. STATE HIGHWAY DEPARTMENT, 50 N.J. 307 (1967).

While this matter was pending unheard in the Appellate Division both appellants (herein petitioners) and respondents asked this court to certify the appeal in order to stamp a final decision with the imprimatur of the State's highest court to provide additional certainty in an area which has been the subject of much confusion and turbulent litigation for several decades. Respondent, Natural Resource Council, continues to feel that the issue presented - the reasonableness of the Natural Resource Council's response to the Legislature's directives - is of sufficient significance to the direction and outcome of many pending actions to warrant review by this court. Respondents diverge sharply from petitioners, however, concerning the reasons for certification.

The Petition for Certification sets forth a series of arguments in support of review. These expressed positions have been heard by the courts of New Jersey (including this court) again and again, and as often have been rejected. Without belaboring each of the arguments raised, respondents will comment on them seriatim to demonstrate that the reasons given by petitioners are not the appropriate bases for review. Review should hinge upon the need for predictability; the recognition of practicality in the solutions adopted;

and an expression of support for the preservation of the public's rights under riparian law and the public trust doctrine.

1. The Effect of Oregon ex rel. State Land Board v. Corvallis Sand and Gravel Company, 429 U.S. 363, 97 S.Ct. 582, 50 L.Ed.2d 555 (1977)

Petitioners postulate that Corvallis, supra holds

> "...that the ownership of land derived as an incident of state sovereignty was originally fixed at the time of the state's admission into the Union at the beds of the navigable waterways within its boundaries. Only after such ownership was initially fixed under controlling federal constitutional principles do state law principles take over to determine property rights as they are affected by changes or movements in the beds of those navigable waterways." Pp12-21.

Petitioners declare that Corvallis was "misread" by the trial court and that the Appellate Division "did not even address the question". Pp12-34.

In fact, the trial court noted as follows in its Proposed Findings and Conclusions:

> "Despite appellants' contentions that O'Neill has been displaced by Corvallis (see the Court's conclusions as to Issue No. 1 infra) and despite appellants' comprehensive argument that O'Neill erroneously states a principle of riparian ownership in conflict with prior State and English decisional law, O'Neill does represent the latest pronouncement of New Jersey law on such ownership and will govern the Court in making its proposed findings of fact and conclusions of law." Aa63.

The court's conclusions as to issue no. 1, referred to in the above quotation, included a statement that title to real property is to be determined by state law rather than by federal common law, and was followed by a quotation from the Corvallis case:

> "'We also think there was no other basis in that case, nor is there any in this case, to support the application of federal common law to override state real property law.' Oregon v. Corvallis Sand & Gravel Co., supra, at 592." Aa66.

The controlling effect of O'Neill was discussed at length in the briefs filed by both parties in the Appellate Division, as was the appellants-petitioners' reading of the Corvallis case. Against this background the Appellate Division's adoption of the trial court's Findings and Conclusions, and its acceptance of the need to conform to the criteria established in O'Neill, supra (Psa5&6), must be seen as yet another rejection of petitioners' thesis.

2. The Attack on the State's Biological Analysis.

Petitioners' second point which attacks the use of a biological test, and its scientific basis, speaks to the reasonableness of the State's action. This issue is directly addressed by the Appellate Division in its opinion when it says:

> "It is manifest that the major problem relating to the techniques utilized by the Council in the preparation of the maps in question is a matter subject to differing expert opinions; and the record amply demonstrates this divergence of views on the part of the experts produced by the opposing litigants. It is also apparent that the conventional method of land surveying is wholly unreliable and inappropriate for the purpose of identifying whether lands are now or were formerly flowed by mean high tide as a basis for the State's claims of ownership.
>
> Under such circumstances, we cannot say that the biological and other corroborating methods adopted by the experts retained by the Council

> are arbitrary or unreasonable. These are techniques found to be preferable and most practical and reliable by well-qualified experts in the field. While other qualified experts hold contrary opinions, this court cannot undertake to determine which method is better or preferable. As long as the means and method selected by the administrative agency charged with the responsibility in this highly technical field of endeavor is reasonably supported by the record, our scope of review mandates the acceptance of its determination despite the conflict of expert opinions." Psa6&7.

As to the lack of practicability in the use of conventional surveying noted by the Appellate Division in its quoted statement above and attacked as "erroneous" by petitioners (Pp16-25-35), the court's conclusion was based on the agreement in appellants-petitioners' reply brief in the Appellate Division that stated:

> "Appellants agree...that obtaining tidal data to map a physical mean high water line in the Hackensack Meadows would require a high spatial density of tide gages and that the data collected at any particular tide gage may not be transferable except over a relatively short distance and, even then, special problems are presented by the slope of the land and the vegetation growing thereon.
>
> * * *
>
> And, finally, we agree with Mr. Yunghans that, with all these known variables, anyone who would go out and try to draw a 'mean high water line' in the interior of a marsh by using the data obtained from a tide gage 'would be a fool' (TXX-110-24 to 25).
>
> What follows from the above? Appellants submit that the 'questionable accuracy' of any line drawn in the interior of a marsh and called a mean high water line militates against drawing it there in the first place." Arb13. (footnotes omitted).

This agreement in the brief followed Judge Trautwein's clear Findings regarding the inadequacy of conventional surveying (Aa70-71 findings 14(a), 14(b), 15(a), 15(b) and 15(c).

3. Petitioners View as to the Standard of Accuracy to be Met in the State's Mapping.

Petitioners demand that the State's mapping methodology produce so conclusive a document that any defensive response which putative property owners might seek to offer in a challenge to the State's claims be prematurely precluded. The need for such a standard has been reviewed by the trial court and the Appellate Division and rejected. Nor was this standard required by O'Neill or the Legislature. This case raises the reasonableness of the State's response to the Legislature's directives. Courts have uniformly noted the right of challenge provided in quiet title proceedings relating to any given property. Such a challenge would likely be undertaken, if appropriate, by a title insurance carrier which accepted the risk of faulty ownership in exchange for premium payments. The identification of the challenging agency is thus different from that set forth by petitioners who seek to portray helpless property owners arrayed against the assembled resources of the State.

4. The Degree of Understanding of the Record by the Reviewing Courts

The final point raised by petitioners relates to the "... incomplete understanding of the substantial record..." on the part of the judges who have thus far reviewed this case. Petitioners raised a variation of this point before the Appellate Division when they referred to Judge Trautwein's work below.*

Respondents will not reply to these allegations except to note the unseemliness of these references to those who disagree with petitioners' positions.

With regard to the extrapolated data mentioned as a part of this last point (Pp22), the issue was addressed by Judge Trautwein in his Findings and Conclusions (Aa76 finding 25 subheadings (a) through (f); was briefed by both parties (Ab125-127, Rb21-27 and Rb81-30;82-5); and was included without additional comment by the Appellate Division in its adoption of the trial court's Findings and Conclusions.

5. <u>This Court Should Grant Certification</u>.

Withal, this case should be heard. Its issues are significant, and the propriety of the State's techniques in a continuing multi-million dollar mapping project should carry the approval of the State's highest court. No doubts should remain in the minds of any of those now participating in the hundreds of quiet title actions pending which relate in some measure to the scope and implications of the claims maps produced by the State in response to the <u>O'Neill</u> case and the Legislature's mandate.

The State has referred to this need in its presentation to the Appellate Division:

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* In Petitioners' brief in the Appellate Division, Judge Trautwein's work was described as "inexplicable", "lacking in both support and merit", and most eggregious, the suggestion was made that the work was less than "fair and impartial". Ab11-8to15.

> "These resulting claim lines provide the information necessary for those private record holders who would demarcate their property with certainty. Nonetheless, the claim maps are not conclusive as to title but merely serve as a prima facie presentation in any litigation. Judge Trautwein calls the Appellate Division's attention to this fact:
>
> > 'It may well be that in existing and future quiet title suits, where ownership to meadowlands is at stake, a better methodology than that which the State followed in promulgating these claims maps will carry the day for the private owner of record. There would be nothing inconsistent with that result and the one here obtaining.' At p. Aa65."

CONCLUSION

Certification should be granted in this matter to set at rest any questions regarding the propriety of the basic mapping methodology utilized by the State in producing its claims maps, in light of the pivotal role the maps play in providing stability and certainty in transactions relating to riparian areas. In addition, acting in accordance with the legislative mandate, the State is mounting a major effort in its cataloging, with large sums committed for this work. This substantial undertaking warrants the approval of this court.

Respectfully submitted,

JOHN J. DEGNAN
ATTORNEY GENERAL OF NEW JERSEY
Attorney for the State of New Jersey
Attorney for Respondents

By Elias Abelson
Elias Abelson
Assistant Attorney General

M388 SEP 1979

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SUPREME COURT OF NEW JERSEY
A-101-79, DOCKET NO. 16,179

CITY OF NEWARK; CITY OF ELIZABETH;
ESTHER G. BERTONI, et al., and
NEW JERSEY LAND TITLE INSURANCE
ASSOCIATION,

Appellants,

vs.

NATURAL RESOURCE COUNCIL, in the
DEPARTMENT OF ENVIRONMENTAL
PROTECTION, et al.,

Respondents.

Civil Action

On Appeal from the May 24, 1979
Judgment of the Superior Court
of New Jersey, Appellate
Division

Sat Below:
Lora, Michels and Larner,
J.J.A.D.

JAN 4 '80
Supreme Court Clerk

SUPPLEMENTAL BRIEF AND SUPPLEMENTAL APPENDIX OF APPELLANTS

FILED
JAN 4 1980
Stephen W. Townsend
CLERK

JOHN R. WEIGEL
Attorney for or Special Counsel
to City of Newark; City of
Elizabeth; Esther G. Bertoni,
et al.; New Jersey Land Title
Insurance Association, and
various other appellants
264 Fisher Place
Princeton, New Jersey 08540
(609) 452-1166

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CASES CITED

SUPPLEMENTAL APPENDIX

SUPPLEMENTAL PROCEDURAL HISTORY

On August 24, 1973 the Appellate Division of the Superior Court granted the State's motion to consolidate with the *City of Newark* case (A-3311-72) a number of tideland quiet title cases, including *New Jersey Sports and Exposition Authority v. Borough of East Rutherford , et al*., Superior Court of New Jersey, Law Division, Bergen County, Docket No. L-16799-72 (Asa43). Honorable Theodore W. Trautwein, Assignment Judge of Bergen County, wanted the records in the *City of Newark* and the *Borough of East Rutherford* cases to go to the appellate courts together so that the reviewing courts would be able to appreciate not only the general tideland mapping techniques but also how those mapping techniques were tested on a specific parcel of land in the context of a quiet title action.* The *City of Newark* case involves the challenge to the State's tideland delineation program, while the *Borough of East Rutherford* case is a quiet title action involving a meadowland parcel of approximately 178 acres which is located on the east bank of Berry's Creek and between Route 3 and the Paterson Plank Road in East Rutherford. Although the *City of Newark* and *Borough of East Rutherford* cases were consolidated for trial, the trials "were consecutive, the *City of Newark* case proceeding first" (Asa7-5 to 6). The *City of Newark* trial commenced on March 8, 1976, and the *Borough of East Rutherford* trial commenced on October 12, 1976.

---

* Judge Trautwein in his opinion in *Borough of East Rutherford* notes:

> "It was the consensus that the instant case would be more readily understood and analyzed if it were to be scrutinized on appeal within the context of the *City of Newark* trial" (Asa7-7 to 10).

Judge Trautwein filed his "Proposed Findings of Fact and Conclusions of Law" in the City of Newark case on August 23, 1978. The Appellate Division of the Superior Court on May 24, 1979 in an unpublished opinion adopted Judge Trautwein's "Proposed Findings of Fact and Conclusions of Law" in the City of Newark case "as our own in supplementing the basis of our review of the administrative determination of the Council (Natural Resource Council)" and affirmed (Psa2-8). On September 18, 1979 the New Jersey Supreme Court granted the petition for certification of the City of Newark case (Asa44). The Clerk of the Supreme Court has advised counsel in the City of Newark case that oral argument before the Supreme Court has been tentatively scheduled for January 21 or 22, 1980.

Judge Trautwein rendered his opinion in the Borough of East Rutherford case on November 13, 1979 (Asa1-41). In this opinion Judge Trautwein held that the boundary between public and private lands was located at the physical mean high water line established by the record property owner's proofs and not at the State's botanical line.*

The sole purpose of the appellants' supplemental brief and supplemental appendix is to bring to the New Jersey Supreme Court's attention the relevance to the City of Newark issues of Judge Trautwein's decision in the Borough of East Rutherford case.

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* This botanical line forms the basis for much of the State's tideland delineation on the Hackensack Meadowlands maps which are under challenge in the City of Newark case. The State did not establish the mean high water line throughout the Hackensack and Newark/Elizabeth Meadows in connection with its tideland delineation program.

SUPPLEMENTAL STATEMENT

Both Judge Trautwein and the Appellate Division in the *City of Newark* case felt constrained to apply the usual standard of appellate review of agency actions and the presumption of reasonableness in passing upon the State's tideland mapping techniques.* As a result, both Judge Trautwein and the Appellate Division upheld the reasonableness of the State's botanical delineation in the face of appellants' contentions that under the rule of *O'Neill v. State Highway Department*, 50 N.J. 307 (1967) the boundary between public and private lands has to be mapped at the physical mean high water line. Judge Trautwein's decision of November 13, 1979 in the *Borough of East Rutherford* case upholds the physical mean high water line established by the record property owner's proofs as against the State's botanical line. These contrary results occur solely because of the difference in the standard used to evaluate the proofs in each case. The State's botanical delineation, which is found acceptable if the presumption of reasonableness is applied to it, cannot stand up in a quiet title action to the record owner's proofs establishing the physical mean high water line.

* * *

Appellants believe that the following holdings from Judge Trautwein's decision in the *Borough of East Rutherford* case should be

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* Point III of appellants' brief sets forth our position that there are compelling and overriding public policy considerations which should subject the State action here under review to a higher standard than that normally utilized in review of agency actions. Appellants believe that each mapping technique employed by the State must possess a high degree of accuracy and reliability for demarcating on the ground the boundary between public and private lands and must produce a claim which is clear and certain and likely to result in a judgment in the State's favor in any quiet title action.

brought to the New Jersey Supreme Court's attention in connection with its review in the City of Newark case:

1. The State mapped the boundary between public and private lands by adopting "a botanical approach" (Asa4-15), while the record property owner established the physical mean high water line "by employing conventional surveying techniques predicated on National Ocean Survey tidal datum verified and refined by various technical methodologies and physical field testing" (Asa5-6 to 10).

   Judge Trautwein concluded that the States's proofs in the Borough of East Rutherford case were "not predicated upon tidal datum" nor did they "constitute an attempt to depict a mean high water line on the premises in question" (Asa11-4 to 6).

   Although there are "admitted built-in tolerances" even in traditional engineering and land surveying practices, Judge Trautwein found that these tolerances "could work for or against the property owner" (Asa24-17 to 20). He acknowleged that:

   > "Although there may not be any exact science, the methods utilized have been accepted for many years" (Asa24-21 to 23).

   Judge Trautwein made the following comment about the traditional engineering and land surveying technique used by the record property owner:

   > "It was shown that the relative accuracy, both horizontally and vertically, of the methodology and equipment utilized was well within the accepted conventional surveying standards" (Asa24-25 to 25-3).

   A multi-discipline team of experts "verified and refined the mean high water line as submitted to the court" and the refinement of that line resulted in "a 1.7% differential in favor of the State" (Asa25-6 to 13). The so-called E.W.E. system (extrapolated water elevation) verifies the physical mean high water line by localizing the vertical datums (Asa25-24 to 26-22). Aerial and ground clarification were used by the record owner (Asa27-2 to 3). Remote sensing was used to establish "the edge of the water at the time of mean high tide" (Asa27-3 to 7). Ecological verification of the mean high water line was conducted (Asa27-8 to 13). "Most impressive was the final testing of the line by way of the team marsh walks in the area of the established mean high water line" (Asa27-14 to 16). "In viewing all of the proofs presented by the Borough, this Court finds that the line presented by the property owner was a reasonable and detailed affirmative mean high water line" (emphasis added) (Asa28-12 to 15).

In contrasting the techniques used by the record property owner with the botanical mapping technique of the State, Judge Trautwein noted:

> "The State in this case did not at any time attempt to establish a more reasonable line than that submitted by the property owner. In fact, the main thrust of the State's rebuttal case was the testimony of Mr. Guth. Although he questioned the judgment of the surveyors relative to the number of E.W.E. points utilized, he did in fact agree with the basic methodology utilized... It is important to note that it was established throughout the Court's inquiry that this same State's witness was never requested to verify the State's phragmites line nor requested to conduct the E.W.E. method relative to the Borough's line. Such proofs may have been extremely helpful to the Court. In the absence of the same, it is difficult to find that the State has in any way convincingly disproved the property owner's line" (Asa36-23 to 37-21).

The State's botanical delineation program essentially depends on the interpretation of aerial photography and without any ground corroboration or testing, while the demarcation of the physical mean high water line is subject to ground testing and verification, i.e., "ground truth". Judge Trautwein comments that:

> "The westerly boundary of the property along Berry's Creek is characterized by a noticeable berm" (Asa4-5 to 8).

He further stated in commenting on the testimony of the State's tidal expert, retired Captain Jack Guth of the National Ocean Survey:

> "It was particularly apparent from this witness' own writing and testimony that where a berm existed, as in the case at bar, the mean high water line is controlled by that berm and must be drawn on the foreshore of it. This is in fact where the line was drawn by the municipality..." (emphasis added) (Asa37-6 to 11).

The importance of ground truth in establishing the boundary between public and private lands was acknowledged by Judge Trautwein in commenting on the field walks of the record owners' team of experts:

> "Although the State argues that these verification walks fail to consider the various tolerances that it pointed out respecting the conventional surveying techniques, it must be found that such field verifications and testing is overwhelmingly convincing in cases of this nature. Admittedly no such testing and verification was conducted by the State on the premises in question" (Asa28-4 to 11).

Finally, it is to be noted that the record property owner produced at trial Captain Wesley Hull of the National Ocean Survey and the senior official in the federal government on coastal mapping who testified that:

> "The only way I know how to survey a mean high water line is through tidal datums and classical surveying methods" (Asa29-1 to 6).

2. Judge Trautwein concluded that the approach of O'Neill v. State Highway Department, supra, 327, in placing the burden of persuasion on the party challenging the existing tideland scene has no practical utility in a quiet title action such as that of Borough of East Rutherford:

> "[B]ecause of the very elusive nature of the terrain and the proofs in this case, such a characterization as 'existing scene' vis-a-vis readily apparent tide flow vel non, is impossible to ascertain and begs the ultimate question in many respects. Hence, the court will render its decision within the context of a classic quiet title action; the defendant (State of New Jersey) has the burden of proof in a suit to quiet title brought by one in peaceable possession"* (Asa6-7 to 16).

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* Appellants believe that this is a very important and warranted refinement of O'Neill v. State Highway Department. The State's ownership claims to interior meadowlands (those meadowlands which line beyond the traditional banks of well-defined tidal waterways) are of fairly recent origin and are in derogation of 300 years of private record titles. These interior meadowlands have long been assessed and taxed to their record owners to support governmental services. Since interior meadowlands have been in the peaceable possession of their private record owners for 300 years, appellants believe that Judge Trautwein properly placed the burden of proof on the State where the record owner meets "the basic jurisdictional prerequisite of possession" (Asa35-5 to 6).

3. Under the rule of O'Neill v. State Highway Department, supra, neither the State nor a record property owner gains title through artificial works which cause changes in the location of the natural mean high water line. It is undisputed that the State in preparing the tideland maps under challenge in the City of Newark case did not take such artificial changes into account in any significant way. However, in the Borough of East Rutherford case, Judge Trautwein pointed out that:

> "There is no dispute that the premises in question has over the decades been substantially impacted by various artificial changes. The property owner submitted evidence relative to these changes as collateral proof to support the reasonableness of the mean high water line ..." (Asa29-9 to 14).

Specifically, Judge Trautwein concluded that the dredging of the Hackensack River from Kearny Point to Little Ferry from 1916 to 1972:

> "caused a substantial increase in the level of mean high water" (Asa39-13 to 18).

This conclusion from the Borough of East Rutherford case that artificial changes have caused a substantial increase in the level of mean high water provides additional support for the appellants' contention in City of Newark that the State's tideland maps are deficient because the State ignored such man-made changes which are largely responsible for the present tideland scene throughout the Hackensack and Newark/Elizabeth Meadows.

ARGUMENT OF LAW

JUDGE TRAUTWEIN'S OPINION OF NOVEMBER 13, 1979 IN NEW JERSEY SPORTS AND EXPOSITION AUTHORITY v. BOROUGH OF EAST RUTHERFORD DEMONSTRATES THAT FUNDAMENTAL FAIRNESS IN THE ADMINISTRATION OF JUSTICE REQUIRES THAT THE STATE IN THE MAPPING OF ITS TIDELAND CLAIMS USE THE LONG-ESTABLISHED AND SCIENTIFICALLY RECOGNIZED ENGINEERING AND SURVEYING TECHNIQUES EMPLOYED BY THE NATIONAL OCEAN SURVEY AND NEW JERSEY LICENSED LAND SURVEYORS (AND REQUIRED BY O'NEILL v. STATE HIGHWAY DEPARTMENT, 50 N.J. 307 (1967)) RATHER THAN THE EXPERIMENTAL AND SCIENTIFICALLY QUESTIONABLE BOTANICAL TECHNIQUES USED BY THE STATE ON THE PUBLISHED MAPS UNDER CHALLENGE

The overriding importance to the City of Newark case of Judge Trautwein's decision in the Borough of East Rutherford case is that it demonstrates:

(1) the basic inadequacy and unfairness of the State's botanical delineation program;

(2) the accuracy and fairness of traditional engineering and land surveying practices;

(3) the equity of using long-established engineering and land surveying practices in the meadowlands in light of the present-day tidal scene which is largely the result of man-made changes in land and water elevations which have permitted the mean high tide to ebb and flow on lands otherwise beyond it;

(4) the enormous burdens and practical problems faced by a record property owner in defending his title against the State's botanical claims; and

(5) the crazy quilt of judgments that will be produced in pending and future tideland quiet title trials if these cases are allowed to be determined on the basis of the ability or inability of record owners to pay for an enormously costly title defense

> rather than on the essential merit of the State's ownership claims.

The *Borough of East Rutherford* decision clearly shows that in a well-tried case the State's botanical delineation cannot stand up to the physical mean high water line established by accepted engineering and land surveying practices. Appellants respectfully submit that as a matter of fundamental fairness a record property owner's title should not be made to depend on his ability to pay for a $250,000 title defense. In such a system only the rich man wins - all other record owners lose. The evil inherent in such a handling of tideland quiet title actions, unless the *City of Newark* decision is reversed, is that most record owners will lose their property not because the State has a superior title but because they simply cannot afford to fund such a costly title defense. Judge Trautwein clearly indicates that he sees this as the inevitable result of the present process, given the approval of the State's botanical mapping in the *City of Newark* case:

> "Few record owners of meadowlands will be able to financially underwrite the construction of those types of expert proofs that the Borough in this instance undertook. *This is a way of life in these cases*" (emphasis added) (Asa41-14 to 18).

This "way of life" can be avoided only if the Supreme Court requires that the State employ long-established and accepted mapping techniques which possess a high degree of accuracy and reliability for delineating on the ground the boundary between public and private lands, i.e., the intersection of the tidal datum plane of mean high tide upon the land. Appellants have urged in *City of Newark* that this higher standard should be employed in reviewing the State's tideland maps, and we have set forth in Point III of our appellate brief a number of compelling public policy reasons for the adoption of such a standard.

The Borough of East Rutherford case stands as a stark and ominous example of the consequences of permitting the State to cloud private record titles by the publication of claims maps based on experimental and scientifically questionable botanical techniques. As was convincingly demonstrated in the Borough of East Rutherford case, such botanical techniques do not locate the mean high water line on the ground. The difference between the botanical line and the physical mean high water line on the property in question was striking - 90% of the disputed land is shown as State owned on the published map utilizing the botanical technique, while only 10% is State owned under the traditional engineering and land surveying techniques upheld in Judge Trautwein's decision. The botanical technique is clearly at variance with the basic tidal test of sovereign ownership enunciated in O'Neill v. State Highway Department.

These desperate results are produced solely because of the less exacting standard of appellate review applied to the administrative action under appeal in the City of Newark case.* Fundamental fairness

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* The Natural Resource Council certainly does not have the expertise in tidal datum plane delineation enjoyed by the National Ocean Survey. NOS is called "the acknowledged authority with respect to mean high tide readings" in O'Neill v. State Highway Department, supra, 323. The parties in City of Newark stipulated the NOS "is the acknowledged authority with respect to mean high tide measurement" (Aa40). NOS uses traditional engineering and land surveying practices to demarcate the mean high water line on the ground. Almost incredibly, by the device of a judicial standard for administrative review the Natural Resource Council's botanical technique is found to be "reasonable" in the City of Newark case in the face of appellants' contention that the engineering and land surveying practices of NOS ("the acknowledged authority") should be used. To appellants, the lower courts have clearly missed the fact that the expertise here involved lies with NOS and not the Natural Resource Council.

in the administration of justice requires that the State map its ownership claims utilizing traditional engineering and land surveying practices rather than botanical delineation.

Respectfully submitted,

John R. Weigel

John R. Weigel
Attorney for Appellants

DATED: January 3, 1980

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION, BERGEN COUNTY
DOCKET NO. L-16799-72

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY, :
:
Plaintiff, :
:
v. :
:
BOROUGH OF EAST RUTHERFORD, et al, :
:
Defendants. :

ORAL OPINION

Bergen County Court House,
Hackensack, N. J.

November 13, 1979

Before: THE HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

Appearances:

C. CLINTON COOPER, Deputy Attorney General,
For the Natural Resource Council,
State of New Jersey.

ALFRED A. PORRO, JR., Esq.,
For the Borough of East Rutherford.

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PETER A. SCHWEITZER
Official Court Reporter
Court House, Hackensack, N.J.

THE COURT: This case is a quiet title action which had its genesis in a proceeding in eminent domain commenced by the New Jersey Sports and Exposition Authority for the whole of the property in question.

Originally, the total tract was some 178 plus acres. But by virtue of various decisions of this court the area here questioned in quiet title has been considerably reduced. Approximately 32 acres of the premises were the subject of a 1968 riparian grant by the State of New Jersey.

Thereafter, the State sought to have the grant set aside on the basis of insufficiency of consideration. The court upheld the validity of the grant and the sufficiency of consideration, thus quieting title to that area in question.

This decision was later upheld by the Appellate Division. See New Jersey Sports and Exposition Authority v. Borough of East Rutherford, Appellate Division Docket A-355 75 decided in 1977.

MR. COOPER: I don't believe it was officially reported, but I don't remember.

MR. PORRO: I don't believe so.

THE COURT: That is the reason I have given the Appellate Division docket number.

Asa 2

Additionally, a substantial area of the premises in question was designated by the State as a "hatched" area, some 30.69 acres in size.

For a detailed analysis of the meaning of hatched in the context of tidelands claims by the State, see Newark v. Natural Resource Council, 133 N.J. Super 245 (1974).

The State's claim to formerly "hatched" areas is now moot by virtue of the December 23, 1975 Order entered in the City of Newark v. Natural Resource Council case, the redlineation accomplished in New Jersey Sports and Exposition Authroity v. Marone, Docket No. L-26794-72, and the pending settlement-- I believe it has been effected--bet ween the State and the Borough whereby the State is relinquishing any tidelands claim to formerly "hatched" areas of the subject property in consideration of payment by the Borough of $7,500.

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I believe it is an accomplished fact, is it not?

MR. PORRO: That is concluded.

THE COURT: The pertinent premises are located wholly within the Borough of East Rutherford on the southerly side of Paterson Plank Road, to the east of Berry's Creek and west of Route 20. It lies in a northerly direction from State Highway No. 3.

Additionally, they border on Berry's Creek and have a small meandering tributary known as Anderson's Creek which is located in the northwesterly section of the property.

The property is substantially intersected by a pattern of mosquito and drainage ditches. The westerly boundary of the property along Berry's Creek is characterized by a noticeable berm. To the east of the berm the property elevations are lower and comparatively level.

The court in this trial and in its opinion is confronted with two basic techniques for fixing a mean high water line to determine real property ownership as between the State and the record owner.

The State adopted a botanical approach, fixing a line based on marsh plant vigor attributable to regularity of tidal inundation.

For a more specific in depth analysis of this technique see the City of Newark case, which is a consolidated action, where this technology was completely explored and its validity, concededly in another context, was upheld, i.e., that the maps encompassing the Hackensack Meadowlands published by the State of New Jersey as Claims Maps, that is, maps indicating what portion of the Meadowlands were claime by the State under the doctrine of O'Neill v. State Highway Department, 50 N.J. 307 (1967) were prepared in accordance with the requirements of N.J.S.A. 13:1B-13.1 et seq.

The Borough of East Rutherford approached the problem of establishing a mean high water line by employing conventional surveying techniques predicated on National Ocean Survey (hereinafter NOS) Tidal Datum verified and refined by various technical methodologies and physical field testing.

Common areas of contention as they affected the trustworthiness of the two vying basic technologies employed by the parties encompassed the effect of man-made artificial disturbances of the terrain, including but not limited to the dredging of the main water course involved--the Hackensack River, mosquito ditching and resulting soil subsidence 130

A cursory search of the record makes it abundantly clear that the trial of this cause provided a battleground for scientific experts, all focusing on where the line dividing sovereign ownership of the lands from private should be drawn--that line being the line formed by the intersection of the tidal plane of mean high tide with the shore. O'Neill v. State Highway Department, surpa.

Asa 5

The court is mindful of the principle anunciated in *O'Neill* that the party challenging the existing scene, that is, the party asserting a tidelands status different from that which now appears, has the burden of persuasion. See *O'Neill*, *supra*, at page 327

In the instant case, however, the court concludes that because of the very elusive nature of the terrain and the proofs in this case, such a characterization as "existing scene" vis-a-vis readily apparent tide flow vel non, is impossible to ascertain and begs the ultimate question in many respects.

Hence, the court will render its decision within the context of a classic quiet title action; the defendant has the burden of proof in a suit to quiet title brought by one in peaceable possession.

The defendant in the instant case is the State of New Jersey.

In several instances certain exhibits of the State and the Borough were marked for identification only, the court reserving on the offer of the parties to mark these exhibits in evidence. I conclude that all such exhibits are being received in evidence, and hence, the exhibit tally in evidence for each party shall be State exhibits S-1 through S-52 inclusive, and Borough exhibits B-1 through B-101 inclusive.

132 The instant case was consolidated with the City of Newark case for trial. In actuality, the trials were consecutive, the City of Newark case proceeding first.

It was the consensus that the instant case would be more readily understood and analyzed if it were to be scrutinized on appeal within the context of the City of Newark trial.

Indeed, all parties to both cases agree that many of the exhibits and much of the testimony in the City of Newark case would be pertinent in the instant case, particularly the theories and methodologies espoused in the City of Newark case by the vying parties and more specifically the botanical approach of the State in fixing its claims lines--all of this despite the difference in the issues generated in these cases.

133 I am more convinced then ever that the consolidation for trial was a practical one and has enabled the court to truncate its instant decision through incorporation by reference in part its findings and conclusions of law in the City of Newark case as more particularly set forth hereinafter. To this and,

all of the exhibits of all parties in the City of Newark case are hereby incorporated by reference as though set forth herein at length.

I want that made clear, even though it might not be necessary to do so because they were consolidated trials in the literal sense of the word.

133 Now, as to the State's case, to the extent here pertinent the court's findings of fact and conclusions of law set forth in City of Newark v. Natural Resource Council, Superior Court of New Jersey, Law Division, Bergen County, Calendar No. 98-0067, Appellate Docket A-3311-73, are incorporated by reference and in particular, as to the State's case in this quiet title action, pages 1 through 31 inclusive of my findings of fact and conclusions of law in the City of Newark case.

By thus incorporating those findings of fact and conclusions of law, the court believes the State met its initial burden in the instant quiet title action to the extent of resisting the motion by the Borough to dismiss at the end of the State's case.

134 Parenthetically, I must state at this stage of my opinion that the State's tidelands claim of ownership based upon botanical analysis as herein demonstrated is legally sufficient to support a

judgment quieting title in the State absent superior and more credible compelling proofs. See <u>City of Newark</u>.

Additionally, the court has taken into consideration the State's claim in the instant case as depicted on photobase map S-10, claims overlay S-2, the log book S-4, and the overlay summary sheet S-3, all in evidence including the various source materials consulted relative to the subject property.

The various source materials used in formulating the State's claim were admitted into evidence as S-7 through S-18 inclusive, and the weight given each source by the State as set forth in S-3 and S-4.

The procedure employed was established in S-19, the rules for analysts. This procedure was uniformly observed. It was updated and broadened in Exhibit R-206 (<u>City of Newark</u> case) to systematize the projected tidelands investigation for the entire state.

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The State's claim of tidelands ownership is predicated upon the incidence of mean high tide flow. Mean high water is the average of all the high tides over a period of 19 years, a tidal epoch. Accordingly, half of the high tides occur above mean high tide level. As such, mean high water is a theoretical abstraction, derived mathematically, and not perceptible in nature.

It should also be noted that salinity is not a factor in determining mean high water. That is to say, mean high water may be saline, brackish or fresh. Salinity or its absence has no bearing on the question of tidal influence or the incidence of the mean high tide.

137 The prime and principal submission was S-15 in evidence; this is on the State's case. S-15, the botanical overlay, was drawn from the original color infra red photography, outlining the configuration or grouping of the various phenotypes of phrgamites and other vegetation according to their reflective signatures. It represents an intermediate interpretive work product between the color infra red photography and the claims overlay, which is Exhibit S-2.

The significance of the reflective signatures as disclosed on the color infra red photography was testified to at length in the City of Newark case, which testimony was accepted by the court as foundation for the instant case. The State's claim, as based on botanical, existing scene analysis, was limited to the phenotype green phragmites. All other phenotypes, pink and red, were conceded as upland and not claimed as tideland.

139 Testimony in the instant case on the State's part, I conclude, was not predicated upon Tidal Datum, nor did it constitute an attempt to depict a mean high water line on the premises in question.

The State did, however, attempt in its affirmative case to corroborate the validity of the State's botanical delineation generally by the testimony of Dr. Maddox in the City of Newark case, summarized in Exhibit R-281, wherein he alleged a general agreement between the NOS high water line where drawn in the Hackensack River basin in 1963 and the botanical delineation.

I conclude, however, that the NOS mean high water line where drawn had little pertinency to the premises in question.

140 Still as to the State's case, I will now discuss the computer description of the State's tidelands claim as I think it is essential that we have an opinion in this regard.

Without here touching on the ultimate issue, which methodology shall prevail in the instant case, the court is constrained to make certain findings and conclusions with respect to the State's undertaking a computerized description of its claim.

One indicium of the emerging nature of tidelands delineation is the matter of descriptive methodology. There were raised in the <u>City of Newark</u> case four challenges to the State's tidelands delineation program in this regard.

1. A competent surveyor could not generate a metes and bounds description of the State's tidelands claim to a specific parcel of property.

2. Two surveyors working independently could not scale from the State's maps and generate the same metes and bounds description.

3. Given metes and bounds descriptions, surveyors could not use them to demarcate private versus public property. that is tidelands, on the ground.

4. Surveyors could not comply with record keeping provisions of the Map Act. The State's methodology of computer description of tidelands negates these objections and satisfies the underlying surveying requirements.

My findings, therefore, with respect to the State's project of a computarized description of the tidelands claims are as follows,

141 A. A perimeter survey of the subject property

(S-5A) upon which had been noted the demarcations of the State's claim as shown on the claims overlays (S-7), and;

B. The Walden Swamp photomap (S-1) with the State Plane Coordinate System superimposed.

These were used by the computer company to generate the plane coordinates of the State claim lines involved, a metes and bounds description thereof, and a computer graphic of the subject property. Whereupon, the computer graphic was related to and overlaid upon the permiter survey. They coincided perfectly in every respect. This clearly established the quality and acceptability of the computer printout of plane coordinates and the computer graphic.

The procedures and equipment used by the computer company were testified to by the State's witness Cali, President of Digital Graphics, Inc. Mr. Cali also authenticated his letter to Roland Yunghans of September 30, 1976 (S-30 in evidence), which discussed the computer delineation procedure.

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Upon delivery of the DGI plane coordinate printout (S-28), the State engaged a licensed land surveyor, H. Bateman of Taylor, Weisman and Taylor. Mr. Bateman testified that he received from Mr. Yunghans a copy of S-28 containing the listing of

Asa 13

plane coordinates. However, the bearings and descriptions shown on S-28 had been deleted. Furthermore, no supplementary maps, such as S-5A, were provided Mr. Bateman.

The only constraints placed on Mr. Bateman's effort were time and budget. This led to implementation of the alternate plan, that is, a sampling of each type of line involved in the subject property.

Mr. Bateman produced, from the version of S-22 given him, S-32, which is a map showing segments of the State's claim lines on the Borough property. He also prepared a metes and bounds description, S-33 in evidence.

The Bateman map (S-32) was placed in register with the Scoppetuolo drawing (S-5A) and the computer graphic (S-29) and found to be in excellent agreement.

In sum, the feasibility of computer analysis and description of the State's tidelands claim has been fully established. What is required is the claims overlay (S-2) and a perimeter survey of the subject property, keyed to the New Jersey Plane Coordinate System, at photomap scale. Given these items, the State will produce a table of plane coordinates which any competent surveyor can reduce to graphic form, scribing exactly the State's claim and permitting the formulation of a verbal metes and bounds description. This enables further the precise and accurate demarcation of the State's claim on the ground, by a duly licensed land surveyor.

My conclusions, therefore, on the State's method of computerized description of the State's tidelands claim are as follows:

145 1. In any proceeding to quiet title to alleged tidelands, the record owner should offer a perimeter survey of the subject property, keyed to the New Jersey Plane Coordinate System, and a verbal metes and bounds description predicated thereon.

2. In any proceeding to quiet title, having received a perimeter survey of the subject property, keyed to the New Jersey Plane Coordinate System and a verbal metes and bounds description predicated thereon, the State shall provide a verbal metes and bounds description of the various sovereign/private boundaries involved, in accordance with the State's computer methodology, which description shall be engrossed in the final judgment of such proceeding.

3. The computer methodology of the State in describing its adjudicated or agreed upon tidelands holdings is accurate and definitive and may be

employed in all tidelands proceedings.

4. The computer methodology of the State permits the accurate and repeatable demarcation on the ground of adjudicated tidelands boundaries by a licensed land surveyor.

5. The State's tidelands delineation program and methodology does not involve surveying procedures and its implementation without employing licensed land surveyors is not in violation of N.J.S.A. 45:8-27 et seq.

146
R2

I will next deal with the question as far as the State's case is concerned as to whether the State's delineation methodology discriminated against the Borough.

It is alleged by the Borough that the State's delineation methodology is discriminatory against the Borough and failed to afford equal protection and due process. The substance of this charge is three-fold:

A. All source materials were not used by the State in connection with all properties delineated.

B. Different methodologies were used for different areas.

C. Some areas delineated were subject to more intense scrutiny than others.

Consideration of the principles of equal protection and due process belies the Borough's allegations in this regard. The substance of equal protection is equivalent, even-handed treatment and application of operative criteria. Thus, all parties similarly situated can and should anticipate like treatment and a like result.

However, this important precept admits of one basic qualification: reasonable classification is permitted according to factual distinction. This is really the other side of the coin, in that the basic concept of equal treatment contemplates parties similarly situated.

Where factual circumstances are dissimilar, legal principle permits different courses of action appropriate to the dissimilarities. Viewed in this light, the three areas of discrimination alleged by the Borough are legally unsupportable.

I make the following findings of fact referrable to this charge of discrimination:

A. As to the matter of not using all the source materials for all areas delineated, the methodology employed by the State was a reasonable, rational one. The source materials consulted, such as aerial photographs, maps, surveys, historical studies, etc., were limited to those of widespread general application, having a credible, impartial genesis, providing a reasonable basis for reliance.

It was determined by State experts to commence with the latest available materials, to wit: the Hackensack Meadowlands photomaps of 1973. If those proved definitive as to the particular "block" in consideration, determination of the tidelands status of the land was made.

It should be noted that such determination was not only limited to affirmative analysis of a tide-flowed condition. Upland status was also determined in this manner. The prime consideration in this regard was that the land be in its natural state, grossly undisturbed by man.

However, if the 1973 photomaps were not definitive, that is, the land was not in its natural state and vegetational analysis was impossible or not representative of true circumstances, then analysts moved to source materials of prior vintage. See Exhibit S-19 and Exhibit R-302.

150 Thus, the 1940 aerial photographs might be employed as the primary source, or the 1963 NOS mean high water line surveys (S-14 and S-15) might prove dispositive of the tidelands issue.

The touchstone in this regard is that all of the available, reliable sources were reviewed as to each "block" investigated.

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Primary reliance on any particular source was not a matter of searching until something was found to justify an affirmative State claim of ownership; but rather was a case of employing the latest definitive materials which disclosed probable ground truth. The nature of the area being investigated and the criteria established for differing characteristics dictated the appropriate source materials to be searched.

B. As to the employment of seemingly different methodologies or criteria in different areas, there were no sinister reasons for doing so. Different areas of land have differing physical characteristics. Some are conceived in nature and others are wrought by the hands of man.

Perhaps a classic example would be two areas, one in its natural state, overgrown by vegetation, and the other artificially filled and improved by buildings and macadam. The former lends itself readily to the vegetational analysis technique including intensive ground observations, which is the major thrust of the State's tidelands delineation program.

With regard to the latter, present day aerial photo maps would offer no hint whatsoever as to the former tidelands status of the property. It must be kept foremost in mind that the accepted legal criterion for State ownership of tidelands is "now or formerly flowed by the mean high tide." See O'Neill, supra.

There is no date of definition, say July 4, 1973, to which all references are made as to whether the land is or was tide flowed. Thus, it is imperative that the State investigate all available materials of credible source, to determine if the land in question is now or was formerly flowed.

Faced with this obligation, in view of the diverse conditions existing upon the land, it would be unrealistic to insist that precisely the same methodology must be used to determine the tidelands status of all properties. Insistence upon that course of action is based upon the sure knowledge that the identical methodology, applied to all parcels, regardless of physical characteristics, will inevitably result in a diminution and limitation of the State's tidelands ownership.

If the State were to pursue the course of action

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suggested by the Borough in this connection, it would violate the spirit of <u>N.J.S.A.</u> 13:1B-13 et seq, traduce its obligation to the School Fund and, perhaps most important, abandon the accuracy of its tidelands delineation program, its scientific methodology and the integrity of its work product.

My conclusions on the issue of discrimination are as follows:

1. Equal protection of the law is equivalent, even-handed treatment and application of operative criteria. All parties similarly situated should receive like treatment and a like result.

2. Reasonable classification is permitted according to significant factual distinction. Where factual circumstances are dissimilar, different courses of action or procedures, appropriate to the dissimilarities, are permitted.

3. The distinction between natural areas and areas altered by artificial change is a reasonable classification, and the use of different source materials for delineation of these separate categories was proper and valid.

4. The delineation procedure used in consulting and relying upon the various and respective source materials was in accordance with the Rules

for Analysts. See Exhibit S-19 and Exhibit R-206.

5. The delineation of the natural areas of the subject property was properly and validly accomplished in accordance with the State's methodology and afforded the Borough equal protection of the law.

6. The delineation of the artificially disturbed areas of the subject property was properly and validly accomplished in accordance with the State's methodology and afforded the Borough equal protection of the law.

As to the Borough's affirmative case, the presentation of the Borough of East Rutherford consisted primarily of the submission to the court of an affirmative mean high water line on the premises in question. This line was initially drawn through conventional surveying methods and thereafter verified and refined through various technical methodology. It was ultimately tested in the field.

Initially, the Borough of East Rutherford entered into a contract with the National Ocean Survey. Carroll Thurlow, the Deputy Chief of the Oceanographic Division of this federal agency, testified at length respecting the NOS standards and procedures utilized generally and particularly relative to the tidal datum survey regarding the East Rutherford property. He supported specific procedures as being in accordance with NOS standards.

The State, on the other hand, attacked the reliability of the NOS tidal datum, pointing out the admitted tolerances and confidence levels set forth in the various NOS publications. All agreed that these confidence levels and tolerances could work either way, i.e., for or against the property owner.

More controversial, however, was the State's attack upon the utilization of the National Tidal Datum Epoch. The State contended that the National Tidal Datum Epoch is a fiction and in fact does not represent ground truth.

It is the State's contention that the Borough erred in utilizing the National Tidal Datum Epoch and should have utilized a more current epoch.

However, this court finds that not only are many of the other techniques and methodology relied upon in establishing a mean high water line also fictions, including the State's botanical approach, but the mean high water line itself is in fact a legal fiction.

Thus, it appears apparent that the NOS establishment of a National Tidal Datum Epoch for uniformity purpose is essential. It should be noted that the testimony established that the NOS periodically updates the National Tidal Datum Epoch for purposes of reasonable accuracy.

Although the utilization of a non-uniform, but more recent epoch, might change the datum on the property in question to an elevation of 3.3 feet instead of 3.2 feet, such a deviation from the standardization would cause havoc.

The purpose of this standardization is to provide continuity in datums throughout the country for utilization of surveyors in drawing mean high water lines.

The Borough's surveying expert and crew utilized conventional tidal boundary techniques and equipment in establishing its mean high water line.

Although the State likewise attempted to attack admitted built-in tolerances in these methods and equipment, it should be noted again that this too could work for or against the property owner.

Although there may not be any exact science, the methods utilized have been accepted for many years.

It was shown that the relative accuracy, both horizontally and vertically, of the methodology and equipment utilized was well within the accepted conventional surveying standards. It was also proven to be reliable statistically through the testimony of Dr. Rawlings.

In addition to the utilization of the conventional surveying techniques, the Borough of East Rutherford did employ a multi disciplinary team which verified and refined the mean high water line as submitted to the court.

This second stage of establishing the final line resulted in a refinement of the primary line; there being a 1.7% differential in favor of the State.

The State argues that the refined line as set forth in B-9 and the accompanying testimony should not be admissible and the Borough should be estopped from presenting the same.

However, it would be inappropriate for the court to exclude evidence of attempts to further refine the establishment of the invisible and complex boundary, the mean high water line, in such cases as this. This is particularly so where the refinement is the result of a well qualified team of experts.

In the case at bar, one of the verifications utilized was that of the E.W.E. system in order to localize the vertical datums. The E.W.E. system stands for a system of extrapolated water elevation. This is a method that is expeditious and does not require simultaneous comparisons. With the E.W.E. method, assuming various conditions are satisfied, it is possible to derive the elevation of mean high water on temporary tide staffs by a graphic analysis of the high water portion of the tidal cycles on the temporary staff and at the location of an existing NOS tide gage. With the E.W.E. method, it may be advisable to extrapolate the elevation of mean high water two or three times for increased accuracy.

This E.W.E. system was employed by one of the country's foremost tidal boundary surveyors from Florida, Paul T. O'Hargan. The State's rebuttal witness, Jack Guth, another recognized authority on the E.W.E. method, agreed to O'Hargan's expertise.

Guth disagreed with the number of E.W.E. points utilized as a general principle, but agreed that this was primarily the judgment of the surveyor and that Mr. O'Hargan was one of the country's foremost authorities on the subject.

Guth further verified that where a berm exists, as on the property in question, the mean high water line should be delineated on the foreshore of that berm regardless of the E.W.E. methodology used.

Both aerial and ground clarification were also used by the municipality. Aerial remote sensing photography was taken by Donald E. Thompson, an expert in his field. The role of this photography in the process of verification was to establish the edge of the water at the time of mean high tide. This it did.

Ecological verification was conducted by Dr. Reimold, who testified to his expert observation in some places where vegetation obscured the line. He concluded from an ecological standpoint that the mean high water line of the property owner's surveyor is in fact a reasonable line on the premises in question.

162 Most impressive was the final testing of the line by way of the team marsh walks in the area of the established mean high water line. This process commenced in January 1976 and continued through May 1976. Actual field testing of the line occurred.

Mixed experts of differing disciplines actually walked the premises, made observations and recorded data in the field. All concluded that the location of the mean high water line as depicted on B-9 was reasonable.

This court finds that this is strong and convincing evidence. The particular uniformity of the observation of an actual berm in the area of the mean high water line as it borders the premises is a convincing indicator of its location.

Although the State argues that these verificatio walks fail to consider the various tolerances that it pointed out respecting the conventional surveying techniques, it must be found that such field verifications and testing is overwhelmingly convincing in cases of this nature. Admittedly no such testing and verification was conducted by the State on the premises in question.

163 In viewing all of the proofs presented by the Borough, this court finds that the line presented by the property owner was a reasonable and detailed affirmative mean high water line.

It should be noted that the New Jersey Supreme Court in <u>O'Neill</u>, <u>supra</u>, has recognized the National Ocean Survey as being the best authority in the United States on the subject matter here in dispute.

With respect to the line in question, one of the representatives of the NOS, Captain Wesley Hull, devoted a substantial portion of his testimony analyzing the various methods available to establish a mean high water line and the extensive experience of NOS relative to the same.

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Captain Hull supported the line as depicted by the municipality on Exhibit B-9. He firmly stood behind the methodology utilized and stated that"the only way I know how to survey a mean high water line is through tidal datums and classical surveying methods."

I will now discuss the question of artificial 165 changes and effect on the premises in question.

There is no dispute that the premises in questio has over the decades been substantially impacted by various artificial changes.

The property owner submitted evidence relative to these changes as collateral proof to support the reasonableness of the mean high water line as depicted on B-9, which keys to a 3.2 elevation chosen by the NOS and utilized by the Borough as the elevation of the mean high water line today.

This 3.2 elevation is a conservative figure; it did not take into account the adverse effect on the property owner's interest of the artificial changes. Thus, the Borough argues 3.2 is reasonable. It also argues that the State in utilizing their botanical approach is relying upon tidal access to the premises by artificial arteries.

Lastly, the Borough argues that the proof of these artificial changes establishes that the premises was not formerly below mean high water. The State, on the other hand, while admitting the existence of the changes questions the inability to quantify the effect on the property.

The State argues further that attempts to establish that changes such as ditching must be performed by the tidelands agency of the State, and
166 if they were not so performed then they can be
23 utilized for tidal access to interior property.

I need the O'Neill case, 50 N.J.

MR. COOPER: Just so that the record is clear, Mr. Porro is going to verify whether or not that $7,000 judgment has in fact been entered on the Borough. It has been agreed to. I don't know whether it has been entered.

MR. PORRO: I think it was paid out of one of the withdrawals; I'm positive it was.

MR. COOPER: We are going to verify it.

MR. PORRO: We will verify it and submit it.

THE COURT: In this regard, former Chief Justice Weintraub speaking for the court in O'Neill at page 324 stated as follows: "* * * the tidal boundary may be established by elevations taken on the land. In that event, evidence that land above that elevation is periodically covered by high tide would not suffice to prove it is tideland. This is not to say that all land below that elevation is tideland; the land must in fact be tide-flowed, and hence interior land which is below that elevation and which the mean high tide does not reach naturally is not tideland.

"The State cannot acquire interior land by such artificial works as ditching which enables the tide to ebb and flow on lands otherwise beyond it. And so too the riparian owner cannot, today, enlarge his holdings by excluding the tide."

The proofs show undisputedly that the premises have extensive mosquito and drainage ditching on it. Jesse B. Leslie, an engineer and attorney who was a former chief inspector, superintendent, executive secretary and honorary commissioner of the Bergen County Mosquito and Extermination Commission, gave credible testimony and submitted convincing historical proofs in this respect. His testimony and exhibits covered a period of approximately 52 years.

He pointed out that the Bergen County Mosquito Commission was under the direct control of the State of New Jersey with respect to its budget approval, mandatory appropriations and approval of plans for mosquito ditching and subsequent supervision and 169 inspection thereof.

More particularly, he submitted D-62 in evidence, a map of the East Rutherford Meadows depicting the premises in question and showing extensive ditching thereon. He reviewed the historica reports of the Commission, classifications, tabulation of work done and submitted extremely disclosing photographs.

Ironically, various of the photographs submitted depicted the exact area of the premises in question along the southerly side of Paterson Plank Road between 1916 and 1917. Roadway and telephone poles can be seen together with the ditching on the property. The vegetation is depicted. More importantly, the property is shown as not under water, but rather appears to be substantially above and dry.

The witness testified to the best of his recollection that this photo accurately depicts that nature of the land involved in this case at the time of this early photo.

Dr. M. Llewellyn Thatcher, a consulting engineer and experienced hydrologist, presented extensive testimony regarding the artificial increase of water level on the property and the artificial subsidence of the land.

Likewise, this testimony was submitted not for the purpose of quantifying these artificial changes but rather for the purpose of bolstering the reasonableness of the 3.2 elevation utilized by the municipality in establishing its mean high water line.

Dr. Thatcher, by way of the utilization of a hydraulic model demonstrated that the changes in the mean high water planes for 1916 and 1972 reflected an increase in the high water plane caused by artificial dredging of the waterway of about three inches or a quarter of a foot.

He also substantiated, together with geologist Lorraine S. Teleky, that the artificial ditching on the premises in question caused a subsidence of the property. This subsidence was generally reported also in the 1896 State Geologist Report entitled "Drainage of the Hackensack and Newark Tide Meadows" by C. C. Vermeule at page 289. The subsidence recorded then ranged in the area of approximately 3 1/2 feet.

Final conclusions:

Throughout the trial of this case the burden of proof and the burden of going forward became an overriding factor. In this respect, I found that the

State of New Jersey did in fact, as I stated before, establish a prima facie case by initially submitting the type of proofs it presented in the City of Newark case.

Viewing all the State's proofs in their most favorable light and viewing them as undisputed, relative tidal inundation can be demonstrated generally in the first instance through the general botanical methodology undertaken by the State.

Thereafter, the property owner becomes obligated to go forward to dispute the State's case. In this case the property owner not only disputed the reliability of the State's methodology on the property in question, but proceeded to establish an affirmative and reasonable mean high water line.

Although it may be sufficient for establishing a prima facie case to submit proofs as to relative tidal inundation, it is here insufficient to carry the ultimate burden of proof on a particular piece of property when the record owner submits persuasive proof disputing the State's methodology and in turn established a tidal boundary which the court concludes is reasonable.

The New Jersey Legislature has specifically provided in N.J.S.A. 2A:62-1 the right of a property owner having possession of lands to have the court settle the title to such lands and to clear up all doubts and disputes concerning the same. It is found that the Borough of East Rutherford did in fact meet the basic jurisdictional prerequisite of possession.

Once the element of possession was established, the burden of proof in such a quiet title action lies upon the adverse claimant; here, the adverse claimant is the State of New Jersey.

<u>O'Neill</u> at pages 323 and 324 specifically sets forth the standard which the State must prove in order to establish tidelands interest. In doing so it has required an ultimate location of a mean high water line. Very specifically, the court in that case at pages 323 and 324 held:

"The State owns in fee simple all lands that are flowed by the tide up to the high-water line or mark. The high-water line or mark is the line formed by the intersection of the tidal plane of mean high tide with the shore. The mean (sometimes called ordinary) high tide is defined as the medium between the spring and the neap tides. See <u>New Jersey Zinc and Iron Co. v. Morris Canal and Banking Co.</u>, 44 <u>N.J. Eq</u>. 398 at 400 and 401; followed by the <u>Borough of</u>

Allenhurst and other citations which I will now omit
175 for the purposes of saving time for counsel.

That definition is deemed to be more exact, and since the Coast and Geodetic Survey of the United States Department of Commerce, the acknowledged authority with respect to mean high tide readings, presumably utilize all the high tides in preparing its data, we accept the definition it believes to be more precise. We subscribe also to the view of Borax that the average to be used should be over a period of 18.6 years.

And O'Neill closes the pertinent portion of the opinion with the principle, "The tidal boundary is then the line of the mean water tide upon the land.

Thus, in the case at bar, a prima facie case, as I said before, was established. However, when confronted with the proofs disputing the accuracy of the phragmites approach and more particularly when confronted with the presentation of a specific mean high water line on a particular piece of property established by well accepted conventional standards, the State had to do more.

The State in this case did not at any time attempt to establish a more reasonable line than that submitted by the property owner. In fact, the main thrust of the State's rebuttal case was the testimony of Mr. Guth.

Although he questioned the judgment of the surveyors relative to the number of E.W.E. points utilized, he did in fact agree with the basic methodology utilized. It was particularly apparent from this witness' own writing and testimony that where a berm existed, as in the case at bar, the mean high water line was controlled by that berm and must be drawn on the foreshore of it. This is in fact where the line was drawn by the municipality as depicted on the Exhibit B-9 in evidence. 177

It is important to note that it was established through the court's inquiry that this same State's witness was never requested to verify the State's phragmites line nor requested to conduct the E.W.E. method relative to the Borough's line. Such proofs may have been extremely helpful to the court. In the absence of the same, it is difficult to find that the State has in any way convincingly disproved the property owner's line.

Again as to the issue of artificial changes as part of my ultimate conclusions, as to the issue of artificial changes, the property owner established the existence of mosquito and drainage ditching.

It also established that the State used these ditches for a tidal connection to areas previously not flowed in making its claim. Further, it established that the impact of the ditches was subsidence of the land's surface.

The court concludes that it is not necessary that the artificial changes be made by the State's tideland agency. It is sufficient, as in the case at bar, that they were in fact man made and did in fact have an impact. The purpose of submitting such proofs by the property owner was two-fold.

In addition to aiding the establishment of the reasonableness of the 3.2 elevation selected, i.e., the excluding of the consideration of the impact of artificial changes, it submitted these proofs also to support the fact that the State was laying claim to interior lands through an artificial tidal connection.

In this latter respect, the Supreme Court of this state has said in <u>O'Neill</u> what I stated before:

"* * * evidence that land above the elevation* * is periodically covered by high tide would not suffice to prove it is tideland. It is not to say that all land below that elevation is tideland; the land in fact must be tide-flowed, and hence interior land which is below that elevation and which the mean high tide does not reach naturally is not tideland."

The State admitted through the testimony of Dr. Feinberg that tidal access to the rear property on the premises was established by utilization of the ditching in question. Additionally, the mosquito drainage ditches themselves were claimed.

I reiterate what O'Neill stated, and that is: "The State cannot acquire interior land by such artificial works as ditching which enables the tide to ebb and flow on lands otherwise beyond it."

The second area of artificial changes submitted by the property owner is that of the impact of the dredging of the Hackensack River from Kearney Point to Little Ferry from 1916 to 1972. This dredging I conclude caused a substantial increase in the level of the mean high water.

In this regard, the State cites Borough of Wildwood Crest v. Masciarella, 51 N.J. 352 (1968), and contends that any inundation which may have resulted from that artificial change was gradual, imperceptible and naturally occurring.

Although it appears to be a far cry from the contended principles set forth in the Masciarella case, it is not necessary for this court to address that issue at this time.

In the case at bar the proofs as they related to the increase of the high water level resulting from such an artificial change went merely to aid in the establishment of the reasonableness of the 3.2 elevation utilized by the property owner.

Thus, it is the finding and determination of this court that all of the properties of the Borough of East Rutherford are hereby deemed quieted in said record property owner, excepting those areas as shown below the mean high water line of Berry's Creek and/or Anderson's Creek on Exhibit B-9 and Exhibit A compiled for the court by East Rutherford.

The parties are directed to submit a metes and bounds description and a map clearly depicting all upland areas as distinguished from riparian areas for the purposes of incorporation in the ultimate order quieting title in this act.

Now a word in addition as to this decision. The court by this decision does not hold that the basic botanical method employed by the State in first publishing a claim under the pertinent statutes has been impugned. Such is not the court's intention or conclusion. And speaking from the trial level, City of Newark remains viable. And secondly, where the Stat employs such methodology as its basic proof in a specific quiet title action, the court does not suggest that the State cannot ever rise to the level of proof sufficient to successfully resist not only a motion at the end of its case, nor from indeed carrying the ultimate burden of persuasion in a quiet title suit. Such is not my intent.

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Indeed, in future quiet title actions the State may very well prevail in a setting where its proofs while substantially the same as here will be more persuasive than those it was called up to overcome in the instant case.

Few record owners of Meadowlands will be able to financially underwrite the construction of those types of expert proofs that the Borough in this instance undertook. This is a way of life in these cases. The State has done well under the circumstances. But the Borough did better.

Somebody draw an order.

MR. PORRO: Thank you, your Honor.

Asa 41

City of Newark remains viable. And secondly, where the Stat employs such methodology as its basic proof in a specific quiet title action, the court does not suggest that the State cannot ever rise to the level of proof sufficient to successfully resist not only a motion at the end of its case, nor from indeed carrying the ultimate burden of persuasion in a quiet title suit. Such is not my intent.

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Indeed, in future quiet title actions the State may very well prevail in a setting where its proofs while substantially the same as here will be more persuasive than those it was called up to overcome in the instant case.

Few record owners of Meadowlands will be able to financially underwrite the construction of those types of expert proofs that the Borough in this instance undertook. This is a way of life in these cases. The State has done well under the circumstances. But the Borough did better.

Somebody draw an order.

MR. PORRO: Thank you, your Honor.

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I certify the foregoing to be a true and accurate transcript of the proceedings in the above-entitled cause.

Certified Shorthand Reporter

- - - - -

Asa 42

ORDER ON
MOTIONS/PETITIONS

CITY OF NEWARK

VS.

NATURAL RESOURCE COUNCIL IN
THE DEPARTMENT OF ENVIRONMENTAL
PROTECTION

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
MOTION NO. M-1971-72
BEFORE PART M

JUDGES COLLESTER
KOLOVSKY
CARTON

Moving Papers Filed JULY 27, 1973
Answering Papers Filed AUGUST 7, 1973
Date Submitted to Court AUGUST 7, 1973
Date Argued
Date Decided AUGUST 24, 1973

ORIGINAL FILED
AUG 28 1973
MORTIMER G. NEWMAN, JR.
CLERK

ORDER

This matter having been duly presented to the Court, it is hereby ORDERED as follows:

	Granted	Denied	Other
Motion/~~Petition~~ for CONSOLIDATION	X		

SUPPLEMENTAL:

L-10790:92:93-72
L-16799-72
L-19420:21:22:23:24:25:26:27:28:29-72
L-20949:52:53:54:55:56-72
L-24883:84:86:87:91:92:93:94:96-72
L-25255:56-72

FOR THE COURT:

P.J.A.D.

Witness, the Honorable DONALD G. COLLESTER, Presiding Judge of Part M, Superior Court of New Jersey, Appellate Division, this 24 day of AUGUST 1973.

I hereby certify that the foregoing is a true copy of the original on file in my office.

Mortimer G. Newman Jr.
Clerk

Asa 43

Mortimer G. Newman Jr.
Clerk of the Superior Court

SUPREME COURT OF NEW JERSEY
C-5 SEPTEMBER TERM 1979

CITY OF NEWARK, a municipal
corporation; et al.,

Petitioner,

v.

NATURAL RESOURCE COUNCIL in
the DEPARTMENT OF ENVIRONMENTAL
PROTECTION, et al.,

Respondents.

FILED
SEP 18 [illegible]
Stephen W. Townsend
CLERK

ON PETITION FOR CERTIFICATION

To the Appellate Division, Superior Court:

A petition for certification of the judgment in A-3311-72 having been submitted to this Court, and the Court having considered the same;

It is ORDERED that the petition for certification is granted.

WITNESS, the Honorable Robert N. Wilentz, Chief Justice, at Trenton, this 18th day of September, 1979.

A TRUE COPY
Stephen W. Townsend
CLERK

Stephen W. Townsend
Clerk

Asa 44

A-101
C.5
A101 SEP 1979

FILED
SUPREME COURT
JAN 25 1980
Townsend
Clerk

RECEIVED
JAN 25 '80
Supreme Court Clerk

SUPREME COURT OF NEW JERSEY
DOCKET NO. 16,179
D1

CITY OF NEWARK, a municipal corporation; CITY OF ELIZABETH, a municipal corporation; ESTHER G. BERTONI, et al; and NEW JERSEY LAND TITLE INSURANCE ASSOCIATION,

Appellants,

v.

NATURAL RESOURCE COUNCIL in the DEPARTMENT OF ENVIRONMENTAL PROTECTION, STATE OF NEW JERSEY,

Respondents.

Civil Action

On Appeal from the May 24, 1979 Judgment of the Superior Court of New Jersey, Appellate Division

Sat Below:
Lora, Michels and Larner
J.J.A.D.

ANSWERING SUPPLEMENTAL BRIEF & APPENDIX ON BEHALF OF RESPONDENTS TO SUPPLEMENTAL BRIEF & APPENDIX FILED BY APPELLANTS AFTER GRANT OF CERTIFICATION

JOHN J. DEGNAN
ATTORNEY GENERAL OF NEW JERSEY
Attorney for Respondents
State House Annex
Trenton, New Jersey 08625

STEPHEN SKILLMAN
Assistant Attorney General

& ELIAS ABELSON
Assistant Attorney General
Of Counsel

ELIAS ABELSON
Assistant Attorney General
On the Brief

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CASES CITED

SUPPLEMENTAL
APPENDIX

Velsicol Chemical Corporation v. State of New Jersey, Department of Environmental Protection, et al (Docket No. L-40853-73); Inmont Corporation, an Ohio corporation v. John Clause, et al v. State of New Jersey, et al (Docket No. C-1782-73). Transcript of Opinion rendered by Hon. James J. Petrella, J.S.C., Superior Court of New Jersey, Law Division, Bergen County on November 13, 1979 (112 pgs.)

PRELIMINARY STATEMENT

Appellants now ask this Court to evaluate their argument against the background of Judge Trautwein's recent decision in the New Jersey Sports and Exposition Authority v. Borough of East Rutherford, et al (Superior Court, Law Division, Bergen County; Docket No. L-16799-72) case. Stripped of its detail the argument does not differ from the one already made in appellants' briefs (Arb 19-20 to 20-4); that is, the State's methodology ought to be tested by more than the standard of reasonableness and should be required to produce an uncontravertible result. Ab 84-8 to 15. Absent such a test, appellants have suggested an abandonment of the tidelands rules which developed in this State in favor of the more limited "top of the bank" approach (Ab 124-9 to 125-1) which they say is so easy to accomplish. In making this argument they also pointed out the complexities attendant upon "the leveling of a tidal datum plane on the ground". Ab 120-15. With Judge Trautwein's decision in Borough, appellants suddenly perceive a new bottle in which to put their old wine. Despite Judge Trautwein's warning at the end of the decision that his ruling does not impugn the State's methodology in City of Newark (Asa 40-20 to 25), appellants argue that the State's method produced greivous overreach in the Borough case, and was reduced to a fraction of the original claim through the use of an alternative methodology which the Borough was able to put forward only through the expenditure of vast sums of money.

Appellants then argue that few land owners will be able to afford the kind of litigation the Borough was willing to engage in. The implied consequence is that the State's claims will go unchecked. Hence, appellants ask this Court to abandon the reasonableness standard applied to the botanical method and compel the State to "map its ownership claims utilizing traditional engineering and land surveying practices...." Asb 11-1.

The argument assumes a great deal and carries with it implications which are highly misleading.

SUPPLEMENTAL STATEMENT

In his affidavit and in appellants' brief, Mr. Weigel implies that what was at stake in the Borough of East Rutherford case was a 178 acre parcel, 90% of which was claimed by the State and only 10% of which was shown to be actually riparian. Aaff. 3-33, 5-15 to 25; Asb 1-29, 10-20 to 25. This use of percentages is misleading, as even a casual reference to the supporting affidavit of Alfred A. Porro, Jr., Esquire will show. The motion for leave to file a supplemental brief together with accompanying material was filed with the Supreme Court on January 4, 1980. Mr. Porro's affidavit dated January 3rd was filed shortly thereafter. In paragraph two on page 2 of his affidavit Mr. Porro states that the total State claim as of the date of trial was 62.7163 acres and with the elimination of "hatched" areas, the total acreage involved was 34.68 acres. "Hatched" areas were those in which the State had difficulty locating its claim. Judge Trautwein ruled in a separate matter that hatching did not comply with the legislative mandate for mapping and that the State would have to decide whether it claimed an area or not. Asa 3-8 to 18. Thus, of a total of 178.995 acres in the taken tract, a little more than 19% was claimed by the State as riparian. This is a far cry from the statement in Mr. Weigel's affidavit that on the published State claim map covering the property in dispute 90% of the land was shown to be sovereign owned. The total amount of land ultimately found to be riparian encompassed approximately 4.5 acres.* This represents 13% of the 34.68 acres.

It is also vital to remember that Judge Trautwein's decision is virtually an initial test of the State's methodology. Even if it is proven to be correct in its outcome it hardly sets a pattern. Indeed, the possibility that quiet title actions would result in judgments favoring record owners was anticipated by Judge Trautwein in <u>City of Newark</u> (Aa65) and by the Appellate Division in reviewing Judge Trautwein's findings and conclusions (Psa8). Despite the fact that at the present time the <u>Borough</u> decision stands unchallenged (no judgment having been entered as yet), it is possible to consider that upon review there may be substantial shifts in its outcome and ultimate determinations concerning how much of the p.q. is riparian and how much is upland. The opinion in the <u>Borough</u> case was rendered from the bench on November 13, 1979. Five days before, in the Superior Court, Law Division, in Bergen County, Judge Petrella gave his bench opinion in the consolidated cases of <u>Velsicol Chemical Corporation v. State of New Jersey, et al (Docket No. L-40853-73); Inmont Corporation v. John Clause, et al v. State of New Jersey,</u>

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* An exact calculation has yet to be worked out for the judgment in this case which has not been entered as of this writing.

et al (Docket No. C-1782-73). Rsa 1 through 112. This opinion has not been brought to the attention of the Supreme Court by appellants. Judge Petrella ruled against the State, finding, unlike Judge Trautwein, that the State's manner of presentation of its biological methodology did not meet its burden of going forward. Nonetheless, Judge Petrella continued his opinion with an analysis of the evidence produced on both sides, describing in great detail the significance of many of the same presentations discussed by Judge Trautwein.* Certain aspects of the decision of Judge Trautwein had a heavy bearing on his determination that the proofs offered by the Borough outweighed the prima facie case presented by the State using the biological methodology. Judge Petrella also addressed a number of these issues, and the testimony of specific personalities, and in doing so differed sharply with Judge Trautwein as to their import. To the extent that Judge Petrella's views ultimately prevail the results of Judge Trautwein's case will shift. Further, there is a question as to whether Judge Petrella's views with respect to the State's failure to meet its burden of going forward will be upheld on review. Here Judge Trautwein's view may prevail.

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* One reason the presentations and witnesses were so similar is that Mr. Porro was counsel for the record owner in both cases.

A comparison of several of the areas of disagreement between Judges Trautwein and Petrella will demonstrate that the differences are not trivial, and that the outcome of either of the two cases will probably turn on the manner in which the differences are resolved. In light of Mr. Weigel's focus on the Borough case the State will also look at that decision first and then turn to the contrasting views of Judge Petrella in Velsicol.

One of the most significant differences occurs in the conclusions regarding which tidal datum epoch should be used. The tidal datums are developed by the National Ocean Survey (NOS) and published for specific bracketed periods of 19 years, representing the period required to establish a primary tidal datum. Any 19 year period is termed an epoch. In essence, the datums are measurements of the height of mean high tide at specified locations. A marsh by and large, has very little slope. Accordingly, a small upward shift in the mean high water can substantially extend tidal inundation horizontally in a marsh. In both the Borough case and the Velsicol case the State offered the most current tidal datum figures. Judge Trautwein rejected the State's request to use a current epoch. Judge Petrella differed. The comments of each illustrate the extent of their disagreement. First, Judge Trautwein:

More controversial, however, was the State's attack upon the utilization of the National Tidal Datum Epoch. The State contended that the National Tidal Datum Epoch is a fiction and in fact does not represent ground truth.

It is the State's contention that the Borough erred in utilizing the National Tidal Datum Epoch and should have utilized a more current epoch.

. . . .

Thus, it appears apparent that the NOS establishment of a National Tidal Datum Epoch for uniformity purpose is essential. It should be noted that the testimony established that the NOS periodically updates the National Tidal Datum Epoch for purposes of reasonable accuracy.

Although the utilization of a non-uniform, but more recent epoch, might change the datum on the property in question to an elevation of 3.3 feet instead of 3.2 feet, such a deviation from the standardization would cause havoc.

The purpose of this standardization is to provide continuity in datums throughout the country for utilization of surveyors in drawing mean high water lines. Asa 23-10 to 24-13.

The reason Judge Trautwein remarks that a deviation from standardization would cause havoc is because even a small increase in elevation could represent a significant adjustment in ground truth.

By contrast, Judge Petrella had the following to say concerning tidal datum epochs:

> In the Court's view, there is some question as to the accuracy of surveys both by Mr. Weidener and Mr. O'Hargan in any event simply because each used the older tidal epoch. Both of those surveyors conceded that had the 1957-75 epoch been used the elevation of mean high water would be higher, and thus, the location of the mean high water line would be somewhere inland of its depiction on their surveys, ...
>
> . . . .
>
> The National Ocean Survey uses the nineteen year tidal epoch, and generally uses the 1941-59 period. Later epochs are available on request. Tide levels can be obtained from shorter intervals based on scientific methods. Perhaps you might call them arithmetic methods, but they can be utilized.
>
> . . . .
>
> From the testimony of Mr. Thurlow of N.O.S., it appears that the only time in recent memory that N.O.S. changed its epoch was based on a 1960 or 1961 Court

decision when they updated from 1924 to 1942 epoch. The procedure essentially appears to be one for the internal workings of N.O.S. and presumably was because of not only basic inertia of a government agency but, I suppose, cost as well as maintaining continuity in navigation charts when such changes would appear to have minimal impact. Of course, the Coast and Geodetic Service is not concerned with boundaries for land for competing property claims, and navigation is not determinative in the type of issue that is before the Court in this particular case. Mr. Thurlow also admitted that the 1957-75 epoch was available to anyone who would request it and that it would be more precise at a specific point. I specifically so find.

It is very difficult for the Court to conclude that using an, in effect, out-of-date epoch as to the real world relative to what the actual facts may be, could produce a survey which is anything more than an approximation and an inaccurate comparison of a 1941-1959 timeframe with reality in either a 1957 to 1975 epoch or as of even 1979, the year of Mr. O'Hargan's-Carlson's work.

...To the extent that former tidal epochs were used, they would only be persuasive while still relatively current (meaning slight variations) or for conformation of older documents.

The fact that the elevation of Berry's Creek number three has changed from 3.27 to 3.42 feet, a rise of 9.15 feet between the 1941-1959 epoch and the 1957 to 1975 epoch, cannot be disregarded.

Thus, the property owners' surveyors' locations of a purported mean high water

> line in this case does not represent current epoch ground truth for the further reason that it does not apply the most current tidal datums. Rsa87-12 to 91-9.

Another point in which the two courts are at variance is in the use, and interpretation by the same individual, of what are termed extrapolated water elevations ("EWE"). The method is described by Judge Trautwein:

> In the case at bar, one of the verifications utilized was that of the E.W.E. system in order to localize the vertical datums. The E.W.E. system stands for a system of extrapolated water elevation. This is a method that is expeditious and does not require simultaneous comparisons. With the E.W.E. method, assuming various conditions are satisfied, it is possible to derive the elevation of mean high water on temporary tide staffs by a graphic analysis of the high water portion of the tidal cycles on the temporary staff and at the locations of an existing NOS tide gage. With the E.W.E. method, it may be advisable to extrapolate the elevation of mean high water two or three times for increased accuracy.
>
> This E.W.E. system was employed by one of the country's foremost tidal boundary surveyors from Florida, Paul T. O'Hargan. The State's rebuttal witness, Jack Guth, another recognized authority on the E.W.E. method, agreed to O'Hargan's expertise.
>
> Guth disagreed with the number of E.W.E. points utilized as a general principle, but agreed that this was primarily the judgment of the surveyor and that Mr. O'Hargan was one of the country's foremost authorities on the subject. Asa25-24 to 25; 26-1 to 22.

Judge Petrella discussed both the use of E.W.E.'s and Mr. O'Hargan's analysis of the results:

> I have considered Mr. O'Hargan's testimony as to his survey efforts and EWE points. He may indeed have relied in part on the opinion of a person who had not testified. On depositions, Mr. O'Hargan had indicated he made a joint determination with Dr. Ogilby, but at trial he seemed to disavow this. I find that he did rely in part on those discussions. He did not portray certain waterways or ditches, mosquito or otherwise, on his surveys, which were of more of a couple of inches or feet in size, we are talking about, and this was a joint decision made with Counsel who did not want what they considered as ditches or mosquito ditches to show. Frankly, I think this approach is an abdication of professional responsibility by a surveyor. Mr. O'Hargan allegedly found certain benchmarks not consistent with published elevations and he adjusted them rather than pursuing it in any other fashion with any other appropriate agency or in any form. Frankly, I was not impressed with that. He apparently used two different controls on two different days. He was evasive as to certain questions on cross-examination particularly as to whether he precisely located two EWE's. He almost continually tried to avoid Deputy Attorney General Cooper's question as to whether he ever precisely located them and gave the impression he was becoming more of an advocate for a position as opposed to an expert. He was also somewhat evasive as to whether or not other surveyors could locate the same points that he used in trying to verify or confirm his survey.
>
> However, as to the utilization of EWE points -- let me just back up -- as to those points, I think no survey is of any

> use unless it can be used by any other surveyor or other experts in the field and that is why I refer to that necessity of a surveyor locating points that can be utilized by others.
>
> However, as to the utilization of EWE points, although the Court recognizes that the EWE technique utilized may be one tool, I find, based on the testimony, it is here of little or no aid to the Court when attempting to determine 'nor or formerly flowed,' particularly in other than areas along tidal water courses. Artificial changes, natural changes, changes in sea level -- all have implications here and all that can be said in the Court's view for the EWE technique compared to N.O.S. extrapolations is that it gives a fairly accurate elevation at the particular point measured as to the then current scene, provided extreme care is used in connection with the measurements and the minimization of outside influence such as wind and wave effect on water surface. For the most part, that testimony was irrelevant to the findings of the Court. Indeed, the description of how the so-called surveying rod 'led the surveyor' almost mystically along the required path when demonstrated in the Courtroom, obviously had great deficiences and was by no means exact and depended largely on the rodman's determinations as to which direction he chose to turn or place his feet. Even the field notes of this witness show there are gaps or inability to locate various points. Thus, this method in the Court's view could not be used as any precise measure of tidal boundary. Rsa 79-11 to 82-17.

Judge Trautwein cites with approval the "credible testimony and ... convincing historical proofs" submitted by Jesse Leslie, a former official of the Bergen County Mosquito Extermination Commission. Asa 31-18. He comments that Mr.

Leslie's testimony and exhibits covered a period of approximately 52 years.

> More particularly, he submitted D-62 in evidence, a map of the East Rutherford Meadows depicting the premises in question and showing extensive ditching thereon. He reviewed the historical reports of the Commission, classifications, tabulation of work done and submitted extremely disclosing photographs. Asa 32-3 to 9.

Ditching is a factor in tidal access. Judge Petrella also describes Mr. Leslie's testimony:

> Mr. Leslie who formerly was employed or held office with the Bergen County Mosquito Extermination Commission for a period of time could not tell by looking at any of the maps which areas were natural creeks and which were artificial ditches, whether early or mid 1900's, dug by the Commission. Thus, he could not tell whether certain waterways or 'ditches' were natural creeks which were straightened and/or widened. Rsa 40-17 to 41-2.

There are other areas of divergence between the two cases. However, it is not to review either opinion that this material is presented. The three items discussed should suffice to demonstrate that the outcome of either case may depend upon the ultimate resolution of these issues in another forum. The comparison reveals the weakness of reliance upon the outcome of Judge Trautwein's opinion in the <u>Borough</u> matter without further, extensive review. If, upon appellate consideration the outcome is changed, the result may be in agreement with the State's botanical line.

ARGUMENT OF LAW

I. THE BIOLOGICAL METHOD HAS BEEN FOUND TO BE A REASONABLE EXERCISE OF THE DISCRETION OF THE TIDELANDS AGENCY.

Tested against the standard of reasonableness the biological method has been deemed acceptable. Psa 6-8. Included as elements in the testing were scientific support and the practical utility of the approach both from the standpoint of time and the expenditure of public funds. Costs are a two edged sword. If the State had not followed a botanical methodology and, instead, relied upon conventional tide gauging and surveying, the work likely could have been accomplished. Problems would have included the high density of tide gauges necessary, the time it would take for appropriate compilation of datums and for very careful analysis of often questionably accurate results. Rb 17-1 to 18-14. What would have resulted was a mapping procedure which would take far longer, and would cost the people of New Jersey far more. For the State to have acted in this fashion would have been irresponsible. Further, even had the State used these conventional methods, with their questionable accuracy and heavy expense, the Borough (or a different record owner) might have discovered experts who could develop a botanical method to use as a counter case. Had this been done, and had Judge Trautwein ruled in favor of the botanical method (as other judges may well do in other quiet title actions) appellants would surely have come before the Supreme Court supporting the botanical method, and pointing out that the drawback of the conventional method is the large expenditure of resources necessary to contest the State's array of tide gauges and use of conventional surveying experts.

Appellants would impose a standard requiring certainty of placement for the State's claim lines. Such a standard exceeds even that used when the claim is tested, property by property, in a suit to quiet title. However, assuming the imposition of a stricter standard for initial promulgation were appropriate, the consequences would include extended delay in the mapping process, a heavy financial burden on the School Fund and the State, further postponement of determinations concerning the validity of record titles, and major gains to the title insurance companies who have accepted premiums to protect homeowners against this very risk of loss. In many instances, it is not the homeowner who must bear the cost of litigation, but the title insurance companies which have been compensated to do so, and to spread the risk. The essential definition of that which is riparian in New Jersey has not changed since its enunciation by the courts in the last century. See

O'Neill v. State Highway Department, 50 N.J. 307 (1967) and cases cited therein. Title companies have taken their premiums fully aware of the rules and the risks.

II. THE REASONABLE EXERCISE OF AGENCY DISCRETION SHOULD BE UPHELD.

Appellants' supplemental brief tries to present an equation in need of balance. The trial court and the Appellate Division have measured the State's botanical method response to the legislative mandate against the standard of reasonableness. Appellant seeks a ruling from this Court which alters this measuring standard in order to avoid the cost of challenge to record owners. The costs at issue are based upon each individual property owner's assessment of that quantum of evidence necessary to meet his burden in a litigation. Except where redirected by rule or statute, the costs of litigation are the responsibility of the protagonist of a position. Judge Trautwein commented on this in the Borough case. Asa 41-14. The record owners do not assert a deprivation of access to the courts. Even where the stake is individual liberty, the law has not provided a protected right extending beyond access. It certainly has not varied the elements of offenses applicable in a given case to suit the pocketbook of a defendant who is financially limited. In U.S.A. v. Scharf, 354 Fed. Supp. 450 (U.S.D.C. E.D.Pa. 1973); aff'd 480 F2 919 (3rd Cir. 1973) the court puts it well. It denied a criminal defendant with limited financial resources the right to appeal in Forma Pauperis. While finding that defendant was acting in good faith and that his appeal was neither dilatory nor taken for purposes of delay, the trial court said:

> However, the petitioner's beliefs are particular to him and to him alone and this Court cannot justify foisting the cost of an appeal based on beliefs particular to a defendant onto society and the taxpayer as a whole. Id. at p. 453.

The State produced a claim line based upon a reasonable, scientifically acceptable and tested method which was subjected to the scrutiny of the courts in an extended proceeding before Judge Trautwein. Among the considerations underlying selection of the method chosen were its reliability, speed of application and cost to the people of the State. These have been aired and deemed acceptable. The judgments of the agency and the courts which have reviewed the method should prevail. That expenses of litigation are necessarily a component in individual contests challenging the results of application of the method does not affect its suitability for its prescribed purpose.

CONCLUSION

For the reasons stated above and in the briefs submitted, appellants' thesis which would impose a different, more stringent standard as a test of agency action should be rejected and actions of the Natural Resource Council under appeal should be affirmed.

Respectfully submitted,

JOHN J. DEGNAN
ATTORNEY GENERAL OF NEW JERSEY
Attorney for Respondents,
Natural Resource Council, et al

By Elias Abelson
Elias Abelson
Assistant Attorney General

SUPPLEMENTAL APPENDIX

Velsicol Chemical Corporation v. State of New Jersey, Department of Environmental Protection, et al (Docket No. L-40853-73); Inmont Corporation, an Ohio corporation v. John Clause, et al v. State of New Jersey, et al (Docket No. C-1782-73). Transcript of Opinion rendered by Honorable James J. Petrella, J.S.C., Superior Court of New Jersey, Law Division, Bergen County on November 13, 1979.

LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-40853-73
CALENDAR NO. 74-4908

VELSICOL CHEMICAL CORPORATION, :
Plaintiff, :
vs. :
STATE OF NEW JERSEY, DEPARTMENT OF :
ENVIRONMENTAL PROTECTION, et al., :
Defendants. :
- :

SUPERIOR COURT OF NEW JERSEY
CHANCERY DIVISION - BERGEN COUNTY
DOCKET NO. C-1782-73
CALENDAR NO. 74-132

INMONT CORPORATION, :
an Ohio Corporation, :
Plaintiff, :
vs. :
JOHN CLAUSE, et al., : Civil Action
Defendant, : OPINION
vs. :
STATE OF NEW JERSEY, et al., :
Defendant, Intervenor. :
- :

November 8, 1979
Court House
Hackensack, N.J.

RICHARD M. JENNINGS, C.S.R.
Official Court Reporter

BEFORE:

THE HONORABLE JAMES J. PETRELLA, J.S.C.

APPEARANCES:

MISS LORRAINE S. TELEKY, ESQ.
For the Plaintiff Velsicol Chemical Corporation.

ALFRED A. PORRO, ESQ.
By: RICHARD W. MACALUSO, ESQ.
For the Defendant-Plaintiff John Clause and Oak Point Excavating and Foundation Corporation.

C. CLINTON COOPER, ESQ.
For the State of New Jersey.

***

THE COURT: This is what I will refer to generally as the tideland title case between Velsicol Chemical Corporation and the State of New Jersey as record property owners, and the other case was originally started as Inmont Corporation, but it is essentially the case of John Clause, et al., versus the State of New Jersey on the tideland aspect.

The issues tried in this phase of the above captioned case relate to the tideland status of certain lands held by record property owners, but claimed by the State under the sovereign doctrine of Riparian Rights. These two cases were consolidated by the Assignment Judge for purposes of trial on the representations of the attorneys for the property owners that they were both ready for trial and there would be no necessity for delay. If they or either one were or was not ready the Trial Judge expressly had discretion under the Assignment Judge's order to deconsolidate. I mention this because I am going to refer to certain proffered testimony later because of the number of applications that were made during the trial and after the trial.

The case involving Velsicol Chemical Corporation was brought as a quiet title action. The second case against Clause was initially brought as a specific performance action by Inmont Corporation. The State is an intervening party defendant because of its Riparian claims.

The Court has considered the testimony and exhibits, the briefs, the arguments of Counsel and their proposed findings. I have reviewed all the evidence, observed the demeanor of the witnesses, the nature of their answers, certain discrepancies as to certain of the exhibits, and I have taken into account all the factors usually considered by the trier of facts, including the absence of proofs, for example, such as but not limited to lack of testimony referable to notations on what I will refer to as an Emilius 1975 survey. The applicable law with respect to Riparian Lands, including, without limitation, O'Neill v. The State Highway Department, 50 N.J. 307 (1967), and the burden of proof has particular impact, although various topographical changes on or near the property make precise application of the principles, particularly as to burden of proof, very complex.

The Court makes findings and conclusions as stated herein and reserves its right to supplement its findings in accordance with the Rules of Court.

The properties are not contiguous, although within a very short distance of each other. I will refer on one hand to Velsicol as a shorthand for Velsicol Chemical Corporation and on the other hand to Clause as a shorthand for Clause, which is also now Oak Point property. Velsicol holds record title to property in Wood-Ridge, Bergen County, New Jersey, as Lot 8, Block 229, on the tax maps and in Carlstadt as Lot 3, Block 146, and Clause and Oak Point hold record title to property in Carlstadt. That is, of course, also in Bergen County. The Velsicol property is bisected in a generally east-west direction by the border between Wood-Ridge and Carlstadt. All of the lands involved in the undecided aspect of the case rest in Carlstadt.

The record property owners are in possession of the respective premises except, presumably, as to Velsicol for what has previously been conceded or adjudged to be State owned as shown on the exhibit attached to the May 11, 1978 "Partial Summary Judgment Quieting Title to Portions of the Subject Premises." I incorporate that order and exhibit in this opinion and direct the Court Reporter to attach a copy thereof to any transcripts hereof.

JOHN J. DEGNAN
Attorney General of New Jersey
Attorney for the State of New Jersey
State House Annex
Trenton, New Jersey 08625
By: WILLIAM C. RINDONE, JR.
Deputy Attorney General
36 West State Street

Trenton, New Jersey 08625
(609) 292-1509

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-40853-73

VELSICOL CHEMICAL CORP.,	: Civil Action
Plaintiff,	: PARTIAL SUMMARY JUDGMENT
v.	: QUIETING TITLE TO PORTION OF
STATE OF NEW JERSEY, Department of Environmental Protection, et als.,	: SUBJECT PREMISES
Defendants.	:

This matter, having been opened to the Court by John J. Degnan, Attorney General of New Jersey, Attorney for the State of New Jersey, Department of Environmental Protection, William C. Rindone, Jr., Deputy Attorney General, appearing,upon Motion for Summary Judgment, and in the presence of Lorraine S. Teleky, attorney for Velsicol Chemical Corporation and Alfred A. Porro, Jr., attorney for defendant, John Clause, in the quiet title action presently pending in the Superior Court, Law Division, *Inmont Corporation v. John Clause, v. State of New Jersey, et als.*, Docket No. C-1782-73, which matter has been consolidated for purposes of trial, and the Court having considered the affidavits filed in this action and having heard oral arguments of counsel and for good cause having been shown, it is on this 11th day of May, 1978,

ORDERED AND ADJUDGED, that fee simple absolute title to that portion of the premises in question which has been designated as "hatched" on Exhibits D-1 and D-2 by the State of New Jersey, which are depicted on the Carlstadt Panel (No. 723-2160) of the Hackensack Meadowlands Photomaps of 1973, and the appurtenant revised claims overlay, and further depicted in red on the attached exhibit, is hereby vested in the plaintiff, Velsicol Chemical Corp., and the same is quieted therein, free and clear of any tidelands interest or tidelands claim of ownership whatsoever of the State of New Jersey, through the Natural Resource Council, in the Division of Marine Services, in the Department of Environmental Protection. Said State of New Jersey, any agency or division thereof, representatives or anyone claiming thereunder is forever barred and foreclosed from asserting any tidelands claim, right, title or interest, whatsoever the nature unto the so-called "hatched" areas of the subject property so designated on the aforementioned Exhibits D-1 and D-2 and appearing in red on the attached exhibit; and it is further,

ORDERED, that fee simple absolute title to that portion of the subject premises which has been designated as "tidal watercourses" on Exhibits D-1 and D-2 aforesaid, and shown in blue on the attached exhibit, is hereby vested in the State of New Jersey, and the same is quieted therein, by virtue of such watercourses being now or formerly flowed by the mean high tide, free and clear of any right, title or interest of the plaintiff, Velsicol Chemical Corp., which plaintiff, its successors or assigns are forever barred and foreclosed from asserting any claim, right, title or interest therein; and it is further, ORDERED, that the defendant, State of New Jersey, shall submit a metes and bounds description of that portion of the subject property herein declared and quieted in the State of New Jersey, derived through its computer technology, upon receipt from plaintiff of a perimeter survey of the subject property, keyed to the New Jersey Plane Coordinate System and a verbal metes and bounds description predicated thereon; and it is further,

ORDERED, that the Court having found the existence of a genuine issue of material fact in connection with the remaining portions of the subject property, the motion of defendant, State of New Jersey, for summary judgment, as it pertains thereto, is herewith denied, without prejudice and without costs.

***

Originally, approximately nineteen of Velsicol's approximately thirty-four acres were designated as "hatched" on the "Carlstadt Panel" and its related overlay.

The main claim of the State is based on the botanical mapping theory. In connection with that May 11, 1978, partial summary judgment order in the Velsicol case there was no dispute as to any material fact as to certain portions of that property amounting to approximately nineteen acres. That order quieted title in certain upland areas in the record property owners (marked in red on the exhibit) and quieted title to certain watercourses or creekbeds (marked in blue) in the State. Although areas previously quieted as to title were not in issue at the trial, the Court reaffirms its rulings and decisions as to those undisputed lands in the respective parties since the facts found by the Court result in the same conclusions. As to Velsicol, the remaining approximately fourteen acres are claimed by the State primarily under a botanical delineation process purporting to establish tidelands.

The State contends that those

remaining portions of Velsicol's tract are now or were formerly flowed by the mean high tide, and that is, of course, defined by the *O'Neill* decision.

On October 4, 1978, the State at the outset of the trial, which, for various reasons, continued, I recognize, for a protracted period of time, mainly because of extensions requested by the parties, but on October 4th, the State conceded and stipulated that it was unable to prove the tidelands status of certain other portions of Velsicol land appearing essential as "islands" of land and as shown on Exhibit S-6 (the overlay). Those areas, including an area also so conceded at the westerly or southwesterly portion of the area previously quieted by summary judgment in Velsicol (the upland being shown by tick marks pointing to upland), are, therefore, hereby quieted in Velsicol. I think I announced that during the trial, but for completeness, I think it should be referred to at this point as well.

Also not in dispute and stipulated

is that Berry's Creek is tide flowed and is the easterly boundary of the property and that the State Riparian Title extends to the mean high water line at the westerly line of Berry's Creek.

Situated approximately 100 feet from the southern boundary of Velsicol's record property line and entirely in the Borough of Carlstadt, is the Clause tract of land known as Lots 2B and 2D, Block 146, consisting of approximately 30.918 acres. The properties are not contiguous, but separated by land apparently owned at the time of trial by Diamond Shamrock Chemical Corp. I do not make that ownership a finding but merely refer to it for descriptive purposes.

As to the lands remaining in dispute, the issue turns on delineation of the mean high water line or defining or ascertaining lands which are or were formerly flowed by the mean high tide. It is apparent in cases tried on the tidelands issue that the mean high water line is not a precise line that can be placed or seen on the ground, but is only a mean or average of all high tides. The State asserts that the botanical line is not an absolute measure of where the upper limits of a mean high water line actually would fall as to any high tide or even an average of high tides, but merely a conservative indicator of where the waters must flow twice daily and, therefore, must be flowed by the mean high tide. As to the botanical theory, I refer generally to the City of Newark v. Natural Resource Council case, decided by Judge Trautwein as to findings, and those were essentially adopted by the Appellate Division. It is my understanding that certification has been granted by the Supreme Court in 1979 and that case is now pending before the Supreme Court for review.

Now, I am going to refer initially to the botanical theory and some of the background.

There are difficulties with cases of this nature as can be seen from decisions in the prior tidelands cases, which

I can take judicial notice of. This Court was troubled, not only in the three cases of: N.J. Sports & Exposition Authority v. Parker; N.J. Sports & Exposition Authority v. M.B.M. Realty and N.J. Sports & Exposition Authority v. Logothetis, but also in certain other cases on the subsequent proffer of the Earth Satellite report as to certain opinions and conclusions that were contained therein, particularly where objection had been made and was concerned with the failure of the State to produce in the quiet title actions any witness from Earth Satellite Corporation to testify or be available for cross-examination as to the botanical theory and the basis of that report. The report was also proffered in this case. It is my understanding from the testimony that the State Department of Environmental Protection has now apparently "adopted" the Earth Satellite report. What effect that would have or whether that would substantiate it based on some argument really was not presented before me and I am not deciding it here. I think that there are obvious problems. Essentially what was proffered by the State in S-3 for identification (as to which I sustained an objection during the course of the trial) is an expert's report or compilation of various individual expert reports for that corporation. It contained obviously much in the line of opinion as well as fact without making the appropriate expert available for cross-examination. The property owners objected essentially on the grounds of hearsay and inability to cross-examine.

In any event, as to the land remaining in dispute and neither resolved as to title ownership by the summary judgment motion nor concession by the State, the problem becomes the delineation of the mean high water line or where the average would put it, or what is "now or formerly flowed." In <u>O'Neill vs. The State Highway Department</u>, our Supreme Court concluded that the high water line or mark and, parenthetically, although I do not believe even that Court thought of it as a precise and exact line, was formed by the intersection of the tidal plane of the mean high tide with the shore. It obviously could not be a precise line since it is a mathematical average. It accepted the definition of "mean high tide" of the then Coast and Geodetic Survey (which is now N.O.S.) (and the then Coast and Geodetic Survey, and I am sure its successor today is the "acknowledged authority with respect to mean high tide readings") as the most precise based on then available knowledge as a mean of all high tides, and that is 50 *New Jersey* at page 323. The *O'Neill* Court also subscribed to the view of the United States Supreme Court in *Borax Consolidated Ltd. vs. City of Los Angeles*, 296 *U.S.* 10, specifically pages 26-27, 56 *Supreme Court* 23, 31, 80 *Law Edition*, pages 9 and 20 (1935), and that was to the effect, if possible, the average should be the average of all high tides over a period of 18.6 years without specifying a requirement for any specific epoch, and I am referring to what the *O'Neill* Court said at pages 323-324 of 50 *New Jersey Reports*.

The case before me requires examination of tideland delineation techniques that were presented and argued. In the past, most cases have been present and decided upon primarily historical data and documents such as maps, aerial photographs and the like. The State in this case is relying in large part on a botanical methodology. The property owners have, of course, presented what I will refer to as the EWE method, the extrapolated water elevation method. The validity of the botanical delineation method on which the State relies in this case is not an issue here because of the pretrial order and because jurisdiction was in the Appellate Division in the *City of Newark* case. It is really not an issue here because it was removed by Paragraph Eight of the pretrial order and because jurisdiction was in the Appellate Division in the *City of Newark* case, but as previously noted by this Court, and recognized by Judge Trautwein in certain phases of the East Rutherford case that has already been decided. I recognize there are certain parts of that case that are not decided at this point, but the botanical methodology as applied to the subject property may be subject to question in determining its specific applicability and probative value.

In the Appellate Division opinion of the City of Newark vs. Natural Resource Council, at page 5 of the slip opinion, the Appellate Division ruled that a botanical or biological approach was not unreasonable or arbitrary and the photo base maps and the pertinent overlays prepared by the State complied with the mandate of New Jersey Statutes Annotated 13:1B-13.1 *et seq*. The Court specifically said:

"This decision, however, is not to be construed as a definitive finding that the State's claims are legally warranted in part or in whole as against other parties who may claim ownership. Such title contests will have to be determined in existing or future quiet title actions wherein adverse claims will be appropriately adjudicated on the basis of evidence produced in those proceedings." (Slip opinion at page 7.)

Now, of course, for the record, property owners have cited the New York property case of <u>Trustees of the Freeholders, et ceters of South Hampton vs. Heilner</u>, 84 <u>Miscellaneous</u> 2d 318, 375 <u>N.Y.S.</u> 2d 761 (<u>Supreme Court</u> 1975), and, of course, that is a New York Trial Court case. In that case a botanical tideland delineation was urged by the public officials. The plaintiffs there argued that the high water mark of Shinnecock Bay should be determined by the line formed by the growth of spartina alterna flora, commonly known as cord grass, because that grass requires a diurnal flooding of that grass to grow vigorously. The New York Trial Court rejected that argument substantially because that definition of the mean high water line would be entirely alien to any land owner's definition, and because under the accepted definition of an average of all tides for 18.6 years, the resultant line may be one never actually marked by the water itself. Of course, I recognize that this decision is not binding authority and may run counter to certain of the conclusions in the State of New York case.

I also recognize that the case before me also differs from the New York case of <u>Heilner</u> because phenotypes of phragmites communis are involved and there is no spartina alterna flora or spartina patens involved, or such a minimal amount that it does not enter into the decision. I also mention parenthetically, perhaps, as a footnote, in prior New Jersey litigation it has been conceded (and it is unnecessary to make any finding here) that the latter plants do subsist only in regularly tide flowed waters. Phenotypes of phragmites are, as I have said, what is contested in this case as to whether they are subject to such tidal inundation, and I will refer specifically to the breakdown of the three signatures that have been referred to shortly.

The botanical delineation process utilized by the State of New Jersey in its tidelands mapping may be subject to some of the preceding comments, particularly in the New York case. It would affect this theory, the bulk of the Clause property that is still in dispute. Now, I am not prepared to say that a botanical method cannot establish delineations between upland and tidelands. It would appear that in this area exact and precise lines cannot always be determined. I cannot fault the Department of Environmental Protection for what it had done in terms of its work under the statute.

The Office of Environmental Analysis of the the Department of Environmental Protection did some work to verify the Earth Satellite conclusions. The verification was made from the applicable 1963 Coast and Geodetic Survey maps.

The State concluded that spartina alterna flora, high vigor, certain other species and certain signatures or phenotypes of phragmites were flowed daily by the mean high tide. Corroboration to this was they had to independently identify tidal access. In comparing the N.O.S. and the shoreline shown (I am talking about the Coast and Geodetic, of course) the State concluded that the work of Earth Satellite concerning phragmites signatures depicted relative tidal inundation. The State concluded that certain phragmites (the green signature) were below the mean high water line. They also independently checked tidal access.

The State's expert, Dr. Feinberg, indicated that the State's claim conclusion was reached that the bulk of the property was "existing scene" as applied to both the Clause and the Velsicol properties here, so the delineation was done primarily from the 1972 color infrared photography (which are S-17A and B in evidence) and the related botanical analysis contained on the phragmites signature class overlay (S-12).

Based on the Department's independant checking, Dr. Feinberg expressed the opinion that S-12 correctly depicted the State's claim based on green signatures with respect to relative tidal inundation. For completeness of the record, I think I ought to indicate pink signature phragmites was not considered an acceptable signature of tiadl inundation. Red signature phragmites was considered to be representative of upland, and was described as of a more cottony texture.

The State's expert concluded that tidal access to the western part of the Clause property was by the down-stream portion of Nevertouch Creek plus overland flow and over the ditch area, what was referred to as ditches. It had tidal access through ditches, through botanical areas, according to the State's theory. The State's expert admitted when he testified there was no tidal datum on either the Clause property or the Velsicol property. However, certain elevations were projected based on a survey by Mr. Weidener which proved faulty and certain corrections, but I will have to note, as I will refer to later, that not all the land area was surveyed but only numerous non-connected points -- some of which would even after correction or adjustment be above elevation of mean high water -- whichever epoch is used. Although I might infer that the record title holders surveyors would be inclined to look for higher elevations or high spots, the question is whether considering the burden of proof there should be a finding that these interior type lands were regularly flowed by mean high water as a result of connection with a tidal creek or overland flow, essentially relying on the botanical theory.

I cannot conclude that the State has carried the burden of proof as to all such interior lands -- except it has carried the burden of proof of certain creeks and waterbeds otherwise established by documents and specifically referred to herein.

Absent testimony by experts who compiled and prepared the Earth Satellite report and established the botanical infra-red analysis approach, the State's proofs do not reach the applicable level in this case as to that aspect. I will discuss this aspect again towards the end of my findings.

I have found and I do find that Dr. Feinberg is expert and well-qualified in his field as well as being a credible witness, but admittedly had to rely on the Earth Satellite report and data as to which objections were sustained in this inadequate factual basis. Since that information is not adequately in the record, the State did not prove its claim to lands on the botanical theory by a preponderance of the evidence. The State was given the opportunity to call witnesses relative to the data in the report and the opinions expressed therein and chose not to do so. That ends and should end the matter in this case. There was one opportunity for trial for each and every party in this case irrespective of who the party may be, and notwithstanding the Public Trust Doctrine, and I am going to refer to that later because it is a sword that cuts both ways, I recognize, but that is our system.

I might also add here when I spoke of Dr. Feinberg, I indicated he was a credible witness and obviously dedicated and credible individual who worked extremely hard in this particular aspect of the case.

That does not end the case. I have to turn to certain other matters in the case because of evidance adduced. There are certain waterways involved and there is also the question of what happened in terms of the so-called "relocated waterbed" at the base of the so-called mercury fill pile on the Velsicol property and the effects of subsequent tidal inundation.

Now, turning to the effect of changing tidelands, it is settled that land which is above the mean high water mark because it has been filled does not vest title in the "record owner" nor protect said owner from a claim by the State unless it comes within the so-called rule of the <u>Ward Sand and Materials Co. vs. Palmer</u>, 51 <u>N.J.</u> 51, 54 (1968). When artificial changes are made upon the property in question, the Court must determine the state of the property prior to the change and consider the nature of the changes, who made them, for what purpose, and for how long the artificial changes have existed and how long water has been allowed to enter the property (talking about tide water, of course), if that is the case, among other factors where water does intrude as opposed to being excluded by fill. There is little doubt that landfills, mosquito ditches, railroad crossings, flood gates, highways, and buildings are all artificial changes which will affect the mean high tide line. I refer to the

O'Neill decision, 50 N.J. at pages 326 to 327. It was for this reason that the artificial fill placed by private interests on the northerly portion of the Velsicol property, and which covered a creek bed and moved it south did not divest the State of title. This is so because it was not done by the State or under State authority or under a Riparian permit and was done without the permission of the State and the State's interest could not be cut off.

In the O'Neill case, the Supreme Court said at 50 N.J. page 324:

"The State cannot acquire interior land by such artificial works as ditching which enables the tide to ebb and flow on lands otherwise beyond it. And so, too, the riparian owner cannot, today, enlarge his holdings by excluding the tide." ...

Of course, the reference to riparian owner there meant in the sense of the person who had the upland to tideland.

In the context of the O'Neill decision Chieft Justice Weintraub was referring in the main, in my opinion, to ditches dug by or at the direction of Governmental agencies, primarily in the nature of the mosquito ditching, and I am referring to ditches specifically. That is what is essentially involved to the property in question, if they are mosquito ditches. Thus, the State could not drprive a landowner of his property by deliberately allowing water to flow onto it. The difficulty is what happens when either the landowner allows his land intentionally or unintentionally to be flooded by tide waters which remain on it for the requisite period of time, such as by either ditching or diverting water or even by subsidence induced by private action. As one example, rising tide levels along ocean shore or even decreasing levels may affect natural boundaries as well as boundaries between nations, states, countries or municipalities, along these oceans, and, perhaps, inland tidal waterways as well as title. In this case there are two problem areas. Firstly, although title has been vested in the State as to the former bed of water course on the Velsicol property in the northern half of the property in Wood-Ridge covered by a landfill which included 160 tons of mercury waste (which landfill incidentally was the subject of a dispute in the Chancery Division as to mercury contamination and remedies, recently decided by Judge Lester) and I refer to that because I am going to have to make reference to that subsequently again, the question remains as to what effect there is on the new bed that is moved.

As a result of defendant's action, it appears -- when I say "defendant" I am talking about the record property owner and private interests -- it appears that the creek bed or the natural water course area has been moved or forced southerly to what I will refer to as the base of the landfill. It is, of course, shown on the documents in evidence. On the one hand it could be argued that the State has title to the filled in creek bed and that should resolve and be the extent of the State's claim. On the other hand, it is also true that such filling was unauthorized and the State and the people of the State were entitled to a creek, polluted or unpolluted, I suppose, in this day and age, with water for its natural functions and purposes and use by the public, and that was the traditional reason that water courses were vested with a certain public interest and the Public Trust Doctrine has been alluded to.

The second problem arises where the property owner by virtue of its own activities on the land causes a decrease in the elevation of land or an influx of tidal waters which continues to be washing that land by the mean high tide for a sufficient period of time.

In the first instance, it is obvious as to the original creek bed that neither artificial avulsion -- that is, a sudden manmade change in the water course, nor more gradual artificial filling divested the State of ownership. <u>Garrett vs. The State</u>, 118 <u>N.J. Superior</u> 594, 601, <u>Chancery Division</u>, 1972. Thus I conclude that in the Velsicol case, the State has title to the relocated water course along the base of the fill area and over to the pond, which is really not a pond, which I am going to refer to. In subsequent documents it was referred to as "chemical disposal area." In any event, that I will refer to later in specific findings. I think to hold otherwise would encourage disregard for the State's title and rights and the Public Trust Doctrine and possibly allow unjust enrichment on improvements.

I am going to turn next to, since certainly the other areas are not in dispute, I have already indicated the general area claimed under the botanical theory has not been proven by the State to be State-owned. I do not have to really get into in this case any specific determination as to what has happened or resulted because water has been let in. I do want to turn to other water courses or creek beds which have been referred to in the testimony and established by the evidence.

The Court finds in this case as will be specified that certain other portions of the land in question had been tide flowed as creek beds in addition to those creek beds previously quieted in the State by the partial summary judgment motion that had been entered in the Velsicol case. I intend to set forth my factual findings as to this particular aspect in generally chronological order. I think it is essential to do so even though I recognize it means going through over almost one hundred years of documents and maps.

I am going to start with the earliest document that had any standing in the evidence in this case -- that is, the 1831 Vermeule map (VC-17) which practically has insufficient clarity or definition due in part to the scale, to locate the properties in question or draw any conclusions with precision. What I am saying is that document was of absolutely no real help to me.

An 1887 Geological Survey of New Jersey by Vermeule (VC-20) at a scale of approximately one inch equals five hundred feet, shows Berry's Creek and a creek running off of it which has the elongated straightened portion which runs through the Clause property somewhat in the middle, and I have these exhibits behind me on the board in case there is any doubt what I am talking about. It is the one that perhaps bisects in the middle Lot 2D which is the Clause property. I recognize I am using a convenience copy, copies of V-2 and C-2 which has been put together. I am only using that for illustration behind me. The property owner argues that the "straightened" portion is indicative of an artificial ditch. The map symbols in the general area denote tide marsh. There appears to be some imprecise drawings of lines which may represent either creek beds or ditches but the Court is unable to find from the record or this particular document exactly what they purport to represent on the ground, and specifically I cannot find just based on this document and up to this point whether that is a ditch or not a ditch. I cannot find it is a ditch, certainly, from that. In any event, the straightened portion does exist on that particular map. The precise location in terms of the land is, of course, made difficult by the scale that is involved.

The 1890 Vermeule map at a scale of one mile to the inch (which is VC-18), essentially depicts little more than the previous exhibit. The approximate location of the Velsicol property was outlined in yellow tape and the Clause property in red tape on the exhibit but the poor nature of the print and the small size adds little to the case. The intersection of "Nevertouch Creek" and Berry's Creek is shown as well as the elongated straightened water course.

The print of the 1896 Vermeule map (VC-19) (which has Velsicol outlined in yellow again and so forth) shows smaller east-west type straightened areas on certain parts of the Clause property. Elevations shown are obviously low where depicted. The figures enclosed in circles, according to the legend, indicate the height and feet of meadow surface above mean sea level are 2.9 and 3.0 feet. The print also indicates in the legend that "where meadow is below 2.5 it has shrunk after dyking and depths of mud shown are too great for present conditions." The legend goes on to indicate that "mean low tide is about 2.4 feet below and mean high tide about 2.4 feet above mean sea level."

The 1896 report entitled "New Jersey Geological Survey, Annual Report 1896," was issued by Vermeule. In a section titled "Drainage of the Hackensack and Newark Tide Marshes," Vermeule said at page 260: "... The Hackensack Marshes have a total of 20,045 acres, of which 1,455 acres lying between Hackensack and Wood-Ridge is not tide marsh but fresh meadow. With this exception the total of 27,334 acres is tide marsh, lying at or slightly above the level of high tide. Occasionally an unusually high tide submerges the whole area, and it is always in a saturated condition."

Our late Chief Justice Weintraub noted in O'Neill vs. State Highway Department, 50 N.J. at page 226:

"Neither Vermeule nor the witnesses who testified to on-site observations prior to the artificial disturbance of the land, had a tidelands title controversy in mind and hence there is room to question the precision of the observations for present purposes."

Vermeule indeed appeared to have other purposes in mind since his report was aimed at promoting draining and reclamation of land, not establishing tideland titles.

Vermeule does not use the adjective "mean", and this leads the Court to conclude that Vermeule was referring to something less than extreme high tide and in the neighborhood of mean high tide because in the next sentence he talks about an occasional "unusual high tide" which submerges the whole area.

A photocopy of a portion of a December 1917 map of property of Michael J. Martin located in the Boroughs of Wood-Ridge and Carlstadt, New Jersey, is incomplete, but it shows Berry's Creek and the intersection or confluence of Nevertouch Creek and flowing initially northwesterly and then sharply more southerly or southwesterly in what appears to be a straightened configuration but which has the designation printed on it of "Nevertouch Creek." This, as shown in S-27, appears to be the water body shown by Vermeule. Although this area appears straightened and hence somewhat artificial, it also has a bulbous type configuration near the southerly boundary of the property beyond the westerly border of the property and near the "New Jersey and New York Railroad" there is a pond-type area which I referred to before with a creek which appears to lead from it towards an area labeled a "ditch" on what would later be a central portion of Velsicol's property and which leads towards Nevertouch Creek where it begins its southerly course.

VC-41 appears to be a photocopy of a hand-drawn sketch, which I mention appears to have a rectangular section of a house on property on Paterson Avenue with the name "Kraft" on it. This sketch was not really explained in the evidence and is not very helpful. As to portions of the Velsicol property it appears to show lines across it with the words "filled in" printed across them and a so-called "hay road." I cannot tell and I don't know from the evidence that this is intended to mean that the ditches or lines are filled in areas the way it is written or whatever, but it is, as I have said, not explained in the record.

VC-42 purports to be a listing of work done by various agencies, for example, the State and/or Bergen County Mosquito Extermination Commission, relative to salt marsh ditching work and tide gates in

Bergen County for the years 1915 and 1916.

VC-43 is a 1916 Second Annual Report of the Bergen County Mosquito Extermination Commission. Pages 18 and 19 indicate that after ditching work was done in the Carlstadt meadows that land which had been submerged and which had been heavy breeding areas was "changed into dry meadowland with clean cut, freely running drains ..." that is as far as I am going to quote.

Nothing significant in VC-44, which is the 1917 Third Annual Report of the Bergen County Mosquito Extermination Commission, and I have considered the other documents. They are not of help.

Mr. Leslie who formerly was employed or held office with the Bergen County Mosquito Extermination Commission for a period of time could not tell by looking at any of the maps which areas were natural creeks and which were artificial ditches, whether early or mid 1900's, dug by the Commission. Thus, he could not tell whether certain waterways or "ditches" were natural creeks which were straightened and/or widened. He did describe the usual dimensions of dug mosquito ditches and they were considerably narrower than the type of ditch shown in certain areas here, particularly when I am going to refer to the straightened areas of Nevertouch Creek which will be seen as two courses.

The June 21, 1928 deed (S-26) from Carlstadt Holding Corp. to Franco-American Chemical Works, Inc., relative to the Clause property refers to the December 1917 sketch map, which I have previously referred to, S-27, which is, I suppose, somewhat of a location survey by Michael Martin. Examination of this deed and various courses discloses reference to a pond area and to various branches of Nevertouch Creek. Incidentally, the use of a word such as "creek" or "ditch" over the years without contradiction may give rise to a permissible inference, especially if supported by other factors. A plotting of the various deed courses establishes that the water body referred to as Nevertouch Creek existed in 1917, and the then configuration was not as straightened and uniform as it appears in subsequent maps and drawings. I am not saying it was a major change, but it is obvious that there was some change.

The third deed course runs northerly to a point in "the pond where the end of the eighth course hereinafter described will intersect with the same ..." This "pond" is the same area and approximate dimension as that shown on subsequent aerial photographs, et cetera, although westerly of the Velsicol property. I am saying it is not on the Velsicol property. It is not the "quarry" shown on other documents which also is off the property in question (I am referring to S-19, the 1963 Coast and Geodetic Survey). Although the precise initial courses conveyed by the deed (S-26) nearest the railway and roadway cannot and need not be precisely followed on the Martin survey (S-27), the balance of the deed description can be that the water body referred to as Nevertouch Creek existed in 1917, and the then configuration was not as straightened and uniform as it appears in subsequent maps and drawings. I am not saying it was a major change, but it is obvious that there was some change.

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The fourth deed course refers to a distance of 2,790.9 feet more or less, which generally conforms with the present southerly boundary of the Clause and Oak Point Excavation and Foundation Corp. property. It specifically states that as it runs along this distance "crossing Nevertouch branch of Berry's Creek" and continuing to the "easterly fork of Berry's Creek" to the "center of the easterly branch of said Berry's Creek". It then follows in the fifth course the center line of Berry's Creek "through its various winding courses to the point where Nevertouch Creek enters Berry's Creek. Then in its sixth course it says "thence (six) along the center line of Nevertouch Creek to the point therein where a drainage ditch enters said Nevertouch Creek, said ditch being the land herein described and land now or formerly of Melchoir Melbig . . ." The land referred to as Nevertouch Creek which is crossed on the southerly border and then again on the return course at a northerly border is the long, wide, generally north-south or northeasterly or southwesterly straightened waterway. The Court finds that it is a reasonable inference, and considering the burden of proof since this is an established waterway, that this aspect or portion of Nevertouch Creek, which averages by scale in 1972 by my measurement on the map over forty feet wide is a natural creek which may have been straightened artificially in part by persons unknown at some point in the distant past. The existing scene is water. Further, proofs by way of deeds and the credible testimony -- and I am going to refer to certain other documents as well -- are to the effect that it is and was a natural creek, and the Court so finds. The State has carried its burden as to the generally north-south branch of Nevertouch Creek and certain water courses depicted off of it by Mr. Weidener on C-2 running easterly from the outer line of

Nevertouch Creek and irregularly shaped and the record property owner has failed to carry such burden. I am not referring to any mosquito type ditches that may run in relatively thin lines west from such center line as shown in the aerial photography. What I am referring to are the irregular water courses plotted by Mr. Weidener at the lower portion of the Clause property which do not run for extended distance, but run off of that and generally, here, I am pointing to on C-2, and I recognize the argument as to Weidener being discredited, but I am referring to those particular areas in the approximate center location.

Taking into account S-27, which is the 1917 survey, and the deed references to such landmarks as Nevertouch branch of Berry's Creek (and I am referring to S-26 and V-1 which I will discuss shortly) as well as the credible testimony and exhibits and the burden of proof, the Court concludes that the long waterway generally running east-westerly and which scales off the 1972 base map as roughly twenty feet wide and which appears to be the southerly boundary of the Velsicol property, at least to the center line thereof, is a straightened natural waterway and tide flowed. Title is quieted in the State as to those waterways. The remaining half would be on the adjoining property of Diamond Shamrock Company which is not a party to this litigation.

Momentarily departing from the chronological order, I am going to refer to some other deeds. A December 18, 1961 deed (S-24) relative to the Clause property from Fries Brothers, Inc. to Inter Chemical Corporation (an Ohio corporation) refers in the eighth and ninth courses to the point where Nevertouch Creeks enters Berry's Creek and thence follows along that Creek to certain lands conveyed to Jacques Wolf and Company by a June 27, 1960 deed.

The survey by Ronald Brown (I am talking about S-23) dated December 6, 1961, has the label "Nevertouch Creek" on the north-south aspect of the water course.

A June 28, 1967 deed (V-1) relative to the Velsicol Wood-Ridge and Carlstadt property was from Wood-Ridge Chemical Corp. of Nevada to Velsicol Chemical Corporation of Illinois. Deed courses number ten and eleven refer to Nevertouch Creek on a portion of the Velsicol property and along the center line of said creek for 860 feet more or less to the middle of Berry's Creek. The recitals include reference to the rights of the State and others in the various creeks, including specifically Berry's Creek and Nevertouch Creek.

VC-1 is undated, but was represented to be a July 19, 1932 aerial photograph as a scale of one inch equals ten thousand feet. It confirms the location of Berry's Creek and the former creek bed which was covered by fill as well as Nevertouch Creek where it met Berry's Creek and went across the property line into a network of waterways which some witnesses referred to as possible ditches or straightened creek beds. This photograph does not clearly show the pond area off of the property either because of the texture of the photograph, the time of day or other reasons. Blotchy areas there cannot be clearly distinguished as being water or something else. Frankly, a comparison of VC-1 with the 1940 and 1953 photography raises some question as to its actual date. It might not be a 1932 photograph, but could have been taken some time after 1940. Frankly, I do not think it matters for specific findings in this case.

In any event, I turn to VC-2 which is an April 6, 1940 aerial photograph which shows essentially the same information as the 1932 aerial photograph. However, the 1940 aerial photograph (including VC-2A and 2B) also shows wide and elongated areas heading from east to west -- obviously wider than the usual mosquito ditch size, at least based on the testimony that I heard as to those sizes.

S-14 is a paper print enlargement of a section of a 1940 aerial photograph. It clearly shows the water areas already quieted in the State by the partial summary judgment. During the trial on October 5, 1973, a witness drew a red rectangular area around the fill area which was subsequently placed on the property. The approximate location of the water course as affected by the placement of fill was marked in green ink. The photograph also shows the irregular shaped pond area beyond the westerly portion of the Velsicol property near the railroad and Route 17.

This so-called "pond area" is connected, at least there, to the former water course by a serpentine natural creek bed, which creek bed even Velsicol's post trial exhibit two (which was part of its brief and which is extracted, it appears, from VC-66) labels in green a "field located MHWL", which obviously is an abbreviation for mean high water line, and seems to concede as such, and to an elongated, fairly wide water area heading westerly off of Navertouch Creek. There are large and small undulations on that tributary. The Court finds that the serpentine configuration is a former, natural, tide-flowed water body and title thereto is quieted in the State.

Navertouch Creek is shown with a configuration running northwesterly from Berry's Creek and with parts depicted as straightened waterways, one branch running southerly with a bulbous type configuration as shown on some of the other maps and the other a large east-west waterway. The Court has already indicated its findings that they are natural creeks, perhaps having been straightened in part.

Prints of the Mosquito Commission maps of the Carlstadt meadow dated April 4, 1941 (VC-3 and VC-3A) of the Bergen County Mosquito Extermination Commission at a scale of one inch equals four hundred feet show the same configuration on the enlargement of the 1940 aerial photograph (S-14). The irregular pond area is labeled "chemical works disposal lake," and it is for that reason I indicated it is not sure whether that was a pond or whether, in fact, it was a disposal area used by chemical companies for disposal of their waste, but that is what is depicted on it in 1941. Obviously, an inference is that it was so used. It shows the former bed of the creek above the fill area with a tide gate noted near Berry's Creek. A witness has drawn in red on the print of the Mosquito map the Clause property. A bulbous area in the north-south water is depicted at the approximate southern border of the Clause property. What I am referring to as a "bulbous area" in the north-south water is depicted at the approximate southern boundary of the Clause property.

The 1931 aerial photograph (S-12), which was enlarged and rectified to the Carlstadt panel shows the small former water course, which I find and have found, to be a creek bed, in a natural type configuration leading off of the natural creek falling into the so-called "pond area." This former water course was circled in red.

Aerial photographs dated December 5, 1953 (VC-36 and VC-37), show the presence of fill developing on the land, and depicts substantially the same configurations as on the immediately prior exhibits although development has increased in surrounding areas. The natural appearing creek beds in the vicinity of the pond area are still present. The inverted hooklike configuration off of Nevertouch Creek and near Berry's Creek is present. I do not think there is any dispute as to what I am referring to, but I point to it on the copy of the work exhibit on the board -- and it was present in the 1940 photograph and 1973 base map and 1978 surveys, except there has been obviously more development between 1940 and 1953 as far as building in the overall marsh area. Many more buildings exist in the 1953 aerial photograph in surrounding areas, particularly north of the so-called "pond area." In addition, a pond area on the other side of Berry's Creek has obviously been filled in and another ponding area substantially enlarged. This water is presumably being pushed or channeled elsewhere as the laws of physics would seem to dictate. These are off of the properties in question, and I illustrate them to show the effect of changes in the area. There has obviously been much increased filling alongside that pond area as well as construction.

The October, 1953 aerial photograph which is VC-56, VC-56A and 56B, and the May 6, aerial photographs are of little assistance to the Court.

An October 18, 1960 aerial photograph, which is enlarged, shows what may be some partial dislocation of the former creek bed, and I am referring to VC-58. It has a more irregular configuration than as ultimately caused by the artificial fill by the private individuals that I refer to. It confirms the existence of small tributaries or creek beds off of Berry's Creek in the easterly or marsh section of the Clause property. I am referring to this area over here at Berry's Creek.

I have also considered VC-53A and B. Those photographs are not that clear. I am talking about the quality of photography at this point, so it could be of little assistance.

S-15 is the next chronologically. It is a paper print enlargement of a 1961 aerial photograph. Dr. Feinberg circled thereon the section of the filled area which moved southerly the former creek bed which had tidal access from Berry's Creek. He also labeled the water courses referred to as "Nevertouch Creek", the straightened portion which generally goes north and south. In addition, what appears to be a former creek bed off Berry's Creek in the easterly part of the Clause property was circled in red. That configuration appears as a creek bed, and since established by the credible evidence and the documents has been and is quieted in the State of New Jersey as found to be subject to the State's claim. Examination of VC-38A and B as well as VC-37, VC-35A and B, VC-37, VC-36 and VC-2A and B (we are talking about 1953 and 1940 aerial photographs introduced in evidence) confirm this configuration.

A December 6, 1961 survey (S-23) of property for Inter Chemical Corp. in Carlstadt at a scale of one inch equals one hundred feet prepared by engineer Arnold B. Brown, in connection with a title insurance policy of lawyers-Clinton Title Insurance Company of New Jersey shows, on what is now the Clause property, the straightened area running from Nevertouch Creek at the top also being labeled Nevertouch Creek. A note indicates that not all drainage ditches are shown.

A September 1962 proposed map, (S-25) prepared by the same engineer at the same scale shows as to the Clause property the same "Nevertouch Creek" designation continuing from Berry's Creek.

I have considered VC-38, 39 and 40, all of which are November 15, 1962 aerial photographs which show the fill area having moved the northerly former natural creek bed on the Velsicol property and filling in certain portions of the former creek bed near the large ponded area on the westerly portion of the Velsicol property. Traces of that former creek bed still remain and are visible. They also show the inverted hook configuration of Berry's Creek and show a creek bed on the easterly portion of the marsh area leading off of Berry's Creek, as well as certain other minor tributaries. There are no vehicle tracks on either of the two properties in question, and nothing that could be considered such, and I refer to that because of certain of the testimony. There is a line that might look like such an item. There had been testimony by one of the record property owner's witnesses, but it is off and below the properties in question in this decision. I note that VC-40 does not have the complete areas of the property in question. The creek bed depicted in the marsh area east of Nevertouch Creek (talking about east of its north-south course) and off of and on the westerly side of Berry's Creek on lands claimed by Velsicol and Clause are tide flowed and title thereto is quieted in the State.

S-19 is the next chronologically, map number one of five of the Hackensack River, prepared by the former Coast and Geodetic Survey at a scale of one inch equals eight hundred feet, compiled from aerial photography taken in November 1962. It has the usual Coast and Geodetic symbols for designation for mean high water line, indefinite shoreline, and so forth. The related project report (S-3) discusses the heavy, bold lines and the indefinite shoreline (on pages 5 and 6) and it discusses the difficulty with measuring in the marsh. The Clause property has been outlined for trial purposes in red and the Velsicol property in yellow on a plastic overlay or covering of it, I suppose, more accurately. The tide gate previously referred to in another exhibit is shown on the Velsicol property in the northeasterly corner and there is a black mean high water line drawn along certain portions of Berry's Creek abutting the Velsicol property. This map shows a slight break of about one-eighth of an inch between one of the natural former creek beds and the pond or "chemical lake" itself. The thicker black line which was circled by a witness is a levee, and the Court so finds. The hook configuration in Berry's Creek is also shown. Likewise, certain creek areas are shown running off of Berry's Creek and onto the Velsicol property. Their configurations as depicted may be used to supplement the location of creek beds in that area referred to in other exhibits as to the eastern marsh area.

Mr. Hull of the N.O.S. agreed that in considering the Coast and Geodetic survey maps, that the mean high water line "meanders on the inland marsh, but has not been so designated by N.O.S.," as it was then known, Coast and Geodetic Survey.

The Corps of Engineers mapped the

tidal waters. The "Project Report - Hackensack (January 1964)", which was S-5 in evidence, was prepared by the Coast and Geodetic Survey and described the scale and the use of various coloring in the map legend. Page 5 of the report states:

"*** The indefinite shoreline (the outer limits of heavy marsh growth) is shown in blue for areas where the actual mean high water line meanders back from the banks through dense marsh and could not be identified.

"All marsh growth is shown by a green tint regardless of whether the marsh has been flooded or whether it has been drained."

The report continues at page 12:

"... Where the mean high water line was found to be just inside the marsh growth,measurements were made to the outer limits of the growth visible on the photographs and the mean high water line was thus plotted on the photographs. The mean high water line was not mapped where the hand level elevation showed that the ground at or near the banks was below mean high water and the mean high water line meandered off into the marsh."

The Court adopts S-11, an overlay of a section of a 1963 Coast and Geodetic Survey which fits on S-9 (which is part of the 1972 aerial photograph referred to as the base map) as showing a conservative establishment of the shoreline (the mean high water line) at Berry's Creek. To that extent and to the extent VC-2, VC-3, C-2 and C-4 depict a shoreline along Berry's Creek further westward or inland, those areas are also quieted in the State. That establishes the boundary along Berry's Creek. The Court finds that this mylar (S-11) depicts with a sufficient degree of accuracy, certain small water courses or tributaries off of Berry's Creek and also shows Nevertouch Creek as it existed at that date on the properties in question. The State has established title to these as being natural creek beds and title thereto, as shown on S-19 and S-11, are quieted in the State.

The April 4, 1965 aerial photograph (I am talking about VC-59A and VC-59) confirms some natural creek bed areas near the pond or chemical disposal lake area that I referred to, but it is otherwise too distorted and blurred to be of assistance. The smaller version is totally unhelpful. The same applies to VC-59B which is the stereo pair of the April 4, 1965 aerial photograph. Some tributaries may been seen in the easterly portion of the marsh thereon, however.

Mr. Angell testified to vehicular activity evident on the property in Exhibits VC-59 (1965) and VC-4 (1968 photography). The Court cannot find and does not accept that was a fact in 1965. It was really not discernible. The photos are of poor quality. I will discuss the 1968 aerial photography shortly.

The June 20, 1966 aerial photographs show the natural creek beds and certain drainage ditches fairly clearly and confirm the tributary off Berry's Creek on the easterly portion of the marsh. I am referring to VC-60A and VC-60B. VC-60 shows a fairly lengthy and well-defined creek bed off of Berry's Creek on the easterly portion of the marsh.

At this point, I am going to turn back to another deed which is VC-1 in evidence, a June 28, 1967 deed that I referred to from Wood-Ridge Chemical Corporation to Velsicol Chemical Corporation. The eleventh course thereon runs along the southerly boundary of the property and goes 880 feet more or less along the "the center line of Nevertouch Creek, as shown on the land survey ... by Frank W. Koestner, dated June 3, 1960 and as revised June 20, 1960 ..." Unfortunately the 1960 survey referred to was either not available or not submitted to the Court. The deed also is subject to -- I alluded to this before, but I want to state it specifically -- certain provisions. I am going to quote subparagraphs d, e, f, and g:

"(d) Rights, if any, of the

State of New Jersey and others in lands located in the bed of Berry's Creek, Nevertouch Creek and any other creeks and touching, bounding or crossing said lands.

"(e) Rights, if any, of adjoining owners and others in all brooks, streams, ditches or drains crossing or touching the herein described lands.

"(f) Rights, if any, of owner of dam to use and maintain same across Berry's Creek.

"(g) Rights, if any, of others, to that portion of lands located east of Berry's Creek as the same formerly existed."

Now, it is recognized that the qualifications in the deed all say "if any", but it is certainly clear in 1967 and before that there were questions of possible claims of ownership by others, including the State, as to certain creek beds, certain water courses, and there is a reference to a dam which obviously would interfer with the natural flow of the creek, so all of these things are in the chain of title and exist back as far as, at least, 1967, and some of the earlier deeds refer to it.

Now, turning back again to the documents in chronological order, continuing, I am going to refer generally to the 1968 aerial photograph, but I am going to refer to VC-61A and B which are the May 21, 1970 aerial photographs. VC-61 is an enlargement of VC-61A. I note thereon and find the increase in developing. There is a creek bed evident in the marsh on the east side of the properties I am talking about, but west of Berry's Creek in the marsh that I previously alluded to.

The August 20, 1972 base map, and I will refer generally to S-9, shows much landfill in the area and shows the former creek bed near the Berry's Creek section having been moved below the landfill area and in a more straightened configuration. It could hardly be called a ditch because it appeared in a straightened configuration. Much of the creek beds in the area of the pond, the so-called "pond" west of Velsicol have been filled. It shows creek beds from Berry's Creek on the easterly marh area of the Clause property. Those small creeks are clearly and obviously tide flowed and title is quieted in the State. These are confirmed even by the Weidener surveys, which I will refer to in more detail shortly.

S-30 is a September 1972 survey by John Harth of Survey Tech Corporation of the Clause property. It shows the mean high water elevation for Berry's Creek of 2.90 and the width of the waterway at high water of fifty feet plus or minus adjacent to the easterly border of the property. Elevations on the marsh are essentially all below that figure with the exception of a cigar-shaped area denominated "fill pile" at the southeasterly border of the property near Berry's Creek and along the southerly border of the Clause property. Another fill pile, again relatively small in shape, is shown at the northwest corner of the property. Internal elevations generally appear below the elevation of mean high water except for fill and some banks along creeks. The scale of this map is one inch equals one hundred feet.

S-29 is another revision of S-30 in which the cross section of Berry's Creek was removed.

VC-66 is a December 20, 1974 aerial photograph. It depicts the property in question, shows extensive filling on the Velsicol property and shows the creek bed with a fairly substantial size to it below the fill area in its relocated location. When I say "size," I am talking about width relative because there are certainly distinctions between what could be a mosquito ditch and a canal and so forth or a natural creek of fairly large width. It also shows the marsh area beneath it including certain tributaries off Berry's Creek, but it also shows what appears to be vehicular traffic along the area just below the relocated creek and just above the southerly boundary line and the southerly waterway running east-west across the property. There is very little traversing of the property by such lines within the interior of this marshland. I am talking about marks being along the perimeter as opposed to the interior. These track-type marks obviously occurred between the August 20, 1972 photography and the December 20, 1974 photography. Indeed, some of the tracks as shown on VC-66 appear to traverse areas which are tributaries or creek beds off of Berry's Creek and into the marsh.

I turn next, and find, that a January 20, 1975 survey by Emilius and Associates (S-28A and S-28) of the Velsicol property contains a mean high water line which is similar to the State's claim on the Velsicol property. It also has the east-west "ditch" labeled "Nevertouch Creek. This water course is at the southerly boundary of Velsicol, as I have already referred to. Interestingly -- and perhaps as a footnote -- nobody proffered testimony as to how the creek got the name "Nevertouch," such as perhaps at high tide the banks could never be found or the one branch never touched the other, whatever. I am not finding that as a fact, but just noting the absence of historical proofs which may be available. Somebody named it at some point in ancient history. Only a few elevations are shown in the marsh area below the fill area -- that is, between the creek at the base of the fill and the creek labeled "Nevertouch Creek" at the southern boundary of the property. Certain markings in green have been added in green as tick marks pointing to highland areas.

S-28 is another copy of a January 20, 1975 survey of Velsicol property by Emilius and Associates. The scale is one inch equals fifty feet. This is without the tick marks. The east-west water course at the southerly boundary is labeled "Nevertouch Creek" and would approximate twenty feet in width, so we are talking about a fairly substantial width in terms of measurement. Of course, it is narrower than Berry's Creek and the other branch of

Nevertouch Creek.

In a deed dated July 14, 1977 between Clause and the Clause and Oak Point Foundation and Excavation Corp., the fourth course refers to the running of a northern property boundary east 899.45 feet to the center of Nevertouch Creek. This appears on a September 1972 location survey of the Clause property by Survey Tech Corporation (this is S-29) at a place where the north-south branch starts to become relatively straightened, but at a distance of about 50 feet south of and below the east-west water course from Berry's Creek (a branch of Nevertouch Creek) at the southern border of Velsicol's claimed property. That east-west incomplete or essentially unmapped water course (I am referring to this document) is off of and above the Clause property and at what would be the southerly boundary of Velsicol. Three other depicted east-west water courses, but on the Clause property, are each labeled as "canal," and a "fill pile" is shown on the northwest area of the property. Likewise, the sixth course, which runs westerly and along the southerly border comes to a point in the center of Nevertouch Creek at a point where it flows southerly off of the property. I cannot find that those so-called areas labeled "canals" are of the nature that title should be quieted in the State, and I, except as may otherwise be necessitated by my findings, I have left that in the property owner and quiet title in the record property owner substantially.

VC-63A is an August 25, 1977 aerial photograph. There is continued evidence of fill in certain areas but the track marks have apparently disappeared and do not show up even on the enlargement (VC-63). I cannot find specifically what made these marks, but I just indicate that they have apparently disappeared. Additional disturbance is evident by increased fill. In addition, there is some interference with the inverted hook configuration off of Berry's Creek.

VC-63B does not show the property

in question. As the Appellate Division noted in the *City of Newark* case and as I have previously observed from the difficulty of attempting surveying in the marsh in other tideland cases:

> "It is also apparent that the conventional method of land surveying is wholly unreliable and inappropriate for the purposes of identifying whether lands are now or were formerly flowed by mean high tide as a basis for State claims of ownership."

And that quote is from page 5 of the slip opinion of the Appellate Division in the *City of Newark* case.

This is so particularly as to formerly flowed and the impact of artificial change. Such surveying may give a presentation of the then existing scene at the time of the survey if accurately and completely done, but little more. Historical data and aerial photography have consistently been of more assistance to the Court in meadowlands tidal and title delineation cases.

Weidener's survey and in the approximate configuration of these documents to the extent shown are quieted in the State, notwithstanding they are not shown on the Emilius Associates (Carlson) -- O'Hargan survey, which I am going to refer to shortly, and that was done after the Weidener survey, I am talking about. I am not talking about the original Emilius survey that I referred to of 1975.

Essentially, Weidener's survey was discredited as to extrapolated water elevations (the "EWE's") and because of inaccuracies of his procedures and lack of controls which resulted in portraying of a higher level of tide. However, this does not mean it need be totally disregarded. Indeed, what Weidener portrayed as tide flowed would be extremely conservative based on his errors. In other words, it would have given an error in favor of the property owners. As a result of Weidener's errors there was a .46 error in all of his field elevations on C-2 and V-2. Thus, a considerable number of elevations appearing on C-2 and V-2 would be lower than mean high water, applying an elevational test, and notwithstanding Mr. O'Hargan's attempted explanation which I do not accept here. Incidentally, Mr. Weidener depicts the branches of Nevertouch Creek in the same approximate widths previously mentioned, and perhaps a little greater.

The Court would have to reject most of Mr. Weidener's testimony. He was inaccurate, not careful in his work -- he was, frankly, not of sufficient expertise, but he appeared more as a partisan witness in his testimony, who appeared, in fact, result-oriented, not matter what, and notwithstanding his work did not meet the test of a professional, and I will refer to *Vornado vs. Hyland*, decided by our Supreme Court, as to what the Court should do in large part with such a witness. However, that is not to say that some relevant findings may not arise from some of that testimony.

The Weidener survey of the

Velsicol Chemical Corporation property, V-2 of the same scale, dated April, 1978, revised August, 1978, was also discredited but shows the location of Berry's Creek and the inverted hook as well as Nevertouch Creek. His reference source seven is a topographic survey by Emilius and Associates. That survey, and I have already referred to, shows Nevertouch Creek labeled as a creek even throughout the north-south area referred to as straightened. Mr. Weidener testified that he disregarded the notation "Nevertouch Creek" even though it appeared on various historical documents and surveys in evidence. However, he did not disregard that reference in certain deed descriptions such as S-24.

The large straightened waterway running east and west, which forms the southern boundary line between the Velsicol property and the Diamond Shamrock Corporation property has been held to be a straightened waterway, as I have already indicated.

V-3 is a print of the Emilius survey of the Velsicol property containing certifications by Emilius and Associates (by Richard Carlson), and Mr. O'Hargan. These were the surveys that were developed during the course of the trial. Mr. O'Hargan has attempted to survey a mean high water line through so-called "HWE points" plotted on the survey. Some areas of disturbed ground are shown, but based on the scale none of those areas would appear to be much more than one hundred feet in diameter in the area southerly of the creek bed as relocated. I am talking about labeled as "disturbed." They are small, less than one hundred feet in diameter. Former creek bed locations previously quieted in the State are also shown. Many interior points are not plotted -- perhaps this would be almost a physical and practical impossibility, and I recognize that.

A similar type survey C-4 dated January, 1979, was made of the Clouse property. The north-south "straightened" waterway which is Nevertouch Creek was not plotted in the survey. That was added in pencil during his examination as a witness at trial.

S-43 and S-44 are, respectively, copies of the Emilius survey -- when I say Emilius here, I mean Mr. Carlson, who was a relatively new employee of Emilius and Associates, so I refer to that as the Emilius and Associates survey dated January, 1979, of the Clause and Velsicol properties, respectively, on which green dots were placed April 4, 1979, by a State employee, indicating elevations that were 3.28 feet or below. These green marks not only are around the water areas in the marsh next to Berry's Creek but cover a large portion of the Clause property.

By way of comment on these surveys, there is a notation that the total deed area on the Clause property is 30.88 acres "less Berry's Creek and Nevertouch Creek below mean high water line equals 3.52 acres for a net of 27.36 acres".

On each of these surveys the mean high water line is surveyed by Paul T. O'Hargan of Craven-Thompson and Associates, Inc., whose certification says that it is "true and correct to the best of my ability and belief." But Mr. Carlson of Emilius and Associates apparently did not work independently of Counsel's instructions as to what should or should not appear on the survey. A surveyor is expected to show what should appear on a survey -- especially when there is a tideland title dispute and water areas whether existing or former, are critical -- or at least important for aspects such as burden of proof and delineation.

The longterm existence of many of the creeks and streams in the area and the obvious tidal connections and tidal flows and the approximate dimensions of some creeks which are substantial such as Berry's Creek and Nevertouch Creek and as borne out by all the subsequent documentation support the State's claim of regular tidal flow twice daily for the requisite period of time, certainly with respect to not only Berry's Creek and Nevertouch Creek but to the creeks in the easterly portion of the Clause property flowing into Berry's Creek. Likewise, the same applies to the creek bed near the pond area off the Velsicol property -- except perhaps as hindered by interference by whatever chemical company used it as a disposal lake.

I have considered Mr. O'Hargan's testimony as to his survey efforts and EWE points. He may indeed have relied in part on the opinion of a person who had not testified. On depositions, O'Hargan had indicated he made a joint determination with Dr. Ogilby, but at trial he seemed to disavow this. I find that he did rely in part on those discussions. He did not portray certain waterways or ditches, mosquito or otherwise, on his surveys, which were of more of a couple of inches or feet in size, we are talking about, and this was a joint decision made with Counsel who did not want what they considered as ditches or mosquito ditches to show. Frankly, I think this approach is an abdication of professional responsibility by a surveyor. Mr. O'Hargan allegedly found certain benchmarks not consistent with published elevations and he adjusted them rather than pursuing it in any other fashion with any other appropriate agency or in any form. Frankly I was not impressed with that. He apparently used two different controls on two different days. He was evasive as to certain questions on cross-examination particularly as to whether he precisely located two EWE's. He almost continually tried to avoid Deputy Attorney General Cooper's question as to whether he ever precisely located them and gave the impression he was becoming more of an advocate for a position as opposed to an expert. He was also somewhat evasive as to whether or not other surveyors could locate the same points that he used in trying to verify or confirm his survey.

However, as to the utilization

of EWE points -- let me just back up -- as to those points, I think no survey is of any use unless it can be used by any other surveyor or other experts in the field and that is why I refer to that necessity of a surveyor locating points that can be utilized by others.

However, as to the utilization of EWE points, although the Court recognizes that the EWE technique utilized may be one tool, I find, based on the testimony, it is here of little or no aid to the Court when attempting to determine "now or formerly flowed," particularly in other than areas along tidal water courses. Artificial changes, natural changes, changes in sea level -- all have implications here and all that can be said in the Court's view for the EWE technique compared to N.O.S. extrapolations is that it gives a fairly accurate elevation at the particular point measured as to the then current scene, provided extreme care is used in connection with the measurements and the minimization of outside influence such as wind and wave effect on water surface. For the most part, that testimony was irrelevant to the findings of the Court. Indeed, the description of how the so-called surveying rod "led the surveyor" almost mystically along the required path when demonstrated in the Courtroom, obviously had great deficiencies and was by no means exact and depended largely on the rodman's determinations as to which direction he chose to turn or place his feet. Even the field notes of this witness show there are gaps or inability to locate various points. Thus, this method in the Court's view could not be used as any precise measure of tidal boundary. Furthermore, Mr. O'Hargan apparently relied on instructions and opinions of Counsel rather than doing an independent job that an expert would normally perform and be able to present the type of testimony that a Court would not be led to the conclusion that was either biased or slanted, rather than the objective testimony of assistance to the fact finder. (I refer to Vornado v. Hyland, 77 N.J. at 359.)

It is also obvious that where the so-called "mean high water line" referred to by O'Hargan was allegedly "obliterated," he could not factually indicate where it might have been previously. I am referring specifically to his points 210 to 221.

Mr. O'Hargan did not compare the Emilius mean high water line with his line. He did not compare the 1963 Coast and Geodetic Survey map with his mean high water line. In any event, obviously he was only trying to establish or draw a line as of the date he was there, but that line was not frozen and is not static as of that date in 1979, and even if it was, that is only one element, and a minor element, at this point.

The State argued in its post trial brief and recommended findings, that on the other hand, that much of the internal land areas of the Clause and Velsicol property is below the level of mean high water and would be subjected to tidal waters and flowed by the mean high tide. It also urges that the area where the mean high tide line has been obliterated would provide access to the mean high tide from Berry's Creek to flow the entire Velsicol tract. This is true if indeed the connection is in fact made and if there is no impediment or rise in the land which would halt the incursion of the tide. Necessarily, the State is relying on the fact that the area is largely below the level of mean high tide and it argues that the phragmites signature class confirms this. I have already discussed that in part. The State also argues that there is nothing to impede the flow of mean high water from the Velsicol property across the Diamond Shamrock property and across the Clause property. As I have said, the proofs were insufficient for me to so find. There are other inferences which might also be reasonably drawn.

The State argues that based on the survey by Mr. O'Hargan there is no mean high water line shown by him from the area of point 210 to point 221. As the result, Mr. O'Hargan on the advice of Counsel and information supplied by Miss Teleky resurrected what he referred to as an obliterated mean high water line. Between those two points, Mr. O'Hargan was not able to find an elevation higher than the elevation of mean high water (I refer to Exhibit S-4). It is clear that there was tidal access from Berry's Creek to the subject premises of Velsicol through this area, but the Court is not satisfied that the State has proved tide water regularly flowed that entire marsh and there was nothing to impede the flow of mean high water across the entire area of Velsicol.

It is clear also that there are some higher elevation points. In addition, the State argues there is nothing to impede the flow of mean high water from the Velsicol property over the property of Diamond Shamrock onto the Clause property. The proofs are likewise deficient for the balance of the lands not herein specifically determined to be water courses, recognizing the harsh impact of such an inference which I feel inappropriate to draw based on these proofs in these two cases. That would, in effect, strip the property owner of the bulk of the land and I am not prepared to make that inference. As noted, merely because interior lands are below the level of mean high tide is not sufficient in and of itself to establish State ownership and divest a record title holder of its claim. I refer to <u>O'Neill vs. State Highway Department</u>, 50 <u>New Jersey</u> at page 323. The botanical theory really was the linchpin of such requested conclusion here. Absent satisfactory proof of the botanical theory as to phragmites or satisfactory proof of actual regular tide flow, I cannot so find. This was not established in this case.

As I have indicated, certain of the State's claims on the Velsicol property were corroborated by existence of a 1975 survey by Paul Emilius which depicts a mean high water line. Significantly, I don't know if Mr. Emilius is alive or not, but he did not testify, or anybody who was there at the time, did not testify to that. Mr. O'Hargan agreed on cross-examination that the Emilius mean high water line and the State's claims to those premises were very similar if the eastern portion and several islands conceded by the State to be upland were excluded.

In the Court's view, there is some question as to the accuracy of surveys both by Mr. Weidener and Mr. O'Hargan in any event simply because each used the older tidal epoch. Both of those surveyors conceded that had the 1957-1975 epoch been used the elevation of mean high water would be higher, and thus, the location of the mean high water line would be somewhere inland of its depiction on their surveys, and I refer to that, and I also indicated, and I have not found it in this case, because it is not appropriate, that there can be an effect when there is a change in tide level by natural means. I will not specifically hold in this case because it is not necessary to this aspect.

The National Ocean Survey uses the nineteen year tidal epoch, and generally uses the 1941-1959 period. Later epochs are available on request. Tide levels can be obtained from shorter intervals based on scientific methods. Perhaps you might call them arithmetic methods, but they can be utilized.

The O'Neill I decision defines "mean high tide" at 50 N.J. pages 323-324, and former Chief Justice Weintraub significantly described the use of the 18.6 years "if possible."

From the testimony of Mr. Thurlow of N.O.S., it appears that the only time in recent memory that N.O.S. changed its epoch was based on a 1960 or 1961 Court decision when they updated from 1924 to 1942 epoch. The procedure essentially appears to be one for the internal workings of N.O.S. and presumably was because of not only basic inertia of a government agency but, I suppose, cost as well as maintaining continuity in navigation charts when such changes would appear to have minimal impact. Of course, the Coast and Geodetic Service is not concerned with boundaries for land for competing property claims, and navigation is not determinative in the type of issue that is before the Court in this particular case. Mr. Thurlow also admitted that the 1957-1975 epoch was available to anyone who would request it and that it would be more precise at a specific point. I specifically so find.

It is very difficult for the Court to conclude that using an, in effect, out-of-date epoch as to the real world relative to what the actual facts may be, could produce a survey which is anything more than an approximation and an inaccurate comparison of a 1941-1959 timeframe with reality in either a 1957 to 1975 epoch or as of even 1979, the year of Mr. O'Hargan's-Carlson's work. I recognize not only basic inertia of a government agency but, I suppose, cost as well as maintaining continuity in navigation charts when such changes would appear to have minimal impact. Of course, the Coast and Geodetic Service is not concerned with boundaries for land for competing property claims, and navigation is not determinative in the type of issue that is before the Court in this particular case. Mr. Thurlow also admitted that the 1957-1975 epoch was available to anyone who would request it and that it would be more precise at a specific point. I specifically so find.

It is very difficult for the Court to conclude that using an, in effect, out-of-date epoch as to the real world relative to what the actual facts may be, could produce a survey which is anything more than an approximation and an inaccurate comparison of a 1941-1959 timeframe with reality in either a 1957 to 1975 epoch or as of even 1979, the year of Mr. O'Hargan's-Carlson's work. I recognize that to some extent the exact measurements of these water courses have degrees of inaccuracies or tolerances, and they even have to be somewhat inaccurate based on aerial photography and survey methods. Obviously, we are not talking about a static situation and to the extent that the Court has the most recent and most relevant facts as to what the level of mean high tide is as of the "existing scene" that data would be more persuasive if a surveyor tries to establish at a specific point in time and space the actual level of mean high tide is such and such, but even that would be inexact to the extent it was extrapolated or averaged -- let alone, taking account of forces of erosion and accretion and so forth. To the extent that former tidal epochs were used, they would only be persuasive while still relatively current (meaning slight variations) or for confirmation of older documents.

The fact that the elevation of Berry's Creek number three has changed from 3.27 to 3.42 feet, a rise of 0.15 feet between the 1941-1959 epoch and the 1957 to 1975 epoch, cannot be disregarded.

Thus, the property owners' surveyors' locations of a purported mean high water line in this case does not represent current epoch ground truth for the further reason that it does not apply the most current tidal datums. It is a close approximation, but it is not anything that I could make such a finding on except to the extent I have to make findings that have to comport, as close as possible, with the best available data.

Nor is it precise as an exact measurement because all things human have tolerances and tolerances involved with tidal datums. I recognize there is some room for discrepancy in almost all measurements, taking into account that at the level of ninety percent probability there is a plus or minus of one-tenth of a foot tolerance in the elevations determined, even if I take them as accurate of either Mr. O'Hargan or even Mr. Weidener, it would also be somewhat imprecise to conclude that the mean high water line drawn by them is the exact location of that line. Nevertheless, in terms of the area along Berry's Creek to the extent that it is consistent with the State's claim as to the line of the mean high water for title purposes, the Court will accept that line.

Now, I have, at this point, I think, concluded most of the factual findings. There is one matter that I feel I must go into before I summarize. I want to review certain witnesses and certain proffered testimony.

The Court should indicate that except as to the proffered testimony of Mr. Schiel and the Earth Satellite report offered by the State, it has elected to consider as evidential, although not necessarily probative or relevant or material or even credible, testimony of witnesses offered by the property owners as to which the Court might have reserved decision and as to which the State had not withdrawn its objections. Certain objections the State did withdraw.

Dr. Thatcher's testimony, I find, unhelpful based on the factual material he attempted to utilize. He made no effort to relate his findings to the subject premises. Likewise, for the most part, Mr. Angell's testimony was not impressive.

I note that Mr. Linthurst reviewed the 1968 aerial photograph, as did Mr. Angell (I am talking about VC-4) and perhaps the 1962 photographs were also reviewed by Mr. Linthurst showing what Mr. Linthurst described as white vehicular lines to the west and northwest part of the Clause property. They did not appear on the Velsicol property. He concluded that the substrate was relatively firm and not marshy. Now, I have compared this with the Schiel proffered report which the Court marked X-1 for identification which apparently refers to 1974 activity on the Velsicol property (referring to VC-66 and VC-66A as well). Mr. Linthurst, although expressing what was purported to be an opinion as to the effect of 160 tons of mercury -- and I do not have to get into this finding on some nineteen acres on the Velsicol property -- could not say where it was found. Obviously, since I have indicated I have not accepted the botanical theory, I do not have to get into that because it has become academic in face of my conclusions as to the phragmites proofs. There is some question about Mr. Linthurst's understanding of the State's procedure, but, in any event, as I said, it becomes somewhat academic.

I want to turn to the proffered testimony of Thomas Schiel of Converse, Ward, Davis, Dixon, Inc. I think a few comments are necessary because of the continued or pursuing or resurrection of the matter both during the trial and post trial brief and requested findings. The Court marked, as I said, Exhibit X-1, his March 30, 1979 report, which had been submitted to Counsel for Velsicol. It had not even been furnished to the attorney for the

State until just about the time it was produced, at the insistence of the Court, on April 24, 1979.

As a result of my findings and conclusions, as I have already stated them, I find essentially that his proffered testimony would be academic and perhaps immaterial, but I want to comment further on it. Viewed as a proffer, Mr. Schiel's report appears to indicate that in late 1974, wide track-like markings occurred in connection with his 1974 work and were visible on aerial photography (presumable VC-66) as a result of the test boring procedure. That photo shows track-like markings, as I have said, only on the Velsicol property -- essentially on the perimiter, and hardly in sufficient quantities for me to conclude from the proffered testimony or even the photograph that it affected the entire area. He would say -- I take it, if I accepted his proffer -- that a "significant amount" of the southerly and northerly portions of the virgin area were so affected. His conclusions can be best capsulized by quoting his "Conclusions" on page five of his report as follows:

"As a result of our analysis, a review of the former boring operations, and existing aerial photographs in your files (referring to Miss Teleky), it is our conclusion that the ground surface of the unfilled, virgin portion of the acreage has been lowered as the result of the imposition of fill in the north, from 2 to 3½ inches at the existing ditch up to ¼ of an inch at the southern property line. In addition, the frequent traversing of the site by a track vehicle during the boring operations, primarily along the souther and northern portions of the virgin unfilled area, depressed the surface from four to six inches at that time and most likely this surface depression is still reflected in lower elevations in this area at the present time."

The report which I read in connection with the proffer does not show any attempt to quantify by area, but obviously it would be pretty much confined to the area reflected in the aerial photograph since the photograph obviously had been taken after the vehicle left the area. There is no vehicle in the photograph. Even accepting such proffered testimony that there might have been some subsidence along the southern and northern portions of the unfilled areas and as shown in the aerial photographs, it is clear from subsequent photography that those tracks disappeared and were no longer evident on Velsicol's property subsequent to that. More significantly, they were not there in 1972 and before on that property -- that is, on Velsicol's property. Most of my findings relate to what was the condition before that. It is a fact that the 1968 (VC-4) aerial photograph shows what appears to be tracks of an identified origin on the Clause property, and possibly the intervening Diamond Shamrock property, but not the Velsicol property. In any event, essentially the State's claim to those areas is based on the botanical theory and the 1972 photoghraphy as to phragmites phenotype signatures. Furthermore, even taking such proffered evidence at its best, the lowering of elevation is no where hinted to be still or subsequently in the neighborhood of four to six inches, but obviously less. This would also have to be weighed against the 1896 Vermeule report, as a proffer and as evidence on page 294 which I previously quoted which discusses subsidence and the rebuilding up of the marsh by allowing water and silt to reundate and, in effect, swell up the compressed area. Certainly the absence of this testimony was in no way prejudicial in this case in light of the fact that I have not accepted the State's testimony as to the phragmites theory as to this area and only based on documents, certain pre-existing tidal waterbeds.

As to Mr. Schiel, an August 13, 1979 post-trial responding letter memorandum to the State's submission, Miss

Teleky says the following:

"... However, because he was a witness in the Ventron suit (and parenthetically that was completed and prior to this decision and prior hereto, that is the mercury pollution case) which is before the Honorable Sharwin D. Lester and testified on behalf of one of the co-defendants in that suit, Mr. Schiel or his firm were not too receptive to testifying in a companion case, where there might be a potential conflict. Accordingly, Mr. Schiel did not accept the offer on behalf of Velsicol until the end of December at which time we had our preliminary conference ..."

Now, it is obvious, as I have said, that the Ventron case in terms of a conclusion, I think it was decided in September of this year, I can take judicial notice of that, it was obvious there was contact in December which is prior to the date we are talking about in the report. There was apparently a conflict with who or what, but, frankly, it more likely had to do with the question which was raised in the testimony of inconsistent positions which had to be taken in the mercury pollution case. It is clear Mr. Schiel is a potential witness having some relevant facts to the case or his being a potential witness was long known. Indeed, if memory serves me, Miss Teleky used to work for his firm, at some point, if I remember his testimony, as a geologist expert in other Meadowlands cases. In addition, issues of subsidence were also known as reflected in Vermeule's report of 1896, his maps as annotated -- and, indeed, from experience of the same attorneys in prior tideland litigation.

As to subsidence, the Vermeule report indicates on pages 294 and 295 that when there was subsidence the land was restored by reflooding. I note also that Mr. O'Hargan testified as to a one inch subsidence and so forth on apparently the Velsicol property. Even Mr. Slam Angell, a witness for the property owners, indicated on cross-examination that subsidence generally would not occur when water is constantly on the surface of the land, although he disagreed that subsidence could not have occurred to the increase in surface water because the cover of the water would not be continuous.

As to subsidence, I refer to the determination of the Court in New Jersey Turnpike Authority vs. Desiderio, presently on appeal, and I refer to what was said there, if I have not quoted it before, I thought I did, but the Vermeule report said:

"... Experience in this State has shown, however, that where the marshes area of a peaty nature, drainage and tillage results in a steady shrinkage or subsidence of the level of the marsh, and this subsidence continues untill the marsh becomes as low as low-tide level or lower if the drainage is continued and the water pumped."

That is the end of the quote, but the report goes on to state that methods have been used to counteract this subsidence by allowing the tide water to flow in and deposit sediment, et cetera.

So it is clear from this case, and from all of the prior cases, as well as the Vermeule reports, that subsidence, countermeasures to reverse subsidence, and regeneration have been known from at least Vermeule to date and certainly by the trial attorneys in this case, to be a part of the history, evolution and problem in the complex area called Meadowlands. The limitation of testimony of this one proposed witness of the record property owner was virtually the only limitation so enforced, notwithstanding, perhaps, valid objections by the State for certain other related matters. If the latter is error, it was generally in the Court's attempt to find the truth in this case. I have to note that the attorneys for the property owners were involved in the trial of the Desiderio case and other tideland cases, including the Parker, M.B.M. and Logothetis cases, although

Miss Teleky testified as an expert in those cases rather than being in the capacity of an attorney.

I have reserved my right to supplement in the event of an appeal, I think I have done that.

I just want to indicate further in terms of that ruling, I have many other things I could say on that particular aspect. If there is an appeal, I will supplement it, but I will not take the time to go into it now. Frankly, I would just say that if in the face of disregard of discovery rules to the extent that they have been, that the Court or any Court was required to let in such proffered testimony on such excuses, I think that I would have to conclude that the Court Rules in that respect are not worth the paper they are written on, no more than a sham and should be tossed into the nearest trash can. I do not believe that was or is the spirit or intent of our Rules. When parties say they are ready for trial, they should be, and that is the way that cases are preserved.

I will not go into the balance that I intended to say because, frankly, I don't think that that would affect the determination of this case and I will only reserve that in the event it is necessary for me to supplement.

I have now concluded my factual findings.

By way of a brief, non-inclusive summary, the Court finds and holds as follows:

1. Berry's Creek is tide flowed and the State's Riparian title extends to the mean high water line at the western line of Berry's Creek as depicted on the State's exhibits.

2. Title to creek beds shown on S-9 (which is a portion of the 1972 base map) on the Clause property and running from Berry's Creek onto the Clause property are quieted in the State.

3. Title is quieted in the State as to the relocated water course along the

base of the landfill on the Velsicol property as shown in the 1972 and subsequent photography.

4. The State has title to, and title is quieted in the State, as to the so-called straightened waterway known as "Nevertouch Creek" on the Velsicol property and through its north-south branch or course through that property and through the Clause property and off of such creek bed as to certain water areas on the Clause property as shown on Weidener's survey C-2 and V-2; and likewise title is quieted in the State as to the branch of Nevertouch Creek running generally east and west and forming the southern boundary of the Velsicol property, or along the southerly boundary of said property.

5. Title is quieted in the State in the natural creek bed running from the pond area westerly of the boundary line of the Velsicol property which runs from that pond area to the area of the former water course.

6. Title is quieted in the so-called "inverted hook" area off of Berry's Creek on the easterly portion of the Velsicol property.

Now, specifically, as to Velsicol:

1. I have found already and I reaffirm my determination as to the partial summary judgment order of May 11, 1978.

2. The areas conceded by the State at the outset of trial as upland are quieted in Velsicol as the record owner of such lands.

3. All remaining lands held by Velsicol as the record property owner and not specifically quieted in the State are quieted in Velsicol as record and actual property owner. This, obviously, results in the greater bulk of the land area having been quieted in Velsicol.

Specifically, next, as to Clause:

All lands with respect to the Clause property not previously or herein quieted in the State are quieted in Clause and Oak Point, however the state of the present ownership may be, as record and actual property owners.

I recognize also that likewise, this results in by far the greater area of land held by Clause-Oak Point being quieted in the record property owners. I am aware that this is so notwithstanding that there may -- and I emphasize "may"-- have been a somewhat different result if the State had pursued a somewhat different course by way of the Earth Satellite report and the botanical theory or physically showed water underlying the phragmites in the particular area, and I have indicated my findings for that any my reasons therefor.

Like the situation with the Schiel proffered testimony, that was the trial of this case. Frankly, I am also cognizant if some higher authority were to see things in a different light in hindsight it would appear that these are all either two-way streets or double-edged swords. The trial judge, obviously, can give no advice or suggestion during the course of the trial, nor do I make preliminary findings, nor is the trial judge the possessor of the proverbial crystal ball.

Based on what I said previously, the attorney for the State will submit an appropriate order for judgment quieting title consistent with this opinion, together with exhibits in the form of sufficient location surveys or sketches to be attached to the form of the judgment. The attorneys for the record property owners should obviously cooperate in this respect. It should be done at an early date so the parties can either have quieted what is theirs and the State have what is theirs, and also if the parties want to appeal, which the parties have a right to do, they may do so at an early date and not prolong the quieting of title. The State may submit appropriate descriptions or they can be measured by a licensed land surveyor or engineer if necessary, and a description prepared or appropriate map submitted so that title can be established as if it was a deed record for the parties, and I think that is what the parties would obviously need. A copy is to be submitted to the Court and to the Counsel for the record property owners and may be attached to either the final judgment or an amendatory judgment quieting title. The intent is that a final judgment form should be promptly submitted so that the matter can be resolved as quickly as possible,and I recognize that this matter took a long time both in terms of the trial and in terms of the decision, but it is a complex matter and I am aware of that.

The Court is also aware that the State can produce a metes and bound description -- frankly, that is an expense -- I don't know that the State has to bear the entire expense when most of the property is awarded to the record property owners, so I leave that methodology to working out between the parties as to whether or not a computer description should be obtained and who should pay for it, as to various segments delineated on the exhibits or whether it should be done by way of maps or aerial photographs. If the parties request it, an appropriate computer description may subsequently be obtained and submitted with a request for a more specific judgment or an amendatory judgment, but this should be after the judgment becomes final in the sense of the time for appeal having expired or the Appellate process having been completed. It obviously makes no sense in terms of economy or anything else to order a completed, computer survey prior to there being a totally final settlement. It seems it would be a waste of time and effort, so if the parties intend to appeal, that should not be undertaken until there is an appeal or the time to appeal has expired. In the meantime, however, I do expect that some form of final judgment should be entered which will, at least, set forth the determination of the Court and from which the parties can then measure their respective rights or consider their respective rights. Thank you.

* * *

CERTIFICATION

I, RICHARD M. JENNINGS, C.S.R., Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript to be a true and accurate record of the stenographic notes taken by me in this matter.

RICHARD M. JENNINGS, C.S.R.
Official Court Reporter

A-3311-72

A1 01 SEP 1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-16799-72

A-3311-72

REC'D
NOV 2 - 1973
A.S.
Clerk

Temp

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY,

Plaintiff,

A1 01 SEP 1979

vs.

THE BOROUGH OF EAST RUTHERFORD; STATE OF NEW JERSEY (RESOURCE DEVELOPMENT COUNCIL IN THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DIVISION OF MARINE SERVICES, BUREAU OF NAVIGATION); STEELCRAFT TOOLS; DAIDO CORPORATION; MUSIC DISTRIBUTION, LTD.; VINCENT PUIG & COMPANY; EAST RUTHERFORD INDUSTRIAL PARK, INC.; EAST RUTHERFORD INDUSTRIAL CENTER; VINCENT COSTA; TRIANGLE REALTY COMPANY; MAYFAIR INFANTS WEAR CO., INC.; C.D.C. DEVELOPERS, INC.; ROYAL WORCESTER PORCELAIN CO., INC.; COSTA ENTERPRISES; COSTA ENTERPRISES, INC.; KNICKERBOCKER DEVELOPMENT CORP., (formerly T.N.J. CONSTRUCTION CO., INC.); INDEPENDENT NEWS COMPANY, INC.; ROYAL DEVELOPERS; PATERSON PLANK ROAD INDUSTRIAL DEVELOPMENT CORPORATION; MICHAEL P. ESPOSITO; PEOPLES TRUST OF NEW JERSEY; FIRST NATIONAL STATE BANK OF NORTH JERSEY; THE HOWARD SAVINGS INSTITUTION; GARDEN STATE NATIONAL BANK; J.I. KISLAK REALTY CORP.; JOSEPH RAIA AND SONS; BERTRAM M. SAXE, Trustee in Bankruptcy; HENRY H. SCHMIDT, Trustee in Bankruptcy; BERGEN-HUDSON ROOFING AND SUPPLY CO.; JOEL TANIS AND SONS, INC.; CAMDEN TRUST COMPANY; JACOB SCHNEIDER, C. CONRAD SCHNEIDER, MYRON BEHR AND RICHARD CARLTON, partners t/a Schneider, Schneider, Behr & Carlton; NEW JERSEY PHYSICIANS AND HOSPITALS EXCHANGE; SEABOARD OIL COMPANY, INC.; UNITED NATIONAL CABINET CORP.; A.T. TILE CO., INC.; CONTE ROOFING COMPANY; NEW JERSEY WARM AIR HEATING CO.; PATRICK J. CONTE t/a P.J. CONTE FUNERAL HOME; NICHOLAS BEZUYEN; STATE OF NEW JERSEY; and THE EAST RUTHERFORD SEWERAGE AUTHORITY,

Defendants.

FILED
NOV 2 1973
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A-3311-72

A1 01 SEP 1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-16799-72

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Defendants.

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A-3311-72

A101 SEP 1979

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perm

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY,

Plaintiff,

A101 SEP 1979

vs.

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Defendants.

FILED
NOV 2 1973
Clerk

TRANSCRIPT OF PROCEEDINGS

Bergen County Courthouse
Hackensack, N.J. 07601
October 18, 1973

BEFORE:

HON. THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
BY: JAMES C. PITNEY, ESQ., and
LAWRENCE B. LITWIN, ESQ.,
For New Jersey Sports and Exposition Authority.

MESSRS. PORRO, CONAGHAN & MURRAY
BY: ALFRED A. PORRO, JR., ESQ.,
For the Borough of East Rutherford.

DAVID GOLDBERG, ESQ.,
BY: ALAN BOOCKVAR, ESQ.-Member N.Y. Bar,
For Steelcraft Tools and Daido Corporation.

EUGENE L. DINALLO, ESQ.,
For Independent News Co. and Music Distribution Center, Ltd.

ROBERT A. TOBIN, ESQ.,
For Vincent Puig & Company.

MESSRS. CALISSI, CUCCIO, KLINGER & BALDINO
BY: ALLAN H. KLINGER, ESQ.,
For Royal Worcester Porcelain Co., Inc.

Albert R. Agostine, C.S.R.
Official Court Reporter

THE COURT: Good Morning, gentlemen.

On New Jersey Sports and Exposition Authority versus the Borough of East Rutherford, today was the final day to file claims by tenants. And then I am to determine, as I understand it, under Judge Pashman's Order whether or not the type of claims submitted, the type of the claim, the character of the claim, the substance of the claim is one that would give the tenant particular standing to participate in the condemnation hearings themselves.

To date I received the claims of Steelcraft, Daido Corporation, Royal Worcester, Vincent Puig.

Well, be that as it may, we have some claims. But many have not filed claims. This is the cutoff date.

What I would do then is fix a special date for you to be heard, because we have so much on today. And then I will determine what we will do from that point.

Some of you have filed briefs. Others have not. I want briefs on this question. So that would cover it insofar as this claim question is concerned.

Steelcraft v. Daido, or whatever way you pronounce it, Royal Worcester, Vincent Puig, Mayfair Infants Wear, and anybody else that has filed a claim, we'll do an analysis and see as to the rest of them. They are not going to be heard if they haven't filed claim by now.

MR. DINALLO: Judge, I represent Independent News and Music Distribution, one of the largest tenants down there. And their claim is not filed as of today. They are working on it, amongst other things.

And I would respectfully request the court a reasonable time within which to file theirs.

I am appearing pursuant to Justice Pashman's Order anyhow, in the matter, in the condemnation hearing.

But as far as Mayfair is concerned, owner of their own building, and Music Distribution, on this particular claim that we are talking about, whether they can appear or not, I would request two weeks additional to file this claim.

THE COURT: What are their claims?

MR. DINALLO: That's Independent News and Music Distribution and Mayfair Infants Wear.

THE COURT: Any objection?

MR. PITNEY: I don't believe so, your Honor. I don't imagine this case is going to condemnation commissioners within the next few days.

I would like to suggest, for the benefit of the court, and also for my own benefit, I think it might be helpful if the briefs which are to be filed by the tenants, hopefully counsel representing the seven tenants involved could get together and file one brief. I think it would save a great deal of paper. Whether this is possible or not, I don't know. I just suggest it.

THE COURT: I think that is a good idea, except where one tenant may have a type of claim that, I don't know, in some way or other is distinguishable from another and might lend itself to special argument. I can't envision it.

All right. The filing of claims

will be continued until November 1st, filing. All briefs will be due not later than November 8th.

And we will hear argument on November 15th at 1:30.

MR. DINALLO: Was that 1:30, your Honor?

THE COURT: 1:30. Those are Thursdays, all Thursdays, November 1st-claims; November 8th-briefs; November 15th-argument.

MR. PITNEY: Is it the court's suggestion that we merely exchange briefs on the 8th?

THE COURT: Yes, just exchange briefs. I am not going into who should serve first.

MR. PITNEY: That's fine.

THE COURT: Naturally if you feel you have to supplement, by all means do it, but do it in time.

MR. PITNEY: I don't anticipate any reason for that, but --

THE COURT: All right. Now, I know we have other questions to lay about title first or condemnation first. And let's go into it this way: Steelcraft, you have a motion for a modification of Judge Pashman's Order referable to the vacation date. I'll hear you.

MR. TOBIN: If your Honor please, Mr. Chasin, who represents Steelcraft, is not here today because of the Jewish holiday. And he is of counsel to Mr. Boockvar, who is a New York attorney.

THE COURT: And this is Daido, too, isn't it?

MR. TOBIN: Yes. In view of the fact that Mr.Chasin is not here because of the holiday I would like to make an application and introduce Mr. Boockvar, and allow Mr. Boockvar just to be heard because of that factor. He is fully familiar with all of the facts regarding Daido and Steelcraft possession aspects.

THE COURT: All right. What is his name?

MR. TOBIN: Mr. Boockvar.

THE COURT: How do you spell it?

MR. BOOCKVAR: The first name is Alan, A-l-a-n.

THE COURT: A-l-a-n?

MR. BOOCKVAR: That's correct. Boockvar, B-o-o-c-k-v-a-r.

THE COURT: Are you a member of the New York Bar?

MR. BOOCKVAR: Yes, I am.

THE COURT: Any objection, Mr. Pitney?

MR. PITNEY: No, your Honor.

THE COURT: All right, you are admitted specially for that purpose.

MR. BOOCKVAR: Thank you.

THE COURT: Now, I understand it the date for Daido is February 1 and for Steelcraft is December 1.

MR. BOOCKVAR: Yes, your Honor,

THE COURT: All right.

MR. BOOCKVAR: Your Honor, Mr. Chasin filed a few days ago with Trenton, and I gave to your secretary this morning, an affidavit from Mr. Hongo, who is the executive vice-president of Daido Corporation.

Most of my comments concerning --

THE COURT: Mr. Pitney, did you get that?

MR. PITNEY: Yes, it was handed to me this morning too, your Honor.

THE COURT: All right.

MR. BOOCKVAR: Our application for an extension of time is based on two particular items: number one, the inability of the Authority to continue on the schedule that they originally planned; and the second on the difficulty that Daido and Steelcraft are having in moving to the new facility, the Bayonne plant.

I think if we concern ourselves first with the difficulty of the Authority, it seems apparent from most of the newspaper articles and the information as supplied to the mass media that they are having difficulty not only in getting the funds but in getting their construction people to do any kind of construction work.

We have had Mr. Hongo, who is sitting in court this morning, constantly at the site; that the Authority had been working. I have some photographs for your Honor, I don't know if you want to look at them. It just seems that there was work being done prior to our last court appearance, which was September 13th and photographs were taken the morning of the 13th, which was our day in court. And there was a construction crew there with some work. But it seemed that in the afternoon after court was over the construction crew was gone, all their machinery was gone. And there hasn't been a bit of work done there since that time.

If your Honor would like these I will show them to you.

THE COURT: Well, show them to Mr. Pitney.

MR. PITNEY: I don't dispute the fact that construction is not going on there now.

THE COURT: Okay. Then I won't have to see the photographs.

All right. Anything further?

MR. BOOCKVAR: Well, concerning the Authority itself, I find that the tenants are in a situation where previously Mr. Pitney's office indicated that since we had access to the mass media articles and the news reports about the condemnation taking place that we should have known about it and moved quicker to obtain new quarters. Our claim was that the reports were not official. They were uncertain.

I think this applies to most of the other tenants. And it was difficult for us to do anything since we were committed to long term leases to either enter into new leases or buy other pieces of property without knowing for sure. It put us in a difficult situation.

The reverse seems to be occurring now. Daido and Steelcraft have purchased other property. We have construction projects that have already commenced, and we are receiving reports now that the Authority is having difficulty.

THE COURT: Well, you are reading newspaper reports.

MR. BOOCKVAR: This is newspaper.

THE COURT: You are reading about tactics over in New York. That is what you are relying on.

MR. BOOCKVAR: No, I am not only concerned about that. That is just part of the overall picture. It is the inability to have the bond issue go through. And with the failure of the Authority to have the funds to work on the construction project it would seem very futile to have to have the tenants out on the days requested, have the buildings either remain vacant or be torn down and not have any work done, all to the detriment of the tenants, because they would have to, in many situations, Daido and Steelcraft included, go into double moves, because their own facility will not be completed on time.

Now, yes, we do receive these reports and we do read them. We are not able to obtain any definite information from the Authority as to where they stand. So it is reverse. Before we were told to believe the newspaper articles. And now we are told not to believe the newspaper articles. So we are in a difficult situation on that score.

Going now to our own construction project, we have had delays twofold: number one, in a worldwide shortage of steel, which, from what I understand from Mr. Klinger, is also applicable to Royal Worcester, and I would think would be even more applicable to the Authority when they commence construction.

We received a telegram this morning, I am sorry, your Honor, it was yesterday, that the fiberglas roof insulation, the work that is done on that is now held up because the union that works in all of these insulation plants went on strike as of October 15th. There is no available inventory of the insulation material that usually goes into the roofs of the buildings, and, therefore, we have been notified by our construction company, which is Muscarelle here in New Jersey, that they are unable to tell us how much of a delay that will cause us. I don't know whether Mr. Pitney would like to see this or not.

THE COURT: You are asking for May 1st, at the latest?

MR. BOOCKVAR: Yes. I think the date of May 1st was asked for.

At this point, your Honor, I would

say yes, that is May 1st. I don't know what effect this insulation problem is going to cause us at this time. It is only a day old. If the strike ends in the next few days I don't imagine it would cause of that much difficulty. But if it continues that could very well cause us some problems.

I think some consideration should be given to the fact that particularly this steel problem is not only going to be our problem it is going to be the Authority's problem also as far as their own construction schedule.

Another concern is that if there is some delay on the part of the Authority for commencing construction, and the delay, even though it may be a few months goes into the winter, just the fact that it is into the winter may, in itself, cause additional delay, which should be taken into consideration because of the weather and the cold and the ground being solid.

I think that is basically our contention, your Honor.

Again, the major thing is we have

had no information or conclusive information that the funds are coming through from the bond issue, and that they are going to be able to stay on their schedule, other than them telling us, "Yes, we can stay on our schedule." We know there has to be funds behind it.

Again, the report indicates that their construction people don't want to work unless they know they have the funds. And we have no information to show that they do have it, and that they are going to be able to complete construction.

THE COURT: Thank you.

Mr. Pitney or Mr. Litwin?

MR. PITNEY: Is it your Honor's wish that we proceed tenant by tenant or would like to hear from all of the tenants and then have me respond?

THE COURT: Let's see, probably a lot of your response is going to be the same.

MR. PITNEY: I would think for everything it would be the same.

THE COURT: I think we will go tenant by tenant. I think we will do all the tenants first and then you respond. Make your notes as to special answers or responses that you want to make.

All right. That was Steelcraft and Daido.

Royal Worcester.

MR. KLINGER: If the court please, Mr. Boockvar pointed out the admonition that Justice Pashman gave to the tenants at the hearing on June 21, and that recitation commences on Page 43 of the transcript of that day, your Honor, where a hearing was held to determine these vacation dates. And Justice Pashman pointed out that there was public notice of the intention of the Sports Authority Complex, the suits that were litigated testing the statute, and the like, and based upon that, and I might say insofar as Royal Worcester's application at that time, it was for a vacation date of February 1, and that application was based upon the information we had gotten commencing with the institution of this suit that we could have other premises built for us by January 15, after finding that we couldn't find an adequate building.

As the affidavits that have been submitted disclosed, our property is a specialized property built for this open shell storage of this high value, small volume glass objects, china, objets d'art, statuettes, and things of that sort.

Justice Pashman also admonished the tenants to use their best efforts to comply with the schedule, and also admonished all counsel to be practical about the situation.

And on the several return days of this motion, that is on July 5, and again on August 9, Justice Pashman again referred to the practical participation of all counsel, including the Authority. And may I just call your Honor's attention to the proceeding on July 5, where the form of the Order was settled embodying the court's ruling of June 21.

And he said on Page 17, "THE COURT: All these orders, you know, have a practical aspect, Mr. Klinger, practical overtones, practical people work out their problems."

Then in the course of argument of counsel as to the form of the order submitted by the Authority the court deleted from the Order of July 5 a provision that there would be no modification in those dates.

And he said, and I am reading now from Page 54 of that transcript, and about the middle of the page, "I do not intend by deleting this sentence to minimize the impact of what I said on June 21. I meant what I said. The tenants are on notice and I would encourage counsel and all concerned to have these people meet that deadline."

However, he then goes on to say that these should be administered again in a practical way. On Page 59 he says, "I just want to remind you in my efforts to keep things practical in moving along I want to encourage you to do that in every sense of the word."

Again, on August 9, your Honor, Justice Pashman said, and I am quoting from Page 168, "I have a lot more faith in the ability of counsel and counsel for the

Authority to work out this problem and other problems as we go along. There is a degree of practicality. This particular area is not 46 N. J. 22. This particular area is good, common sense, practicalities and flexibilities. That is what we are talking about here."

Now, in that respect, sir, this is our application now, to the practicalities of the situation.

Now, part of our problem, your Honor, is that approaching this issue has been like punching at cotton, because this record is devoid of any competent, factual proof on behalf of the Authority of what their construction schedule is.

Sometime in the early proceedings some affidavit was filed by a man named Mellon, and as these new problems came up we heard on August 9 about the red herring prospectus. We heard about the efforts of brokers. And as we pointed out I am sure most of us are aware that we have gotten in the mail announcements from brokerage houses. And I think the language of those announcements are significant when we are talking about problems as serious as this.

J. B. Hanouer sent out an announcement entitled "First slice of the Sportin' Life", trying to sell bonds; Merrill, Lynch, "The $280,000,000 Kickoff", trying to sell bonds; Hornblower, Weeks, one of the sponsors, as is Merrill, Lynch, "Now the opportunity to invest in the development of one of the largest tracts of urban real estate in the world", trying to sell bonds.

This was all prior to announcements in the newspapers.

And your Honor is absolutely right about the incompetent nature of these articles. I used to pend them the affidavits I submitted so I was sure Judge Pashman saw them. I am sure your Honor is aware of it.

THE COURT: We both reacted to this. I talked with him the other day by saying that, "They must think we don't read the newspapers."

MR. KLINGER: Well, it is not an underestimation of your reading. It is an attempt to emphasize the particular articles involved.

And that is this, your Honor: That we have not yet had a representation as to the nature of the sponsorship of these brokers, that is, is this a firm commitment? Is there an agreement? Obviously there is not, or obviously there was to be. And the sponsors didn't sign it, obviously, because they withdrew. That is what I cull from these newspaper articles.

Now, it may well be that their construction schedule is not dependent upon getting money to pay the contractors. That is hard for me to understand. But if that is so we ought to have competent factual proof of those facts by an appropriate affidavit.

THE COURT: Well, you are saying that solely with reference to vacation, aren't you, because it is none of the tenants business as to how the sports complex is going to proceed and what they are going to do? It is only relevant to when you get out. Right?

MR. KLINGER: Absolutely, because

their --

THE COURT: Because there seems to be a tenor here of, "we are entitled to know everything of what they are doing and what their plans are." And that is not so, really, except as a citizen.

MR. KLINGER: Yes, I respectfully submit it is a public authority, and I don't know what the secret is. Obviously whatever secrets there are are not working for them.

And, you know, I don't want the court to infer any lack of enthusiasm for the probject on my personal behalf or on behalf of my client. The point is we have got a plant, a brand new plant built in 1969. We've got fifty people working there. We want to move. We are building a brand new plant almost identical to the one we have in Wayne. And our moving is complex. We have our Christmas season. It is a gift type item.

The best contract we could make with Troast Enterprises, with the Troast Organization, was to provide a plant for January 15th.

We got them to sign an agreement where if they didn't deliver our premises by January 15th they had a daily penalty of something like $150 for every day they delayed.

Of course there was a forced majeur, and they don't have bar joists.

We went out with Troast and got an alternative source of supply at a cost which Royal Worcester is picking up. And that is in the affidavit. We are adding several thousand dollars to our costs to try to move this along.

We are now told that we can get steel the latter part of this month. And they say that they will now deliver the building April 1.

Now, our application was always February 1, and we are now asking for April 1. And in this context, your Honor, I think it is important to note that to the extent that the tenants are cooperating I think Royal Worcester has demonstrated it is cooperating. And we are trying to be practical.

The practicalities of our move are that it requires us about four weeks notice to move, because each one of these items has to be wrapped and packed. We are going into the Christmas Season and we don't have anyplace to go.

I submit that in the economic picture, if this court should not grant the tenants some relief, that there might well be a claim against the Authority, either in the condemnation proceeding under the concept of indemnity as embodied in State v. Gallant, Jersey City Redevelopment, Myers, Flemington Housing Authority v. Myers and P. and C. Realty, are under the Relocation Act, which is adding additional costs on the condemnation proceeding, which is public funds, and my funds and your funds. And we don't want to do that either.

We submit the most practical way for the Authority to proceed and for the tenants is to try, together with the court's help, to adjust our schedule.

We have made full disclosure of our schedule.

We have not added any margin in our schedules as to that April 1 date. That is what our builder tells us, and, frankly, that is what his penalties are going to be keyed to. And that is where we are.

We respectfully submit that this relief should be granted.

I would also make an alternative suggestion. I think the ruling of the court on June 21 shifted the burden in the wrong direction.

On June 21 the application was that of the Authority to fix dates of vacation. And the court fixed it.

Now, of course, by virtue of that order the burden is shifted to the tenants to modify the order.

I would suggest to your Honor that your Honor might very well issue an order saying the vacation dates contained in the July 5 Order be subject to application by the Authority, with proofs, as to when they need property 1, when they need property 2, when they need property 3, and why they need them.

And then your Honor might well approach the problem when they've got their contractors ready to go on the job.

I also submit that on the factual material before your Honor that there is an affidavit by Mr. Mellon, long before any of these developments -- I think it is Mellon that on that factual basis your Honor should grant the modification of the tenants, and should give us the dates that, at least as far as Royal Worcester is concerned, that our builder says we could have these premises.

THE COURT: Thank you.

Now, as to the other tenants, is there anything? I have heard this twice now about steel shortages, about the apparent inability of the Sports Complex to move with respect to these various properties. You do not have to repeat that. All I would like to hear is something new with respect to your own individual properties.

Now, I guess I better take them in order.

Vincent Puig.

MR. TOBIN: If your Honor please,

just to put in the record that we are applying for a stay of possession until the 1st of April, we too are building a building, and we have been assured that the delivery of the building will be effective on April 1st.

There is nothing more that I want to add, except that the building is next to the Borough of East Rutherford Pumping Station, and that is not being taken. And there seems to be no good reason why Puig cannot be left to the last from an engineering point of view, since it is on the same road that services the pumping station. And that road is going to be open. I don't think we have ever had a satisfactory explanation as to why, from an engineering point of view, Puig could not be deferred to the end.

THE COURT: Incidentally, you have not filed your claim, have you?

MR. TOBIN: Yes, I have.

THE COURT: Okay.

MR. TOBIN: But I have nothing further to add to what the other gentlemen have argued.

THE COURT: Thank you.

Mayfair.

MR. DINALLO: Judge, we have filed with the court and counsel affidavits by the president of Mayfair and the general contractor. In my letter to the court and counsel I indicated that a subsequent affidavit would be filed of Alexander Summer Company. I have prepared the affidavit of Alexander Summer Company. But the same could not be signed, they advised me yesterday, because they were one of the negotiating brokers for the Authority originally. And they thought they would have some sort of conflict, even thought they were the brokers who got this land for us to relocate on.

Judge, there is nothing I can add to what Mr. Klinger has said, what Mr. Boockvar has said, except that I was in these negotiations from the beginning. And in this practical approach, which Justice Pashman wanted during these negotiations, we did meet with the engineers, project engineers and architects, on two separate occasions, once at my office, once at Mr. Pitney's office. This was all kicked around.

Everybody was told to do the best they could possibly do as far as vacation was concerned, which resulted in Justice Pashman's Order of July 5th.

And on Page 6 of said Order, your Honor, counsel argued very, very vigorously, that the language in that Order, that "the foregoing dates shall not be extended for any cause whatsoever", was improper, because unknowns, which are present today, to wit, our steel shortage, we can do nothing about this, have happened.

And as a result of that argument, Justice Pashman ordered that particular paragraph stricken, as it appears in the original order.

And as a result of this anticipation we are right back where we are today, requesting this extension through absolutely no fault of our own. We have done everything within our power to relocate, as our affidavits indicate, at a tremendous cost of money.

And we submit, your Honor, that the date requested in our affidavits of March are the best dates that we can get today from our general contractor, and from our steel supplier.

It just so happens in two of these cases or three of these cases Bethlehem Steel is the supplier.

I bring to the court's attention that, Judge, if we have a problem getting steel, it has nothing to do with our application for extension, I submit that the Authority has a problem getting steel. There is no question in my mind.

I make one more suggestion to the court. As of yesterday I inspected the site. As an officer of the court I represent to the court that absolutely nothing is being done down there at this time.

I ask the court to take judicial notice of this by inspecting the site itself to determine what progress is being made.

THE COURT: There is a stipulation to that effect, Mr. Dinallo.

MR. DINALLO: I am just bringing

this out, Judge. And if they get back on their construction schedule, and I am all for this Authority, I have been for this construction complex since the beginning, we all have, and have all worked very closely with the Authority through all these proceedings.

But, Judge, if they are going to be delayed why should we be compelled at our expense to get out of the site when the construction schedule initially submitted prior to July 5th cannot be adhered to?

And since July 5th, Judge, which has been more than three months, there has not been one single solitary piece of evidence before this court as of this morning filed by the Authority to show that their position is exactly the same or it has changed.

THE COURT: All right. Thank you.

MR. DINALLO: Thank you, your Honor.

THE COURT: Are there any other tenants that wish to be heard generally on this matter of modification of dates for vacating premises?

(No response.)

THE COURT: Mr. Pitney.

MR. PITNEY: First of all, your Honor, and I think this is perhaps the proper point of departure, there has been a good deal of comment made as to the provision in Judge Pashman's Order which was stricken. That provision, as your Honor knows, says that the dates should not be extended for any cause whatsoever.

Now, when Judge Pashman made his ruling he did make that statement. At the time that the order was actually entered he indicated that even though he had made this statement he felt that it was proper to strike that phrase, which he did do.

However, if my memory serves me correctly, at the time he made that deletion that "the foregoing dates shall not be extended for any cause whatsoever" he also said to counsel for the tenants, "Look, gentlemen, I don't want you coming back here next month or the month after. If you get into a bind at the eleventh hour I suggest that you come back at that time, or speak to Mr. Pitney for temporary relief or possible extension of a short period of time."

I suggest, first of all, that this is not the time for these applications to be made.

Secondly, I think it is abundantly clear, and the record will support this, this particular case was initiated, I believe, last December.

In one of the affidavits which was filed by Daido and Steelcraft they indicated that they were aware that they had to vacate the premises, I believe it was about the end of January of this year or the first part of February.

The Declarations of Taking and the Demand for Possession were served in early March. So there is no question that it has been very, very clear that the Authority needed this property. And it has been clear for a long time.

A comment has been made about what the Authority has presented to the court, what the Authority has shown in the way of its construction schedule.

Actually what was presented to the court was a letter from our architects and engineers explaining why this construction schedule had to be complied with and indicating that there was an alternative method of construction which could delay these vacation dates that would cost the Authority an additional $1,100,000. And the Authority is prepared to incur that additional cost in order to accommodate these tenants.

That letter keyed the vacation dates. The vacation dates were keyed into the site improvement. In order for the site work to be completed in time for the opening of the two facilities in question these vacation dates had to be complied with. That is still the case.

The mere fact that there has been a delay in construction of the stadium and the construction of the grandstand does not effect this picture at all unless this delay is such that the grandstand for racing will not be completed in March of 1975, and the football stadium will not be completed in

August of 1975.

Now, in the red herring prospectus which is sent out to investors every word of which has been rather carefully gone over and composed, and with respect to which obviously full and complete disclosure is required by law, the architect and engineers have made the statement that it is the considered opinion of the joint venture and engineers that the project can be constructed to permit racing in the Spring of 1975 and football in the Fall of 1975 if these contracts are awarded as per the present schedule. The completion date of the racing facility is mid-May 1975, and the football stadium August 15, 1975, if presently bid contracts are awarded in October.

We are not anxious to kick these people out for the sake of kicking them out.

As a matter of fact, if we can keep them in there the longer they stay in there the longer they pay us rent.

What I am suggesting is that our construction schedule is still as it always has been.

If it appears within the next month that the construction of the two major facilities, the grandstand and the football stadium no longer make the completion dates viable why then, of course, we would have to put back or would postpone the completion of the site work, and I am satisifed we would have no difficulty whatsoever telling these tenants that, and I would represent to the court, that we would tell these tenants that they can remain in for an additional period of time.

THE COURT: Are you saying, Mr. Pitney, that this application for a modification of the vacation schedule is premature?

MR. PITNEY: Exactly.

THE COURT: In that, and this is why you can very readily stipulate no work has been done, the schedule hasn't actually called for it with respect to these various properties.

MR. PITNEY: There has never been any scheduled site work during this period anyway.

THE COURT: Right. And what you

are saying is within a comparatively short time the arguments of the tenants may have considerable merit.

MR. PITNEY: Yes.

THE COURT: There is a possibility of that.

MR. PITNEY: Right.

THE COURT: Without your being pessimistic about the whole complex. And that the complex is willing to adopt the practical pragmatic attitude that Judge Pashman so vigorously urged, not only upon you, but upon the others.

MR. PITNEY: That's correct.

THE COURT: Face up to the realities when the moment of truth has arrived.

MR. PITNEY: That's right.

THE COURT: All right. I think I understand your argument on that score.

What about steel? Have you heard anything?

MR. PITNEY: I have not specifically inquired about that. We are prepared, as I understand it, to award our steel contract. It has been bid and the low bidder has been established. To be quite candid with the court I have not asked the question which occurred to me this morning as the arguments were being made, and that is whether or not the steel that these gentlemen are talking about is the same steel that would be involved in our construction. They are talking about steel joists apparently. I take it this is I-beams, and this sort of thing. I am not aware one way or the other whether steel joists, and I should I hasten to add, your Honor, that I was at somewhat of a disadvantage because I didn't get, at least three of these affidavits until this morning, so that I have not asked the architects and engineers whether there is any problem about getting the kind of steel that we need for the football stadium. My guess is that the steel involved may be completely different.

THE COURT: Thank you, Mr. Pitney.

Sort responses.

MR. KLINGER: Yes, if the court pleases, Mr. Pitney suggests that this motion is still premature, and I understand that.

However, I must point out to the court that an order of this court presently says that Royal Worcester should vacate these premises on December 1.

In order for us to do that we need four or five weeks lead time to move. Here we are on October 18th.

THE COURT: Well, what is your date, December 1?

MR. KLINGER: December 1.

THE COURT: Incidentally, just so I can get something cleared up, Mr. Dinallo, Independent News and Music Distribution, February 1, you are not making application

MR. DINALLO: We have no problem there, Judge, no problem there at all. As a matter of fact, if they got out sooner we would move Mayfair in there to accommodate them. But they can't get out sooner.

THE COURT: Yes, sir.

MR. KLINGER: Now, I understand Mr. Pitney's willingness to cooperate and the uncertainty about the date. So I would reiterate the suggestion I made previously, your Honor, that the dates in the existing order be stayed pending application by the Authority on notice as to why the stay should be modified or dissolved.

I say that, really, to protect the record for my client, because if you deny our motion today, and this is the final hearing on this motion, and practically I think my watch is a little faster than Mr. Pitney's, I think for my client I am at the eleventh hour, because of this moving time necessary.

THE COURT: You say four to five weeks lead time?

MR. KLINGER: Yes, I think the affidavits say four weeks to pack up. And we really have no place to go at this point. And that is the point.

So I would suggest, your Honor, and I don't know if Mr. Pitney would object, that if those dates are stayed subject to application by the Authority, and very candidly what I am trying to accomplish is this, I am trying to shift the burden on the Authority to come into court and say, "This is why I need the property now."

And I think this is fair, your Honor at the present posture.

THE COURT: See, Mr. Klinger, that might be fine with you, and I know that would not make you relax your pressure to get moving. But I am fearful that your clients, not yours particularly, but these various tenants might draw too much comfort from that type of an order.

MR. KLINGER: I might say, your Honor, that might have been true on June 21. But your Honor has before you affidavits which indicate contractural relations, disclosed contractural relations that each one of these tenants have entered into, that they have bought property.

THE COURT: Oh, I believe that.

MR. KLINGER: That they have committed to it. And I think at this point by examining these affidavits you can see that these tenants are well on their way to making the move.

At some point I think that some of us thought that maybe we are somehow, somewhere the terrible day is not going to come, I think we are all convinced it is coming, we are all trying to adjust to that and we are saying to the Authority, "Just give us the time to do it. And here is the commitments we've made."

MR. DINALLO: In furtherance of that, your Honor, assume the Authority never proceeded past tomorrow. We are still committed to get out now. We borrowed money from institutions, have acquired land, have already entered contracts with general contractors. We are one hundred per cent committed. We are not talking in a vacuum anymore or any wishful thinking that we may remain. Matter of fact, we are paying rent to the Authority right now.

I would adopt Mr. Klinger's suggestion to the court, your Honor, and rather even examine a general contractor for the Authority as to what his opinion is as to his construction schedule.

I would be willing to accept an affidavit from the general contractor filed with the court served on counsel as to what he thinks his schedule is once it is awarded.

It hasn't even been awarded yet. Their steel contract has not even been awarded today. Everybody is talking steel, your Honor. I submitted in my affidavit a detailed article on this shortage supply, October 12th, The Record. We have a big cement crisis facing us also. And they are going to use a lot of cement in this stadium and race track.

MR. KLINGER: In regard to steel, your Honor, I would just like to point out to the court that it is my understanding as recently as yesterday in another proceeding that the steel commitments for the mills are filled through the first quarter of 1974. So any orders placed now are going to be at least the second quarter of 1974. I don't know what their schedule is, but that is the information I have.

THE COURT: All right. Mr. Pitney, I would like you to respond within five days with some type of affidavit that can assist the court in evaluating the arguments presented by the tenants here today in any way you can. You know what we are concerned with here.

You haven't had a chance to consult with some of the people you probably want to. And I will trust you just lay it right on the line for me as best you can, through whatever people you want, or your own affidavit, for that matter.

And I will thereafter -- I have in mind your lead time, Mr. Klinger -- you will receive a decision from me.

MR. KLINGER: Thank you, your Honor.

MR. PITNEY: Your Honor, could I ask for seven days?

THE COURT: Yes.

MR. PITNEY: I am going to be completely out of touch tomorrow.

Monday is a holiday. And I think it is a fairly simple matter. This is something that the architects and engineers are going to have to advise us on. And, as I say, I think the information already exists. But the specific problem of the steel and what that may mean is something that I am sure he is prepared to comment on.

THE COURT: All right. This is October 18th. We have quite a few of these fellows on December 1st. Mr. Klinger has told me about his problem.

I am sure other people need lead time too. So I want to be prompt in disposing of this.

So I will give you a week on it.

Yes, Mr. Boockvar?

MR. BOOCKVAR: Do you want to listen to discussion on what we have been reviewing just now?

THE COURT: Well, I think we have heard enough.

MR. BOOCKVAR: Concerning certain points that have been made?

THE COURT: I don't think I need to hear anymore. I am impressed with the really strained circumstances that you tenants are under. I am sure Mr. Pitney appreciates that to a great extent.

MR. PITNEY: I would like to just say to the court it is entirely possible that we may come back and be perfectly willing and anxious to give them more time.

The last thing in the world I want to do is to kick them out if it is not necessary.

THE COURT: I am confident of that.

MR. BOOCKVAR: Your Honor, if I just may inquire of the court as far as the time schedule here, that Mr. Klinger indicated, Daido and Steelcraft also feel we are at the eleventh hour because if the December 1 date remains the commitment we have to make for temporary space and for a temporary move--

THE COURT: I think I can appreciate that. And I said that even though others have not alluded to it specifically I will treat them the same, as if in the same class. So have no doubt about that.

Okay. We are going to pick up at two o'clock. And I have the rest of the afternoon open then.

So the rest of you are excused.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-16799-72

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY,)
Plaintiff,)
vs.) **CERTIFICATION**
THE BOROUGH OF EAST RUTHERFORD, et als)
Defendants.)

I, ALBERT R. AGOSTINE, certify the foregoing to be a true and accurate transcript of the testimony and proceedings in the above entitled cause.

Albert R Agostine
Albert R. Agostine, C.S.R.
Official Court Reporter

A-3311-72

A101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L 20952-72

REC'D
NOV 28 1973
A-6
Mortimer G. Newman Jr.
Clerk

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY, :
Plaintiff, :
v. :
ESTHER G. BERTONI, et al., :
Defendants. :

FILED
NOV 28 1973
Mortimer G. Newman Jr.
Clerk

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

BEFORE

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for the New Jersey Sports & Exposition Authority

MESSRS. GOLDMAN, CARLET, GARRISON & BERTONI
by FRANK A. CARLET, ESQ.,
for Esther G. Bertoni, et al.,

MESSRS. PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR., ESQ.,
MS. TONITA S. CONAGHAN
for the Borough of East Rutherford

Albert R. Agostine, CSR
Official Court Reporter

THE COURT: Okay, this is Esther G. Bertoni. It is Docket No. L-20952-72.

MR. CARLET: That, your Honor, is one in which the State claims a small portion of it, and a part of which is not mapped and a part of which is mapped, and for which the State has no claim or interest. I would think a portion of the amount which the State claims no interest and is not mapped, which is approximately half of the lands, we should be allowed to withdraw that money, less the one-third set aside to protect the Bergen County Associates' claim.

THE COURT: Well, are you saying half is --

MR. CARLET: I'm saying half, your Honor, if we can agree and compute it.

THE COURT: Are you sure we are correct when we are doing it that way? You are calling for me to make an allocation now.

MR. CARLET: Yes, sir.

THE COURT: I mean different parts of that land can vary a great deal, couldn't they?

MR. CARLET: I doubt in this small portion. It fronts on a paper street. I don't think anyone has raised that question. They've appraised it, to the best of my knowledge, on an acreage basis.

MR. PITNEY: Can I just suggest, your Honor, we are talking fairly small dollars here and I think the whole thing will be resolved, can we carry this one for another two weeks, too? I think the problems that will be created by trying to make some sort of an apportionment between what is mapped and not mapped are not worth the dollars that are involved.

MR. CARLET: I wouldn't object to that, your Honor.

THE COURT: You what?

MR. CARLET: I wouldn't have any objection to carrying it for two weeks on that. That has been mapped already. It is just a question of getting an affidavit brought in.

THE COURT: All right. November 1st, and then we have to watch out for East Rutherford.

MR. PORRO: Yes.

THE COURT: On this, too, this you definitely have some claim on.

MR. PORRO: Yes.

MS. CONAGHAN: There is a problem.

THE COURT: Ms. Conaghan states that there may be a problem as to taxes.

MS. CONAGHAN: It appears that it may be that the Borough has never even assessed this particular piece of property.

MR. CARLET: I'm sure it has been assessed. They may not have assessed it for enough money.

MS. CONAGHAN: It may be that Rice Associates, who also owns Lot 25 on Block 208 has paid the taxes on this particular piece too.

I have conferred with the Borough Engineers, and they are supposed to be getting me an answer.

So within the next few days I'll have an answer and I'll let everybody who is involved know.

THE COURT: Okay. November 1st.

MR. CARLET: I have another motion on that, that is to enter final judgment against certain of the defendants as having no interest in this property.

THE COURT: Oh, yes. We had an interesting question. Mr. Carlet brought this motion in your name, Mr. Pitney, didn't you?

MR. CARLET: Pardon?

THE COURT: Is this the one?

MR. PORRO: Very good.

MR. CARLET: We attached an affidavit in effect --

THE COURT: I know you did. But you went further than that. I have a note on here.

MR. CARLET: I can't believe it.

THE COURT: How come Carlet brings

it in Litwin's name?

"Please take notice on the 18th day of October, counsel, or as soon as counsel can be heard, Pitney, Hardin & Kipp, will apply--"

MR. CARLET: I will tell your Honor, I gave my secretary the very motion that Mr. Litwin made in the prior case and said, "copy it. Just put our name in it."

Well, she didn't bother doing that last part.

THE COURT: Your whole motion is predicated on affidavits of Larry Litwin.

Did you get a copy of this?

MR. LITWIN: Yes, we did, your Honor. There is no problem with it.

THE COURT: No problem otherwise?

MR. LITWIN: Right.

MR. CARLET: I have one other thing.

I have gotten -- too late to serve with the Court -- an affidavit from Mr. Kero in which he states he has no claim on this property.

THE COURT: All right. Then this will cover Trenton Trust Company, Civil Loan Company, Great Gorge, U.S. of America, Martin Marinus, Meyer Doubough and Peter Kero.

MR. CARLET: Shall I file the affidavit with the Court now or do you just want me to send it in normal channels?

THE COURT: File it with us now.

MR. PITNEY: Since that is our motion should we submit the judgment, your Honor?

MR. CARLET: Go right ahead.

THE COURT: Let him draw it again and submit it to you. I don't care how you do it.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 20952-72

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY, :
:
Plaintiff,
v. :
:
ESTHER G. BERTONI, et al., :
:
Defendants. :

CERTIFICATE

I, ALBERT R. AGOSTINE, an Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R Agostine

A-3311-72

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 10793-72

REC'D
NOV 28 1973
A-8
Mortimer G. Newman Jr.
Clerk
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NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY, :
-Plaintiff, :
v. :
BERTONI (C & S DEVELOPMENT):
Defendant. :

DOCKET No. L 20952-72

FILED
NOV 28 1973
A-3
Mortimer G. Newman Jr.
Clerk

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY, :
Plaintiff, :
v. :
ESTHER G. BERTONI, et al., :
Defendant. :

Courthouse, Hackensack, New Jersey
Thursday, October 18, 1973

BEFORE

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
For the New Jersey Sports & Exposition Authority

MESSRS. GOLDMAN, CARLET, GARRISON & BERTONI
by FRANK A. CARLET, ESQ.,
for Esther Bertoni, et al.

WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General, for State of New
Jersey, Resource Development Council

(Appearances continued)

Reported by; Albert R. Agostine, CSR
Official Court Reporter

APPEARANCES (continued)

MESSRS. PORRO, CONAGHAN & MURRAY
by **ALFRED A. PORRO, JR., ESQ.,**
MS. TONITA S. CONAGHAN,
for the Borough of East Rutherford

MESSRS. GLADSTONE, HART, MANDIS, RATHE & SHEDD
by MARVIN H. GLADSTONE, ESQ.,
for Sisselman

THE COURT: Bertoni, C & S Development. Oh, this is Bertoni. There are two of them.

MR. CARLET: Your Honor, there are three matters on, one is a continuation of the application for withdrawal of funds in the case bearing Docket L-10793-72, which is the property between James Rice Associates and Maislin's. I appreciate the fact that the Rice people were able to get an affidavit out of Scapatullo. We haven't been able to, for reasons I don't know. It is right next to it.

As far as I can see the map the riparian land is completely on the other side of Route 20. And it doesn't affect this property at all.

We are talking about a million and a half dollars still sitting in the court.

THE COURT: Well, on L-10793-72, we are inclined to agree with you. It doesn't look as though there is any claim.

I've got a problem on L-20952-72 though because the State is claiming some of the land.

MR. CARLET: Not of Parcel 11, as I understand it, your Honor. Oh, yes, I'm sorry, you are right. They are claiming a part of it. I'm sorry.

THE COURT: All right. Mr. Rindone, you in the same position on this first one?

MR. RINDONE: Yes, I am. I can only add, for the record, that the Rice Associates' affidavit emerged when it did in connection with Mr. Friedman's application of two weeks ago where your Honor had made an adjudication as to title, and to forestall some waiver questions I specifically requested Mr. Scapatullo to turn his attention to that one particular matter. The others are catch as catch can as far as I am concerned.

MR. PITNEY: Your Honor, I want to be sure that I have this straight. It is my understanding that the first of these cases that we are talking about, and I don't have the docket number in front me, is an area which has not yet been mapped.

THE COURT: That's right.

MR. PITNEY: And in that respect it is the same situation that we have in Maislin.

THE COURT: Well, it has been mapped, but it hasn't been interpreted.

MR. PITNEY: That is what I meant to say.

THE COURT: And the expert hasn't put his attention to it.

MR. CARLET: Except, your Honor, that the map itself shows the line on the other side of Route 20 completely, not touching this.

THE COURT: Well, unless there is some exceptional circumstances I want to wait until Mr. Scapatullo gives me an affidavit on this.

MR. CARLET: Can we get an idea of when, your Honor?

THE COURT: Carrying it 11-1. And if it gets to be too much of a problem I will let you pull it out in the form of a certificate.

MR. CARLET: Well, I would ask

to do that now. It is an awful lot of money even for two weeks, the interest on it is tremendous. I would like the same type of order that you allowed Mr. Checki.

THE COURT: Well, I was hoping you would forget about that.

MR. CARLET: It was my idea a month ago, your Honor, we should have done it then.

THE COURT: Yes. As to No. 12, prepare the same type of order.

MS. CONAGHAN: I would just like to indicate, for the record, that there is a considerable tax owing to the Borough of East Rutherford, and I'll have an affidavit.

MR. CARLET: Not on this piece. Not on this piece.

MS. CONAGHAN: Which piece?

THE COURT: We haven't reached that one yet. I have a note on that about your claim. We are on L-20952-72.

MS. CONAGHAN: Right. Well, this one which is Lot 25-N that you are talking about now --

MR. CARLET: We are not talking

about that now.

THE COURT: We are talking about 6-A and 6-C.

MS. CONAGHAN: I believe there is taxes owing on that portion, yes.

MR. CARLET: Your Honor please, I have a tax search. Mr. Porro, you didn't claim it when moneys were released for the part of those two parcels that had been mapped. You didn't claim tax due.

THE COURT: Well, look, can't we settle this? Do you mind adding her name on the Certificate, Mr. Carlet?

MR. CARLET: Yes, sir.

THE COURT: Why?

MR. CARLET: There is no taxes due to East Rutherford, they are all paid.

THE COURT: Look, I'm not settling any claims now.

MR. PORRO: It is very easy for us to check. We don't have to do that here. We will check it.

THE COURT: If there is a claim you will put them on there and pay him.

MS. CONAGHAN: Right. I haven't

any idea.

THE COURT: Okay. Submit your order on this one then.

MR. GLADSTONE: May I be heard on this?

THE COURT: Which one? On Bertoni?

MR. GLADSTONE: Yes. We are in this as a claimant by virtue of a notice of lis pendens, I am speaking of Bergen County Associates, that was filed in connection with a lawsuit filed some time ago for an adjudication of our interest in this property.

THE COURT: There is a lis pendens and there is a claim, Mr. Carlet, you better add them on the C.D. too.

MR. CARLET: Your Honor, in this instance I would ask that it be set down on a prior portion. As you know, moneys have been released on these parcels as to that parcel which had been mapped and not claimed by the State. At that point one-third of the amount was held and is still in the hands of the Clerk of the Court to protect the claim of Bergen County Associates.

I would ask the same thing be allowed with reference to the rest. Let the one-third in there.

MR. GLADSTONE: I have two comments with regard to that. The last time this matter came up we came in and opposed the application for withdrawal on this ground: We are a claimant as to one-third. And Mr. Carlet says, "Fine, leave your third in. We'll take out two-thirds."

Our argument is that Mr. Carlet's clients, I don't know how many there are, 15, 18, 20, distributees of various estates and other interests and so forth, they withdraw, they distribute, there is one-third left in the bank or in the clerk's account, the clerk of the court, we come to the point of condemnation, valuation and award, and we find out, lo and behold, as is the law with respect to withdrawal, that the Sports Authority has deposited too much money.

THE COURT: I understand what you are going to say.

MR. GLADSTONE: Somebody may say that that's incredible, but I must say that there is substantial, there is substantial ground for what I am saying.

THE COURT: Okay. I agree with you. Wait a minute. Why aren't you concerned about earning the high interest rate Mr. Carlet wants to earn?

MR. GLADSTONE: I am perfectly willing to do that.

THE COURT: And I am going to put your name on this.

MR. GLADSTONE: That's fine.

THE COURT: Well, what more do you want?

MR. GLADSTONE: That's all.

THE COURT: Okay. Subject to what Mr. Carlet says, what difference does it make whether their claimed part is in the bank with your money or whether it stays in Trenton?

MR. CARLET: I'll tell you why, because it goes in a C.D., if you want to withdraw it and distribute it before it's due, if we get an answer by November 1st from the State, then I got this problem, his client is still -- his client is still over in Israel now. He is a permanent resident of Israel. We have a trial date set down for his claim, but I have no guarantee, and neither does Mr. Gladstone, that his client is ever going to show up for the hearing. This thing can get tied up forever and a day.

I would just as soon leave the money in court for another two weeks and come back here on November 1st than get him on that certificate.

THE COURT: Why can't you, let's assume the maps come out fine for you --

MR. CARLET: Yes.

THE COURT: Why can't we then make another order where you pull out your money but leave his in a C.D.?

MR. GLADSTONE: Subject, of course, to my right to argue my position that I don't want my third to stand as security for the State's claim for reimbursement for overpayment against 18 people to whom he has made distribution, or subject to the Appellate Division throwing out the maps on which all these deposits are based anyway.

THE COURT: You are always exposed to that.

MR. GLADSTONE: Ah, but here they've got their security for their claim for reimbursement as the amount I have in the pot, whether it is in the clerk's account or in a C.D. and that's my problem. I agree, and I suggested last time that all the money ought to come out and be put into an account bearing some interest. But it can do that without damage to anybody, without harm to anybody, earning the rate of interest that it ought to earn pending a disposition, because here this is a serious matter, this one.

And my client has never failed to show up at a hearing and come from Israel.

THE COURT: Do you have any objection to what Mr. Carlet posed?

MR. GLADSTONE: As of this point,

no.

THE COURT: Don't worry about whether the Sports Authority has paid too much money. What can I do about that now? Nothing.

MR. GLADSTONE: Oh, not expose my third to their claim for reimbursement.

THE COURT: How can I do that?

MR. GLADSTONE: By keeping the money in escrow, whether it is in the C.D. or in the clerk's account, preferably in the C.D., where it is earning interest until at least my case is disposed of.

THE COURT: Well, when I am faced with that problem I will decide that.

Now, you can have your choice of a C.D. with him named in it or leave everything down in Trenton.

MR. GLADSTONE: Take the C.D., Frank.

MR. CARLET: By the time I circulate that C.D., your Honor, in the order it is going to be November 1st anyway.

THE COURT: Oh, no, I tell you what you put in this order, and this is an announcement: The check is going to be sent here to this Court, and everybody on that check is going to be here on a given date to sign it, endorse it.

MR. PITNEY: And at the same time consent to the provision, to the form of consent contemplated by the statute, that if the amount of the award is less than the amount withdrawn all of the parties will be jointly and severally liable to return the excess.

THE COURT: That will have to be in there.

MR. CARLET: You want the consent filed prior to the time putting it in a C.D. in which Mr. Pitney is going to be a co-signer and Mr. Rindone is going to be a co-signer, I have to circulate it among 18 people.

THE COURT: I don't want you to circulate it among 18 people. This matter has been called to my attention and it drags on and on and on. Somehow or other I have to arrange, and you have to do it for me, a date when that check is going to be here, and we will have a check-endorsing ceremony right out in the courtroom, and you will go right down to the bank and get your certificate.

MR. CARLET: The question I have, your Honor, is does your Honor want a consent prior to that check being issued since Mr. Pitney is going to be one of the persons on the C.D.?

THE COURT: Yes. I want one order signed, consent for withdrawing of funds, which says that you can withdraw these moneys; that they will be put into a certificate of deposit; that that certificate of deposit cannot be changed or drawn on without further order of the Court. And that it is renewed automatically unless there is an order of the Court changing that procedure.

And the order you are preparing now is going to say that on blank day, and you make this arrangement with Mr. Pitney, a check will be produced in this courtroom, and all parties in interest in that check, any payee shall be here on that date to sign the check. And in default of signature on that date sanctions will be imposed by way of a loss of a portion of the moneys they are entitled to.

MR. CARLET: As a practical matter, your Honor, Mr. Sisselman has to come in from Israel to be here. I want to know if Mr. Gladstone can have him here.

MR. GLADSTONE: I can get -- let's make it payable to the attorneys as trustees. I don't think there is any objection to that, is there, to drawing the check in that manner?

MR. PITNEY: Yes.

THE COURT: Isn't his son around here? Why doesn't he get a power of --

MR. GLADSTONE: They are both over there in Israel.

MR. CARLET: Your Honor, as a practical matter, if Mr. Rindone can give us some type of hope if we can have an affidavit for this piece, it is right next to Rice, it shouldn't be too difficult in two weeks, then we will carry it until November 1st.

MR. GLADSTONE: I'll get a power of --

THE COURT: Because we have a lot more things, and I'm not going to get into problems as to who is in Israel. I made you an offer and that's it.

MR. CARLET: Your Honor, let's carry it to November 1st.

THE COURT: November 1st on L-10793-72.

Now let's take a short break.

[There is a short recess.]

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 10793-72

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY, :
Plaintiff,
v. :
BERTONI (C & S DEVELOPMENT):
Defendants. :

DOCKET No. L 20952-72

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY, :
Plaintiff,
v. :
ESTHER G. BERTONI, et al., :
Defendants. :

CERTIFICATE

I, ALBERT R. AGOSTINE, an Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R Agostine

A-3311-72

A-101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L-19424-72

REC'D
NOV 28 1973
Clerk

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY,
Plaintiff,

v.

KOZIOL, et al.,
Defendants.

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

BEFORE

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

FILED
NOV 28 1973
A-3
Clerk

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for the New Jersey Sports & Exposition Authority

MESSRS. PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR., ESQ.,
Ms. TONITA S. CONAGHAN
for the defendant.

Reported by: Albert R. Agostine
Official Court Reporter

THE COURT: All right. The next one is Koziol, K-o-z-i-o-l.

MR. PORRO: Your Honor, I think that that is one that has come up clean on the new map. There is an affidavit that was filed last week, but it did not cover the whole piece of property, if I recall correctly, and I don't think Mrs. Scapatullo has had an opportunity to file a supplemental affidavit. And I guess it would be wise to just carry this to November 1.

THE COURT: Let me see. This is a total of 1.819 acres, and there only seems to be a question as to .0403 acres.

MR. PORRO: That's correct.

THE COURT: Where there might be a riparian claim, but it might be worth your while to wait.

MR. PORRO: I think we will have two pieces here,rather than have two orders, we will put it into one.

THE COURT: You want to wait until the 1st?

MR. PORRO: November 1.

THE COURT: Carry it until November 1.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 19424-72

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY, :
:
Plaintiff,
v. : CERTIFICATE
:
KOZIOL, et al.,
Defendants. :
:

I, ALBERT R. AGOSTINE, AN Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R Agostine

A-3311-72

A101 1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L 27732-72

REC'D
NOV 28 1973
A-G
Clerk

NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :
: Plaintiff,
v. :

AMERICAN HOIST & DERRICK CO., et al., :
:
Defendant.
-------------------------------:

DOCKET No. L 26787-72

NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :
Plaintiff, :
v. :

JOSEPH C. ZANKA, et al., :
:
Defendants.
-------------------------------:

FILED
NOV 28 1973
A-3
Clerk

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973.

B E F O R E

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for New Jersey Sports & Exposition Authority

MESSRS. SCHWARTZ & ANDOLINO
by JOHN P. NULTY, ESQ., (not present)
for American Hoist & Derrick Co. et al.

PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR., ESQ.
MS. TONITA S. CONAGHAN
for Joseph C. Zanka, et al

Albert R. Agostine, CSR
Official Court Reporter

THE COURT: American Hoist and Derrick.

Now, this is the return of an order to show cause why commissioners should not be appointed in American Hoist and Derrick Company.

Is there an appearance on their behalf?

MR. LITWIN: Your Honor, I've spoken with Mr. Nulty, who represents American Hoist. He advised me he had no objection to the entry of the order and he indicated he was not going to be here. But he is in the case already.

THE COURT: Granted. Submit an order.

THE COURT: The same with respect to Joseph C. Zanka, Z-a-n-k-a, et als.

MR. PORRO: We represent Mr. Zanka. No objection.

THE COURT: Submit an order.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 27732-72

NEW JERSEY SPORTS & EXPOSITION :
AUTHORITY,
:
Plaintiff,
v. :

AMERICAN HOIST & DERRICK :
CO., et al.,
:
Defendant.
------------------------------ :

Docket No. L 26787-72

NEW JERSEY SPORTS & EXPOSITION :
AUTHORITY,
Plaintiff, :
v.
:
JOSEPH C. ZANKA, et al.,
:
Defendants.
:

CERTIFICATE

I, ALBERT R. AGOSTINE, an Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R Agostine

A-3311-77

A101- 1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 24896-72

REC'D
NOV 28 1973
A-6
Clerk

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY, :
:
Plaintiff, :
v.
:
ROCH REALTY CORPORATION,
et al., :
:
Defendants.
:

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

BEFORE

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

FILED
NOV 28 1973
A-5
Clerk

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for the New Jersey Sports & Exposition Authority

MESSRS. FRIEDMAN, KATES & USHER
by MARTIN M. FRIEDMAN, ESQ.,
for Roch Realty Corp.

Reported by: Albert R. Agostine
Official Court Reporter

THE COURT: The next is Roch Realty.

This is yours, Mr. Friedman.

MR. FRIEDMAN: Yes, again, this is one that I understand the map is prepared, but has not been colored in to indicate the various areas.

THE COURT: Okay. November 1st.

MR. FRIEDMAN: Thank you.

THE COURT: I appreciate your patience on these, all of you.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO.L24896-72

NEW JERSEY SPORTS & EXPOSITION AUTHORITY :
Plaintiff, :
v. : Certificate
ROCH REALTY CORP., ET AL., :
Defendants. :

I, ALBERT R. AGOSTINE, AN Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R. Agostine

A-3311-72

A 101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 24893-72

REC'D
NOV 28 1973
A-6
Clerk

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY :
Plaintiff, :
v. :
HARRY PFLIO, et al., :
Defendants. :

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

B E F O R E
HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

FILED
NOV 28 1973
A-3
Clerk

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
Lawrence B. LITWIN, ESQ.,
for New Jersey Sports & Exposition Authority

WILLIAM J. MC CORMACK, ESQ.,
Deputy Attorney General
for the State of New Jersey

Reported by: Albert R. Agostine, CSR
Official Court Reporter

THE COURT: Harry Pelio, et al.

MR. MC CORMACK: If your Honor please, I understand that portion of the map has not been interpreted, so we will consent to an adjournment on that.

THE COURT: Thank you.

November 1st.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 24893-72

NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :
Plaintiff, :
v. :
HARRY PELIO, et al., :
Defendants. :

CERTIFICATE

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Albert R. Agostine

A-3311-72

A-101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L 19425-72

REC'D
NOV 28 1973
A-D
Clerk

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY, :
Plaintiff, :

v. :

CARL RAIA, et al., :
Defendants. :

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

B E F O R E
HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

FILED
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Deputy Attorney General
for the State of New Jersey

MESSRS. PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR., ESQ.,
Ms. TONITA S. CONAGHAN
for Raia

Reported by: Albert R. Agostine, CSR
Official Court Reporter

THE COURT: Carl Raia.

MR. MC CORMACK: That comes out of Koziol. I don't know whether there is any question on that now or not.

MR. PORRO: Yes, that same piece -- that's a portion of the same piece of Koziol. Actually it is out of a common title.

November 1?

THE COURT: Okay. November 1st.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L 19425-72

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY,
:
Plaintiff, : CERTIFICATE
v. :
CARL RAIA, et al., :
Defendant. :

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Albert R. Agostine

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for New Jersey Sports & Exposition Authority

WILLIAM C. RINDONE, Deputy Attorney General
for State of New Jersey, Resources Development Council

EUGENE L. DINNALO, ESQ.,
for Mayfair

HARTMANN & BROOKS
by RONALD M. FRAIOLI, Esq.,
for Keith Realty

MESSRS. PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR.,
MS. TONITA S. CONAGHAN
for Borough of East Rutherford and
for John J. Carridi, Cheval Realty,
Eisenbaum, Kogothetis, M & M Truck
Joseph E. Fisher, for Tramintozzi

THOMAS H. BRUINOOGE, ESQ.,
for Bruinooge

DOMINICK PRESTO, ESQ.,
for Frank Burian, George W. Smithson and
P & L Truck

MESSRS. HEIN, SMITH & BEREZIN
for Seymour A. Smith and Eichholtz

MEYER SMORODSKY, Esq.,
for Fantacone

MESSRS. FRIEDMAN, KATES & USHER
by MARTIN H. FRIEDMAN
for Federal-Pater

MESSRS. FORNABAI & ZIMMERMAN
by FRANK ROMANO
for Otto Knissel

APPEARANCES (continued)

MESSRS. WILENTZ, GOLDMAN & SPITZER
BY ROBERT J. CEREFISI
for Laeffel

DONALD L. HACK, ESQ.,
for Nicholas Marone

MESSRS. KIEFER, BOLLERMAN & KAPLOQITZ
by ALFRED K. KIEFER, EST.
for Marion Greenberg Parker

MESSRS. CHARY & PORCORO
by HERBERT A. CHARRY, ESQ.
for Triflex Machine Tool

MR. MENCOWITZ
For Joseph E. Schultz

EDWARD M. AGNELLO, ESQ.,
for Mary Sharry

THOMAS A. VENINO, Esq.,
for Otto Venino

MESSRS. HANNOCH, WEISMAN, STERN & BESSER
by DEAN A. GAVER
for Olin E. Watt

Reported by: Albert R. Agostine, CSR
Official Court Reporter

THE COURT: Okay. We have 38 matters in which the question has been generated as to why an order should not be entered establishing the date of the hearing to determine the title of these lands or the properties to be taken before a determination of any damage is due to the defendants, in other words, try title first. This is in 38 proceedings.

I have already indicated to you that I think title should be tried first.

Is there any opposition to that? You know what we are talking about? We are talking about cases in which the Authority has filed complaints in condemnation.

In these 38 complaints the State is a co-defendant with the record title property owner.

Normally the matter would go to condemnation and allocation, if any, of funds would abide that event.

I am just as open as I am suggesting we ought to try title first and determine whether the State owns the land or the record title owner owns it or what portion, if any, is tideflowed and what isn't? Get that settled first and then go to condemnation.

MR. PITNEY: Your Honor, I'm basically on those 38 cases. I think I'm right. I don't think there is any opposition to the relief requested any of them with the exception of the Olin Watts case in which Mr. Gaver has filed an objection.

THE COURT: Okay. All right. Suppose I do this: Will you just listen to the list?

The first one is Allan Oil Company. Any objection to trying title first?

[No response.]

THE COURT: Philip Anzelano and Stella B. Anzelano.

[No response.]

THE COURT: Nunzio R. Barone.

[No response.]

THE COURT: Borough of East Rutherford?

MR. PORRO: No objection.

THE COURT: Thomas H. Bruinooge?

MR. BRUINOOGE: No objection to the trial of the title question, your Honor. I just have a little bit of a procedural problem on the answer that has been filed.

THE COURT: You want to call my attention to it in just a minute.

If you are answering, please give your appearances.

Frank Burian.

MR. PRESTO: Dominick Presto, appearing for Burian and Altar. No objection.

THE COURT: Thank you.

John J. Cariddi?

MR. PORRO: Yes. Alfred Porro appearing for Cariddi. No objection.

THE COURT: Cheval Realty.

MR. PORRO: For Cheval, Porro, no objection.

THE COURT: Charles J. Eichholz.

MR. SMITH: Hein, Smith & Berezin, Seymour A. Smith; no objection.

THE COURT: Thank you.

Edward Eisenbaum.

MR. PORRO: For Eisenbaum, Mr. Porro; no objection.

THE COURT: Rocco Fantacone.

MR. SMORODSKY: Meyer Smorodsky for Mr. Fantacone. No objection.

THE COURT: Thank you.

Federal-Pater Company.

MR. FRIEDMAN: Martin Friedman for Federal. No objection.

THE COURT: Joseph E. Fisher.

MR. PORRO: Porro for Fisher, no objection.

THE COURT: Industrial Construction Associates?

[No response.]

THE COURT: Carrie Kahlert?

[No response.]

THE COURT: Keith Realty Corp?

[No response.]

THE COURT: Otto Knissel?

MR. ROMANO: Frank Romano, Fornabai & Zimmerman. No objection.

THE COURT: Koeller Realty?

[No response.]

THE COURT: Marguerite Laeffel?

MR. CEREFICI: Robert J. Cerefici, Wilentz, Goldman & Spitzer. No objection.

Judge, just for clarification, the order to show cause talks in terms of fixing a hearing, but I don't think your Honor really intends to do that today, do you?

THE COURT: No, no.

MR. PITNEY: I should explain for the benefit, I think, your Honor, of some of the gentlemen in the courtroom, it would be our intention in all of these cases to do what we have done before, and that is to make a motion to consolidate every one of them for purposes of trial on the issue of title with one another and with the approximately 30 cases which involve the same question, which are presently consolidated.

THE COURT: Okay.

Marguerite Koeffel. That's adjourned to November 1.

Peter J. Kogothotis?

MR. PORRO: Porro for Kogothotis, no objection.

THE COURT: Thank you.

M & M Truck Leasing Co?

MR. PORRO: Porro for M & M. No objection.

THE COURT: Nicholas Marone?

MR. HACK: David Hack, your Honor. There is no objection.

THE COURT: Marie Mazza?

MR. LITWIN: That's adjourned, your Honor, to November 1st.

THE COURT: 11-1.

Minwax Company?

[No response.]

THE COURT: National Community Bank of Rutherford?

[No response.]

THE COURT: New Jersey Bell Telephone Company?

[No response.]

THE COURT: P & L Crane Service, Inc.?

MR. PRESTO: Dominick Presto. No objection.

THE COURT: Marion Greenberg Parker, we heard from Mr. Kiefer on that.

MR. PITNEY: That one is carried, your Honor, to November 1, I believe.

THE COURT: Okay.

Plank Realty Co. November 15th.

MR. CHARY: Herbert A. Chary, Chary & Porcoro, appearing for the defendant, Triflex Machine Tool Company.

It appears that the Plank Realty Company is the owner of the company sought to be condemned. And our client is a lessee of a portion of those premises.

Now, I have no objection if that would not prejudice my right to apply for a severance at some time in the future.

I should state that the portion occupied by my client appears to be a portion not claimed by the State, according to the map.

And the other portion that is owned by Plank appears to be claimed by the State.

THE COURT: Well, all I'm doing today is saying we are going to try title first. That's all.

MR. CHARY: Well, that won't prejudice my right to bring a motion to sever it?

THE COURT: There is a proceeding under the rules where you can come in for an allocation of funds after the condemnation.

MR. CHARY: I don't want to wait for the condemnation.

THE COURT: What do you want to do, participate in the condemnation?

MR. CHARY: Yes.

THE COURT: Well, I guess we are going to have to do the same things we did in the others in these. I will have him file a claim and see whether or not he has standing.

MR. PITNEY: You mean to assert now a right to participate in the condemnation hearings before commissioners as a tenant?

THE COURT: Yes.

MR. CHARY: Yes.

I might also say that the 14-day

letter that is attached to the complaint encompasses the total amount that has been offered for all of the property. That would have to be apportioned too, so that I'll --

THE COURT: Tell me what you envision as to how you are going to get your claim into the court so you could be heard? What are you going to do and under what circumstances?

MR. CHARY: Well, I just heard your Honor say November 15th. I probably can get my claim in to the Court by that time.

THE COURT: Okay.

MR. CHARY: 8-day notice?

THE COURT: No, just file a claim. You don't need any notice, do you?

MR. CHARY: I filed a cross-claim against the State, and I sent you a copy of it. You probably got it this morning. It's not with you.

THE COURT: Well, I don't know -- I'm deciding to try title first today. There is nothing else before me. I don't know what you want me to do.

MR. CHARY: I just want assurance from your Honor that the -- I have no objection to the order provided that it does not prejudice my right to sever the property occupied by my client since that is not a portion claimed by the State.

THE COURT: The order today is to try title first. This will not prejudice your rights to come in and make any application you want with respect to protecting your client's interest. I am not going to make a specific protective order today, Mr. Chary.

MR. CHARY: No, I do not want a protective order.

THE COURT: Okay. Which one is that?

MR. CHARY: Plank.

THE COURT: Okay. That is carried.

MR. LITWIN: Your Honor, the reason that is carried is the record owner advised us he wanted it carried and I thought he advised all the other attorneys in the matter.

MR. CHARY: Well, he didn't advise me.

THE COURT: All right. 11-15.
Joseph E. Schultz?
What is your name?

MS. SCHULTZ: Genevieve Schultz.

THE COURT: Yes. Mrs. Schultz, do you understand what is going on here today?

MS. SCHULTZ: Yes.

THE COURT: Yes. Do you have an attorney?

MS. SCHULTZ: Yes, sir. Mr. Mencowitz.

THE COURT: Mencowitz. Would you come up here, please, a little closer.
Do you understand what is going on today?

MS. SCHULTZ: It's about the title of the property.

THE COURT: Yes. The Sports Authority is taking some of your lands.

MS. SCHULTZ: Yes, yes, your Honor.

THE COURT: If they are your lands you are going to be paid an amount that a jury fixes ultimately or commissioners fix.

MS. SCHULTZ: Yes.

THE COURT: Apparently there may be a claim of title in the State, saying some of the lands are now tideflowed or once were tideflowed. We don't know whether that is so or not. We are saying we are going to have a trial and decide that first before we get to the trial where we fix how much money is going to be paid to whoever owns the land.

MS. SCHULTZ: Right.

THE COURT: All right?

MS. SCHULTZ: Yes, your Honor.

THE COURT: Now, you have an attorney. Did he tell you to come here today?

MS. SCHULTZ: We received papers. It was delivered to us last week.

THE COURT: You say you have Mr. -- what is the name of your attorney again, Joseph what?

MS. SCHULT: Mr. Mencowitz.

THE COURT: How do you spell

his last name?

MS. SCHULTZ: Mencowitz.

THE COURT: What town does he live in?

MS. SCHULTZ: Broad Street, Bloomfield.

THE COURT: Broad Street, Bloomfield. Okay. Thank you. You can go if you want to now.

MS. SCHULTZ: Yes. All right.

THE COURT: Mary Sharry?

MR. AGNELLO: Edward M. Agnello appearing for Mary Sharry. No objection, your Honor.

THE COURT: George W. Smithson?

MR. PRESTO: Dominick Presto. No objection.

THE COURT: Emily Tuma?

[No response.]

THE COURT: Gerald Tramintozzi?

MR. PORRO: Porro, No objection.

THE COURT: V.E.S. Realty?

[No response.]

THE COURT: Otto Venino, Jr.?

MR. VENINO: Thomas M. Venino,

no objection.

THE COURT: Olin E. Watts, Trustee?

MR. GAVER: Dean Gaver, Hannoch, Weisman, Stern & Besser. And we do object.

THE COURT: You do object?

MR. GAVER: Yes, sir.

THE COURT: Keith Realty Corp?

MR. PITNEY: Your Honor, I don't believe there is any objection to the relief requested in the order to show cause. There is a motion in that matter. We have just called the attorney and he is on his way over.

I will represent to the Court that the attorney has decided to withdraw that motion, provided we make certain statements on the record which we are prepared to do.

So the motion in that matter will be withdrawn.

THE COURT: Okay. All right. You want to be different. Why?

MR. GAVER: Yes, your Honor.

I seem to be a minority of one, but I believe the facts are such that I do ask the Court not to exercise its discretionary authority and order prior to trial a trial of title.

The particular parcel here is something small, something under a 4-acre rectangular piece of unimproved and unfilled property bordering on one edge of the Berry's Creek.

Since I had knowledge of this action from Mr. Pitney back some months ago I have been in touch with the Attorney General's office, Mr. Rindone primarily, to see if we might get together to discuss whether we would be able to resolve our respective title claim so that we might then be in a position to negotiate with the Sports Authority, since there is nothing on deposit for this particular piece of property.

I have been advised by Mr. Rindone that the Attorney General's office has developed no procedure for resolving such claims with the record title owner.

As a consequence it is apparent that the prospects are that we would have to go through a potentially expensive trial on title in advance of any possibility of settling or resolving the situation.

THE COURT: Why do you want to go through a condemnation case without knowing whether or not you are ever going to get your money? Isn't it the same thing?

MR. GAVER: Well, the claims, as I understand it, of the State thus far are for something less than one-half of the property. So I anticipate certainly getting something out of it.

In any event, since the land is wholly unimproved there are not multiple claimants other than ourselves and the State.

I would expect that the proofs would be absolutely identical regardless of how large a piece of property we are talking about. The comparables would be the same, and indeed I think the State could anticipate by its ultimate settlement or sale to the Sports Authority to receive undoubtedly the identical sum that is determined in the condemnation as to our title in this.

Accordingly, this particular situation is --

THE COURT: You haven't been told flatly that there is no procedure for settling a claim, have you?

MR. GAVER: Yes, I have, your Honor. I have a letter from Mr. Rindone that there is no such procedure.

THE COURT: All right.

MR. GAVER: I should say I am told they are in the process of effectuating it, but that's a long way from being --

THE COURT: Okay. Incidentally, Justice Pashman, has he ordered a trial of title first in the other consolidations?

MR. PITNEY: Yes, he has in all of them. And in all those cases the cases have already been consolidated for trial.

And an additional order in those cases, those cases have all been consolidated with other cases up in the Appellate Division, and the matter is now in the process of discovery.

One of the reasons for doing it in this way, as I have represented I believe to the Court before, is to enable the property owners to pool their resources and save the money that Mr. Gaver is understandbly concerned about, the scientifici proof. And we thought that there would be a substantial saving of money and attorneys' time and judicial time by doing it this way.

MR. PORRO: Your Honor, I might point out that this statute is one of the reasons why the clause that Mr. Pitney mentioned to you before in the order when we resolved the other cases, that clause being that title is resolved as between the parties, because that effectually takes that one case out of this overall title first thing, and allows us to go on on that one particular case to commissioners. It's something to reflect on.

THE COURT: I think with all the advantages and just general fairness constrains me to exercise my discretion towards trying title first. And I so order.

What do we have left today?

MR. BRUINOOGE: I would like to be heard for a second.

THE COURT: Oh, Mr. Bruinooge.

MR. BRUINOOGE: I don't know whether this is the appropriate time or not. We did file an answer to the complaint of the Sports Authority. I must apologize to the Court and to Mr. Pitney that apparently it was not filed timely.

I would ask for the appropriate extension in that respect. We don't contest the condemnation really.

THE COURT: No, you won't have any trouble with that. You seen something formal on that?

MR. BRUINOOGE: Well, I don't think it is really necessary. But my problem is this: I find myself, I think, in a little bit of a unique position as executive of an estate, and it is a nonliquid situation, and the bulk of the assets, of course, are this tract out in the Hackensack Meadowlands.

I am faced with a tax deadline with the Internal Revenue Service.

I have applied for extensions but even if I get the extensions, of course, I am going to be faced with interest.

Under the rule of summary actions I must obtain a leave of court to cross-claim.

I have filed that cross-claim along with my answer against the State of New Jersey for interest, and I don't know whether this is appropriate to ask for leave of court or whether you want a formal order for granting me leave or me to file my cross-claim.

THE COURT: Is there any objection to his filing a cross-claim against the State?

MR. RINDONE: No, your Honor.

THE COURT: No objection.

MR. BRUINOOGE: Thank you. Thank you.

THE COURT: You have the right to do it.

Do you want to go on the record on this motion of Mr. Dinallo?

MR. PITNEY: Of Mr. Dinallo's to modify the order of July 5th?

THE COURT: Yes.

MR. PITNEY: Yes. Does Mr. Dinallo -- it is his motion. He may wish to be heard first.

MR. DINALLO: Judge, this is a joint application continued down until today of the Borough of East Rutherford and myself to withdraw the balance of $3,468,771.86, together with accrued interest as deposited with the Clerk of the Superior Court representing the balance of moneys on deposit.

THE COURT: Can I just interrupt for a minute? You keep referring to an application to modify an order of July 5th. You mean modification with respect to the mistake you allege in rents?

MR. PITNEY: The matter of the rent, yes.

MR. DINALLO: Now, I'll get to that very fast, your Honor.

The application as made, every attorney consents to the application being made to this Court, to wit, taking the money out, put it in the parties' names, and the respective counsels' names.

One objection comes from the plaintiff, Authority, through Mr. Pitney. We have agreed on all moneys to come out of this fund payable over to Pitney, Hardin as per their letter to this Court, which I answer, their letter is dated October 4, 1973. I agreed to the amount set forth in that particular letter to be paid over to the Authority forthwith with the exception of some $16,000 or exactly $16,212.03. I have attempted to explain to the Court and to Mr. Pitney how an error appeared in Justice Pashman's order.

Apparently it did not satisfy Mr. Litwin and, therefore, I ask the Court to release all moneys with the exception of this amount, $16,212.03.

And with consent of counsel take that sum out, put it in the form of C.D. in Pitney, Hardin and myself, or leave it in the Clerk's hands or set a date down to resolve this little matter of $16,000. There was an error committed.

MR. PITNEY: Why don't we resolve it right now? I think it is a very simple matter to argue. Let's resolve it right now.

THE COURT: Do you understand his argument in his letter?

MR. PITNEY: Absolutely perfectly.

THE COURT: And why don't we hear you respond?

MR. DINALLO: I rest on my letter than.

MR. PITNEY: Your Honor, there seems to be some suggestion here that the amount of this rent ought to bear some relationship with the terms of the lease between the East Rutherford Industrial Center and M. Vincent Costa. I should explain to the Court that what happened in this order of July 5th, this year, was that Justice Pashman prescribed certain vacation dates, and at that time he prescribed certain rentals for the tenants who were to remain in possession.

The amount of the rent was decided pursuant to the revisions of R.S. 20:3-19, which provides in effect that the Court may permit an owner or tenant to remain in possession with the condemnors' permission on a rental basis for a short term period subject to termination on short notice. The amount of rent shall not exceed the fair rental value of the property to a short term occupier.

Justice Pashman made that determination that the proper rent for this parcel was $3,770.24 a month.

Now, in point of fact that figure came out of a lease for this precise piece of property, which was entered into between this tenant and the lessee, a sub-lessee from the Borough of East Rutherford, C.D.C. Developers. That was a negotiated figure. It was a figure which appears in the lease.

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Justice Pashman determined that it was a reasonably monthly rental for this piece of property because of the fact that it was negotiated on arm's length basis between C.D.C. Developers and Mayfair.

Now, what happened after that was that there was an assignment of one of the superior leases to Mayfair, which paid for it, and the assignment , in fact, then caused a reduction, as I understand it, of the rental between Mayfair and the superior landlord. I've forgotten in this case which one it was. But the only point I think here is that the monthly rental between Mayfair and C.D.C. Developers negotiated on an arm's length basis was the figure which appears in this order, and that is the figure which Justice Pashman adopted, and that is the figure which -- with respect to which there never was any objection, as I understood it, until recently, when we sought to correct the money.

MR. DINALLO: Judge, I get back to one thing, that a mistake was committed. On Page 6 of Justice Pashman's order, which we referred to all day this morning, they have in Paragraph 9, Mayfair Infants Wear Co., Inc., $3,770.24 monthly rent.

THE COURT: I see.

MR. DINALLO: And that order came through, Judge, in these entire proceedings in the last year the only day I was absent from court was this day, and I got a copy of this order from Mr. Porro in his office. One day I was missing this came.

And the records will show that, Eddie Salbin will show that. When I saw this order, I assumed, and I say this to the Court, that the $3,770.24 monthly rent that they had inserted in here, there was no negotiation with Justice Pashman. This order was prepared by Pitney, Hardin --

THE COURT: What did you assume?

MR. DINALLO: These leases were sent to the Authority.

THE COURT: We are at twenty-five after four, and I am not going to go much further with you.

MR. DINALLO: Judge, I'm not going to go into this. $3,770.24 is not a monthly rental. That's a mistake. That's a quarterly rent.

MR. PITNEY: That's not so.

MR. DINALLO: Just let me finish, Jim.

MR. PITNEY: Let's resolve that one by pulling the lease.

MR. DINALLO: I do not think I want to resolve this today, but that is our position. I know the entire background of this. I have broken it down in my letter.

And I say, Judge, if that is a dispute --

THE COURT: He says he has a document he is relying on that says this is $3,770.24 a month. Is that so?

MR. PITNEY: That's correct.

MR. DINALLO: If he could produce that I'll show him that that document is in error.

I explained how it comes about, this error. It is not a monthly rent. It is a quarterly rent, and his figure is wrong. It should be based on $60,000 a year not $40,000 a year. I am trying to give him more on one hand, but his computation is absolutely wrong.

And rather than argue over $16,000 at this time I will take any date and argue this in an hour rather than today at 4:30.

THE COURT: All right. We will carry this. I'll give you a date on it.

Matthew will call you on it. I don't know just what date I can give you right now.

MR. DINALLO: All right, Judge.

THE COURT: Okay.

MR. DINALLO: Now, what about the balance of the moneys, the remainder of the moneys, the three million --

THE COURT: I think Mr. Pitney and Mr. Litwin are opposing any withdrawal until this is resolved. Is that correct?

MR. LITWIN: That's correct, your Honor.

MR. DINALLO: All right. Then in that case, your Honor --

THE COURT: I'll give you a very

short date.

MR. DINALLO: In that case I agree to pay the entire sum over to the New Jersey Sports & Exposition Authority, chargeable to my client, Mayfair.

THE COURT: Well, then there is no problem. Because I can't see why $16,000 should hold up a withdrawal of $3,400,000. It just doesn't seem conscionable to me. I would be glad to pay it over.

MR. PORRO: Your Honor, that is quite frankly the position of the Borough, that Mr. Dinallo has the --

THE COURT: I don't want to do you out of whatever it amounts to, Mr. Dinallo.

MR. DINALLO: Judge, the interest that will be lost will more than make this up in the long run.

MR. PORRO: That's correct.

MR. DINALLO: I'm not going to cut off one arm and then lose a leg. I have no objection to taking this entire letter as it is and paying the entire amount over.

THE COURT: All right. Then prepare the order.

MR. DINALLO: Now, your Honor, with respect to the order, I heard the pronouncement of the Court before in prior matters. Usually the consents accompany an order, the consents to be signed by the parties. And there are a numberous amount of parties in this particular consent that have to sign. Can we have the consent accompanying the order sent to this Court and have the parties come here and sign them and then the order is sent to the Clerk of the Superior Court upon disbursement of the check? Can the order provide that the check come here and the parties endorse here?

THE COURT: Yes.

MR. DINALLO: And that the order follow that check to the depository?

THE COURT: Yes.

MR. DINALLO: In C.D.s?

THE COURT: And I want the order also to have the same language that I have sort of gave out before.

MR. DINALLO: I took notes on that.

THE COURT: That the C.D. is automatically renewed. There will be no cashing or disbursements under this C.D. until further order of the Court; that the C.D. be left with the bank itself, with the bank as custodian of the Certificate of Deposit.

MR. DINALLO: May I make just one more suggestion, your Honor, along that line? I would like to suggest to the Court that in view of the substantial amount of money involved that we submit the names of five banks to the Court and that the Court pick out of the five, three depositories within which to make the deposits.

Any objection to that?

THE COURT: Any objection to that?

MR. PORRO: I have no objection, your Honor.

THE COURT: This is on what bank? You are not interested in that?

MR. PITNEY: I'm not interested in that.

MR. DINALLO: Thank you, your Honor.

THE COURT: Okay.

MR. PITNEY: Your Honor, could we dispose briefly, I stated that I was going to make a statement on the record, in this matter, I believe I'm correct in representing to the Court that counsel for the defendant has no objection to the relief requested in the order to show cause, namely, that the question of title be determined before the question of value.

There is a motion filed on behalf of two of the defendants asking for certain relief.

I have talked with my adversary, Mr. Fraoli, who has agreed to withdraw that motion upon my representation to the Court, number one, that the Authority will not seek costs in connection with the interpleader action, namely, the question of the trial of title, and I so represent to the Court, and that the Authority is not seeking possession of the premises which are subject to this proceeding at this time; and further that when possession is sought, of course, we will file the usual declaration of taking and make the usual deposit which is required by the statutes in these cases.

MR. FRAIOLI: Thank you, Mr. Pitney.

THE COURT: Will you note your appearance on the record, please?

MR. FRAIOLI: Ronald Fraioli, Hartman & Brooks, for Keith Realty Corp. and J.P. Patti Company, Inc., the tenant as Mr. Pitney said.

As Mr. Pitney said, these are the statements that he had agreed to make on the record, and we will withdraw both motions that we have filed.

THE COURT: Very well.

MR. FRAIOLI: Thank you, your Honor.

THE COURT: Thank you.

MR. FRIEDMAN: Your Honor, there is apparently one motion that has not been dealt with by the Court, and that is State of New Jersey v. Martin Friedman, Docket No. L 3339-70.

THE COURT: We don't have it. What is the motion?

MR. FRIEDMAN: It is a motion for adjudication of title. Mr. Scapatullo has filed an affidavit in that matter. Mr. Rindone just delivered it to me, to withdraw the funds.

THE COURT: When was the motion filed? Do you know?

MR. FRIEDMAN: I had asked for an adjudication of title based upon a map.

THE COURT: What do you want, more for yourself than for your clients?

MR. FRIEDMAN: No, I want the same thing for my clients. It is my feeling that the parties are willing to accept the map. Why shouldn't they just pay?

THE COURT: In a withdrawal motion?

MR. FRIEDMAN: Well, I asked the motion and cross-claim.

THE COURT: All right. I'll rule

on it. I have to say what I said before, the maps are under attack and I don't know how I can do that.

MR. FRIEDMAN: Your Honor, if Mr. Rindone doesn't object to an adjudication and I don't object to an adjudication --

MR. RINDONE: Wait, I didn't say anything about adjudication. You have an affidavit as to withdrawal and the last paragraph says as to withdrawl, it better say as to withdrawal.

MR. FRIEDMAN: Made in connection with to withdraw. But the motion goes beyond that.

MR. RINDONE: Well, I would have to oppose the balance of the motion for the reasons stated.

THE COURT: Okay. Denied. Granted, but denied as to the judgment.

CERTIFICATE

I, ALBERT R. AGOSTINE, an Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript of proceedings.

Albert R. Agostine

A-2311-72

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L 25637-70

REC'D
NOV 28 1973
A-6
Mortimer D. Newman Jr.
Clerk

EAST RUTHERFORD INDUSTRIAL :
PARK,
Plaintiff, :
v. :
BOROUGH OF EAST RUTHERFORD, :
Defendant.

DOCKET No. L 16799-72

NEW JERSEY SPORTS & EXPOSITION:
AUTHORITY, :
Plaintiff, :
v.
BOROUGH OF EAST RUTHERFORD, :
Defendant :

FILED
NOV 28 1973
A-3
Clerk

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

BEFORE

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for New Jersey Sports & Exposition Authority

MESSRS. PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR., ESQ.,
Ms. TONITA S. CONAGHAN
for Borough of East Rutherford

MESSRS. CALISSI, KLINGER, CUCCIO & BALDINO
by ALLAN H. KLINGER, ESQ.,
for Royal Worcester

EUGENE L. DINALLO, ESQ.,
for East Rutherford Industrial Park

Albert R. Agostine, CSR
Official Court Reporter

THE COURT: All right. The next one is East Rutherford Industrial Park v. Borough of East Rutherford and New Jersey Sports and Exposition Authority v. Borough of East Rutherford. L-25637-70 and L-16799-72.

This is a motion for consolidation and for intervention in the PW suit.

MR. PORRO: Your Honor, last time this was before the Court it was said that I would withdraw the motion for consolidation provided we had a quick trial date which your Honor requested you were pretty much in accord with at that time.

However, in the interim period Mr. Klinger now has brought a motion to intervene in the PW suit.

THE COURT: Right.

MR. PORRO: And I guess it is his argument at this point.

THE COURT: I take it you just want to be sure your interests are not prejudiced at all by what happened in PW suit as it might relate to the ultimate --

MR. KLINGER: Well, not only that, the answer and counsel's counterclaim which we finally got, and wasn't in the file on October 4th, asserts on behalf of the Borough, that the so-called master lease, the 66-year lease for 89 acres has been breached and, therefore, terminated prior to the condemnation proceeding; and also asserts that all those holding under that lease therefore have no interest in the proceedings.

We are moving to intervene because we do hold under that lease, and we call the counsel's attention to the fact that lease expressly provides for sub-tenants, such as my client, to cure defects and to participate as direct lessees of the Borough, the master lease expressly provides.

So I want to get in that suit because our client has been paying rent, has been paying taxes, doing all the things that we say they have to do, and the master lease expressly provides that these arrangements are contemplated so that each sub-tenant can protect its own position.

So we say we ought to be able to get in the suit to show our interest in that.

Alternatively, we say we want to move to dismiss this suit and let it await the allocation proceeding.

However, since making the motion, and that was the nature of my motion, since making the motion I do think these factual issues will simplify the condemnation proceeding if we can find out who really has the interest, that is, if the Borough is right, everybody is out.

THE COURT: Now, Mr. Porro.

MR. PORRO: Your Honor, Mr. Klinger's client is right where they should be in the condemnation suit. His interest --

THE COURT: He doesn't know whether he is really in it though.

MR. PORRO: Well, he doesn't know if he is in the condemnation suit?

THE COURT: Well, he is named, yes.

MR. PORRO: The question of curing defects of his client's interest will be decided in the allocation proceeding. This proceeding with regard to the master lease, and admittedly there is that clause in the master lease, relates to 89 acres. If there are any sub-lessees that are going to be allowed in that PW suit it means we have to open it wide open to all of the sub-lessees, and this is the type of situation, if you look at a graph, you will see sub-lessee, sub-lessee; so my suggestion to the Court is this: That we should litigate the question as it relates to the master lease, which will not affect the interests of the sub-lessees, until we get down to the point of disbursement, which is in the condemnation suit. And I think Mr. Klinger is in the right place in the condemnation suit, and in the wrong place in our action between ourselves and the tenant.

Now, he said he has paid. The argument is that we haven't received anything. He has paid it to the master lease, and any argument that's going to pursue there will be between themselves and the person holding the master lease.

THE COURT: Suppose he isn't in the PW suit, in the lease suit and you prevail? He is not in it. He has had it then, hasn't he? And isn't he affected by that?

MR. PORRO: He is affected, your Honor, to the extent that that action asks for possession. I don't see how he is really affected here because that's a moot question. We are not putting him out as a result of the default in the lease. He is being put out as a result of the condemnation. So that question is moot.

Then we come to the money question. Is the Borough entitled to money? I don't think there is much question in that suit that that is going to be a major issue. What does he have to add? We are going to show our records that we didn't receive the money. He is going to show that he paid money to the master lease.

We are not even disputing that. His argument there isn't with the municipality. His argument there is with the lessee holding the master lease. So I don't see how his interest is going to be affected.

Now, when we get to the real money issue, because in that action there will be -- there isn't going to be any disbursement or any allocation of money from the condemnation, but what he is really interested in is getting his hands on some moneys from the condemnation.

MR. KLINGER: If the Court please, I think that Mr. Porro's presentation is internally inconsistent. He says that all of the determination should await the allocation proceeding subsequent to the condemnation suit of this tenant except for the Borough. And as far as the Borough and the main lessee, let me litigate that first and then let everybody else wait until after the condemnations.

THE COURT: Doesn't that law apply to you then?

MR. KLINGER: I say let's do it first or let's do it afterwards, but let's do it together.

MR. PORRO: Your Honor, what I am saying here is that in the allocation suit, the sublessees can exercise their rights under the master lease to cure the defects, if any.

The PW suit is going to point out defects, if any. And it is going to be a question of dollars and cents.

THE COURT: It is going to affect allocation, isn't it, your PW suit?

MR. PORRO: Well, I don't see how it is going to affect sub-lessees' allocation.

THE COURT: Well, forget about that now. You saw fit to file a prerogative writ suit or who started it anyway?

MR. DINALLO: I did.

MR. PORRO: The master lessee, and we counterclaimed.

THE COURT: All right. And it is charging the viability of a lease or the viability of a lease is in issue in that case. That to me means to be intermittently connected to a question of allocation of funds in a condemnation suit. Won't it affect it?

MR. PORRO: I don't --

THE COURT: And I think Mr. Klinger has a good point there when he says that there is something inconsistent in your position because he says, "I agree with you. And what is going to happen, that suit is going to intermittently affect any claim I might have."

See, I was going to not consolidate. I was willing to give you a trial date today, pretrial and trial, just by calling in Mr. Winter, and giving you a date and going right to town on it, subject to whatever I was going to do as far as Klinger is concerned.

MR. PORRO: Well, then our alternatives, your Honor, there are 89 acres involved. I think Mr. Klinger is on a half an acre. I don't want him messing up --

MR. KLINGER: Oh, no, it's three acres.

MR. PORRO: All right, three, I'm sorry. Whatever the proportion of three to 89 is.

MR. KLINGER: But when you get down to three or a half, it is a greater portion than one-half of 89. So let's get it clear.

THE COURT: How many sub-lessees are there?

~~MR.~~ PORRO: Oh, there are a load of them.

MR. KLINGER: I have a chart here.

MR. PORRO: It had to be charted to really understand it.

MR. KLINGER: I think there are fourteen.

THE COURT: If they wanted to they have a right to intervene too.

MR. KLINGER: Certainly do.

MR. PORRO: Then why don't we consolidate it, your Honor? I have my motion pending yet.

THE COURT: Well, that doesn't really accomplish anything. If you consolidate it then you mean try this PW phase after the condemnation?

MR. PORRO: No, we will consolidate and then I'll move to have that portion -- and we'll have everybody in. The reason I'll do that is because if your Honor feels that I need him in the suit I certainly need all of the others in the suit.

THE COURT: I think you would be wise in that.

MR. PORRO: If that is what it boils down to.

THE COURT: No, we can do it some way else. I can make an omnibus intervenor order and just join them. If they default after that's up to them.

MR. PORRO: The thing that I fear though is that in each sub-lessee their interest is very, very limited, mainly that they have the right to cure. That's the only issue that he has, what --

THE COURT: I'm sure he understands that. When you intervene in this suit, you are only intervening what you can contribute toward a resolution of the main issue.

MR. KLINGER: And I'm only interested in my client, not interested in any other sub-tenant, just want to protect their interest, that's all.

THE COURT: How do you choose to protect their interest?

MR. KLINGER: To show the conduct of Royal Worcester, to show the payments, to show the occupancy, and to show the participation of the Borough, and to show that they are stopped from asserting any claim superior to my claim in their property except for the remainder in it.

MR. PORRO: That's what I was afraid of. That's what I was afraid of.

MR. KLINGER: That's what I'm trying to protect. If the Court please, the counterclaim says --

THE COURT: Aren't you still interested in proving that the main tenant still has a good lease?

MR. KLINGER: Oh, yes, I am. But

I am not going to assume -- yes, I join in that. But Mr. Dinallo represents the main tenant and he is going to try the case. And I think, Mr. Porro, again is trying to limit my participation, and I'm offended by that. We are good friends, and I'm kidding. But the point is that Mr. Dinallo is going to litigate that issue for the main tenant. I'm going to join and help all I can as far as the conduct of Royal Worcester is concerned in that proceeding. That's what I'm interested in.

MR. PORRO: See, the problem is though he has really no interest in the question of the relationship of the master lease with the Borough. He has one interest. His interest is this: Did the master lessee default, and if so, do I exercise my right to cure? That's the way I see it. He has not paid -- there has been -- at no point has there been any privity between the Borough and this sub-tenant. They've made their payments.

MR. KLINGER: I say that's false,

your Honor. That's factually false; that there is a kind of privity.

THE COURT: Look, we can solve that. We can solve that. I am going to grand your motion to intervene. I am going to deny the motion to consolidate. And the order you prepare shall state your motion to intervene is granted; also as to all other subtenants a copy of the order shall be sent to them within five days of the signing of the order saying they have leave to also intervene within five days of receipt of the order. And upon default --

MR. KLINGER: By filing an appearance.

THE COURT: By filing an appearance.

MR. PORRO: Right.

MR. KLINGER: Okay.

THE COURT: The order will provide further this matter is set down -- you are to file your pleading within ten days of the date of the order, responding pleading within ten days, then another ordering paragraph that the matter is set down for pretrial conference before Judge Blank on blank date.

MR. PORRO: Okay. Good. That's fine.

THE COURT: Now, at the pretrial conference the Judge will determine whether or not this intervention is going to expand the suit to such a degree that it destroys the very purposes of what we are trying to accomplish here.

MR. KLINGER: Yes, sir, that's fine.

MR. PORRO: Now, Mr. Klinger also has pending a motion to dismiss the complaint.

MR. KLINGER: No, no, that was the proposed pleading for the purposes of the intervention, but in light of the Court's order today, I will not move to dismiss. I will file a pleading. We will respond and we will crystallize the issues in the pretrial order.

MR. PORRO: Okay.

THE COURT: Now, you don't need

discovery in this case, or do you?

MR. KLINGER: I don't know yet, your Honor.

THE COURT: Well, we will let that abide the pretrial. I'm trying to give you a speedy resolution of this P.W. case.

MR. PORRO: Yes.

THE COURT: Now, look, you will go on because we will give it a firm date, and the judge will be assigned to you for this.

MR. PORRO: Quite frankly, that is really my interest, to see it expedited.

THE COURT: Now, I am sensitive to what you are worried about. Maybe I will pretry it myself in view of the fact that I have been into this.

MR. KLINGER: Thank you, sir.

MR. DINALLO: What about the discovery prior to the pretrial conference, your Honor? That is an integral part of this suit, discovery.

THE COURT: Oh, I see. You mean you can't put in meaningful contentions?

MR. DINALLO: There are two things: Is the lease in effect, and what is due the Borough, if anything? And I am trying to find that out.

THE COURT: What is your thought? You think you may want some discovery before you have a pretrial conference?

MR. DINALLO: No question.

MR. PORRO: We have been served with a notice to take depositions, your Honor.

MR. DINALLO: As long as we keep the door open, your Honor.

THE COURT: You will have all the discovery you need.

MR. KLINGER: Thank you, Judge.

THE COURT: So the date of the trial is going to be in your hands. The sooner you --

MR. DINALLO: I'll take the earliest trial date.

THE COURT: The sooner you tell me you are ready the sooner you will get your trial date.

MR. KLINGER: Thank you, Judge.

MR. PITNEY: Your Honor, if I could just make one observation. I take it then that until this case is disposed of it may not be appropriate to resolve the question of the extent to which the tenants will participate in the condemnation proceeding.

MR. PORRO: That's correct.

THE COURT: That is so.

MR. PORRO: That's correct.

THE COURT: That is so, because I've got the claims now. Did I set a date for argument yet?

MR. KLINGER: November 15, briefs on November 9th.

THE COURT: Wait a minute. You are right. But I don't have to upset that timetable.

MR. PITNEY: Well, if it is determined, I take it, as a result of this proceeding that the tenants have no interest because of these breaches obviously they have no right and shouldn't in any way, in any way participate in the condemnation proceeding.

THE COURT: You are right.

MR. PITNEY: If they have any right to participate in the first instance, which we, of course, dispute.

THE COURT: He is absolutely right.

MR. KLINGER: I think he is right, sir.

THE COURT: Well, we are just going to carry that claim bit. Look, we can do this: We can put it on the record on the 15th what your contentions are with respect to standing, and I'll probably say I'm going to wait until the P.W. is disposed of and then rule on it.

MR. KLINGER: Good idea. That's fine.

THE COURT: And that isn't going to hurt anything because my inclination, subject to what happens today, is we are going to try title first anyway. So your condemnation cases are not in the immediate offing.

MR. KLINGER: I don't think it creates any problem. Thank you, Judge.

THE COURT: Okay.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 25637-70

EAST RUTHERFORD INDUSTRIAL :
PARK, :
Plaintiff, :
v.
BOROUGH OF EAST RUTHERFORD, :
Defendant. :

DOCKET NO. L:16799-72

NEW JERSEY SPORTS & EXPOSITION:
AUTHORITY, :
Plaintiff, :
v.
BOROUGH OF EAST RUTHERFORD, :
Defendant. :

CERTIFICATE

I,. ALBERT R. AGOSTINE,

AN Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R [illegible]

A-3311-72

A 101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION :BERGEN COUNTY
DOCKET NO. L 24890-72

FILED
NOV 28 1973
Clerk

REC'D
NOV 28 1973
A-6
Clerk

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY, :
Plaintiff, :
v. :
BOGART MEMORIAL REFORMED
CHURCH, et al., Defendants. :

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

B E F O R E

HONORABLE THEODORE W. TRAUWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for the plaintiff

MESSRS. PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR., ESQ.,
Ms. TONITA S. CONAGHAN
for the defendant Bogart Memorial

EUGENE L. DINALLO, ESQ.,
for Paterson Plank Road Industrial Corporation

Reported by: Albert R. Agostine, CSR
Official Court Reporter

THE COURT: New Jersey Sports and Exposition Authority v. Bogart Memorial Reformed Church.

Now, this was received late under our 8-day rule. Mr. Litwin or Mr. Pitney, are you opposing the hearing of this motion?

MR. LITWIN: Your Honor, we don't oppose the hearing on this motion.

I think one of the problems in this respect, your Honor, has been that before we had been operating under, not the so-called 8-day rule, I don't think we have any problem with proceeding, as long as it is clear to everyone concerned that the 8-day rule is not operative again.

THE COURT: Well, I have tried to accommodate you on that score but we are observing the 8-day rule on motions.

MR. LITWIN: Thank you.

THE COURT: Now, appearances, please.

MR. DINALLO: I'm for the moving party.

MR. PORRO: Your Honor, I

represent Bogart Memorial Church.

THE COURT: This is a motion by the defendant, Paterson Plan Road Industrial Development Corporation, for withdrawal.

As I understand it, it involves Parcel 19, one acre. It is mapped. There is no riparian claim.

There is a deposit of $50,000.

MR. DINALLO: That's correct, your Honor.

THE COURT: Is that so? There is no claim?

MR. LITWIN: That's so.

May it please the Court, Mr. Porro represents the record owner in this matter, and it is the understanding with the record owner and the Authority that this matter has been settled.

MR. POTTO: That's correct, your Honor. The record owner has discussed with the Authority and has come to agreement with regard to a final settlement, which final judgment could be entered here.

I understand from the church also

that they have been speaking with Mr. Dinallo's client, and that they have agreed with them as to certain releases that are going to be exchanged.

Bogart has an interest in some property, his clients have, and they are going to exchange releases is what I've been told.

THE COURT: If you fellows have it worked out, that is fine.

MR. PORRO: I think we will bring it to a final judgment, quite frankly.

THE COURT: You better turn around and look at Mr. Dinallo.

MR. DINALLO: This is all news to me.

THE COURT: Well, you fellows should talk to each other.

MR. PORRO: We will, your Honor. We always argue.

MR. DINALLO: Your Honor, I would still like my application to withdraw the funds from court. Any objection to that?

MR. PORRO: No, I think we are all in accord that the funds should come out of court, and that my clients should get all of it.

But I know that in order to effectuate that Mr. Dinallo's people are going to have to, you know, sign off.

Your Honor, it is disposed of. We will bring it to a head and submit the order.

THE COURT: I don't understand this. You are not going to get any money?

MR. DINALLO: Judge, I don't care what they say, really.

Your Honor, my application is to withdraw funds from court. I represent a long-term lessee again. Of course, the Borough is the record owner, and I'm making an application to withdraw these funds from court, and there is no objection.

If they have settled something out, I'll probably find out about it in the next week.

MR. PORRO: That's right, your Honor. I think we can all be in agreement that the funds can be withdrawn and between counsel here we will draw a final order to be put into the court.

MR. LITWIN: I will submit the final judgment.

THE COURT: I've heard that song before. He is going to want everybody on that check, aren't you?

MR. LITWIN: That's correct, your Honor.

THE COURT: That is named in here. So get your agreement. There is no riparian claims, so we are not worrying about C.D's really, are we?

MR. PORRO: No, no.

MR. DINALLO: Just a moment. I know we are not. Now let me say something. I don't know what is going on. My application to withdraw $50,000 that is on deposit, that is my application. Now, we want an order from this Court directing the Clerk of the Superior Court to issue a check to the named payees in my motion.

THE COURT: I will do it on a consent order.

MR. LITWIN: With a final judgment, your Honor.

THE COURT: What?

MR. LITWIN: Final judgment that the matter is disposed of.

THE COURT: Yes.

MR. PORRO: Yes.

MR. LITWIN: Very good.

MR. PORRO: It will be in everybody's name.

THE COURT: Is the condemnation case settled too?

MR. PITNEY: Yes.

MR. LITWIN: Yes.

MR. PORRO: Yes.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 24890-72

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY,
:
Plaintiff, : CERTIFICATE
v. :
BOGART MEMORIAL REFORMED :
CHURCH, et al.,
:
Defendants.

I, ALBERT R. AGOSTINE, AN Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R.

A-3311-72

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-27801-72

A 3311-72

A101 SEP 1979

January 22, 1976

REC'D.
APPELLATE DIVISION
FEB 9 1976
A.O.C.-C
Elizabeth McLaughlin
Clerk

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY,)
Plaintiff,)
vs.)
BARONE,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-20953-72

FILED
APPELLATE DIVISION
FEB 9 1976
A-1
Elizabeth McLaughlin
Clerk

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY,)
Plaintiff,)
vs.)
BERGEN COUNTY ASSOCIATES,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-10792-72

SEP 21 1979
CLERK

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY,)
Plaintiff,)
vs.)
BERGEN COUNTY ASSOCIATES,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
BERGEN COUNTY - LAW DIVISION
DOCKET NO. L-10793-72
L-20952-72

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY,)
Plaintiff,)
vs.)
BERTONI,)
Defendant.)

QY
MR
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SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-16799-72

NEW JERSEY SPORTS AND)
EXPOSITION AUTHORITY,
)
Plaintiff,
vs.)

BOROUGH OF EAST RUTHERFORD,)

Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-26797-72

NEW JERSEY SPORTS AND
EXPOSITION AUTHORITY,)

Plaintiff,)
vs.
)
FEDERAL PATER,
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-26777-72

NEW JERSEY SPORTS AND)
EXPOSITION AUTHORITY,
)
Plaintiff,
vs.)

KEITH REALTY CORP.,)

Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-26781-72

NEW JERSEY SPORTS AND
EXPOSITION AUTHORITY,)
Plaintiff,
vs.)
MAZZA,
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-19429-72

NEW JERSEY SPORTS AND)
EXPOSITION AUTHORITY,)
Plaintiff,)
vs.)
MARINO & PATERNO,)
Defendants.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-12561-68
(C-5, C-5C)

STATE OF NEW JERSEY, by)
Comm. of Transp.,)
Plaintiff,)
vs.)
COUNCIL/BERGEN COUNTY)
ASSOCIATES,
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-13137-74

STATE OF NEW JERSEY, by
Comm. of Transp.,)
Plaintiff,)
vs.)
JONY,
Defendant.)

JONY, (Docket No. L-1926-74 PW)
Plaintiff,)
vs.
STATE OF NEW JERSEY,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-32262-73

STATE OF NEW JERSEY, by)
Comm. of Transp.,)
Plaintiff,)
vs.)
ROHDE,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-30868-73

STATE OF NEW JERSEY, by)
Comm. of Transp.,)
Plaintiff,
vs.)
AMSTER,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-33121-73

STATE OF NEW JERSEY, by)
Comm. of Transp.,)
Plaintiff,)
vs.)
TRAMONTOZZI,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-20874-73

STATE OF NEW JERSEY, by)
Comm. of Transp.,)
Plaintiff,)
vs.)
ANTONUCCI,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. 1-12561-68
(C-13 and C-13A)

STATE OF NEW JERSEY, by)
Comm. of Transp.,)
Plaintiff,)
vs.)
COUNCIL/FEDERAL PATER,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-36499-74

STATE OF NEW JERSEY, by
Comm. of Transp.,)
Plaintiff,)
vs.)
HUGBERG,
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-17847-71

STATE OF NEW JERSEY, by
Comm. of Transp.,)
Plaintiff,)
vs.)
HARPER,
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-30776-73

COUNTY OF BERGEN,)
Plaintiff,
vs.)
HUDSON VALLEY REALTY CORP.)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-15609-75

BOROUGH OF MIDLAND PARK,)
Plaintiff,)
vs.)
BLACK MILLWORK,)
Defendant.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
(A-3311-72)

CITY OF NEWARK,)
Plaintiff,)
vs.)
NATURAL RESOURCE COUNCIL,)
Defendant.)

EXCERPT OF TRANSCRIPT OF PROCEEDINGS

BEFORE:

HON. THEODORE W. TRAUTWEIN, A.J.S.C.
BERGEN COUNTY COURTHOUSE
HACKENSACK, NEW JERSEY
January 22, 1976

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
BY: WILLIAM J. WARD, ESQ.,
For New Jersey Sports and Exposition Authority.

WILLIAM F. HYLAND, ESQ., Attorney General
BY: WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General,
For the State of New Jersey.

MESSRS. GLADSTONE, HART, MANDIS, RATHE & SHEDD,
BY: MARVIN H. GLADSTONE, ESQ., and
DAVID CARMEL, ESQ.,
For Bergen County Associates.

ALFRED A. PORRO, JR., ESQ.,
For Borough of East Rutherford, et als.

MESSRS. HARTMANN & BROOKS
BY: RONALD M. FRAIOLI, ESQ.,
For Keith Realty Corp. and Antonucci.

NICHOLAS MARTINI, ESQ.,
For Mazza.

MESSRS. ELY, BRUINOOGE & SHERIDAN
BY: THOMAS H. SULLIVAN, ESQ.,
For Jony.

WILLIAM F. HYLAND, JR., ESQ.,
Attorney General,
BY: MATTHEW MILLICHAP, ESQ.,
Deputy Attorney General,
For the Department of Transportation.

JOHN R. WEIGEL, ESQ.,
For the City of Newark and
City of Elizabeth.

Reported by:

Albert R. Agostine, C.S.R.
Official Court Reporter.

THE COURT: Okay. I had reserved on a motion to consolidate the Sports Authority v. Borough of East Rutherford case. I'm not prepared to rule on that, and also rule on the application for a stay of that trial. I have decided to deny Mr. Rindone's motion for a stay of their riparian trial in the case of Sports Authority v. The Borough of East Rutherford.

I will, however, stay the trials in the cases of Bergen County Associates, Industrial Sites and Desidiero.

I have decided to consolidate the Borough of East Rutherford with the City of Newark inasmuch as, number one, this case involves a condemnation of public property. It's lands owned by a municipality.

The case also involves numerous tenants, large sums of money are involved, and we've got to get this title question settled once and for all.

I believe the case easily lends itself for incorporation into the City of

Newark trial. The same experts will be used, I believe, by Mr. Porro in the East Rutherford cases will be used in the City of Newark case. They will be called to testify and I think timewise, economywise that's the way to do it.

Lastly, and just as importantly, I want to see whatever court reviews City of Newark, I want them to see what this whole problem is all about, and I think it would aid them in their decision if they could see a practical application to an actual case of those theories that are going to be bandied about during the City of Newark trial. I think it will give them the broad overview that any reviewing court will need in order to understand the problems that have confronted litigants and the court for so long.

What we are doing is broadening the base. So we should have an appropriate Order submitted doing just that.

MR. RINDONE: May I suggest I have submitted to the court orders in the alternative.

THE COURT: There wasn't one for consolidation on this.

MR. RINDONE: Perhaps a couple of lines at the end of the appropriate one would do it.

THE COURT: All right. We'll see. We'll see. We'll let you know whether you should submit an order or not, Mr. Rindone.

MR. RINDONE: Yes, sir.

THE COURT: Now, I just would like to remind the attorneys of the City of Newark timetable. By January 30th -- there are a couple of typographical errors in the Pretrial Order, January 30, 1976, list of witnesses must be filed and trial briefs must be filed; February 2, exhibits or lists of exhibits must be filed; February 5th I understand we are going to have argument on the Boneilli issue; February 6th I would expect a joint statement of facts to be filed, and any requests for additions, modifications or supplementations to the Pretrial Order must be filed; February 17th, 10:30 A.M. trial will commence.

Now, I have before me many motions for summary judgment based on the court's indication. And I told Mr. Rindone at the last session of the court that he should expect to proceed with a hearing on these motions, if indeed I did not stay the matters.

Mr. Rindone?

MR. RINDONE: Your Honor, I received telephone instructions this morning. Mr. Goldfine regrets he could not be present, but he was required by the Attorney General to remain in Trenton for a particular meeting.

I'm instructed to suggest to the court that in view of the pending application before the Appellate Division for which all the documents have been placed into the hands of the Clerk's Office that perhaps it might be inappropriate to proceed with these motions for partial summary judgment, and that the State renews its position in that connection.

THE COURT: All right. I am going to deny the application and we will proceed to hear these motions for partial summary judgment. Do you want to discuss what you have just handed to me?

MR. RINDONE: Yes, your Honor. May it please the court, as an outcropping of the Parker Decision, the scientific personnel of the Department of Environmental Protection undertook to review the source materials pertinent to these title questions to ascertain if there were some other viable system by which the State might undertake to prove its assertion of title in lands which are presently filled.

I have handed to the court today, and I believe appropriate counsel have received copies, of an affidavit with a short report appended, which is intended to apprise the court of the fact that the State believes it has been able to construct a methodology by which adequate proofs can be offered to the court to determine the nature and extent of the State's claim in these hatched areas now filled.

To some extent there is an element of novelty to this, and certainly, your

Honor, the State does not wish to take opposing counsel by surprise or preclude them of any opportunity to explore the ramifications of this before taking a position with regard to this methodology.

I have present in the court room Dr. Feinberg of the Office of Environmental Analysis, who has been the principal worker in the execution of this methodology. And he is prepared, if the court so wishes, to describe exactly what he has done, the way he has done it, and why it has been done.

He has with him, I believe, I have not reviewed them this afternoon, suitable exhibits so that the court might fully inform himself as to the nature of this undertaking.

Again, I say I don't want to take counsel in any of these cases, put them at a disadvantage, that is to say, because of the fact that this is being broached at this time to the court. I hope counsel and the court will appreciate that analysis of this type does take some time. It is a little easier when you have the theory clear in your mind how you are going to proceed and then you go ahead and apply it.

Perhaps the most difficult part is to construct the theory and the methodology by which to proceed. We believe that we have sufficient information to demonstrate to the court that the State has a viable claim in these hatched areas. All of the information is derived from the particular parcel in question, without employment of a theory of analogy such as was employed in the Parker case. So it varies materially from that.

It is the contention of the State that once the details are revealed to the court that a sufficient and genuine issue of material fact would exist concerning the issue of title in the cases listed for consideration today under motion for partial summary judgment, and that under the Judson Decision the court would properly withhold a favorable decision on those motions.

THE COURT: Thank you.

All right. I just want to hold

that in abeyance for a few minutes.

MR. RINDONE: Yes, sir.

THE COURT: Number 18 on the list, Commissioner of Transportation v. Hugberg, where are we at?

MR. MILLICHAP: Matthew Millichap, Deputy Attorney General, for the Commissioner of Transportation.

I don't know where we are on that.

THE COURT: I propose to dismiss the Complaint without prejudice so you people get together. We are just carrying this and carrying and carrying it.

MR. MILLICHAP: So perhaps that appropriate under the circumstances.

THE COURT: Okay. Then it can be restored on motion or the order vacated.

Okay.

Now, Number 19, Commissioner of Transportation v. Harper is carried to February 5th.

Number 20, County of Bergen v. Hudson Valley Realty Corp., is carried to January 30th at 11:00 A.M.

Number 21, Borough of Midland Park

v. Black Millwork is carried to January 30th.

Anybody here on that?

That's an Order to Show Cause.

(No response.)

THE COURT: Number 22, City of Newark v. Natural Resource Council, this is a motion for summary judgment on the Bonelli issue, that is carried to February 5th.

That's all these motions, that leaves the motions for partial summary judgment. In some cases there may be motions for additional relief.

MR. RINDONE: May it please the court, we have responded in affidavit form in-the particular cases to the extent that we were able to. I had hoped that we would follow the court's list exactly so that we could go down the line.

THE COURT: We are.

MR. RINDONE: But apparently, Number One, we do not have an affidavit for.

THE COURT: Well, wait a minute, before we get to that, before we get to these particular cases, it is my recollection, that I stated to the litigants, that these motions were ripe for motions for partial summary judgment on title involving hatched areas. I had thrown out the hatch-hatching technique sometime previously. And I said I would hear motions for partial summary judgment by those private property owners who owned areas that were previously hatched, but I wanted to know whether there were any creek beds, any stream beds, things of that nature. You were told what I wanted to know.

What I can't quite put the handle on is this, Mr. Rindone: What you are offering today, you say "We've developed a new technique, a new methodology to solve the dilemma of fixing a line of mean high tide in areas that were hatched." Wasn't what you are offering me today, wasn't that what I was waiting for you to do all along and you didn't do?

MR. RINDONE: Your Honor, the methodology which the State now has undertaken to employ embodies the existence of creek beds, artificial ditches and certain vegetation.

What is present now that was not present before is the ability to ascertain tidal access to areas which before were thought to be tide flowed, but we were not in a position to establish that tidal access. With the Parker Decision involving artificial changes and with the requirement that we come forward with something different then the analogy theory --

THE COURT: This is my question. If you are not responding to it maybe it is because I didn't articulate it.

MR. RINDONE: My apologies.

THE COURT: Right now the posture of the maps in which the State states its claim is this: You've got areas you claim and areas you do not claim as being tide flowed. Do you have the hatched areas where you might have a possible claim? I said that is no good. And I said I gave you a certain length of time to come forward and say tell us, tell the people what you actually claim and what you do not claim.

That was never done.

Hence, in my decision I said as far as I'm concerned everything in the hatched area belongs to the record title owner except I wanted the record title owner to tell the court what they recognized as without any doubt as old creek beds and the like where certainly the state might have an interest. And then I said because the City of Newark, I'm not going to quiet title in the City of Newark action because of the limitations and the strictures set forth in the remand, I would hear applications for partial summary judgment in the individual cases.

Now, what I meant by that was this: As far as I am concerned they are getting their motions for partial summary judgment. I just want them to help me not divest the State of something that clearly belongs to the State, but I could no longer rely on the State, so I just wanted them to supply me with the information.

As far as I'm concerned, you all have your motins for partial summary judgment granted except for those areas that encompass creek beds and the like. And that is the posture we are at.

Now, you have come forward with documents that resist these motions for summary judgment as though there is a whole new day in court for a trial to quiet title in the hatched areas, and that is not what I envisioned.

MR. RINDONE: Well, your Honor, it is --

THE COURT: You may use this technique in a lot of other cases if you want to, but as far as I am concerned there is no longer a hatched area. As far as I am concerned the record property owner owns that property. Title is in them, except, and I've put this obligation on them, and it is just as solemn a duty for them to inform as it is the State to tell me where there are quick, easily recognizable areas that had to be tide flowed at one time if they are not now. I don't mean to cut you short, because I will hear some more from you in a minute, but I want to hear from you people who are effected by this proffer right now.

Mr. Porro, I'll start with you.

MR. PORRO: Your Honor, it was my understanding, as you set forth, that that was the posture we were in. Each and every one of these cases or many of these cases have different factual situations. We are prepared to go ahead and represent to the court and have either by way of affidavit or unopposed affidavits of Mr. Scapatullo to tell the court where there are creek beds in those areas recognized we cannot get the summary judgment there. In all other instances we stand the motion for summary judgment with either an affidavit from Mr. Scapatullo that says it's generally hatched or if he says there is a creek bed we stand on those affidavits. We stand on those affidavits for purposes of our motion.

THE COURT: Mr. Gladstone.

MR. GLADSTONE: We have two parcels, your Honor, both hatched, designated under the calendar control.

This is Bergen County --

THE COURT: Well, I'm not asking you to address yourself to your particular case.

MR. GLADSTONE: Oh, I see.

THE COURT: I want to know whether or not I should hear Mr. Rindone on this type of methodology in each one of these motions.

MR. GLADSTONE: Certainly not. As I understood it this case was decided and, as a matter of fact, a judgment has been entered, which although not final in each particular case, is final insofar as this level insofar as the determination that the state cannot prove its title to hatchlands, and the invitation your Honor made was to all individual parties to submit individual applications for summary judgment, and in my case in particular for withdrawal of monies on deposit in the hatched areas, consequently upon that adjudication. So that I was not anticipating receipt of an affidavit and an unsworn report dealing with some new method, really an old method, because the report refers to old maps, not new maps, ancient maps, I guess, but in any event I wasn't anticipating having to address myself to the contents of this affidavit, but really I was looking for something from the State which might contravene, which I don't think they can do, the affidavits on our part that there are no old creek beds in these areas that we are claiming. And I think that I'm not prepared to reopen a case at this point, which happens to be on appeal anyway. I think they took an appeal from your Honor's Order, and you denied a stay.

So it seems to me that there is nothing further to be done now but to determine on what is before the court whether these are hatched areas, whether there are any creek beds running through them, and if there are no creek beds, and they are hatched according to the map, to sign orders granting partial summary judgment, then orders that are applicable for the withdrawal of funds applicable to the hatched areas.

THE COURT: Thank you, Mr. Gladstone.

Mr. Martini.

MR. MARTINI: Number 9, your Honor, we strongly are opposed to this last minute offer on the part of the Natural Resource Council. The matter has already been adjudicated. There is no denial of the affidavits that we have filed that there are no creek beds in this property of the Mazza's. And I certainly don't think we should be delayed in having a partial summary judgment entered in our favor to quiet title. I think it would be highly unfair, and at this last minute to try to inject a totally foreign item in this dispute which has already been adjudicated by your Honor is improper.

THE COURT: Mr. Carmel.

MR. CARMEL: Your Honor, reviewing the affidavit of Mr. Rindone and the report attached to it, ostensibly they are trying to defeat the summary judgment motion and they are trying to introduce new evidence.

Now, the report itself indicates that they had this report all along, but they decided to gamble on a greater area rather than go with this line theory which they say would have resulted in less land going to the State.

Having lost that gamble they now say, "We'll settle for the least amount." I don't think the law can permit that.

THE COURT: Mr. Weigel, do you have anything to offer on this?

MR. WEIGEL: Just a couple points, your Honor.

For the Reporter, my name is spelled, W-e-i-g-e-l, and I represent among others, the City of Newark, the City of Elizabeth.

I did not understand your Honor that there was open to the State at this point in this proceeding in effect what is put forth as a new technique for mapping claims. I can represent to the court, because I have taken the discovery of the State's experts and I have in the record which was made before you on the decision in this matter, I quoted sworn testimony of Roland Younghands and Dr. Feinberg's statement is not under oath, the sworn testimony of Mr. Younghands, was that the State could not on the basis of everything it had, and I think the quote is well known to the court because the court used it, and I put the question in terms of everything you have, whether it's maps, whatever, photography, can you take and draw a line, because the court has already determined that the State's obligation is to draw the line.

In the answer of Mr. Younghands, which is unchallenged, is that no, they cannot draw the line in the hatched areas.

So that really the technique, even if it's to be considered, is no new technique. It's in effect an old technique.

And I think that the court well stated in the beginning that what we are here for I thought was for the State to come in, if it can, and to indicate clearly where there existed well defined, clearly known, clearly identified, former creek beds within the hatched area and not to introduce at this point in the proceeding a whole new technique that they hoped to use to salvage conceivably all of the hatched areas.

MR. PORRO: Your Honor, may I say one further thing. What is stated on the papers that we were handed today, I just got a chance to go through it, was the exact testimony of the exact man that sits in the court today in the Parker and Logithetis case. They tried to find little squiggles on the 1930 and the 1940 case.

Judge Petrella said that those proofs were insufficient, and for them now to come back and try to refine something that's already been rejected by the court after three weeks of trial I think should be rejected as a general proposition here, unless they can come forward on a specific piece of property and say, "We find the creek" or "We find something very specific."

THE COURT: Mr. Rindone, are these documents that you offer resisting the motions for partial summary judgment, are they theories or the methodology or whatever you want to call it, are you offering this as some type of newly discovered evidence?

MR. RINDONE: I think I would have to give a qualified yes. Obviously some of the physical characteristics which were embroidered into the conclusions had, the scientists had already been aware of them at the time of the initial interpretations were made for the claims overlay attendant the 1972 mapping.

However, it was not until Judge Petrella's determination that the State was entitled to artificial changes that any consideration at all was given to such changes and the relationship which they had to areas suspected of being tide flowed but not claimed.

The claims overlay as originally published by the State did not claim artificial changes.

The state of the law at that time did not clearly allocate to the State such ownership.

I would like to take this opportunity to comment on a couple of things that have been placed into the record by counsel, because I would not like the court misled. The question to Mr. Younghands referred to by Mr. Weigel was whether a mean high water line could be drawn. And the answer of Mr. Younghands was "No, we cannot today draw a mean high water line. And the reason is very simple, we don't have the components necessary for that."

THE COURT: Well, that's fine. If you can't do that you can't meet the test that the Legislature says you must meet.

MR. RINDONE: I beg to differ with the court. If your Honor will review the provisions of 13:1B.13-3, I believe, the sets forth the criteria which the Council will employ.

THE COURT: Yes.

MR. RINDONE: In making its study. One of those criteria was the mean high water line as provided by the National Ocean Survey or its predecessor, U.S. Coast and Geodetic Survey where available. The mandate of the Legislature, like the mandate of the Court, in O'Neill was not to construct a mean high water line. There is a very fine distinction, and I think if we can --

THE COURT: Mr. Rindone, does the State want to ever claim anything that lies above mean high tide?

MR. RINDONE: No, sir.

THE COURT: It doesn't, does it?

MR. RINDONE: Not one square inch.

THE COURT: Right. But it wants every square inch that lies below it, doesn't it?

MR. RINDONE: That we can reasonably prove.

THE COURT: Now, let me finish.

MR. RINDONE: Sure. I'm sorry

THE COURT: If that's so then we have to have a line, don't we?

MR. RINDONE: And this new methodology will give you a line. It does not purport to be a mean high water line. What it purports to be is a line of demarcation where we are satisfied and hope that the court will be satisfied that the land which we show as being tide flowed is below the mean high water line. That's all we have to show, that the land we claim is below the mean high water line.

THE COURT: Well, how will we ever know that?

MR. RINDONE: By biological delineation, and that is the business of the City of Newark.

THE COURT: That has to be a point of reference. Right in your very statement there is a point of reference, isn't there? You at least say we claim this land, we show this land, this is what we claim is below mean high tide. Is that right?

MR. RINDONE: That's right, yes.

THE COURT: Okay. What is your point of reference then?

MR. RINDONE: The point of reference is, your Honor, the biological analysis which the State --

THE COURT: Excuse me. I don't mean that kind of a point of reference. If I say to you, Mr. Rindone, "I'm not going to claim everything that I think I could claim, I'm going to take less than what I could claim -- " Right?

MR. RINDONE: Okay.

MR. RINDONE: Less.

THE COURT: "The point of reference that I claim is what I could claim;" don't I have to show you to satisfy you that I'm being generous as I claim I am? Don't I have to show what I could claim?

MR. RINDONE: No, sir.

THE COURT: Well, then I submit it has no meaning.

MR. RINDONE: I say it does. Let me give you a concrete example. It is accepted fact, judicially accepted fact that Spartina Alternaflora grows below the mean high water line. I don't think there is any dispute to that. And your Honor can question any counsel in this court room that is knowledgeable in these matters and I think that person would agree that Spartina Alternaflora grows below the mean high water line.

If we can demonstrate on a particular parcel of land that Spartina Alternaflora is growing there that land is below the mean high water line, and we don't have to show where the line is if we are willing to limit our claim to where the Spartina is growing.

THE COURT: Well, you don't know what happened. You don't know if years ago that was not flooded by tide.

MR. RINDONE: Well, your Honor is assuming certain facts that really are within the province of the City of Newark. Isn't that what that case is going to test?

THE COURT: I know it is. I want to know why this wasn't done months ago when they told me they were working on something. Don't come and tell me that you decided to do this because of Judge Petrella's decision. You knew, you knew you had a lot of trouble with the hatched areas long before Judge Petrella made his decision. And I was told that people were working on something, and that they were going to produce something.

Now, what is it that -- what magic does Judge Petrella, who I love very dearly, what magic does he have that prodded or led the State into doing something that I don't have?

MR. RINDONE: Your Honor, if I can state this --

THE COURT: And I don't purport to have any magic either, but --

MR. RINDONE: If I can state this as simply as I can, your Honor --

THE COURT: This sounds like a last minute, desperate effort to artificially inject into this case something under Hudson that says there is a disputed question of material fact or law. It's a last gasp, isn't it? Because you even concede in the supporting document that this might not stand up to the requisite degree of proof in the trial. You are even alerting me to that fact that this isn't too good, Judge, but we are going to throw it in.

MR. RINDONE: Your Honor, I can only be advocate. I can't be judge also. If I exercise a little humility please don't criticize me for that.

THE COURT: I am sorry. I am.

MR. RINDONE: I offer that as prima facie, I think, the prima facie establishment of the claim and the generation of a genuine issue of fact. I suppose I could have gone further and said, "This is it", but maybe that's not my nature. I don't know.

But getting back to the --

THE COURT: They are getting their money's worth from you. You think this is a personal reflection on you?

MR. RINDONE: No, sir.

THE COURT: It is not.

MR. RINDONE: Getting back to your Honor's prior question. What exists now that didn't exist before --

THE COURT: Yes.

MR. RINDONE: Well, let me give you my understanding of it, and I hope it is right, because apparently there is a lot riding on this colloquy this afternoon, I'm told that the Parker Decision, and I think I've indicated this to the court, the Parker Decision relative to artificial changes made all the difference in the world because the State in its initial methodology would not claim lands that were thought to be tide flowed unless there was tidal access to the property, because as, I think it was in the O'Neill Decision, the court says that you can have elevations below mean high tide in interior locations, but that in and of itself does not necessarily mean that it's tide flowed. The tide has to be able to get there.

The tide is very insidious and you don't need much of an opening sometimes, but there has to be some element of tidal access.

Now, I can represent to the court, and I use the word representation advisedly, that this methodology which is now presented was not withheld from this court for any reason whatsoever either strategic or whatever the mind of man can concoct.

That isn't the case.

THE COURT: No, I meant in 120 days plus the 90 why didn't you use this method and redo the hatched areas and say, "This is what we claim and this is what we disclaim"?

MR. RINDONE: Probably for the same reason, your Honor, that the Legislature is going to get a budget they wouldn't believe for the next fiscal year, dollars and cents, manpower. I can't assess for the court and make an accurate statement. Sure we had the personnel. We could have done it. I'm told we didn't. I do know there are other demands besides these cases on the personnel of the Department, because I've made them in connection with other pending cases in other counties, but that has to figure into the mix a little bit too.

Now, I wanted to clarify one other thing for the court Mr. Porro said. I think the Parker Case and the failure of the State's proofs in the Parker Case has to be limited to the three parcels in the Parker Case. There were remnants of creek beds on at least one of those three parcels little squiggles I think Mr. Porro indicated. We didn't claim those, because we couldn't hook them up. We weren't satisfied, although counsel may not acknowledge it I hope the court would at some point acknowledge that the scientific method attendant this business, if it may not be as scientific as it could possibly be, has at least been accomplished and attended by an element of integrity.

Now, I apologize to the court if I misapprehended the nature of the proceedings at the last session, and Ithink your Honor can see from my affidavit exactly what I had in mind. I was not trying to reopen, because if that were my state of mind I would have said that. It was my impression that the matter was still on the table for discussion in these terms.

Now, if your Honor were to look at one of the maps, the diagrams that have been produced in accordance with this methodology, it would become abundantly clear that the result of this type of analysis comes up with a sort of, I guess mottled is the best word, effect, as to the upland areas claimed as riparian.

THE COURT: You know when I look at this the first thing I think of is this: This is why I know, I know on my heart the suggested rule in New Jersey today is wrong. This is just what you fear when you look at it. Nobody can tell me that that was what was behind the sovereign owning tide flowed lands, that kind of a scheme.

MR. RINDONE: You see what happened, your Honor, we had a body of law called tidelands. And then in 1961 and again in 1968 the court amplified the definition of tidelands, pouring into the old bottles, if you will, of law, new significance, and, perhaps, this is the effect. I'm not particularly happy with it myself, but we have to ride with what we find.

THE COURT: You have your duty, I know it.

Does anybody else want to add anything to this?

MR. GLADSTONE: One point, if I may. And that is that the affidavit and report submitted ostensibly in opposition to the individual summary judgment motions, your Honor already having granted a general summary judgment uncontradicted by two official acts of the defendant, Natural Resource Council, the first was their approval of map overlays which designated these hatched areas as hatched and questionable and constituted an admission aside from Mr. Younghands admission that the State could not delineate its claims, that's why they designated them questionable.

And the second one was its official resolution of September 12, 1975, claiming all the hatched area which is also inconsistent with Mr. Rindone's affidavit in the annexed report.

The rule of Judson v. Peoples Bank does not mean that you can by virtue of an affidavit or a report like this, raise an issue of fact that does not otherwise exist.

In Judson, many people forgot, Justice Brennan held, that the bank was entitled to summary judgment, because the issue of fact raised was not genuine, and this is not genuine. At best it's disingenuous.

THE COURT: All right.

MR. MARTINI: Your Honor, I have one further comment. On this quote from the deposition of Mr. Younghands, the question is, "Can you, if you are put to it, from whatever source, whether it's the '30 photography or whatever source you put a claim-I understand the area is filled, but from whatever source -- can you take and define a claim in the areas that have been hatchmarked?"

And the answer was, "No."

THE COURT: All right. We'll take a few minutes recess.

(There is a short recess.)

THE COURT: I'm prepared to rule on the propriety of the State's proffer of this technique. I've marked as C-1 in Evidence, January 22, 1976, the affidavit of William C. Rindone, Jr. in New Jersey Sports and Exposition Authority v. Bergen County Associates as a typical documentation of the State's position in resisting the motions for partial summary judgment in all the rest of the hatched area cases.

Yes, Mr. Rindone.

MR. RINDONE: Excuse me for interrupting your Honor. Something just occurred to me which may help the court, I don't know. If your Honor will remember at our last session I indicated to the court I had one report, but I was not satisfied as to the quality of the work in the report and the substance of the methodology involved, and I indicated to the court that unless counsel has some degree of confidence in the viability of it that it would not be offered to the court, that it would not be offered.

I offer thatrecollection to the court by way of explanation of my understanding of the status of the proceedings at our last session.

THE COURT: All right. In all the pending motions for partial summary judgment based where the motions were brought, based on the court's decision of December 4, 1975, in the City of Newark case, where the court granted a motion for partial summary judgment invalidating the hatched area legend on the maps published by the State of New Jersey, the court in relying on that motion for partial summary judgment deems that the State is precluded from offering anything resisting the pending motions for partial summary judgment, except to demonstrate to the court that what the moving parties submit to the court with respect to clearly defined creek beds or areas that were tide flowed, if there is inaccuracy or some errors in those submissions, then the State has leave to point these errors or omissions out to the court. In other words, what the court is saying in precluding the State from resisting these motions is that the spirit and intent of the grant of the motion for partial summary judgment in City of Newark was that the State had not met its duty to clearly and unequivocally either claim or disclaim ownership of lands in these areas; that the court had given it ample opportunity to do just that; that the State had not taken advantage of that opportunity; that the time had run and the State is now in a position with too little too late.

I believe my ruling is consistent with my ruling in the City of Newark case of December 4, 1975.

Additionally, the State has suggested in oral argument that it doesn't have to draw the mean high tide line in these cases, that it is taking something less than that. Well, I suggest in turn then that the State through the agent for the trustees, that is, the Natural Resource Council, is not meeting its duties to the trustees of the School Fund. It is to claim everything that it believes it can prove by way of ownership of lands that now or were formerly tide flowed; and that the Natural Resource Council is not meeting that duty.

As far as I am concerned there must be a line, and that line is mean high tide, and that is the way I read O'Neill and the cases associated with O'Neill. We have been told that time and time again. This is not to be a game of guesswork or of taking something less or of taking something more, because by the same token I don't believe the private property owners should have title vested in them in lands that conceivably now are or once were tide flowed. That's just as bad. So I am prepared to hear those motions.

Now, I want to say this: Some of you have provided the court with what we asked for, and have you provided, for example, Number 9, Sports and Exposition Authority v. Mazza, did you provide the State with copies of documents you provided us with?

MR. MARTINI: Yes, your Honor.

THE COURT: All right. We will just go down the line then.

MR. RINDONE: May I ask a point of clarification, your Honor?

THE COURT: Yes.

MR. RINDONE: Does the court expect at this time this afternoon that the State is to offer whatever objections are to be offered?

THE COURT: That was my intention. The trouble is I believe many of the moving parties have not supplied you with the data that you might be entitled to have in order to, you know, review it.

Okay. You people know the posture that we are in now with these motions for partial summary judgment. I expect you, and many of you have not done this, some of you allude to something that has been offered months, if not years ago, that's in the jacket someplace. I'm not going to go through all that. I will carry everyone of these motions until February 5th.

I expect you, except the ones I

point out here are okay to grant motions, the ones that I say are carried until February 5th, I expect you to forward to Mr. Rindone what you rely on for your motion for partial summary judgment, and to the court. I don't care if it was given or filed once before in one form or another. If you want to call Mr. Harris he can tell you about the form that has been used in some of these instances. He will tell you just what you need.

Now, New Jersey Sports and Exposition Authority v. Barone. I'm afraid that it's going to have to be carried to the 5th.

MR. PORRO: February 5th.

THE COURT: February 5th. And that is you are going to show him, I understand what you show or what you concede to be once tide flowed.

MR. PORRO: I understand.

THE COURT: By way of a creek or a bed in a stream or what have you.

MR. PORRO: Your Honor, I understand.

THE COURT: All right. So that is February 5th.

* * * *

CERTIFICATION

I, ALBERT R. AGOSTINE, certify the foregoing to be a true and accurate transcript of the testimony and proceedings in the above entitled cause.

Albert R. Agostine

Albert R. Agostine, C.S.R.
Official Court Reporter

A101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 10790-72

REC'D
NOV 28 1973

FILED
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NEW JERSEY SPORTS AND :
EXPOSITION AUTHORITY,
:
Plaintiff,
v. :

MAISLIN REALTY CORP., :
et al.,
Defendants. :

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

BEFORE

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
BY: JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for New Jersey Sports & Exposition Authority

WILLIAM C. RINDONE, JR.,
Deputy Attorney General
For State of New Jersey, Resource Development Council

MESSRS. CHECKI & POLITAN
by JAMES D. CHECKI, JR., ESQ.,
for Maislin

Reported by Albert R. Agostine, CSR
Official Court Reporter

THE COURT: Okay. Maislin.

MR. CHECKI: If your Honor please, this is on my continued application to withdraw from the standing master something less than half a million dollars representing the unmapped portion of our land on the easterly side of Route 20. I think it is 9-A and 10-A.

THE COURT: 10-A and 9-A.

MR. CHECKI: Yes, sir.

THE COURT: Both unmapped as of now.

MR. CHECKI: Are they still unmapped, Judge?

THE COURT: Aren't they?

MR. RINDONE: All the maps are completed, your Honor, except some portions have not been defined as to the nature of the land, whether it is riparian or upland.

THE COURT: What is your position on this today?

MR. RINDONE: Our position has to be, your Honor, that I must request the Court's indulgence so that I may have an opportunity to present suitable affidavit to the Court, indicating the State's claim of ownership predicated upon these new maps.

THE COURT: All right. Will you have them interpreted by the 1st?

MR. RINDONE: I'll do my very best. If I did it with my own two hands I could calculate, your Honor, what time it would take me. I can only request.

THE COURT: I guess you have to be patient. I want something from Scapatullo here, who looks at the maps.

MR. CHECKI: I think it is clearly upland, your Honor. But, of course, I'm not expert in this area. But in any event if that is the case, and since we must again adjourn it, and as your Honor remembers the last time we were here, we were to have it on today, I would suggest then, your Honor, that I prepare a form of an order withdrawing the money from the standing master so that I may put it in a Certificate of Deposit wherein I can get my proper rate of interest, and that form of order I would make subject to the approval of Mr. Pitney and Mr. Rindone.

THE COURT: Who is going to own the certificate with you?

MR. CHECKI: I think perhaps all three of us, talking about 10 percent on more than half a million dollars.

THE COURT: Who is all three?

MR. CHECKI: Well, I suppose the Sports Authority should be on there and Rindone, as attorney for the State, and assuming it is upland, I would be entitled to the interest due on that money.

THE COURT: Prepare an order for a withdrawal which can be deposited under a Certificate of Deposit. I want the order to state, number one, that a copy of the order accompany the deposit, and that it be given to the bank.

MR. CHECKI: Yes, sir.

THE COURT: That they have the order; that that Certificate of Deposit upon expiration by its own terms shall automatically be renewed.

MR. CHECKI: Yes, sir.

THE COURT: Unless there is notification to the bank or an order of the Court, unless there is an order of the Court not renewing it. I don't want that problem of something like in limbo.

MR. CHECKI: Yes, sir.

THE COURT: That the Certificate of Deposit be made payable to, and you fellows agree on who it is going to be, either the attorneys as trustees or the people themselves; that the Certificate of Deposit be left with the bank, in custody with the bank. I'll sign such an order.

MR. CHECKI: Thank you, Judge.

THE COURT: We will carry this until November 1.

MR. CHECKI: Thank you, Judge.

THE COURT: So that you may know when that money is freed up, if at all.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L 10790-72

NEW JERSEY SPORTS AND :
EXPOSITION AUTHORITY,
:
Plaintiff,
:
v.
:
MAISLIN REALTY CORP., :
et al.,
:
Defendants.
:

CERTIFICATE

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

I, ALBERT R. AGOSTINE, an Official Court Reporter of the State of New Jersey, do here certify the foregoing transcript.

Albert R Agostine

A-3311-72

A-101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 10792-72

REC'D
NOV 28 1973
Clerk

FILED
Clerk

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY :
Plaintiff, :
v. :
BERGEN COUNTY ASSOCIATES, :
et al., :
Defendants. :

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

BEFORE

HONOTRABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for the New Jersey Sports & Exposition Authority

WILLIAM C. RINDONE, JR., Deputy Attorney General
For the State of New Jersey,
Resource Development Council

MESSRS. GROSS, DEMETRAKIS & DONOHUE
by JOEL M. ELLIS, ESQ.,
for Bergen County Associates

MESSRS.GLADSTONE, HART, MANDIS, RATHE & SHEDD
by MARVIN H. GLADSTONE, ESQ.,

MESSRS. PORRO, CONAGHAN & MURRAY
BY: ALFRED A. PORRO, JR.,
Ms.TONITA S. CONAGHAN

Reported by: Albert R. Agostine CSR
Official Court Reporter

THE COURT: Bergen County Associates. This is another one, Parcel 4, 6.56 acres; Parcel 12 -- oh, we have a late affidavit, wait a minute.

MR. ELLIS: Your Honor, that's my problem, if I may, the motion to withdraw funds only to Parcels 4 and 12-K, in the same complaints Parcels T-1-K, which the State has alleged are a riparian claim, we are not seeking the withdrawal of any funds. In fact, no funds were deposited with the court on that.

The problem is that as the Court just indicated of the parcels in question, the subject matter of this motion, consists of.654 acres.

The affidavit which was just submitted talked about 10 acres, of which 3.2 percent is considered upland, 3 percent is considered riparian and 64 percent, approximately, is considered questionable.

THE COURT: Yes.

MR. ELLIS: And, number one, I don't know as to Parcels 4 and 12K from this affidavit what percentage, if not at all, are considered upland.

THE COURT: Maybe Mr. Rindone can help us.

MR. RINDONE: Unfortunately I can't shed any light on these two affidavits, your Honor. I have promised Mr. Ellis that Mr. Scapatullo will be on the phone with him in the morning.

THE COURT: Oh.

MR. RINDONE: And we will get it resolved.

THE COURT: Okay. We will carry it till the 1st then. See if you can work it out.

We have an affidavit here with Bergen County Associates that has a different --

MR. LITWIN: That's a duplication, your Honor.

MR. GLADSTONE: That's for C & S Development.

MR. LITWIN: No, I think that's a different case. I think that's Parcel T-1-C, your Honor.

THE COURT: What do you think it

is?

MR. LITWIN: Parcel T-1-C.

THE COURT: All right. We will carry this to 11/1.

MR. ELLIS: Your Honor, with respect to the prior motions regarding Parcels 4 and 12-K, there are taxes admittedly due on the entire parcel. And the question has arisen with East Rutherford whether or not there would be an apportionment of the taxes based upon the percentage on that parcel relating to the taking.

It is our contention that indeed there should be an apportionment if there are taxes on the whole parcel, and only I think 23 percent is the subject matter of the Sports Authority taking.

Then we should pay the Borough for purposes of this motion 23 percent of its taxes. I only raise that now because it may very well be that I may be able to reach a consent order prior to November 1st with Mr. Rindone, and I would like to have a resolution of that aspect.

THE COURT: Well, the statute covers taxes, doesn't it?

MR. PITNEY: I believe so, yes.

MS. CONAGHAN: Your Honor, this is another question.

MR. PORRO: Not this question.

MS. CONAGHAN: What they are saying is they are condemning 23 percent of this lot, tax lot. All the taxes are due on the whole lot, but he is saying he only has a 23 percent of it because they are taking 23 percent of the lot.

And I'm saying no, no, now there is a fund in court. I want all my taxes as the Borough. Why should we have to go through tax sale certificates and foreclosures and so forth and so on, to get the rest of the taxes out of this guy who owns this lot now once we've got a fund in court that we can get to?

MR. ELLIS: Your Honor, number one, I do believe that since we have been involved in a number of years with respect to tax appeals on this property, the property owner has a right under the statute to withhold full payment on the taxes until a final adjudication.

So given that situation, and as I indicated earlier, I think the fairest and most equitable course would be to prorate the taxes that would have to be paid.

THE COURT: What about the part that is tidelands?

MS. CONAGHAN: That's a good question. Because if it turns it is tidelands then I suppose we have to face the issue which we are not going face at the present time as to whether there is any taxes at all.

MR. ELLIS: I'm proceeding under the assumption that the small portion in question, the subject matter of this motion, may be considered upland.

THE COURT: And you are saying that whatever percentage of the total the upland represents that is the percentage of the taxes you want to pay?

MR. ELLIS: Yes.

THE COURT: And they say no?

MR. ELLIS: They say no, and we would say if we had no condemnation here we would have a right to refuse to pay all the taxes now, because we have tax appeals pending.

MS. CONAGHAN: Is there a tax appeal pending on this lot?

MR. ELLIS: I believe so.

MS. CONAGHAN: I don't know. I don't think so.

MR. ELLIS: I think so.

THE COURT: How much are you talking about in tax dollars?

MS. CONAGHAN: I didn't know this was going to come up today, so I don't have the -- I may have it.

MR. ELLIS: We are talking about a claim, your Honor, of the Borough of $8,963.14. If we apportion it we are talking about a reduction to $2,063.82. This was set forth in an affidavit with the Court in April of 1973.

THE COURT: You want $83,000 for Parcel 4 and 12-A?

MR. ELLIS: We would ask out of

the 86,000, $80,913.

THE COURT: I'm not prepared to rule on this today. This was never raised.

MR. ELLIS: It was raised, your Honor.

MS. CONAGHAN: Before Judge Pashman, and he never made a determination either.

THE COURT: Well, this is carried to 11-1 and I want you to brief the problem of taxes, short memorandum, and I'll rule on it but I'm not prepared to do it now.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 10792-72

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY
:
Plaintiff,
:
v. :
BERGEN COUNTY ASSOCIATES, :
et al.,
Defendants. :
:

CERTIFICATE

I, ALBERT R. AGOSTINE, AN Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R Agostine

A [illegible]

A-101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No.L 24891-72

FILED

REC'D
NOV 28 1973
Clerk

NEW JERSEY SPORTS AND
EXPOSITION AUTHORITY, :

Plaintiff, :

v.

JAMES M. RICE ASSOCIATES, INC., :
et al.,
Defendants. :

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

B E F O R E

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for the New Jersey Sports & Exposition Authority

MESSRS. FRIEDMAN, KATES & USHER
by MARTIN M. FRIEDMAN, ESQ.,

MESSRS. PORRO, CONAGHAN & MURRAY
by ALFRED A. PORRO, JR., ESQ.,

MESSRS. BRESLIN & BRESLIN
for CHARLES RODGERS, ESQ.,

WILLIAM C. RINDONE, JR.,
Deputy Attorney General
for the State of New Jersey
Resource Development Council

Reported by Albert R. Agostine, CSR
Official Court Reporter

THE COURT: New Jersey Sports & Exposition Authority v. James M. Rice Associates, Inc., et al.

MR. PITNEY: Your Honor, this is an application for withdrawal, the result of which I think is dependent upon the maps which are being presented to the Court here for the first time today. And I would like to suggest, if I may, that perhaps we put the map up on the board.

THE COURT: The applicant seems to think that -- the applicant says I signed an order back in 1971 that said this land was upland. I would like to see that order, if I ever did.

MR. FRIEDMAN: Your Honor, that, if you recall, last week, there was a motion on behalf of the mortgagee of this property to withdraw.

THE COURT: Oh, yes.

MR. FRIEDMAN: This is the same property. It was conveyed by my property, who was the mortgagee, to Rice Associates.

THE COURT: I saw Mr. Rodgers here

a moment ago.

MR. FRIEDMAN: Mr. Rodgers was here.

MS. CONAGHAN: He had to go into another courtroom for some reason.

THE COURT: You've got $722,000.

MR. FRIEDMAN: Well, hopefully, it is one of those orders there was no problem on.

THE COURT: I have it granted on October 4th.

MR. FRIEDMAN: Yes, but the owner hasn't --

THE COURT: And the amount remaining is $977,950.

MR. FRIEDMAN: My recollection, your Honor, although I have no real business with it, is that I served with a copy of an affidavit by Mr. Scapatullo in this matter.

THE COURT: Yes, there is one. There is one.

MR. FRIEDMAN: Saying that they had no interest in the property, my recollection.

THE COURT: He tried to catch that though on something else. He says in Paragraph 4 of his affidavit, "My computations indicate that the matter of New Jersey Sports --" no, he doesn't say that. The entire area of the parcel 27.519 acres in question is upland and, therefore, not tidelands.

MR. PITNEY: Oh, your Honor, Mr. Rodgers is here. We are on the Rice matter now.

MR. RODGERS: Oh, thank you.

THE COURT: If you stay back there we almost granted your motion without your being here.

MR. RODGERS: Well, I get a little worried.

Your Honor, there are two aspects to the motion that I am concerned about. One, Mr. Friedman's motion as the mortgage, representing the mortgagees has already been granted.

THE COURT: Mr. Rodgers, what do you think we have been doing while you have been outside?

MR. RODGERS: I'll leave.

THE COURT: No. You are telling me things I know.

MR. RODGERS: All right, sir.

Is your Honor aware of the fact that there has been an application by Mr. Porro for taxes for the Borough of East Rutherford?

THE COURT: I don't know if there is an actual application. But before you get your money you have to pay your taxes.

MR. PORRO: We filed an affidavit.

MR. RODGERS: May I say that an affidavit has been filed to the effect that taxes have been paid through the third quarter, and I wanted to ask your Honor if the order which I will be happy to prepare or if Mr. Pitney cares to prepare it, he is certainly welcome to, could provide that the New Jersey Sports & Exposition Authority will pay the taxes for the fourth year.

I would like the order to provide, however, that on a pro rata basis my client will be reimbursed by the New Jersey

Sports and Exposition Authority for those taxes which we have already paid beyond the date of taking.

THE COURT: All right. Mr. Pitney?

MR. PITNEY: Well, I think, your Honor, if the statute contemplates an apportionment of that type I have no objection.

THE COURT: All right. Fine.

MR. RODGERS: And, finally, the only other matter I call to the Court's attention is that I believe the map that is here demonstrates that the entire tract is upland, is not riparian, and that therefore, if we could have an adjudication to that effect it would clarify a lot of matters. I don't think this is any longer in dispute.

So that by the time we come up to the question of damages we won't have any of these side issues.

THE COURT: Well, this is a motion for you to withdraw funds. And based on Mr. Scapatullo's affidavit I'm going to let you have those funds. There is not going to be any adjudication unless you want it.

MR. PITNEY: Well, your Honor, as I recall, I don't have the map in front of me, there was a parcel which was, I believe it is described as Parcel T-1-L on this map which was not subject to the Scapatullo affidavit, and I think basically we can dispose of the entire matter with an adjudication that James M. Rice owns all of this property. The State of New Jersey has no interest in any of it, and that James M. Rice is entitled to the balance of the moneys on deposit and that we are entitled to possession, and taxes will be apportioned as of the day of the entry of the order.

MR. RODGERS: I think, perhaps, it might be appropriate to prepare an order for judgment with regard to the matter of ownership and an order for payment with regard to the payment. I'll be very happy to do that, and I really mentioned it, your Honor, only because Mr. Pitney and I were both of a mind on that score.

MR. PITNEY: Your Honor, there is another aspect of this. We would like a clear adjudication, as long as there is no dispute, so that at a later point in time there is no question about ownership.

If the State is not asserting ownership of this parcel T-1-L, it seems to me that a final judgment on that score ought to be entered at this time.

MR. RINDONE: May I be heard, your Honor?

THE COURT: Yes, Mr. Rindone.

MR. RINDONE: I'd like to solve all of Mr. Pitney's problems, if I could, but this headlong rush to judgment distresses me a little bit. These maps haven't been promulgated yet. They are subject to change.

THE COURT: They are subject to challenge too.

MR. RINDONE: Yes.

THE COURT: There is a suit pending right now which I think is going to comprehend all of them as they come out.

MR. RINDONE: Right.

THE COURT: That's our problem. The suit that is filed in the Appellate Division covers only the first seven as I recall it. And I think, to be practical, the rest of them are being made under the same techniques, as I understand it.

MR. RINDONE: That's right, your Honor.

THE COURT: And I think that suit is going to be enlarged by the time discovery is finished so we can test the whole map, the whole 36 panels.

And I think Mr. Rindone has some merit in that contention from Mr. Pitney.

MR. RODGERS: May I have one comment, for the record, and I hope for the edification of the Court. May I call the Court's attention to Mr. Scapatullo's affidavit.

THE COURT: I have it here.

MR. RODGERS: I'm referring to the affidavit, sir, which the jurat is dated October 9th of this year.

THE COURT: That's right.

MR. RODGERS: Sir, I really do think we are reaching the point where we are being a little bit wasteful of everyone's time when in the face of the affidavit of the State's own expert title to our property is concededly in James M. Rice, and none of the land concededly, your Honor, is riparian.

THE COURT: Well, Mr. Rodgers, I think you are neglecting to consider what we were just speaking about. Mr. Scapatullo is relying on maps prepared by the Resource Council, and those maps are under attack.

MR. RODGERS: Sir, I am not going to press the matter further. I really thought that we have an awful lot of litigation pending here, and I appreciate counsel's comment about a headlong rush.

My impression here is that this is far from a headlong rush. It is my feeling this matter has been delayed for many, many, many years. I don't think there is anything headlong here.

MR. FRIEDMAN: May I just make one comment on this, not on the title, but you contemplate again a check payable to all parties?

MR. PITNEY: Absolutely. And it would be, your Honor, I take it allocable only to Parcel 5, which is upland, as a result of this prior adjudication, and that there will remain on deposit the moneys deposited for Parcel T-1-L.

THE COURT: There is no deposit on T-1-L.

MR. PITNEY: There is no deposit. Oh, I beg your pardon.

THE COURT: Okay. All right.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 24891-72

NEW JERSEY SPORTS AND
EXPOSITION AUTHORITY, :

Plaintiff, :

v. :

JAMES M. RICE ASSOCIATES, : CERTIFICATE
INC., et al., :

Defendants. :

:

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

I, ALBERT R. AGOSTINE, an Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R Agostine

[illegible]

A.101-1979

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET No. L 26792-72

REC'D
NOV 28 1973
Clerk

FILED
NOV 28 1973
Clerk

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY, :
:
Plaintiff, :
v. :
MARION GREENBERG PARKER, :
et al., :
:
Defendants. :

Courthouse, Hackensack, N.J.
Thursday, October 18, 1973

BEFORE

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

APPEARANCES:

MESSRS. PITNEY, HARDIN & KIPP
by JAMES C. PITNEY, ESQ.,
LAWRENCE B. LITWIN, ESQ.,
for New Jersey Sports & Exposition Authority

MESSRS. KIEFER, BOLLERMAN & KAPLOWITZ
by ALFRED W. KIEFER, ESQ.,
for Parker

Albert R. Agostine, CSR
Official Court Reporter

THE COURT: New Jersey Sports & Exposition Authority, v. Marion Greenberg Parker.

MR. KIEFER: For today I appear for Marion Greenberg Parker individually in the capacity stated in the complaint. She was served with this complaint within the past week, and by telephone has authorized me to appear on her behalf.

We have in prior years represented Mrs. Parker, and had difficulty at one time or another in connection with that representation.

Mrs. Parker is a rather particular kind of person. And this particular action involves numbers of very serious legal questions, which will involve possibly extensive and difficult services, and as of now we have had no opportunity to confer personally with Mrs. Parker or to enter into any fee arrangement.

On prior occasions we have had difficulty in this particular respect, and I do not wish to anticipate difficulty in this action which is now being heard by the Court.

I would like to, in an appropriate way, work out a fee arrangement with Mrs. Parker and then submit it to the Court for approval prior to our actual performance of the services so that our services would be protected.

In any event, today in her behalf I would like to oppose the application to reserve the right to attack the validity of this complaint, and the remedies sought thereunder, and ask that the Court protect her rights in the event that we do not represent her in the future.

THE COURT: Very well. Thank you, Mr. Kiefer.

Okay.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION : BERGEN COUNTY
DOCKET NO. L 26792-72

NEW JERSEY SPORTS & :
EXPOSITION AUTHORITY, :
Plaintiff, : CERTIFICATE
v. :
MARION GREENBERG PARKER, :
et al.,
Defendants. :

I, ALBERT R. AGOSTINE, an Official Court Reporter of the State of New Jersey, do hereby certify the foregoing transcript.

Albert R. Agostine

A 101 SEP 1979

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A-3311-72
(On Remand to Law Division,
Bergen County.)

FILED
APPELLATE DIVISION
JAN 6 1978
Elizabeth McLaughlin
Clerk

CITY OF NEWARK, et al,)

Appellants,)

vs.)

NATURAL RESOURCES COUNCIL,)
et al,)

Respondents.)

VOLUME XVI

BOROUGH OF
EAST RUTHERFORD

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
Docket No. L-16799-72

NEW JERSEY SPORTS &)
EXPOSITION AUTHORITY,)

Plaintiffs,)

vs.)

BOROUGH OF EAST RUTHERFORD,)
et al,)

Defendants.)

FILED
SEP 21 1979
Stephen W. Townsend
CLERK

January 11, 1977,
Courthouse,
Hackensack, New Jersey.

BEFORE:

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

Reported by:

Albert R. Agostine, C.S.R.
Official Court Reporter

APPEARANCES:

For Natural Resources Council:

WILLIAM F. HYLAND, ESQ.,
Attorney General of New Jersey,
BY: WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General.

For Borough of East Rutherford:

ALFRED A. PORRO, JR., ESQ. and
LORRAINE S. TELEKY, ESQ.

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THE COURT: All right, gentlemen.

MR. PORRO: Your Honor, we wish to recap, very, very shortly for the court, essentially we have had the Christmas break, the Borough of East Rutherford has completed its case relative to the case establishing mean high water line, and the witnesses to this point have been addressed primarily to that particular issue.

We have three witnesses left, all three of which will be short. These three witnesses will address themselves to the issue of the effect of artificial changes on the premises in question.

Rather than do the gamut of all of the artificial changes we have chosen two major artifical changes, and those changes being one, the mosquito ditching and two, the dreding of the Hackensack River over a stipulated time period that we will give to the court.

Today's witness is Jesse Leslie, who is not here to give expert or opinion testimony, but rather to give factual testimony relative to the work and the function of the Bergen County Mosquito Commission, and through him it is our intention to put in a series of exhibits or not exhibits, documents, maps, photographs, which will relate to the mosquito ditching.

Tomorrow we will present Dr. Thatcher, and I'll make a proffer at that time.

And, lastly, the loose ends by way of Lorraine Teleky and her cross-examination. Hopefully we can be done with our case by next Tuesday, or whatever. I don't anticipate that we need anymore than three days is what I am saying to the court.

THE COURT: All right.

MR. PORRO: I'd like to call Jesse Leslie.

JESSE B. LESLIE, sworn.

DIRECT EXAMINATION BY MR. PORRO:

Q Mr. Leslie, could you give us what your profession is.

A I'm a practicing lawyer as of

now.

Q Okay. And could you tell us how long you have been practicing? You are practicing in the State of New Jersey?

A I was admitted in 1921.

Q Okay. And do you have a license or have you practiced any other profession during your lifetime?

A Well, I was an engineer before I became a lawyer.

Q Okay. And can you tell us when you were an engineer, give us some time reference.

A Oh, I was graduated in 1913 and a Masters Degree in 1915, practiced until I took over my law practice.

Q Okay. Now, can you tell us what was your relationship with the Bergen County Mosquito Extermination Commission?

A Well, I came up here in 1915 as chief inspector to take charge of the work, and stayed for 52 years.

Q Now, 1915, was that the commencement of the Commission? Is that when it first came into effect?

A Well, it did some preliminary

work in 1914, but really 1915 was when it started.

Q Okay. Now, can you tell the court throughout those years, those fifty someodd years, can you tell the court what positions you held with the Commission?

A Well, I was chief inspector for awhile, and then superintendent, and then executive secretary, and I'm now an honorary commissioner without pay.

Q Will you tell us what you did and what your function was in those various positions.

A Well, in the early days of the Bergen County Mosquito Commission it was pretty nearly a one man show. I did everything.

Q Okay. That's in the early -- 1915 and --

A Up until the wartime I was actively full time until after my time in the service, which was 1919. Then I was on a consulting capacity more or less part time.

Q Okay. Now, you said you did everything. Can you explain to us generally what the Bergen County Mosquito Commission would do and generally and then more specifically in the

Hackensack Meadows?

A. Well, of course our primary purpose was to get rid of mosquitoes. When I came into Bergen County in 1915 canopies over beds were quite customary, and mosquitoes were really a terrific pest, and there was a good deal of malaria.

So our primary purpose was to get rid of the mosquitoes. And a great deal of the time and money, which was very limited in those days, was devoted to getting rid of the mosquitoes on the salt marsh because they were migrants. They'd fly as far as Ridgewood.

Q. Now, relative to the Hackensack Meadowlands you are familiar with the meadowlands and you were during your time period with the Commission. Is that so?

A. Well, yes, there was no mosquito ditching at all on the meadows when I came up here in 1915. We had about -- when I say Bergen County must have something better than eight thousand acres of salt marsh, and that had to be drained, and we had to lay out the ditching and the diking and anything to get rid of water, because the mosquitoes fly before -- I mean swim before they fly. So that --

Q Okay. Now, can you tell us how would the State of New Jersey get involved or was there any involvement between the County Mosquito Commission and the State of New Jersey in the early days?

A Well, the fundamental mosquito laws, Chapter 104, Laws of 1912, and under the provisions of that law when the Mosquito Commissions, county commissions were formed your budgets were submitted to the director of the experiment station, and approved by the director. So in that way -- and once the director had approved the budgets it was mandatory on the part of the Freeholders to appropriate the money.

Q Now, did the State have any control relative to the plans and the methods that would be used?

A Well, according to the provision of the law the plans and methods are stated in the budget figures that are sent to the State Director.

Q Okay. And they all had to be approved by the State. Is that correct?

A That's right.

Q Would the representatives from that State Commission come and inspect the work done more particularly in the Hackensack Meadows?

A Oh, when Dr. Headlee was in charge definitely.

Q And would they inspect the work more particularly you are familiar with, the Walden Swamp Area?

A Yes.

Q Did the representative from the State of New Jersey inspect the various work over the years that was done on the Walden Swamp Area?

A Yes.

Q And the plans for that work was submitted to the State?

A That's right.

Q Okay. Now, I'd like to show you for purposes of evidence --

MR. PORRO: Your Honor, I've prepared a list of the various exhibits, but I have left off the list the exhibit number. So perhaps as we go through we can put them on.

Q (Continuing) Now, first, Mr. Leslie, I'd like to show you a map which is entitled East Rutherford Meadow, and it's -- can you identify what this map is and whose map it is?

A Well, this is the Walden Swamp Area. It's dotted in here, and these are the number 1 ditch, number 2 ditch, number 3 ditch (indicating).

Q That's the Walden Swamp Area shown and the three main ditches that are shown?

A That's right, and then the dike, the dike along here. (Indicating)

Q Can you identify where this map came from or who prepared the map?

A Oh, it was apparently prepared by the Federal Works Administration.

Q And is it a map of the Bergen County Mosquito Commission?

A Well, it's a map that shows the ditching put in by the Bergen County Mosquito Commission, yes. This is all our ditching.

Q Okay.

A I don't know who actually prepared the map.

Q Okay. And this is part of the records of the Bergen County Mosquito Commission?

A That's right.

MR. PORRO: Okay. I don't care really if we wait until the end to submit all of these or if your Honor would prefer to submit them one at a time.

THE COURT: I'll give them numbers as they go in provided there is no argument on it.

MR. PORRO: I think Mr. Rindone is familiar with this map. It is the one we used in Parker.

THE COURT: This will be B-62 for Identifiation. You going to offer it in evidence right away?

MR. PORRO: Whichever. I might as well now that we're at this stage.

THE COURT: Let's see it for a minute.

MR. PORRO: It is the map showing all the mosquito ditches in the area.

MR. RINDONE: I have an objection at the appropriate time, your Honor.

THE COURT: Is there an objection to it being received in evidence?

MR. RINDONE: Yes, your Honor.

THE COURT: What is it?

MR. RINDONE: I don't think it comes within any of the established exceptions to the hearsay rule.

THE COURT: Where did you get it, Mr. Porro?

MR. PORRO: Bergen County Mosquito Commission. It's part of their records. It was used in the Parker case. It's the same map that was used there. This is the original though. In Parker we used a copy.

MR. RINDONE: I wouldn't want to be prejudiced by my ignorance in the Parker case, your Honor. Perhaps I should have objected there and I didn't or maybe my objection was overruled. I don't recall. I think the salient things now is the genesis of the map, where this comes from, and the opportunity that the State has to cross-examine whomever is responsible for the map to determine the facts surrounding it.

MR. PORRO: Your Honor, the rest of the documentation will support it. Suppose I withhold my offer now.

THE COURT: All right. It will just be marked for identification so far.

MR. PORRO: The rest of the

documentation will support the map.

THE COURT: All right. B-62 for Identification, Map of East Rutherford Meadow, April 1941, prepared by Works Project Administration, Federal Works Agency, Project Number 6994-2.

(Map of East Rutherford Meadow, April 1941, prepared by Works Project Administration, Federal Works Agency, Project Number 6994-2 is marked B-62 for Identification.)

BY MR. PORRO:

Q Now, I show you two sheets entitled Statement of Salt Marsh Ditching and Tidegates in Bergen County, 1915. Look at those two sheets, and can you tell us what they are?

A It's a resume of the ditching that was done under contract with the U.S. Drainage & Irrigation Company and Riley and Eaton.

Q And that is 1915?

A That would be 1915, yes, 1915.

THE COURT: Did you ever see that before, Mr. Leslie?

THE WITNESS: Yeah, I probably

made it up.

THE COURT: Oh.

MR. PORRO: Can we mark this for identification.

THE COURT: 1915 Statement of Salt Marsh Ditching, B-63 for Identification.

(1915 Statement of Salt Marsh Ditching is marked B-63 for Identification.)

BY MR. PORRO:

Q Now, I show you four sketches of ditching marked 1916, each one stamped with the word "file" on it. Do you recognize those four sheets?

A. Only as they were sketches of work that was anticipated or laid out.

Q And the first one is of the Walden Swamp Area. Is that correct?

A. That's right.

Q And that's dated April 29, 1916?

A. '16.

Q And these are from the records of the Bergen County Mosquito Commission?

A. That's correct.

MR. PORRO: I'd like to have that

marked for identification, your Honor.

MR. RINDONE: May we have them marked by letter in counterpart?

MR. PORRO: On the list I showed that one, two, three, four, maybe we can make that a, b, c and d.

THE COURT: Yes. You can leave it that way. B-64-1, 2, 3, 4, sketches of ditching, 1916 marked "File"; 1 is the Walden Swamp Area, April 29, 1916; 2 is the south side of Paterson Avenue, April 22, 1916; 3, Moonachie Creek Area, undated; 4, Moonachie Creek Area, undated.

(Sketch of Walden Swamp Area, April 29, 1916 is marked B-64-1 for Identification.)

(Sketch of south side of Paterson Avenue, April 22, 1916 is marked B-64-2 for Identification.)

(Sketch of Moonachie Creek Area, undated is marked B-64-3 for Identification.)

(Sketch of Moonachie Creek Area, undated is marked B-64-4 for Identification.)

BY MR. PORRO:

Q Now, next I show you a report entitled "The Use and Construction of Tidegates for Mosquito Control". Do you recognize that?

A I wrote it.

Q You wrote it. Okay. And this is part of the records of the Bergen County Mosquito Commission. Is that correct?

A That's correct.

MR. PORRO: Okay. I'd like to have that marked also.

THE COURT: B-65 for Identification, report entitled the Use and Construction of Tidegates for Mosquiot Control.

(Report entitled The Use and Construction of Tidegates for Mosquito Control is marked B-65 for Identification.)

THE COURT: Off the record.

(There is a discussion off the record.)

BY MR. PORRO:

Q I now show you a report entitled "Dikes and Tide Gates", prepared for the Twelfth Annual Meeting of the New Jersey Mosquito Extermination Association. Do you recognize that?

A. Yes, I remember it. Yes, I wrote it.

Q You wrote it. And it's now part of the record of the Bergen County Mosquito Commission. Is that so?

A. Yes.

THE COURT: On those that he wrote, subject always to relevancy, can we put them into evidence?

MR. RINDONE: Subject to relevancy, yes.

THE COURT: All right. I'll make a note of that. B-66 is in Evidence, subject to being tested for relevancy. B-66, Report entitled "Dikes and Tide Gates", prepared by Jesse Leslie, in evidence.

(Report entitled Dikes and Tide Gates is marked B-66 in Evidence.)

BY MR. PORRO:

Q Now, I show you what is captioned Second Annual Report of Bergen County Mosquito Commission, October 31, 1916, the original manuscript or a copy of the original manuscript. Do you recognize that?

A. Yeah, I wrote all the annual reports for 52 years.

MR. PORRO: Okay.

MR. RINDONE: You are not going to bring them all in, are you?

MR. PORRO: No, just the ones that help us.

MR. RINDONE: Oh,okay. That's fair.

THE COURT: He has around seven or eight of them.

MR. RINDONE: May the court conclude that the balance of the 52 years worth of annual reports are not helpful to the Borough?

MR. PORRO: No, we can produce them all, but these are particularly helpful.

THE COURT: Okay. Which one was this, the third?

THE WITNESS: The second.

MR. PORRO: That's the second.

THE COURT: All right. Subject

to the same limitation, B-67 in Evidence.

(Second Annual Report of Bergen County Mosquito Commission, October 31, 1916, is marked B-67 in Evidence.)

BY MR. PORRO:

Q Now, can you tell us after those reports in there -- I show you a printed report, which is bound and entitled Third Annual Report.

THE COURT: What was this one?

MR. PORRO: That's the second.

A. These are all part of the records of the Commission. 1917 is the Third Annual Report. Every year we prepared these reports and filed them.

Q Now, they would end up in a printed form from the original manuscript. Is that what would happen?

A. Yes.

Q And photographs would be added. Is that so?

A. Generally so, yes.

Q Now, referring to that 1917 Report, I turn to Page 35, and there is a photo that appears there. Do you recognize that photo?

A. Yes. That's when we dynamited a

ditch in Walden Swamp.

Q And that's a photo of Walden Swamp in 1917. Is that correct?

A. Yes.

MR. PORRO: That can be marked. Your Honor, on that exhibit I have on the exhibit list the original manuscript, but I really don't think that it's necessary that that goes in.

THE COURT: It looks like the Argonne Forest, doesn't it?

THE WITNESS: Yes. Well, that was our one experiment in dynamiting.

THE COURT: B-68, copy Third Annual Report, Bergen County Mosquito Extermination Commission, 1917, printed copy in evidence.

MR. PORRO: The original manuscript I'm not going to submit.

THE COURT: No, I don't think that's necessary.

(Third Annual Report of Bergen County Mosquito Extermination Commission, 1917, printed copy is marked B-68 in Evidence.)

BY MR. PORRO:

Q All right. I am going to show you another report, 1918 entitled Fourth Annual Report, and more particularly address you to Pages 9 and 13 that are marked, and ask you first of all do you recognize that report?

A Yes.

Q Can you tell us what you see on Page 9 of that report?

A Well, that's a photograph of the Walden Swamp before ditching and the Walden Swamp after ditching.

Q And then I ask you if you would turn to Page 13 and the upper photo. Can you tell us what that is?

A That's one of the stumps that was pulled out of the cedar swamp, Walden Swamp.

THE COURT: B-69 in Evidence subject to the same reservation.

(Fourth Annual Report, Bergen County Mosquito Extermination Commission, 1918 is marked B-69 in Evidence.)

BY MR. PORRO:

Q Now, I show you a letter dated

July 31, 1917, from the New Jersey Agricultural Experiment Stations addressed to the Bergen County Mosquito Commission and ask you do you recognize that?

A Yes. It's a letter that the Commission received from Dr. Headlee discussing the fact that we had a bad year with mosquitoes.

Q And I show you another letter from the Station, same agency, dated April 28, 1919, and that one is more particularly addressed to you. Is that correct?

MR. RINDONE: May it please the court, these two letters I would like to request a proffer from counsel as to how they are intended to be used in this matter. We are getting a volume of exhibits here and I am concerned that in the crush at the end of this witness' testimony, which I'm sure Mr. Porro hopes to end this afternoon, we may not have an opportunity to explore fully each item. And these two in particular I'd be interested to know what direction counsel is going with them.

MR. PORRO: Well, I'll offer them later so we can have the argument later then. I will not offer them at this point. Let's just get them marked for identification.

THE COURT: You have the other one there?

MR. PORRO: That's one and he has the second one, your Honor.

THE COURT: Letter from the New Jersey Agricultural Experiment Station dated July 31, 1917, to the Bergen County Mosquito Extermination Commission, B-70 for Identification.

(Letter dated July 31, 1917 from New Jersey Agricultural Experiment Station to Bergen County Mosquito Extermination Commission is marked B-70 for Identification.)

THE COURT: B-71 for Identification, letter dated April 28, 1919, from the State of New Jersey Agricultural Experiment Station to Mr. Leslie.

(Letter dated April 28, 1919 from State of New Jersey Agricultural Experiment Station to Mr. Leslie is marked B-71 for Identification.)

MR. PORRO: The next four for identification or for evidence are the Fifth, Sixth, Seventh and Eighth Annual Reports ranging from 1919 through 1922.

THE COURT: B-72 through 75 are the Fifth, Sixth, Seventh and Eighth Annual Reports for the years 1919, 1920, 1921, 1922. They will be marked in evidence.

(Fifth Annual Report, October 31, 1919 is marked B-72 in Evidence.)

(Sixth Annual Report, 1920 is marked B-73 in Evidence.)

(Seventh Annual Report, 1921, is marked B-74 in Evidence.)

(Eighth Annual Report, 1922, is marked B-75 in Evidence.)

BY MR. PORRO:

Q Now, next I show you Report of County Conditions, and that is July 1, 1927. Do you recognize that?

A This is the report that I prepared at that time.

MR. RINDONE: May we know, your Honor, to whom the report is directed.

Q Can you tell to whom that report was directed?

A Yes, to the Commission. I reported every month to the Commission.

MR. RINDONE: This was your report?

THE WITNESS: This is a monthly report apparently.

THE COURT: Mark it for identification; I think for your own good you might look these over before I rule on them.

MR. PORRO: Right.

THE COURT: B-76 for Identification, Monthly Report, July 1, 1927.

(Monthly Report, July 1, 1927, is marked B-76 for Identification.)

BY MR. PORRO:

Q And now I have three reports which are listed on the list, specifically addressed to the New Jersey Experiment Station from the Bergen County Mosquito Commission and the dates of the reports are October 31, 1932; October 31, 1933; and October 31, 1934.

A These are the annual reports.

Q Those are the annual reports?

A. Yeah, these are the annual reports.

Q For those particular years?

A. These are the reports that state the plans and methods and budget for the next year.

Q Okay. And that was done every year?

A. That was done every year according to the provisions of the law. That's the only way we got our money.

THE COURT: B-77A, B and C, annual reports 1932, 1933 and 1934, of the County Commission to the New Jersey experiment Station, for identification.

(Reports to New Jersey Experiment Station from Bergen County Mosquito Extermination Commission, October 31, 1932, October 31, 1933 and October 31, 1934 are marked B-77A, B-77B and B-77 C for Identification.)

BY MR. PORRO:

Q Now, next I show you "Specifications for the Drainage Work Required on the Salt Marshes of North Arlington, Union Township, Rutherford, East Rutherford and Ridgefield", can you tell us what that is?

MR. RINDONE: Excuse me, your Honor. We are having trouble with that. Am I to understand that each of these annual reports are reports from the Mosquito Extermination Commission to the New Jersey Experiment Station.

MR. PORRO: That's correct.

THE COURT: Yes.

MR. RINDONE: Then I would like to preserve a right to object beyond the matter of relevancy, forgive me. I didn't understand that they moved in that direction.

MR. PORRO: Yes, the State control was the top of the umbrella, so that Judge Petrella's decision doesn't hurt us in this case.

MR. RINDONE: Yes, but I'd like to discuss the O'Neill decision.

MR. PORRO: All right. I'm not going to offer them at this point.

MR. RINDONE: Well, his Honor has --

THE COURT: No, I'm only marking these for identification.

MR. PORRO: They are only for identification.

MR. RINDONE: But the other annual reports, your Honor, were marked in evidence, and I didn't understand that they were the same.

THE COURT: Oh, you are talking about the other ones.

MR. RINDONE: Yes, I am sorry to create this problem, but I'm becoming acquainted with these now.

MR. PORRO: Well, I think maybe Mr. Leslie can clarify that.

BY MR. PORRO:

Q Was there a difference in the annual report as compared to the report that was submitted to the State? I think there is some confusion. I'm not sure myself.

A The only reports that were submitted to the State were the annual report each year.

Q And these that we have just --

A And the reports submitted to the

Commission, I don't know.

THE COURT: The other ones are the report to the Commission.

MR. RINDONE: The other reports, the second, third, and so on, are from the Superintendent to the Commission, is that it?

THE COURT: Let me see B-74 for a minute.

MR. PORRO: Why don't we show him and then maybe we can clarify that.

THE WITNESS: No, the annual reports are submitted by the Commission itself to the State Experiment Station. They are signed by the president and treasurer.

MR. PORRO: Okay.

THE WITNESS: The monthly reports were the ones that I as superintendent made up and submitted to the Commission. The annual reports were from the Commission to the State Experiment Station.

THE COURT: Then the only annual report is the one that was submitted to the State?

THE WITNESS: That's right.

THE COURT: There were no annual reports just within --

THE WITNESS: No, that's as of the 1st of November of each year.

BY MR. PORRO:

Q That's why they were always dated the last day of October?

A That's right.

THE COURT: Now, I'll hear you.

MR. RINDONE: You see, your Honor, I have a particular objection to B-76, for instance, the report from the superintendent to the Commission. I have a different objection to the annual reports from the Commission proper to the New Jersey Experiment Station.

THE COURT: Yes. I realize that.

MR. RINDONE: BUt your Honor has marked some of the or most of the annual reports thusfar in evidence with only the reservation as to relevancy. And my objection doesn't go to relevancy.

THE COURT: Yes. What is the

other one? What is the other basis of the objection?

MR. RINDONE: If it's intended by Mr. Porro that the State be bound by the factual content of these reports, because the report moves from the Bergen County Commission to the New Jersey Experimental Station, which I take it to be a function of the Department of Agriculture, I would respectfully submit that in the O'Neill v. State Highway Department case that very question was treated, and the court said there that the tidelands agency of the State cannot be bound by undertakings of other instrumentalities of State government.

In O'Neill it was the State Highway Department. The Tidelands Agency must be a party to litigation.

THE COURT: I realize that, but if these documents describe conditions at that time I don't care about who is being bound. It is a matter of evidence. It isn't what O'Neill was talking about. They were talking about some action by the

State Highway Department as not binding the Natural Resource Concil, what is now the Natural Resource Council. If there is something in any one of these reports that says there was a mosquito ditch at a certain location, then it was tide flowed or wasn't tide flowed and how it got there I think I ought to have it in evidence.

MR. RINDONE: And your Honor says it makes no difference who the recipient of the report would be.

THE COURT: No.

MR. RINDONE: Okay. I can live with that.

THE COURT: I don't think you are offering it for that reason.

MR. PORRO: No.

THE COURT: You are offering it as something that typifies the condition in the meadow?

MR. PORRO: Yes.

THE COURT: Wherever here pertinent that existed at a certain time. Is that correct?

MR. PORRO: Yes. And in the event

Mr. Rindone attempts to argue however that these ditches were not -- that we have to prove that the State was involved in these ditches I will say we have shown that they were involved, but that's a legal issue and I don't think we have to get into that now.

THE COURT: Well, for example, there is one of those letters that says the State does not consider Walden Swamp to be a tide marsh.

MR. PORRO: That's right.

THE COURT: All right. The letter says it.

MR. RINDONE: Well, I submit you can give different weight to such an utterance, depending upon the circumstances under which it was uttered.

THE COURT: Sure.

MR. RINDONE: And I'm sure your Honor is aware of that, but I think Mr. Porro, I anticipated to some extent Mr. Porro's intent, and he has anticipated to some extent my intent. We did not, the State of New Jersey, the Tidelands Agency, neither directed nor condoned, nor supervised, nor in any way was a part of the construction of this series of mosquito ditches.

MR. PORRO: I think you are going to find that there is no tideland agency back at the days that these letters were written, your Honor.

MR. RINDONE: Or the predecessor, and as a result, your Honor, I do not think that if there were any results of the construction of these ditches which affected the tideland status of the property I don't think the tidelands agency of the State should be held accountable or its holdings diminished in that regard, much like --

THE COURT: What about its holdings being expanded? Do you think they should be?

MR. RINDONE: Well, we don't --

THE COURT: You see, Mr. Rindone, I can solve your dilemma for you. I'd like to mark all of these in evidence as being business records of Mosquito Commission subject to your ultimate opportunity to argue relevancy and competency. I think that would cover it then.

MR. RINDONE: All right, sir.

THE COURT: Okay?

MR. RINDONE: Thank you.

BY MR. PORRO:

Q Now, I show you the exhibit marked "Specifications". Can you just briefly identify that?

A. Yes. These are the tide gates and -- that we built. We had no specifications for them. We had nothing to work on, and very little money. So that we had to prepare the specifications that we felt would build adequate gates within the means that we had. So those are specifications that I prepared at that time.

Q You prepared those. And are they typical as to these specifications as to the difference and depths and widths and things of that nature?

A. They were all --

Q That's all set forth there?

A. That's right.

Q And those were prepared by you and

used by the Bergen County Commission when they contracted out jobs?

A That's correct.

MR. PORRO: Okay.

THE COURT: B-78 for Identification, Specifications for Drainage Work. I'll keep marking these for identification.

(Specifications for Drainage Work is marked B-78 for Identification.)

BY MR. PORRO:

Q I now show you what is entitled Tabular Statement of Mosquito Work dated 1924-1925 in most instances, can you recognize what that is?

A Well, it's a summary sheet of the work that was being done at that time.

Q And that's from the records of the Bergen County Mosquito Commission?

A It's all summarized from the records, yes.

MR. PORRO: Okay.

THE COURT: B-79, Tabular Statement.

(Tabular Statement of Mosquito Work 1924-1925 is marked B-79 for Identification.)

MR. PORRO: Now, the next is a group, your Honor, I'll have him identify it first, and then we can decide how to handle it.

BY MR. PORRO:

Q I show you these groups of work sheets and see if you recognize them, and can you tell us what they are generally, and generally where they come from, and then we'll decide how to handle them?

A We got reports and sketches from every inspector everyday to show what he particularly had been doing, and these are apparently summary sheets of work that was being done by that inspector.

MR. PORRO: Your Honor, only some of them apply in this case, but I think for preservation of records perhaps we may want to --

THE COURT: I don't know how these are going to fit in.

MR. PORRO: These are the work sheets of the people in the field as to what work was done in the various areas. So you can just mark them for identification at this point.

THE WITNESS: We got a daily report from every inspector everyday.

THE COURT: Set of typical work sheets -- are these all by Kraft?

MR. PORRO: Only one has Kraft's name on it. Maybe Mr. Leslie can --

THE WITNESS: I think they are. I think they're all Jack Kraft's. They look like his work.

THE COURT: All right. Typical work sheets anyway B-80 for Identification.

(Typical Work Sheets are marked B-80 for Identification.)

BY MR. PORRO:

Q Now, Mr. Leslie, can you tell us during the years that you were in your various positions did you have occasion to visit the Walden Swamp Area in East Rutherford?

A Yes.

Q Can you tell us approximately how often you would visit that area?

A Well, we had salt marsh all the way from North Arlington to Little Ferry, when we were building the tide gates at Kingsland Creek that took a lot of time. I would say I visted the Walden Swamp Meadow oh, maybe two or three times a week.

Q Okay. And did you have occasion to be accompanied on any of your visits by any representative of the State of New Jersey that you can recall?

A. Oh, Dr. Headlee used to come up, Dr. Headlee was really the motivating force from New Brunswick. He came up quite frequently, and we walked around Walden Swamp. It was then just a cedar swamp, and really a cedar forest you might say, and we walked around, tramped that meadow a great many times. I have no idea just how often.

Q But it was many times?

A. Yes.

Q Now, I show you a photograph and ask you if you can identify that photograph, and the photograph has some writing on the bottom, if you can identify that writing.

A. Yeah, the printing is definitely mine. Nobody else prints like that. That's the dynamiting in Walden Swamp.

Q That depicts Walden Swamp?

A That's Ditch Number 1, Walden Swamp.

Q And that shows the heavy wooded areas that you referred to?

A Yes, yes, that was a dense swamp woodland at that time.

Q Now, can you point out to us where Ditch Number 1 is on this first exhibit, when you say Ditch Number 1?

MR. RINDONE: Your Honor please, I think if we are going to have exhibits used in testimony and the exhibits have not been entered into evidence yet what's the purpose of discussing their admissibility later? It becomes somewhat moot, does it not?

MR. PORRO: Well, we can agree to have it struck if this map doesn't go in. I just wanted to tie the picture together.

THE COURT: Well, we can't make any marks on the map, can we?

MR. PORRO: He can identify where Ditch Number 1 is. I think that's the best that --

THE COURT: Okay. I'll remember

that if that doesn't come into evidence we won't use it. I don't know how to do it any other way.

BY MR. PORRO:

Q Now, referring to the map which I believe was B-61, can you just point out where Ditch Number 1 is, and perhaps you can --

Where is Paterson Plank Road?

A Right here. (Indicating)

Q Ditch Number 1 would be this one.

A (Indicating)

Q And Ditch Number 2 is the one in the middle?

A That's right.

Q And that runs from Berry's Creek right straight through. Is that Ditch Number 2?

A To Route 3, yes. This was is never finished.

Q What is this?

A Those are ditches.

Q Okay.

A And this is your dike here. (Indicating)

Q Okay. And the dike is shown in

red?

A That's right.

Q Okay. Now, I show you a photograph album --

THE COURT: All right. This little photograph will be B-81, the dynamite blasting, Ditch No. 3. That's a ditch that was never completed?

THE WITNESS: Yes -- no.

MR. PORRO: The dynamite was Ditch Number 1.

THE COURT: You say photo entitled Dynamite Blasting Walden Swamp Number 3, is this Number 3 or Number 1?

THE WITNESS: That's Number 1.

THE COURT: It says Number 3 on it.

THE WITNESS: No, that's Number 1. Oh, it says Ditch Number 3. It's Number 3.

MR. PORRO: It's Ditch Number 3. Okay.

THE COURT: B-81 for Identification.

(Photo entitled Dynamite Blasting-Walden Swamp-Ditch Number 3 is marked B-81 for Identification.)

BY MR. PORRO:

Q I show you a photograph album and I ask you do you recognize that album and where it came from?

A. We've had it in the Commission Office for a long, long time.

Q And that has photos that were taken for the Mosquito Commission?

A. That's right.

Q I'd like now to refer you most particularly to Page Number 1, the first page that you are looking at and the photo to your left. Can you tell us what that photo is?

A. That's a ditch in Walden Swamp.

Q Okay. Now, can you turn that over to Page Number 2, and all the photos, the three photos on Page 2, can you tell us where they were taken?

A. Yeah, those are pictures of the dynamiting in the Walden Swamp.

Q Okay. Now, perhaps if we can move on to Page Number 7, and I think I have it marked, there it is, Page Number 7, and on Page 7 there are four photographs. Can you tell us where those four photographs were taken?

A Yeah, they're photographs of Walden Swamp.

Q And the lower photograph has a man in it. Can you identify that man?

A Almost a boy, yes, that's myself.

Q I'd like to go to what is marked Page 15 and I show you the large photo to the right hand, your right-hand side of the page, can you tell us, can you identify where that photo was taken, the telephone poles?

A Well, I think it's along Paterson Plank Road down in the Walden Swamp Area, because this is Walden Swamp in the background.

Q Okay. You can see Walden Swamp in the background?

A Yes.

Q And is that, from your recollection, is that the nature of the property along the southside of Paterson Plank Road in the early days before and at the time the mosquito ditching was --

MR. RINDONE: Objection, your Honor.

THE COURT: On what ground?

A Well, all I can say it's a typical mosquito ditch.

MR. RINDONE: Mr. Leslie, please.

THE COURT: Okay. Let me hear the question.

(The Reporter reads the preceding question.)

THE COURT: Was what? Let me hear the rest of the question.

Q (Continuing) Was commenced.

THE COURT: What was the basis of your objection?

MR. RINDONE: We don't know when this was taken, your Honor, by whom it was taken, the time it was taken, what season it was taken and whether it represents the property 365 days a year, whether this was an exceptional day that this photograph was taken. I realize it's difficult for the witness to reach back.

THE COURT: We'll see if the witness can tell us about what year that would be.

BY MR. PORRO:

Q Tell us approximately when this photo would have been?

A I would say probably 1916 or '17, certainly in the early days.

Q And what is depicted there, the telephone poles, that's along Paterson Plank Road to the best of your recollection?

A To the best of my recollection, I don't know.

Q All right. Now, can you tell us what you see there? Do you recognize that as being the typical condition of the area south of Paterson Plank Road in those days?

A I would say that's reasonably typical, yes.

THE COURT: I'll allow the question and the answer. Counsel is referring to what will ultimately be marked as B-82D for Identification.

MR. RINDONE: All of it, your Honor? All of it? I realize it's a precious keepsake, but --

THE COURT: All of what?

MR. RINDONE: Are we going to have the benefit of the entire photo album?

THE COURT: Oh, yes. I see some interesting pictures there. I'm dying to look at it.

BY MR. PORRO:

Q Now, on what is marked Page 19 I'd like to refer you to the lower right photo and can you tell us what that is?

A This one?

Q Right.

A Well, it's Walden Swamp.

Q Okay. And that was one of the photos that was used in one of the earlier reports. Is that correct?

A Could be.

Q Okay. Point that out.

A (Complying.)

Q And I take you to what's marked Page 21, and more particularly the lower left photo here, can you tell us where that is?

A That's Walden Swamp.

Q Okay. In and about that same time period?

A That's right.

Q Okay. Now, I take you to what is marked Page 26, and on Page 26 the upper right-hand photo, your right.

A That's one of the stumps that was

taken out of the Walden Swamp.

Q Okay. In and about the same time period?

A Yes.

Q Okay. And now I take you to Page 29, and can you tell us are any of the state representatives depicted there?

MR. RINDONE: Objection, your Honor, unless they have some connection with the Tidelands Agency of the State I really think that's irrelevant.

MR. PORRO: I think we are going to be able to show that the Department of Agriculture was the Tidelands Agency in those days, your Honor, but for purposes of identification, and we can argue relevancy later --

A That's Dr. Howard, the United States entomologist.

THE COURT: In the center?

THE WITNESS: Yes, from Washington. This was taken at Atlantic City.

That's Dr. Headlee.

Q And he is the New Jersey State Representative?

A. Yes, he was State entomologist.

Q And he's Dr. Headlee that traveled the Walden Swamp with you, that you referred to before?

A. He was the one that knew more about mosquito work then anybody else.

Q Okay. Now, I'm going to leave the album to you. Now, that album has many other photos. Is that correct?

A. Yes.

Q And those photos range from different parts of Bergen County. Is that correct?

A. That's right.

Q Okay. And we have pointed you only, and solely to the ones in Walden Swamp?

MR. RINDONE: May I address a question to the witness, your Honor, on the photo album?

THE COURT: Yes. Let us just mark it for identification first.

MR. RINDONE: Sure.

THE COURT: This photo album will be marked B-28A through H for Identification; A, Page 1 photo identified as "Ditch in Walden Swamp After Cleaning"; B at Page

2, three photos of Walden Swamp; C, Page 7, four photos of Walden Swamp; D, Page 15, Photo lower right, Walden Swamp, Southside of Paterson Plank Road, circa 1916-1917; E, Page 19 lower right photo Walden Swamp; F, Page 21, lower left-Walden Swamp; G, Page 26, upper right-roots of tree, Walden Swamp; H, Page 29, Photo of State Supervisor, Thomas J. Headlee.

(Group of photos above referred to are marked B-82A, B-82B, B-82C, B-82D, B-82E, B-82F, B-82G, B-82H for Identification.)

THE COURT: Off the record.

(There is a discussion off the record.)

MR. RINDONE: May I inquire of the witness as to one item?

THE COURT: Sure. Go ahead.

CROSS-EXAMINATION BY MR. RINDONE:

Q I notice, Mr. Leslie, that there is writing in the back pages of the album, somewhat faded white ink. When was that writing put in? Do you know?

A I wouldn't know. I assume that when the album was made up that's when it was done.

Q And I notice in the front of the album there is some writing also in white ink, but it looks pretty nice and bright and new, do you know when that was put in?

A No.

Q It wasn't -- you have no knowledge of it?

A No.

MR. RINDONE: All right, your Honor.

DIRECT EXAMINATION BY MR. PORRO: (CONTINUING)

Q Now, eventually a dike was built in the Walden Swamp Area as was shown on this Exhibit B-61, and you can just for purposes --

MR. RINDONE: Objection again to the reference, your Honor, to the exhibit. That's going to become so intertwined in the testimony --

MR. PORRO: This is the last reference I'll make to it.

THE COURT: One more, that's all.

MR. PORRO: This is the last

reference, for identification, and then later on --

Q (Continuing) And that's marked in red. Is that so?

A. This is the dike we put in, yes.

Q Okay. Now, the one that's marked in red, was that in replacement of one that was there before, do you recall?

A. Yes.

MR. RINDONE: Objection to counsel leading the witness, your Honor.

A. (Continuing) Well, there was a dike there before, but it wasn't satisfactory because we were still getting breeding.

Q Okay.

A. So we put in the new dike to protect that area.

MR. PORRO: Okay. I have no further questions.

And I thank you, Mr. Leslie.

THE COURT: All right. We'll take a short break.

(There is a short recess.)

THE COURT: Okay.

CROSS-EXAMINATION BY MR. RINDONE: (CONTINUING)

Q Mr. Leslie, can you give us an approximation of where, referring to the map on the easel, of where the dike is on the Borough of East Rutherford property?

THE COURT: You can go down and look at it if you want to, Mr. Leslie.

That's referring to Exhibit number what, Mr. Rindone?

MR. RINDONE: B-9, your Honor.

THE COURT: Thank you.

MR. PORRO: Your Honor, in all fairness to this witness, he has never seen these exhibits. We only went over with him the mosquito commission map.

THE COURT: All right. Let him take his time.

Q If it's off the map don't hesitate to say so, Mr. Leslie.

A Where is Paterson Plank Road?

THE COURT: Can you help orient him on that? He's looking for Paterson Plank Road.

Q Would it help you to look at this?

A It would be right about in there.

(Indicating)

Q Here is your first bend in Berry's Creek. (Indicating)

A Well, it's about out in there somewhere. (Indicating) Here, here it is. (Indicating)

THE COURT: Does the dike run generally northeast-southwest?

MR. PORRO: North-South generally. It has a couple curves in it.

Sir, in all fairness to the witness the dike is not shown on this map.

THE COURT: Yes, I realize that.

THE WITNESS: It's in here somewhere. (Indicating)

BY MR. RINDONE:

Q Do you see Anderson Creek here?

A Anderson's Creek.

Q We find it on the map here.

MR. PORRO: Do you want a stipulation, Bill? I'll stipulate where it is.

THE COURT: Do you know where it is?

MR. PORRO: I know where it is.

(Indicating)

Q Here is your first bend in Berry's Creek. (Indicating)

A Well, it's about out in there somewhere. (Indicating) Here, here it is. (Indicating)

THE COURT: Does the dike run generally northeast-southwest?

MR. PORRO: North-South generally. It has a couple curves in it.

Sir, in all fairness to the witness the dike is not shown on this map.

THE COURT: Yes, I realize that.

THE WITNESS: It's in here somewhere. (Indicating)

BY MR. RINDONE:

Q Do you see Anderson Creek here?

A Anderson's Creek.

Q We find it on the map here.

MR. PORRO: Do you want a stipulation, Bill? I'll stipulate where it is.

THE COURT: Do you know where it is?

MR. PORRO: I know where it is.

I'll stipulate to it.

THE COURT: Off the record.

(There is a discussion off the record.)

THE COURT: All right, counsel. Mr. Porro will stipulate that the dike referred to in Mr. Leslie's testimony with reference to B-62 is not on B-9 for the simple reason that B-9 does not cover an area where that dike is located.

MR. PORRO: Now, it's just to the east of what is shown there.

THE COURT: It's just to the east?

MR. PORRO: Yes. It's immediately to the east of what is shown there, and it is not shown on that particular exhibit. It is, however, shown on the mosquito map exhibit and we'll stipulate that that's its location.

MR. RINDONE: You were going to get that reference in there, weren't you?

MR. PORRO: I was, but I didn't.

BY MR. RINDONE:

Q Mr. Leslie, the dike that's off the map that Mr. Porro just spoke about, is that the same dike that you said was rebuilt?

A. Yes.

Q. And there was the dike before then if it was rebuilt, there was a pre-existing dike there?

A. That's right.

Q. And do you know how old that pre-existing dike was?

A. I really have no way of pinpointing dates on that. I know that the dike that was in there, the best of my recollection we put in back in the early days, '17 or '18, and the one that was rebuilt I would think was put in about in the 1940's.

Q. All right. So that the original dike was put in before World War I, do you think?

A. I think it might have been. I'm not sure.

Q. And the rebuilding procedure was before -- just before World War II. Is that a fair statement?

A. I think that's fair, yes.

Q. And the rebuilt dike was on the same location as the initial dike?

A. Yes.

Q Now, the photographs that are in the album that you testified to, were they taken in an area to the west of the dike or were they taken in an area to the east? Do you understand my question?

A. I would say to the east.

Q They were taken in an area to the east of the dike. So that in those photographs where there are trees on the horizon, do you know the photographs I'm talking about, there are some in there with trees on the horizon, that would be looking east, the general orientation of the picture would be looking east?

A. Yes, sir.

Q Now, Mr. Leslie, if you know, was this a dike to create a reservoir to keep water in or was this a dike to keep water out?

A. This dike was to keep water out.

Q And it ran --

THE COURT: Excuse me, Mr. Rindone.

MR. RINDONE: Yes, sir.

THE COURT: You say the dike was to keep water out. Keep water out from the-east of the dike or west of the dike?

THE WITNESS: To keep the meadow in back of the dike dry.

THE COURT: And that meadow in back of the dike would be where, to the east or to the west of the dike, if we assume the dike runs north and south?

THE WITNESS: I think it would be to the west of the dike.

THE COURT: It would be to keep water out of the west of the dike.

Well, you are happy with that, aren't you?

MR. RINDONE: I don't think so.

THE COURT: Maybe I'm misunderstanding something.

MR. RINDONE: I'm not sure the witness was properly oriented there.

THE WITNESS: I might not be. Could I see the map again?

MR. PORRO: Sure.

THE COURT: You know we are looking at Exhibit B-9, and the area in green is the p.q. in this case, is it not?

MR. RINDONE: Yes.

MR. PORRO: Part of it.

THE COURT: I know part of it, yes.

MR. PORRO: The other part is the hatched which is east of the dike.

MR. RINDONE: If you remember the Jobe Survey, your Honor, with the elevations.

THE COURT: Oh, yes.

MR. PORRO: See, this part was really --

THE COURT: And you like his testimony, don't you?

MR. PORRO: Oh, very much so.

THE COURT: That's right. I forgot that now.

BY MR. RINDONE:

Q Berry's Creek is here and the dike is here (indicating)?

A Yes.

Q This is the Walden Swamp here? (Indicating)

A This is the Walden Swamp here. (Indicating) And the dike is put in there to keep this water out and keep this area dry. (Indicating)

Q All right. Now, when you say "To keep this water out" you mean keep water from the direction of Berry's Creek from flowing eastwardly. Is that right?

A That's right. Then the tide gates are here, and when the tide would go out this other-- otherwise this meadow was completely wet at times. That's why these ditches only went in for a short way because then you got the higher land around the actual cedar swamp itself, but it was a very wet meadow in there.

Q In the area you wanted to keep dry was the area to the --

A Inside the dike.

Q Inside the dike to the east of the dike. Is that correct?

A That's right, yes, that's right.

Q Mr. Leslie, none of your work with the Bergen County Mosquito Commission concerned itself with ownership of tidelands, did it?

A Pardon?

Q None of your work with the Bergen County Mosquito Commission concerned itself with ownership of tidelands, did it?

A With what?

THE COURT: Ownership, title to lands.

THE WITNESS: Oh, no, no, we never investigated titles at any time.

Q None of your observations in your reports had anything to do with whether or not the mean high tide flowed on a particular piece of property, did they?

A No. We weren't really concerned. Our only concern was to get rid of the water and the breeding. We were not concerned with titles or mean high tides or what have you as long as we could get the water out of there and stop the breeding.

Q None of the pictures that were taken in the photo album was taken with an eye toward the cycle of tide at the time the picture was taken. That's correct, isn't it?

A That's correct.

Q None of your observations in any of the reports that have been submitted were made with an eye toward the question of whether lands were flowed by the mean high tide, were they?

A We never thought that was any particular concern. All we wanted to do was get rid of the breeding. No, the answer is no.

THE COURT: Do you know when the Mosquito Commission was created?

THE WITNESS: The Bergen County Commission?

THE COURT: Yes.

THE WITNESS: Created in 1915.

THE COURT: 1915.

THE WITNESS: It could have been 1914.

THE COURT: Somewhere in that area?

THE WITNESS: Yes.

THE COURT: You showed us pictures where dynamiting was taking place, I saw other pictures where men were digging ditches and it looked like a ditch digger, what did you do when you went on the property and did that? Did you ask anybody if you could do it? Just went and did it?

THE WITNESS: No. Well, the reason -- can I digress a little?

THE COURT: Sure.

THE WITNESS: Well, the reason is

when we put in the first tide gates in Eckle's Creek we had to get permission from the Department of Conservation and Development and the Army Engineers and the United States this and that, it took me eighteen months to get a permit. In the meantime we lost brood after brood after brood after brood of mosquitoes while we were waiting to get permission to build the gates. So then from herein we go ahead and do what we think has to be done until somebody stops us.

For fifty years nobody stopped us, but I think the real reason was the Chapter 14 of 1912 was so very broad. It says the Commission shall have the power to do whatever in its opinion it thinks is necessary to get rid of mosquitoes. And we took that literally, you know, we never investigated titles or asked anybody's permission to do anything, the theory being the mosquitoes were there and it was the health of the people that was important, and we just went ahead.

THE COURT: Right.

REDIRECT EXAMINATION BY MR. PORRO:

Q Now, Mr. Leslie, mosquitoes would breed basically where there was stagnant water. Is that so?

A Basically, yes.

Q And the ditching that was done in the Walden Swamp, that was done primarily to drain those areas. Isn't that so?

A That's right.

Q And is it also so that it had the effect of bringing water in from the creek and flushing those areas?

A Not primarily.

Q Okay. Primarily they were dug for the purpose of draining the area?

A Right.

Q Where the stagnant water is.

A Sure.

Q Okay. Now, you referred to the two dikes. Can you tell us -- you said that it was in the second -- the second dike was in the same location. Can you be a little bit more specific about that answer? Is it about the same location or was it --

A Well, as I recall it was the same

location. It was a rebuilding of the older dike.

Q A rebuilding of the other. Okay. Now, the reports that have been marked for identification, those were reports that were done at the time recording the conditions at that time, and there are references in those reports to rainfalls at that time and water conditions and things of that nature. You say most of those reports were done by you?

A. Yes.

Q And would you say today in 1976 that those reports that were done then accurately recorded what was occurring and what was observed back in those days?

MR. RINDONE: Objection, your Honor.

MR. PORRO: I'll withdraw the question.

BY MR. PORRO:

Q Do mosquitoes breed or did mosquitoes breed in fresh water?

MR. RINDONE: Objection, your Honor.

THE COURT: What is the basis of the

objection?

MR. RINDONE: This witness has been qualified as a fact witness. There has been no attempt to establish any scientific credentials on his part. He has to this point testified in a factual vein. I think counsel is now departing from that structure and asking a question which calls for some scientific knowledge of the breeding habits of mosquitoes; and in addition there is no foundation for the question. There are all kinds of mosquitoes that breed in all kinds of areas.

THE COURT: Mr. Porro.

MR. PORRO: I withdraw the question.

THE COURT: All right.

MR. RINDONE: Are you done?

MR. PORRO: I'm done.

MR. RINDONE: One question, your Honor.

RECROSS EXAMINATION BY MR. RINDONE:

Q Mr. Leslie, understanding that the dike is immediately off the left edge of the map labeled as B-9 the Walden Swamp Area that you spoke of, would that be the area to the east of the dike that you wanted to keep the water from, the wooded area, or some other area?

A. Well, it would be the area before you got to the wooded area. There was swampland outside -- when you got to the wooded area it was actually a little higher, the topography, but there was a space of meadowland that held the water and bred mosquitoes between the dike and the woodland itself, and that's what we were draining.

Q. And this would be to the east of the dike?

A. That's right.

Q. I see. And this was the area that you referred to as Walden Swamp?

A. Yes. The cedar swamp is Walden Swamp.

Q. The cedar swamp. And that was to the east of the dike?

A. Going toward Route 3.

MR. RINDONE: Over toward Route 3. I wonder might we proceed to a discussion of the exhibits, your HOnor, so that if --

MR. PORRO: I just want to ask him --

THE COURT: Are you finished with him, because it is twenty of four, and at four o'clock I have an appointment?

MR. PORRO: Just one question, your Honor. I want to show him one thing.

REDIRECT EXAMINATION BY MR. PORRO:

Q I show you a photograph on Page 15, just very briefly, and I ask you if this is the photo of the area south of Paterson Plank Road in which you said that the wooded area is to the east?

A That's right.

Q Now, this area depicted in that particular photo then would be the area that is to the west of the dike, is that correct, if the wooded area is to the east and --

A Yes.

Q Okay. And would say that that photo accurately depicts the nature of the land that was west of the dike?

A As I recall. I'm not sure.

MR. PORRO: Okay. Thank you.

MR. RINDONE: I wonder might we

talk about the exhibits, your Honor, while the witness is here?

THE COURT:Yes, yes.

MR. RINDONE: He can step down.

THE COURT: Will we need him anymore?

MR. RINDONE: I don't know, unless some questions come up.

THE COURT: Okay. Stick around for a few minutes. You can wait back there though.

THE WITNESS: Yes, your Honor.

THE COURT: Are you offering these in evidence, Mr. Porro?

MR. PORRO: Yes, your Honor.

THE COURT: All right. Mr. Rindone.

MR. RINDONE: B-62 for Identification, your Honor, this was prepared by the WPA, Federal Project. The witness testified that in effect, if I recall his testimony, it was not prepared by the Bergen County Mosquito Extermination Commission. I don't think a proper foundation has been laid for its admission into evidence. There is no one here from the federal government, the appropriate agency of the federal government to cross-examining regarding how the map was drawn, the ingredients for it. It does not come under any exception to the hearsay rule that I can recall at this moment.

THE COURT: What about the ancient documents doctrine?

MR. RINDONE: Well, your Honor, this is 1941. Does your Honor --

THE COURT: Well, it all depends on what your perspective is. You might not have even been born then, I don't know.

MR. RINDONE: Unfortunately I was, and in school, your Honor, at that time.

I submit that ancient documents might be 1930 aerial photographs where there are no records as to who took them and at what elevation, but a map of this nature, 1941, I think the party against whom it is offered should have an opportunity to probe into the constituent portions of it, the information from which it was derived, and it just can't be done on this basis. There is no way that I can ask anyone regarding the information detailed here, which might have a bearing on the issues in this case.

MR. PORRO: Your Honor, it's obviously a public record. The map shows that it was done by the New Jersey State Administrator who is named, and it was done for a public agency. It's a map of a public agency, and I submit that the reports and the sketches will tie directly into this map and it will be supported, but I do think it comes under the exception to the hearsay rule as a public record, and particularly here since the testimony shows that this particular agency is under the direct control of the State of New Jersey.

I think that there is very little question that this particular record is one that was prepared through federal funds. The map shows that it was done by the New Jersey State Administrator. I just don't see that there is any question. It is a public record.

MR. RINDONE: I think that counsel is confusing the designation in the legend, your Honor. The gentleman, Robert W. Allen, may have been the New Jersey State Administrator, but he was the administrator for the federal government assigned to the State of New Jersey. He was not part of the political subdivision State of New Jersey, and, therefore, would not fall within the exception to the hearsay rule that counsel has in mind.

MR. PORRO: Why not? Any record or any project that is done for a public body, and I don't care if he was a federal administrator --

THE COURT: All right. Just hold off on B-62 for a few minutes.

MR. RINDONE: All right, sir. Unfortunately, your Honor, I haven't had an opportunity to review these reports in detail. I would say this, by way of --

THE COURT: Why don't you look them over in your leisure.

MR. RINDONE: All right, sir.

THE COURT: And then I'll hear

some argument on it.

MR. RINDONE: All right, sir.

THE COURT: Why don't we do that. Okay. At the end of the case we are going to go back over these and see what we have left out and what we are going to put in.

MR. PORRO: That's fine.

THE COURT: That would be easier to do it that way. In fairness I think you should have a right to do that.

MR. PORRO: Yes, your Honor.

MR. RINDONE: Thank you, your Honor.

THE COURT: Okay. Tomorrow morning at eleven o'clock, gentlemen.

(Court is adjourned for the day.)

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A 3311-72
(On Remand to Law Division,
Bergen County.)

CITY OF NEWARK, et al,)
Appellants,)
vs.)
NATURAL RESOURCES COUNCIL,)
et al,)
Respondents.)

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
Docket No. L-16799-72

NEW JERSEY SPORTS &)
EXPOSITION AUTHORITY,)
Plaintiffs,)
vs.)
BOROUGH OF EAST RUTHERFORD,)
et al,)
Defendants.)

CERTIFICATION

I, ALBERT R. AGOSTINE, certify the foregoing to be a true and accurate transcript of the testimony and proceedings in the above entitled cause.

Albert R. Agostine

Albert R. Agostine, C.S.R.
Official Court Reporter

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A-3311-72
(On Remand to Law Division,
Bergen County.)

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VOLUME XVII

BOROUGH OF EAST RUTHERFORD

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NEW JERSEY SPORTS & EXPOSITION AUTHORITY,)
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vs.)
BOROUGH OF EAST RUTHERFORD, et al,)
Defendants.)

January 12, 1977,
Courthouse,
Hackensack, New Jersey.

B E F O R E :

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

Reported by:

Albert R. Agostine, C.S.R.
Official Court Reporter

APPEARANCES:

For Natural Resources Council:

WILLIAM F. HYLAND, ESQ.,
Attorney General of New Jersey,
BY: WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General.

For Borough of East Rutherford:

ALFRED A. PORRO, JR., ESQ., and
LORRAINE S. TELEKY, ESQ.

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THE COURT: All right, gentlemen.

Mr. Rindone, on that problem yesterday we were discussing the admissibility of a lot of these exhibits that have been marked for identification through Mr. Leslie.

I threw out something called The Ancient Documents Rule, and I would think that when the time comes to offer them into evidence you might refer to Section 67-3 of our Rules of Evidence, Modes of Authentication.

I am of the view under that rule, Part A, Ancient Documents, that a good deal, if not all of the documents might be admissible.

That rule provides that if they are at least thirty years old and they are unsuspicious in appearance, and they came from the place where one would expect to find them they are self-authenticating. So maybe when you examine these you might look at them in that light. Some of them we might not have a date fixed on them, but I believe a lot of them we do have dates.

This is not to say that you may not have merit on another basis for arguing that they should not be admitted, i.e. relevancy and competency.

MR. RINDONE: Yes, sir.

THE COURT: As far as that your right is reserved.

Off the record.

(There is a discussion off the record.)

THE COURT: Okay. Let me see, we have a proposed new exhibit list.

MR. PORRO: Your Honor, relative to those documents Mr. Rindone and I have agreed subject to the court's approval that between us we will take them out of the court today, make photostats, because he wants a set and we would like a set. So if it is okay with the court this morning we are having someone come up and we are going to have them photostated.

THE COURT: All right. Let the record show then that Exhibits B-62 through --

MR. PORRO: We will not take the photos.

THE COURT: -- B-82, both inclusive except the photos will be in the possession of counsel for the time being.

MR. PORRO: Now, today, your Honor, we have Dr. Thatcher, who will testify, and I will make a proffer in that regard. He will testify as to two areas, one the effect of dredging of the Hackensack River between 1916 and 1972. More particularly that the dredging of the Hackensack River between Kearny Point and Overpeck Creek during the time period of 1916 to 1972 has increased the mean high water level at the property in question, the East Rutherford Property, by three inches.

The second area of testimony will only be collateral, but will open up the door for further testimony, is the effect of the artificial mosquito ditching on the property in question. And in that regard that the extensive mosquito ditching on the premises in question has caused a subsidence as a result of processes which he will -- scientific processes which he will describe in the land surface or land elevation.

THE COURT: Is he going to express that subsidence with any precision?

MR. PORRO: No, your Honor, unfortunately no. I should make it clear that since both of these effects that we have chosen on artificial changes would appear to be moving around the number at which the line is drawn is not our purpose to do that. What we intend ultimately to say to the court is that the artificial changes here would work very much to our favor, but we feel that the 3.2 that we have picked is extremely conservative, and we will ultimately ask the court to use the 3.2.

This testimony that is going in now is to bolster up the 3.2, the conservatism of the 3.2, and any attempt to quantify is being done in an attempt to show how conservative and reasonable the

3.2 is.

THE COURT: All right. Will you wait just a moment, please.

All right. You may call your witness.

MR. PORRO: Dr. Thatcher.

MORRIS LLEWELLYN THATCHER, sworn.

THE COURT OFFICER: Your address, please.

THE WITNESS: 30 Euston Road, Garden City, New York.

MR. RINDONE: May it please the court, this is hopefully the appropriate moment to broach the matter of artificial changes, the legal implications of them and the viability of the testimony of this witness as Mr. Porro has outlined it as having probative value for the issues in this case and being competent to be admitted into the record.

I suspect the only guidance we have through judicial utterance on the subject of artificial changes appears in the O'Neill Case, O'Neill v. State Highway Department, 50 N. J. 307 and following, decided in 1967.

Unfortunately that was the case that established legal principle in gross with the remand for retrial as to the facts of the case, which retrial never occurred. So we don't have in the crucible of the decision making process of the court the final extension of that theoretical discussion as applied to facts of a particular case and a determination by the court of those particular facts to give us the kind of firm precedential guidance that we would like to have in broaching a problem of this nature.

However, we have to work with what we've got. As I'm fond of saying, the longest journey begins with a single step. Perhaps this was the first step, and we are moving forward.

The salient portion of that decision appears, I believe, on Page 324, which is the discussion of artificial changes; and the court says if I may quote, "The State cannot acquire interior land by such artificial works as ditching which enables the tide to ebb and flow on lands otherwise beyond it. And so too the riparian owner cannot, today, enlarge his holdings by excluding the tide."

THE COURT: What does that mean? 1967?

MR. RINDONE: Contemporaneously today, and at anytime in the future acting wilfully or perhaps even with disregard, be it benign or malignant, it doesn't make any difference, of the tidelands question.

I think the second sentence gives us the mood of the court, what they were thinking about. The court says again, "And so to the riparian owner cannot". What this means is that the actor may not either aggrandize his ownership or diminish the ownership of the contending party.

Now, the actor can either be the State's tidelands agencies or it can be the record owner. These are the parties that can affect title to land.

A third party coming in has no

standing to create a state of facts by which operation of law will move to modify the state of title.

So I think that it is incumbent that the record owner in this case, the Borough of East Rutherford, demonstrate at the outset as a matter of competence of testimony that it was the State's tidelands agency that was the efficient cause of any change, artificial change that may have occurred which acted toward increasing the extent of tidelands.

Now, we know from the O'Neill case that just any instrumentality of the State acting is not enough. I have had --

THE COURT: Well, that's talking about how they treat land legally titlewise. Where do you get your idea that where artificial changes are wrought upon lands that have an effect of increasing or decreasing that land which is flowed by mean high tide, where do you get your idea that if someone other than the State or the title owner does it that that doesn't count? Where is that in that case? Because we have to get that settled before we go on any further.

MR. RINDONE: I don't know that it's in that case expressly, your Honor. A lot of the problems we have encountered in following the tracks of that first O'Neill case weren't thought of then. I'm impressed by one fact.

THE COURT: Well, let's just test it for a minute. Suppose someone comes in, a third party, not connected with the title owner or with the State's tideland agent, and does something to the land, physically so that it increases the amount of land that is flowed by mean high tide. Does the State -- are you contending for the State that those benefits do not accrue to the State's tideland agent?

MR. RINDONE: I would have to contend that they did accrue, your Honor.

THE COURT: Well, then you can't have it both ways, can you?

MR. RINDONE: Well, wait a minute. Forgive me. What is the law? What is the yardstick we use? What are we measuring by? *O'Neill* tells us, the statutes tell us, Title 13, I'm not sure that it is expressed in Title 12 exactly, the tidelands belonging to the State of New Jersey are those lands now or formerly flowed by the mean high tide.

THE COURT: And what they say by implication that those lands that are not flowed now or formerly flowed by mean high tide do not belong to the State. Isn't that so?

MR. RINDONE: In framing Title 13, and that is the latest articulation of the Legislature on the subject, there was ample opportunity I think, for them to get into the matter of a time frame. There was opportunity for them to deal with the subject of artificial changes as opposed to natural conditions, but we do not see these items addressed directly.

THE COURT: They were addressed in the *O'Neill* case.

Let me ask you something, Mr. Rindone, why did the Chief Justice enunciate a rule. And he said, of course, it has always been a rule of evidence, but he reenunciated, it was nothing new, in the *O'Neill* case when he said he who challenges the present scene has the burden of proving otherwise. But then he said something further. He said where there is artificial disturbance and the party who disturbed it didn't preserve the data then there was a presumption working against them also. Isn't that so?

Now, he is talking about a party, I know.

MR. RINDONE: He is talking in futero also.

THE COURT: Yes, he is talking in futero also. Why would that be significant?

It seems to me that what the court wants you to do is to find out what was the natural state of the land undisturbed by man in the framework of the ebb and flow of the tide. They wanted to eliminate the effect of artificial disturbance, didn't they?

MR. RINDONE: It seems to me that

the thrust of the O'Neill case, your Honor, in that regard, was that the court was very skeptical that any litigant could amass the type and quality of information necessary under any framework of Northern New Jersey, generations of activity. The court was very skeptical, I suspect, that a litigant could be able to separate the fibers of change that are interwoven so as to give a clear picture of a prior natural scene. It could not preclude this possibility. It had to leave the door open, because such is the nature of our judicial process, a day in court.

So far you and I are in agreement. I ask you why did the Chief mention that? What is the reason for the rule being in the case?

MR. RINDONE: The reason for the rule being in the case, your Honor, I think was to make warning to landowners that they had best, if they intend to do anything, they are in a troubled area, an area in which there is or will be much litigation, and which is grossly unsettled, if they intend to do anything with their property, as most property owners want to do, because if you don't use property it, for most people, has no value. If you want to do anything you best preserve through whatever means are available, what you've got there before you put the first shovel in or cause any condition that is going to alter what exists.

THE COURT: Well, isn't there a logical -- doesn't equity really almost compel one to extend that doctrine and say where a property owner has a change wrought upon his land innocently by someone else that he shouldn't be penalized for that?

MR. RINDONE: In the abstract, your Honor, the concept cries out for recognition. It seems very commonplace justice. Why should somebody else come in on a man's property or woman's property without permission and do something which is going to result in horrendous circumstances.

But getting it down to a factual basis, when you start talking about a complex area such as this, and this witness is going to testify only, according to the proffer, as to the effects of the dredging in the Hackensack River, at the mouth of the Hackensack River --

THE COURT: At the mouth?

MR. RINDONE: Or wherever, I am sorry.

THE COURT: They dredged from Kearny Point to Overpeck, or whatever --

MR. RINDONE: Wherever.

THE COURT: And subsidence due to ditching, at least this is the proffer.

MR. RINDONE: Which he may not be able to quantify, and if he can't quantify it we are going to be speculating an awful lot.

THE COURT: Well, that is a matter of weight that I will give to it.

MR. RINDONE: But we know there were other forces at work here. How can you segregate one event for which the tidelands agency cannot accept responsibility?

THE COURT: That's a matter of cross-examination and of attempting to diminish the weight to be given to this evidence. The court will weigh that, or to impeach the credibility of such evidence. I don't think it is -- I take it you are moving to have me strike any testimony ahead of time rather than waste the court's time. Is that what you want to do?

MR. RINDONE: Yes, sir.

THE COURT: Based on the proffer. I'm not criticizing you for doing that. This is why proffers are very handy tools. But again let me see if I understand you correctly. Are you contending that if this witness in his testimony in summary says the dredging operation raised the level of mean high tide by some inches, and that ditching operations caused a subsidence in the elevation of the lands in question, and all of this done not by the Borough of East Rutherford but by some other agencies, for example, the Corps of Engineers, I would assume did the dredging or some division of it, and the good old Mosquito Commission was doing the ditching, are you saying that there is something in O'Neill that says this testimony is not competent or relevant?

MR. RINDONE: I am saying, your Honor, that it cannot be adduced with a sharpness sufficient to provide a basis for the court to conclude as a matter of fact that whatever levels we have seen of water, of land elevations, and that sort of thing, is effected by these factors.

Now, I would in addition on my motion call the court's attention to prior testimony of this witness, which I hope --

MR. PORRO: What page are you on?

MR. RINDONE: 8.112.

THE COURT: What is the citation?

MR. RINDONE: This is <u>New Jersey Sports & Exposition Authority v. Parker</u>, Docket Number L-26792-72. These were proceedings on June 25, 1975, before Judge Petrella.

THE COURT: What page?

MR. RINDONE: Page 8.112.

The question was by me, quoting on Line 9, "One final question, Doctor: Can you quantify for us the effects of the various artificial changes that you testified to?"

The answer, beginning Line 12, "I think that the artificial changes which I have been testifying to are essentially those related to ditching and to diking. Quantifying them is by no means easy. Every case depends on what actually you have as evidence. In this area, the closest source of information we have was the diking situation in the Sawmill Creek which is reported by Vermule. This assumes a particular set of circumstances -- that is to say, diking, where they actually dried up the section of land. Ditching, I would not expect to be that effective.

"Now, as far as quantifying, saying how many inches of settlement per year is concerned, that requires a knowledge of the actual conditions that were there when the oxidation started, and I do not have that information."

THE COURT: Okay. Keep in mind, Mr. Rindone, in Mr. Porro's proffer, and I'm sure that he can speak for himself, but I remember it, the Borough believes that it's quantified, or the Borough believes it has produced testimony that would establish mean high tide at 3.2 feet. They are precise in that through the testimony of prior witnesses.

As I understand Mr. Porro's proffer Dr. Thatcher is going to testify about the effect of ditching, diking and dredging in very general terms, except that as to the dredging he may say it resulted in a rise of three inches on mean high tide, but he is not offering this man's testimony to establish a line with precision.

He is offering it to show that prior testimony is conservative and credible, and at least I think it is his position, this is how he avoids the -- you can speak for yourself on this, Mr. Porro. Am I correct?

MR. PORRO: That's exactly what I said, your Honor.

MR. RINDONE: Which brings us to full circle.

THE COURT: Okay.

MR. RINDONE: Wasn't this what the O'Neill court was talking about? They had testimony in that case, and I refer to Page 325, "The Highway Department contends, however, that the lands were grossly disturbed by artificial means and therefore the elevation readings should be discarded."

THE COURT: What page is that?

MR. RINDONE: 325, your Honor. It is the first full paragraph beginning "Although it is difficult -- " and I am reading the next to the last sentence in that paragraph.

THE COURT: Oh, yes.

MR. RINDONE: And the court goes on to enumerate and characterize, I think, and encapsulate the testimony of artificial change that was before it. And it seems to me that the whole thrust of this decision in this regard is that such generalities are not sufficient, because these were generalities, the same type of generality.

THE COURT: But you see the Borough says, "We're not challenging the present scene. We've been able to, using classical engineering methods, and even some other methods to confirm them. We'll take the present scene."

The argument in this case seems to be what is the present scene?

MR. RINDONE: To a certain extent, your Honor --

THE COURT: He says that is what exists today and we'll stand by it.

MR. PORRO: That's correct.

THE COURT: This is what is a little peculiar in this case.

MR. RINDONE: To a certain extent your Honor is right, but when you consider the testimony in the record that at some time all of Lot 90, all of Lot 91 is covered by tidewater, at sometime, I'm not talking mean high tidewater, tidewater, all of it --

MR. PORRO: I don't think there is any such testimony in the record, your Honor.

MR. RINDONE: When you consider yesterday's testimony they put a dike in.

For what purpose? To keep water out.

MR. PORRO: I object to the testimony here.

MR. RINDONE: If I may, sir.

MR. PORRO: If he will read the reports he will find out why the dike was put in, but now he is testifying. And I submit he will find a big surprise in the reports.

MR. RINDONE: Well, if I'm surprised, your Honor, we'll have a motion somewhere along the line, but that's another matter.

But the testimony is fresh in the court's ear, so that I don't have to characterize it. Perhaps I don't even have to recall it for the court.

So you can't I don't think legitimately characterize this as a question over what is the existing scene. The existing scene here is water without question.

Whether it's precisely mean high tide water which is an arithmetic abstraction is perhaps another question, but aren't we going to get into that type of problem everytime we broach one of these cases? Isn't that going to vitiate the effect of the rule of the burden of persuasion? Is that going to be a tennis ball back and forth that ultimately has to sit on top of the net because the parties have moved in so close there is no room to swing the racket? There is water here, tide water here. That's the existing scene. Back on the other side of the dike that's another story. But as of the date of taking there is water here, and the burden of persuation goes to the record owner in that case.

So, therefore, the comments that I'm making to the court regarding this matter I think take on a new importance and a new incisiveness, and perhaps we have to consider at this juncture whether this, the testimony of the caliber of the proffer should go into this record.

MR. PORRO: Your Honor --

THE COURT: Okay. I'll hear you, Mr. Porro.

MR. PORRO: Your Honor, I just want to say that Mr. Rindone must be looking at a different quadrangle, and I was just looking for the State quadrangle. The State quadrangle is their photography. That shows the existing scene.

I respectfully submit that the human eye in this case can see from their photography that this property is not under water. And I was looking for the exhibit number, but I can't find it at this second.

Now, if he is disputing that photography then perhaps we wasted an awful lot of time, not only in this case, but in the City of Newark case. I say the existing scene is shown by their photography and their photography does not show this property under water.

MR. RINDONE: May I suggest a thought to the court in evaluating that concept?

THE COURT: Yes.

MR. RINDONE: Our photography shows vegetation. The canopy of the vegetation obscures the water. So --

MR. PORRO: I haven't heard any witness testify to that other than Mr. Rindone, your Honor. Our witnesses testified that they walked the property and that they were there and they testified and we showed pictures as to what is there.

Now, Mr. Rindone keeps testifying as to all this water. Maybe he should take the witness stand.

THE COURT: All right. You have to excuse me.

(Court is recessed for lunch.)

AFTERNOON SESSION

THE COURT: I was querying Mr. Rindone on his motion to bar Dr. Thatcher's testimony.

I'd like to hear for a minute from Mr. Porro.

MR. PORRO: Your Honor, I think that in the manner that we have made the proffer that namely that his testimony ultimately, the bottom line is that his testimony is being given to this court for when the court finally has to look and make a decision as to what elevation to choose, and we are going to urge the court to accept the 3.2, even though he is going to testify that there is a difference of three inches according to the model, and even though he is going to say there is subsidence that he cannot quantify. The bottom line is we are going to say to the court therefore the 3.3 is not only reasonable it is extremely conservative, and thats what the court should follow.

Now, as to Mr. Rindone's argument as to improvements made by third parties I think in that regard I can't remember the name of the case, it came out of South Jersey, and I've tried to get it, was it Garrett? I think it's the Garrett case, where the railroad put up an improvement across the creek, the impact of which was to dry up the creek.

THE COURT: I cited that case in one of my opinions.

MR. PORRO: Yes. Now, the court held there that the improvement made by a third party could not affect the tideland status of the creek. Even though the creek was dried out and was used by the property, upland property, the State still had a claim there.

Now, that's the one case that I can recall where a third party made an improvement which affected the tideland status.

Now, he's got to take, that's the law to benefit the State retaining title, certainly the State can't turn around and say that/if the third party makes a change which has the effect of expanding the State's claim -- what I'm saying is that there has got to be some logic to this law.

And I will grant Mr. Rindone that we haven't found any particular case on point as of this moment on the point that he raises, but I think that there is law to the other effect, and at this stage I would suggest that we hear the testimony and certainly at the end of this your Honor is going to want some law from us and we can list that as one of the points of law to be briefed.

I feel quite confident that the upper court would not have the law going one way to benefit the State and then another way or artificial changes to the detriment of owners. And you could easily see the havoc you would have if you adopted the Rindone theory.

THE COURT: All right. I'm prepared to rule.

MR. PORRO: What is that, Garrett v. The State of New Jersey, isn't it?

THE COURT: I cited that opinion in which I said the hatching was improper, for some reason, I don't know why, but I remember that.

MR. PORRO: That is the case where you see the interjection of a third party, and if I recall correctly it was a railroad.

MR. RINDONE: Without wishing to prolong this point unduly, your Honor, may I express myself on the Garrett matter?

THE COURT: Yes. You know what,

I am not going to spend my life on this case. I am not. It's wrecking havoc with my job as assignment judge. It was a mistake for me to do this. I never should have taken the case. I am at a point of frustration.

MR. RINDONE: I think we can take satisfaction in the aspect of it, your Honor, that we are creating a body of law, and perhaps only once in a lawyer's lifetime, if ever, is he privy to that opportunity to shape and mold legal precedent.

THE COURT: Well, go ahead and tell me what you want to.

MR. RINDONE: In Garrett I didn't have the privilege of trying the case, but I did settle it after the trial with Mr. Garrett. I think that has to be viewed on its peculiar facts and the law, the principle of law that was applied, and I made allusion to it.

THE COURT: You know I think we can save time, Mr. Rindone. I really beg your pardon on this.

MR. RINDONE: Yes, sir.

THE COURT: I intend to follow Mr. Porro's suggestion. I'm going to hear this testimony. I will reserve on your motion to bar it. When you submit your post-trial findings of fact and conclusions of law and legal argument I want you to deal with it.

MR. RINDONE: All right, sir.

THE COURT: Okay. I will give you a chance to then get into it. I will give you a chance to get into Garrett again and look it over.

Just a second, please.

(There is a short recess.)

THE COURT: All right, Mr. Porro.

DIRECT EXAMINATION BY MR. PORRO:

Q Dr. Thatcher, would you tell us what is your profession and your specialty within that profession?

A I'm a professional engineer in particular in the field of civil engineering, coastal and ocean engineering.

MR. PORRO: Okay.

MR. RINDONE: I am sorry.

Could the witness speak up, please.

THE WITNESS: Coastal and ocean engineering.

BY MR. PORRO:

Q And I show you a resume. Do you recognize that resume?

A Yes. That's a resume which I believe I gave to you recently.

Q Okay. And that is your resume and contains your educational background, practical experience and publications?

A That's correct.

MR. PORRO: In the interests of expediting the testimony, your Honor, I'd like to submit this and have it marked. Mr. Rindone has not had the benefit of it and I'll request that/a later point that it go in evidence.

THE COURT: B-83 for Identification.

(Resume of Dr. Morris Llewellyn Thatcher is marked B-83 for Identification.)

BY MR. PORRO:

Q Now, without going through your

whole resume and in an attempt to expedite your testimony, can you tell us what is in that resume? Well, wait a minute. Let me withdraw that.

Can you tell me when you were retained and for what purpose by the Borough of East Rutherford?

MR. PORRO: And this is still on qualifications, your Honor.

A It was about April 1973 that you and Miss Teleky met with Professor Harlaman and myself at MIT.

Q Who is Professor Harlaman?

A He is the director of the Ralph M. Parsons Laboratory for Water Resources and Hydrodymanics at MIT.

Q Okay. Now, back in 1973 -- and you were ultimately retained by the municipality for what purpose?

A To apply a mathematical model of tidal motion in estuaries for the purpose of evaluating the effects of different changes in the estuary.

Q Now, can you tell us, making reference generally to your resume, what in --

THE COURT: Excuse me. We might

as well get some terms. What does "mathematical model" mean? Is it a physical thing?

THE WITNESS: No. As opposed to a physical model where sometimes you would use plaster of Paris or concrete to create a scale model the modeling is done using the mathematical equations, the physical equations which describe the phenomenon, and a great quantity of numbers will describe, for example, the depths of the river, of the rivers and its tributaries, and these numbers will be used with a computer.

BY MR. PORRO:

Q I show you two exhibits which I'll request be marked.

MR. PORRO: They are the next two exhibits on the list, your Honor.

Is that B-85 and B-86?

THE COURT: B-84 is the study of the St. Lawrence River.

MR. PORRO: Okay. And the next one is also on that same study, which can be used to demonstrate what a model is. Maybe if I just mark them at this point, I do not have any intention, quite frankly, of putting these in evidence, but he is going to refer to them. So maybe we can have them marked.

THE COURT: B-84 for Identification, Study of the St. Lawrence River, Appendix B-User's Manual for the Computer Programs March 31, 1974, by Surveyor, Nenniger and Chenevert, et als; and B-85 for Identification, Study of the Saint Lawrence River, Hydrodynamic Simulation Model, March 31, 1973 by Surveyor, Nenniger and Chenevert, Inc., et als.

(Study of the St. Lawrence River, Appendix B-User's Manual for the Computer Programs March 31, 1974, by Surveyor, Nenniger and Chenevert, et als is marked B-84 for Identification.)

(Study of the St. Lawrence River Hydrodynamic Simulation Model, March 31, 1973 by Surveyor, Nenniger and Chenevert, Inc., et al, is marked B-85 for Identification.)

MR. RINDONE: Do I understand, your Honor, that B-84 and B-85 will be used for the methodology of models rather than for any other factual material?

MR. PORRO: That is correct. And, as a matter of fact, I do not think I will offer them in evidence, but they will help to understand his testimony at this point.

BY MR. PORRO:

Q Now, can you tell us what in your resume, referring just briefly to your resume, and also perhaps to these last two exhibits, what would qualify you and what in your background would make you qualified to perform this task for the municipality of East Rutherford?

A Starting with my doctoral thesis at MIT, which was A Development of a Mathematical Model of Salinity Intrusion in Estuaries, and extending to work as an engineering consultant, which I've done since then, my activities have included developing model applications for several estuaries, including the Delaware, the Hudson, the St. Lawrence.

Q And the St. Lawrence are the exhibits that we just had marked?

A Well, these are two reports which came from that study where I was retained by the firm Surveyor, Nenninger and Chenevert through Hydroscience of Westwood, New Jersey, to advise them on the application of the MIT dynamic network model.

Q Okay. Now, is this known or is this related to hydrodynamics?

A Yes, it is. This is hydrodynamics.

Q Okay. And can you tell us basically what is the function of such a model so that we can understand as laymen what does such a model purport to do and what is the purpose of it?

A Well, the purpose of the model is to enable one to predict what will happen when something is changed in a physical system. In this particular case we're dealing with a waterway. The models which I related to you extended to the prediction of salinity and other pollutants, but in terms of the hydrodynamics the predictions are those of the water surface elevation and the flow in the water body.

MR. PORRO: Now, I have no further questions on qualification.

I would intend at this point to get right into what he did on the East Rutherford model.

THE COURT: Any questions on qualifications?

CROSS-EXAMINATION BY MR. RINDONE:

Q That I might be clear in my mind, doctor, what role does salinity play in your modeling?

THE COURT: In this --

MR. RINDONE: In the modeling that he has spoken of as qualification for the rendition of his expert opinion.

A The role of salinity is -- can be a minor role. In the study of flow in estuaries today, the salinity being more dense then fresh water in some cases will modify the actual water surface elevations as was found in a study in Lake Maracaibo in Venezuela, and its neglection can cause a certain error. Usually salinity is studied as a substance. One is interested in knowing where is it, where will it go under certain conditions, and its effect on the hydrodynamics is often overlooked. However, it does have an impact.

THE COURT: Is this going to qualifications?

MR. RINDONE: I believe so, sir.

THE COURT: What did he say?

MR. RINDONE: Well, if in fact his --

THE COURT: You can ask him these questions after he testifies, but I don't see how this goes to qualifications.

MR. RINDONE: If in fact the thrust of his prior efforts in modeling was salinity that has no bearing in this case, and perhaps the modeling that he has undertaken for the borough would lack the expert quality which Mr. Porro intends that it should have.

THE COURT: Well, let's find out something right now. You stated just a few minutes ago that the things you become involved in sometimes are to determine what happens when something changes in a water system, what effect, if any, does that have on the water system, correct?

THE WITNESS: That's right.

THE COURT: Very briefly, what changes did you assume took place in the Borough of East Rutherford that you reflected in the mathematical model that you had constructed?

THE WITNESS: There were three changes.

THE COURT: What were they?

THE WITNESS: One was the construction of Berry's Creek Canal.

THE COURT: Yes.

THE WITNESS: Another was the effect of the changes in Newark Bay between 1896 and 1972.

And the third was the effect of the changes in the river's geometry from Kearny Point up to Overpeck Creek between 1916 and 1972.

THE COURT: And I believe it was suggested in the proffer that you were going to deal with the effect, if any, on the land through developing. Is that in your--

MR. PORRO: That has nothing to do with the model though. Yes, by way of clarification that's a separate issue.

THE COURT: All right. That has nothing to do with the model. Okay.

Now, do you believe you want to question him on his qualifications to do that kind of a job?

MR. RINDONE: Only to the extent of determining if his prior efforts and inquiry dwelled upon the element of salinity. Was that was he was concerned with in what he was doing?

Because I submit if that was the focus of his attention and if these are the only experience in that the witness has had in this kind of work that issue is absent from this case, and justifiably so, and reflects directly upon the expert quality of his efforts in connection with this case. In other words, we may be viewing a first attempt on the part of this witness to do what he has done. I don't know.

THE COURT: Well, was salinity a focus of your attention in these other projects in the St. Lawrence River?

THE WITNESS: No, it was not.

THE COURT: Go ahead.

BY MR. RINDONE:

Q Were they designed to elicit the same type of information pertaining to the areas in question as are issues in this case as Mr. Porro has explained them to you?

A They were designed to be able to simulate the surface elevation and the flow in the estuary. I speak now of the report which was offered as -- marked B-84. Is that the number?

MR. PORRO: B-84 and 85, right.

A (Continuing) Which dealt with the hydrodynamics ofthe St. Lawrence River. Before one can go on to study the water quality of something, it is necessary to completely determine the hydrodynamics.

Q Were there involved in those questions matters of the extent of the intrusion of mean high tide?

A I hesitate to say as to property ownership because that doesn't necessarily govern the situation.

Q Did they involve the matter of

the extent of intrusion of mean high tide upon land?

A They involved simulation of the water surface elevation as developed through having a tidal force at the mouth of the estuary. Whether that was a mean tidal elevation or not depended on the purpose of the study, and in these other cases were not like this case where purpose had to do with mean high tide, but the hydrodynamics are the same.

Q In other words, are you saying that whether the mean tide -- whether the inquiry was as to the extent of mean high tide intrusion upon land or not the mechanics of the project would be exactly the same, is that your testimony?

A Well, I haven't testified yet, but the project, as you call it, the modeling of an estuary is the same procedure. One represents the same physical laws. What changes from one estuary to another are the geographical -- the geometry, the features of the estuary.

Q I would appreciate that the physical features vary from estuary to estuary as do noses from face to face, but the question is would the procedure of your modeling, the mechanics that you employ, be the same whether or not the inquiry had to do with the mean high tide?

A. The basic procedural steps are the same.

Q Are there any differences?

A. The differences might be that in one case --

THE COURT: Excuse me. What has that got to do with his expertise? If this is the first time he ever took on a project to determine mean high tide using certain principles that he used in the past in other projects in bodies of water where that was not the ultimate goal, what difference would that make? Because you have put on experts for the State that I have listened to very carefully who I believe have devised some unique methods that I don't think were ever done before.

Does that in any way relate to their expertise, provided they have the basic engineering background --

MR. RINDONE: No, your Honor.

THE COURT: -- to perform those functions?

MR. RINDONE: It might go to the

weight the court accords the testimony.

THE COURT: Then this is not the time to ask the questions.

MR. RINDONE: I appreciate that, but, of course, we don't know that until the question has been asked and answered, perhaps. And having received the answer I think I've asked as many questions as I care to ask at this time on his qualifications.

THE COURT: All right.

MR. PORRO: Could I have this book marked for identification, B-86. It's listed as such on the list of exhibits.

THE COURT: B-86 for Identification, User's Manual for the MIT Transient Water Quality Network Model for U. S. Environmental Protection Agency - August 1976.

(User's Manual for the MIT Transient Water Quality Network Model for U. S. Environmental Protection Agency - August 1976 is marked B-86 for Identification.)

DIRECT EXAMINATION BY MR. PORRO: (CONTINUING)

Q Now, are you familiar with what

has just been marked as B-86?

A Yes, I am.

Q And can you tell us briefly what that is?

A that is a copy of a manuscript to EPA in Corvallis, Oregon, which is about to be published from Professor Harlaman at MIT. It represents the most recent documentation on this particular computer model.

Q Were you one of the co-authors of that?

A Yes, I was.

Q And are you so named in that publication?

A Yes, I believe I'm Number 3 out of six.

Q Okay. Now, can you tell us more specifically relative to the East Rutherford Project what you did first?

A Well, the first step was the choice of model, and at MIT at that time there were two hydrodynamic models to choose from, one of which was limited to a straight reach, that is to say, a reach with a beginning upstream and an end downstream, and a more recent numerical model which permitted one to join up different reaches and form a network. This second model was more adapted, and I think obviously adapted to the modeling of Hackensack Estuary, including Berry's Creek, Berry's Creek Canal.

MR. PORRO: Okay. I'd like to have this map which is listed on the list as B-87, I believe, marked for identification.

THE COURT: B-87 for Identification, C & GS 287, Nautical Chart for Passaic and Hackensack Rivers by NOAA, NOS June 1972.

(C & GS 287, Nautical Chart for Passaic and Hackensack Rivers by NOAA, NOS June 1972 is marked B-87 for Identification.)

MR. RINDONE: May I intrude a question. On B-86 for Identification is this the model the witness used?

THE COURT: User's Manual is B-86.

MR. RINDONE: Yes, is it the model that the witness used? He has described two models that were available, and

I think he testified he selected the second of the two.

CROSS-EXAMINATION BY MR. RINDONE: (CONTINUING)

Q And is this User's Manual for the model that you selected?

A It is -- actually it's the most recent version of the User's Model. When I was using the model it had -- this had not yet been published, but it is that particular model. This is a research project that has been refined in the water quality aspects over the last few years, and this documents the most recent refinements.

Q So that this post-dates the model or post-dates your use of the model?

A Yes, it does.

Q But it does relate to the model that you did use?

A It relates to the same model, because the hydrodynamics of the model are the same in this report as the other report of the St. Lawrence Study.

DIRECT EXAMINATION BY MR. PORRO: (CONTINUING)

Q Now, after the selection of the

model what was the next step?

A The next step was to assemble information, hopefully on charts describing the geometry of the estuary to the model.

Q Now, can you tell me what is schematization?

A Schematization is the process of establishing a technique for describing in numbers the geometry of the river. In this case it consisted essentially of drawing a center line up the main stream and at intervals which should be representative of the change in the river's cross sectional properties, establishing lines across the river from bank to bank, and then along those lines,using those lines to position depth measurements so that by those depth measurements and the distance from each measurement to the center line one can describe in terms of a series of numbers the cross sectional shape of the --

Q Did you in fact do that on this project?

A Yes, I did.

Q I refer you to B-87, which is front of you for identification. Can you show us, using that particular exhibit, generally the schematization that you set forth for the Hackensack River relative to this project?

A Yes. This does show a black line which has been traced up the center line or thalweg, t-h-a-l-w-e-g, as it is sometimes called, and going across at different intervals there are other lines approximately perpendicular to this.

Q Now, those are the lines or lines that were drawn in and selected by youself. Is that correct?

A Yes, these are cross section lines. These are the lines on which the cross sections were developed.

Q Okay. Now, after the schematization can you tell us what was the next step that you do in putting together this mathematical model?

A Well, in this particular case not all the geometric information was contained on this chart, and so it was necessary to look for other sources of information for -- in particular for the depths of Berry's Creek in its upper -- upper Berry's Creek both in the portion of Berry's Creek below Berry's Creek Canal, there were no depths indicated in the chart. There are no depths indicated in the chart in the upper reaches of

Berry's Creek after its confluence or shall we say north of its confluence with Berry's Creek Canal.

It was necessary to have actual soundings or depth measurements make to furnish that information.

Q Was that done?

A And that was done. That information was given to me by Ms. Teleky.

Q Okay. That's relative to the depth soundings in Berry's Creek?

A Yes, Berry's Creek.

Q Okay.

A It was also necessary to consult an engineering report which had some information, had cross sectional information upstream of Anderson Street Bridge in Hackensack where this chart, exhibit is it B-87?

Q Yes.

A B-87 does not cover that area.

Q Okay. And was that in fact obtained?

A That was obtained covering the stretch from Hackensack up to Oradell Dam.

Q Okay. Did there come a time then that you went to the next step, calibration?

A Yes. At that time it was necessary to define the driving force for this hydrodynamic study, that is to say to define what the tidal elevation was at the mouth of the estuary which was taken in this case at Kearny Point, and also to see if there was significant inflow from fresh water sources at the -- over Oradell Dam, for example.

MR. PORRO: YOur Honor, can we have this marked as B-88.

THE COURT: Yes. B-88, Calibration of Computer Model, for identification.

(Calibration of Computer Model is marked B-88 for Identification.)

BY MR. PORRO:

Q I show you a copy of B-88, ask you if you recognize that and to tell us what it is.

A This represents, actually the 13th calibration run which I made.

Q this was prepared by you?

A By me.

Q Okay. Go ahead.

A The procedure was to describe

the tidal elevation at the mouth, that is to say how it changed with time, in other words, the model is a dynamic model, and one gives it numerical information describing how the tidal elevation changes at Kearny Point. And this in turn drives the flow in the model just as in nature the elevation of the tide and the ocean produces the tidal flow in the river.

There are some parameters, in particular the frictional coefficient which are only known approximately from previous studies, and these parameters are adjusted in order to get a good match between existing data such as that published by NOAA, by the Coast and Geodetic Survey, and what the model is predicting.

So in this case the model is submitted to a tidal change down at Kearny Point. The mathematics of the model is developed in time, and the resulting high water and low water elevations and the time of high water and the time of low water are compared with those given by the Coast and Geodetic Survey.

In this particular case I used the month of September 1962 data, averages for the month from the Coast and Geodetic Survey.

I had previously started with the rough estimates in the back of the tide tables, and once I obtained this more detailed data from the Coast and Geodetic Survey I used it as the basis for comparison.

Q Now, B-88 represents the calibration of this particular computer model. Is that correct?

A Yes.

Q And looking at that exhibit which you have prepared can you tell us in your opinion and on the basis of your experience whether or not such calibration as shown there is a good fit and what that means?

A Well, basing this on studies of other estuaries I would say that it is a good fit. In particular I think the figure speaks for itself, and you see that the range is very closely matched by the calculated points, compared with the observed points. The time lags are not as perfect, and generally this is a problem in matching lag information.

However, I would consider with one exception the low water time lag at Hackensack is off by, I guess that's about 25 minutes. The others are certainly satisfactory.

Q Now, do you feel that the model as calibrated could give a reasonable representation of the tidal elevation in the Hackensack and the tributary -- and its tributaries in the area depicted?

A Yes, I think reasonable is a good word for that.

MR. PORRO: Okay. Now, I'd like to have marked B-89 and B-90, one being the 1916 map, the Nautical Chart or maps, and the other being the overlays.

THE COURT: B-89 for Identification is Coast and Geodetic Survey 287, Nautical Chart for Passaic and Hackensack Rivers September 1916.

B-90a for Identification Overlay from 1972, USC&G Chart 287, lower portion of the Hackensack River; B-90b, Overlay from 1972 USC&GS CHart 287, upper portion of the Hackensack River.

(C & GS 287-Nautical Chart for Passaic and Hackensack Rivers September 1916 is marked B 89 for Identification.)

(Overlay from 1972, USC&G Chart

287, lower portion of the Hackensack River is marked B-90a for Identification.)

(Overlay from 1972 USC&G Chart 287 upper portion of the Hackensack River is marked B-90b for Identification.)

BY MR. PORRO:

Q Now, you are familiar with the exhibits that have just been marked for identification?

A Yes, I am.

Q B-89 and B-90a and b. Now, can you tell us briefly did you prepare B-90a and b?

A That's these?

Q Yes.

A Yes, I did.

Q And can you tell us what use you made of B-89 and B-90 a and b and what purpose they served in setting up this project?

A I wanted to make the -- a similar schematization, one similar to what I had done on the 1972 chart which is marked for identification.

Q B-87?

A B-87, I wanted to do the same schematization, but instead of the 1972 chart use the 1916 chart which was the earliest chart I could obtain from NOS.

Q Okay. And that is the time period that you then worked with?

A. Yes.

Q The changes between 1916 and 1972?

A. That's correct.

Q Okay. Now, so that there is no confusion on the record you referred to three experiments before, one to do with the canal, one to do with the Newark Bay and the third one to do with the dredging in the river itself.

A. Yes.

Q To make the record clear which of the three do these exhibits deal with?

A. These exhibits deal with the comparison of what you call the dredging in the canal, from Kearny Point to Overpeck Creek.

Q All right. Not the canal, you are talking about the river?

A. The river, I am sorry. The canal was the first one, the second one was the Newark Bay and this pertains to the third one, which is the changes in the main stem of the Hackensack from

Kearny Point to Overpeck Creek between the years 1916 and 1972.

Q Okay. Again for clarification now can you tell us what happened to the first two, very briefly.

THE COURT: Before you do that you keep saying the canal and Newark Bay. What do you mean when you say that? Did something happen there?

Q Why don't you go over --

THE COURT: Are you referring to dredging in the Newark Bay and --

MR. PORRO: Yes.

THE COURT: And in the canal?

THE WITNESS: To changes in Newark Bay.

THE COURT: What changes?

THE WITNESS: Well, proceeding with the first one, which is the Berry's Creek Canal, I tried to run the model without the canal, that is to say using Vermule's Map, I believe it was 1896, as my source of information, and comparing the results before the canal was dredged from the Hackensack to where it is now.

BY MR. PORRO:

Q Okay.

A And looking at the predicted tidal elevations, using the same tide down at Kearny Point comparing the results one with the canal and one without the canal --

Q And concluding what the effect of the dredging of the canal had?

A Yes, in terms of the high water plane.

Q Okay. So we can eliminate that experiment. Can you tell us just briefly what happened?

A Briefly -- the numbers showed a difference of 2/100ths of a foot. Based on the uncertainties -- incidentally it was instead of -- it was lower as a result of dredging the canal, not higher. Based on the uncertainties in estimating the depths in Berry's Creek in the time of that chart of 1896 I felt that this was inconclusive.

Q All right. So you abandoned Experiment #1?

A I did.

THE COURT: Well, wait just a minute. Experiment Number 1 was the --

the change you are talking about was the creation of the Berry's Creek Canal, was it not?

THE WITNESS: Well, the creation of it.

THE COURT: I think it went in in 1916.

MR. PORRO: You are absolutely right, its creation, not dredging.

THE COURT: The effect, if any, was a lowering?

THE WITNESS: It was 2/100ths of a foot lower.

THE COURT: 2/100ths of a foot. Because you had more room for the water to flow, would that be a safe conclusion?

THE WITNESS: Well, it's very complicated, tidal action.

THE COURT: I would just think if I had a tub of water and it was three inches deep and I cut a hole in the tub and ran a pipe out that the entire level would go down because there is a greater area being covered, but I know that's a very simple --

BY MR. PORRO:

Q Very simply, doctor, is that concept a reliable concept in dealing with the hydrodynamics of the Hackensack River?

THE COURT: You could be honest.

A No.

THE COURT: It won't hurt me.

Q It is not. Is that correct?

A No.

MR. PORRO: We are going to get into that when he deals with the river, Judge.

BY MR. PORRO:

Q Now, experiment Number 2, so we could move on --

THE COURT: My example is erroneous, I could see it already, but what about my example? You can't tell me that the water level wouldn't be lower in my example.

THE WITNESS: You had a bathtub and you made a hole --

THE COURT: Put a pipe down and sealed off the pipe, I forgot about the Atlantic Ocean out there.

MR. PORRO: That's the problem.

BY MR. PORRO:

Q Now, is it also true that Experiment Number 2, the effect of the dredging in Newark Bay was also abandoned eventually?

A It wasn't just effect of dredging in Newark Bay, it was the changes in Newark Bay between the time of Vermule's 1896 and the 1976 charts. There was an enormous amount of filling in Newark Bay. The entire configuration changed.

Q Okay.

A In this case, you say abandoned. Well, the results again I considered inconclusive.

Q All right. Abandoned is a bad word. The results were inconclusive?

A For the same reason there was a very small change I believe it was the order of -- well, let me -- it was of the order of a few hundredths of a foot.

Q Which way?

A It was up in this case.

Q Okay. Now, isn't it a fact that your testimony will center today on the third experiment? Is that so?

A Yes.

Q And isn't it a fact or is it a fact that the third experiment proved to be more conclusive then the first two?

A Yes, it did prove to be more conclusive.

Q And that third experiment dealt with the effect of the dredging from in the Hackensack River from Kearny Point to Little Ferry during the time period stipulated, 1916 to 1972. Is that correct?

A I would rephrase it somewhat to say not only the dredging, but all other changes that were reflected in the differences between the two charts, which I used.

Q All right. Let's get to that particular experiment then. Can you tell us, you have already started, am I correct, that Exhibits B-89 and B-90 dealt with that particular experiment? Is that correct?

A Yes, yes.

Q As a matter of fact, B-87, 88, 89 and 90.

A Yes.

Q So that the record is clear they all deal with that particular experiment. Okay.

Now, I'm going to show you --

A Excuse me. Which was the calibration curve?

Q That was B-88.

A Yes, that's a preliminary calibration curve.

Q Okay. And B-87 is the map that is the June '72 map. Correct?

A Yes. That was one of the two charts which I used for schematization.

Q Okay. Now, dealing with that particular experiment --

THE COURT: All right. You will have to hold it for a minute.

(There is a short recess.)

THE COURT: Okay. We are on the dredging operations, Kearny Point to Little Ferry from 1916 to 1972, and some other changes physically that happened in, I guess, the contours of the river or what have you.

MR. PORRO: I'd like to request that B-91, which is a computer plot be marked for identification at this point.

THE COURT: B-91 for Identification, Computer Plots of total core area of Reach 1, Kearny Point to Berry's Creek, 1916 and 1972 Geometry.

(Computer Plots of total core area of Reach 1, Kearny Point to Berry's Creek, 1916 and 1972 Geometry is marked B-91 for Identification.)

THE COURT: Was there that dramatic a change?

THE WITNESS: This is a geometry. It depends on the way you read it. In this case there was a distinct change in area, increase in area in this location between 1916 and 1972. There will be some other exhibits which I think will explain it better.

THE COURT: I see. Because this is total core area and you are depicting it geometrically. Right?

THE WITNESS: Yes. Here is going upstream from Kearny Point here, going up to essentially the confluence with lower Berry's Creek.

BY MR. PORRO:

Q Can you explain to us what that

depicts?

A It will be easier to explain with some of the other drawings.

MR. PORRO: All right. We'll proceed with the others.

THE COURT: When you use the expression "core" do you mean that area between the banks where the water flows, that space?

THE WITNESS: I'm distinguishing between in a cross section, between that part of the cross section which conducts the water upstream and downstream as opposed to maybe an embayment which might be off to the side which merely fills laterally from the river and doesn't participate in that.

THE COURT: I see. It's just a lateral flow back and forth, but it's not toward the sea and back fromthe sea.

MR. PORRO: I'd like to request that B-92a and b be marked for identification in the order I'm handing them to the court.

THE COURT: B-92a Computer Plots

of Reach 1, 1916 and 1972 Geometry, Core width; and B-92b will be the same, core depth.

(Computer Plots of Reach 1, 1916 and 1972 Geometry Core Width is marked B-92a for Identification.)

(Computer Plots of Reach 1, 1916 and 1972 Geometry Core Depth is marked B-92b for Identification.)

BY MR. PORRO:

Q Now, utilizing these two exhibits B-92a and b can you tell us what they depict and what they demonstrate?

A The three of them together were produced by the computer with the exception of the labeling on the upper right-hand corner, which identifies the dashed line representing 1916 geometry and the solid line representing 1972 geometry.

Q Now, when you say the three together you are talking about B-91, B-92a and b. Is that the three you are referring to, the last three that were marked?

A Yes, the last three that were

marked.

Q Okay. Continue.

A These are a computer plot of the schematized cross sections, showing their geometric characteristics, that is to say showing the comparison with which the computer was working, and they illustrate, especially in terms of B-92b, the fact that the core depth, that there was a shallow portion, two shallow portions in the lower part of the Hackensack Estuary, that is to say near Kearny Point where an increase in depth, which is almost constant corresponding to the 1972 geometry reflects a typical result of dredging.

Q How is that shown or how can one find that on those exhibits that you are looking at? How is that depicted?

A By observing between the distance zero and the distance 180 x 10^2, the comparison is evident from the drawing, from the plot.

THE COURT: Let me see it for a moment.

THE WITNESS: Sure.

THE COURT: If on B-92b I see a place in this reach where the depth has increased dramatically you could show me on that Coast and Geodetic Survey Map where that would be on the river, and then we could find out that indeed dredging did take place there, is that it?

MR. PORRO: That's correct, your Honor.

THE COURT: Okay.

BY MR. PORRO:

Q Now, in reading those charts for clarification purposes could you tell us which direction we read to find a deeper depth?

A Yes. B-92b the depth increases going toward the top of the page.

Q And not towards the bottom as would be normally --

A Not towards the bottom, this is a source of possible confusion.

MR. PORRO: Yes.

THE COURT: I wasn't confused on that, frankly.

MR. PORRO: I think I was probably the only one that was confused on that.

MR. RINDONE: Which one is down

stream?

MS. TELEKY: Zero.

THE WITNESS: Zero.

BY MR. PORRO:

Q Now, when you referred to Reach 1 how could we tie in Reach 1 to the map?

A Reach 1 is from Kearny Point to the confluence of what I call lower Berry's Creek.

Q Okay.

A And the Hackensack River.

Q And there are other maches that you will refer to later in your testimony?

A Yes.

MR. PORRO: I'd like to have marked for identification B-93 a and b, which deals with Reach 2, the Computer Plots of Reach 2, Berry's Creek and Berry's Creek Canal 1916 and 1972.

THE COURT: B-93a, Computer Plots of Reach 2, Berry's Creek and Berry's Creek Canal 1916 and 1972 Geometry core width; B-93b, Computer Plots of Reach 2, Berry's Creek and Berry's Creek Canal 1916 and 1972 Geometry, Core Depth.

(Computer Plots of Reach 2,

Berry's Creek and Berry's Creek Canal 1916 and 1972 Geometry Core Width is marked B-93a for Identification.)

(Computer Plots of Reach 2, Berry's Creek and Berry's Creek Canal 1916 and 1972 Geometry Core Depth is marked B-93b for Identification.)

BY MR. PORRO:

Q Can you describe for us where is Reach 2, what area is that?

A Reach 2 begins at the confluence of Berry's Creek and the Hackensack River and extends to the confluence of Berry's Creek Canal and the Hackensack River.

Q Okay. Now, I show you the last two exhibits, B-93a and b, and can you tell us as to that particular reach what the exhibit showed, what the computer plotting shows?

A The computer plot illustrates that the depth has not changed significantly, but that the 1972 widths shows considerable change in that reach.

MR. PORRO: Now, for purposes, your Honor, of demonstration and clarification I'd like to mark for identification B-94 and B-95, but I submit to the court I will not ultimately submit them in evidence because they are very bulky and I think it will be for a limited purpose now. I just want him to explain what they are so we can get a full picture.

THE COURT: B-94 for Identification, Computer print out of Program Calculations on project.

(Computer print out of Program Calculations on project is marked B-94 for Identification.)

B-95 for Identification, Fortran Source Listing - Computer Program.

(Fortran Source Listing - Computer Program is marked B-95 for Identification.)

MR. PORRO: All right. I just wanted to mark them for identification.

BY MR. PORRO:

Q I show you B-94, which is a computer print out. Can you tell us what this is and how that relates to the project that you are describing?

A Well, this print out contains the printed information corresponding not only to the computer plots, that is to say for each one of these plots the actual numbers that were plotted are contained in here, but also the actual simulation runs, that is to say the model results, the calculated results for the comparisons which I made between the 1916 condition and the 1972 condition.

Q Okay. Now, can you tell us what this B-95 for Identification is?

A B-95 is a listing of the actual program instructions in the program language Fortran. This constitutes a documentation of the program.

Q What is that,-I mean, what do you do with that?

A This is -- this information instructs the computer as to how to process the numbers which it is given that describes the geometry and the tidal elevation at the downstream boundary of the estuary.

Q So that B-95 is basically the instructions for the computer program. Is that correct?

A Yes.

Q Okay. And B-94 is the print out?

A The results.

Q The results. Okay. Now, I'd like to show you B-96a, b and c, and they are entitled Reach 6. A and B is Reach 6. Is that correct? And C is entitled Berry's Creek Canal, Berry's Creek Canal and Creek, Reach 6, can you tell us what is Reach 6?

A Reach 6 is the reach beginning at the confluence of Berry's Creek Canal and the Hackensack River and extending to the point where Berry's Creek north of Paterson Plank Road where Berry's Creek splits in two, I believe one is called Peach Island Creek and another I think maintains the Berry's Creek name.

THE COURT: They will be so marked for identification.

(Computer Plots, Reach 6, Berry's Creek Canal and Berry's Creek-changes in HW and LW 1972 Geometry are marked B-96a.)

(Computer Plots, Reach 6, Berry's Creek Canal and Berry's Creek-changes in HW and LW 1916 Geometry are marked B-96b for Identification.)

(Computer Plots, Reach 6 - Berry's Creek Canal and Berry's Creek - changes in HW and LW Composite - 1972 and 1916 Geometry is marked B-96c for Identification.)

BY MR. PORRO:

Q Now, can you tell us what are these three exhibits now as compared to the others?

A. B-96a is a computer produced plot, it is a computer plot of the resulting high water and low water plane for this reach corresponding to the 1972 geometry.

B-96b is a computer produced plot of the high and low water plane corresponding to the 1916 geometry. And B-96c is a drawing made from the B-96 a and b showing the comparison between the 1916 and 1972 high water and low water planes.

Q Now, these three exhibits are the results of the program. Is that correct?

A. That's correct.

Q Now, referring to C, which is the compilation, would you tell us what, in fact, is the results of the program that you have described?

A. The results show an increase in

the high water plane, a decrease in the low water plane, as one goes historically from 1916 to 1972.

Q And that increases -- can you quantify that increase for us by looking at those exhibits?

A Yes. It's about three inches or about a quarter of a foot.

Q All right. About three inches or a quarter of a foot?

A That's the increase ofthe high water plane. The low water plane increased a little bit more.

Q Okay. Now, Dr. Thatcher --

A Excuse me, it decreased a little bit more.

Q All right. But so far as the high water is concerned that was an increase, the result is an increase of some three inches?

A Of approximately three inches, yes.

Q Okay. And that's demonstrated on that particular exhibit B-96c?

A Yes, it is.

Q Now, Reach 6, does that involve the property in question, the East Rutherford

Property? You familiar with that location?

A Yes, I am.

Q So that the three inch increase in high water that you are addressing yourself to affects or relates to the property in question?

A Yes, it does.

Q Okay. Now, I'd like you to direct your attention at this point in time to the second aspect of your work, and that is the aspect of the subsidence issue.

MR. RINDONE: May it please the court, two things: Number one, I would like to move to strike the testimony of this witness regarding his conclusions concerning the results of this computer analysis because I submit no proper and complete foundation has been laid for those conclusions.

As your Honor will recall when the State had occasion to introduce to the court computer work the State offered not only its initial work product, not only State testimony as to what was intended and what was done, not only the results, but we brought into this court room the varying constituent instrumentalities, to wit, the president of the computer company, Mr. Sellig, and the surveyor who performed, both of whom --

THE COURT: Well, forget about what you did, because that doesn't necessarily set the tone.

MR. RINDONE: I submit it's essential.

THE COURT: Wait a minute. Tell me why it's essential, not what you did.

MR. RINDONE: That is essential, your Honor, because we do not know, there is no testimony on the record. The record is bare that the computer record was performed properly and adequately, that the purposes of the project were properly translated into computer instructions.

THE COURT: We have the computer instructions here, incidentally.

MR. RINDONE: They were marked for identification. But this witness hasn't testified, and he hasn't been qualified to testify that these computer instructions represent a proper and complete execution.

THE COURT: All right. I understand your argument.

Mr. Porro?

MR. RINDONE: I have a note here if I may just check here a minute.

I might add, your Honor, that we have certain underlying data referred to, which has not been introduced, to the best of my knowledge, data relating to soundings, how this was accomplished, who accomplished it, when, and under what circumstances.

THE COURT: All right.

MR. PORRO: On that issue, your Honor, I will represent to the court that Ms. Teleky who will be the next witness, will testify as to the soundings, the taking of the soundings. She was the one that compiled them and turned them over to this witness. So that his testimony can be subject to that tie in, if the court please.

THE COURT: All right. As to soundings, we'll wait and see what Ms.

Teleky says and then you may renew your motion.

MR. RINDONE: I understood that she was going to be cross-examined, the cross-examination of Ms. Teleky would continue. That had been kind of held in abeyance.

THE COURT: Yes.

MR. RINDONE: And she is going to come back again into the direct case for this purpose?

MR. PORRO: On the issue of artificial changes and --

THE COURT: He announced it today for her to come in and tie up the --

MR. PORRO: The artificial changes is really what --

THE COURT: All right. So now we are back to the computer. Mr. Rindone has urged that this testimony be stricken on the grounds that much of the testimony and the end result is predicated, in fact much -- the end product is all computer produced.

MR. PORRO: Correct.

THE COURT: And that we have had no testimony referable to whose computer it was.

MR. PORRO: Okay.

THE COURT: Who operated it, was it given proper instructions, and so forth.

BY MR. PORRO:

Q Dr. Thatcher, relative to that particular issue, can you clarify for us in my zeal to try to speed this up we jumped over who did the computer work and whether or not it was under your supervision, and these instructions that I referred to as B-95, whether or not they were properly utilized, can you address yourself to that particular issue?

THE COURT Okay. Just a second, please.

Go ahead.

A The computer program originated at MIT. It was a result of a variety of different research efforts, as you have introduced an exhibit that shows that it is being published. It has been sponsored by government agencies, primarily the Sea Grant and the EPA.

Q The program that was used now, was that complete, Mr. Rindone raised the question as to whether or not it was complete when utilized in this particular project, and if the question is a --

A There have been changes made to it since being used on this project, but those changes are only to the water quality aspect of the program.

Q It would not effect the results of this particular project?

A No, they would not.

MR. PORRO: Okay.

THE COURT: Well, where was the computer, at MIT?

THE WITNESS: No, the computer used is the computer formerly called Grumman Data Systems, they reincorporated into the name Calladata Systems, which is a subsididary of Grumman Data Systems.

Q Where is that located?

A Which is located in Bethpage, Long Island. It's a trademark.

Q And you utilized the Grumman Computer, for a shorter word?

A Yes, I used that.

Q And can you tell us, did you supervise that or tell us basically -- just give us the facts as to how that works.

A The computer itself is operated by their staff. The information given to the computer is the responsibility of the user.

Q And you were the user?

A And I was the user. And I furnished it with the information.

Q Okay. Now, when you say you furnished it with the information, what information?

A Both the program, that is to say the series of instructions --

Q That's B-95.

A And the input data, that is to say, the actual numbers describing the geometry, which incidentally the input data is listed out with each one of the listings corresponding to a computer simulation or a computer modeling.

Q Now, have you done this before in other projects?

A Yes, I have.

Q And on this particular project can you tell us whether or not the input and the utilization of the equipment was complete and correct? If that's -- that may be an inarticulate way of saying it -- I'll withdraw that.

MR. PORRO: Mr. Rindone, if you have any -- that's all that I have to ask him. If you have any questions maybe you want to ask him --

MR. RINDONE: I'd like to renew my objection, your Honor. I don't think thatś enough, I submit.

THE COURT: Well, you are not challenging his expertise to devise a program and hire a computer and become a user of it and give it a project, are you? Because I'm looking at his resume, and I see he has done this.

Roman Number IIId, consultant in computer applications and engineering for control -- I don't know, a whole bunch here in Spanish, consulted directly on the organization of a computer system on the use of computer systems and conducting classes in the use. What is lacking other than his being right there as the computer whirled around or spun around?

MR. RINDONE: If I am somewhat late in my comments, forgive me --

MR. PORRO: Excuse me. To your Honor's last question I believe that the witness was in fact physically there, is that true or is it untrue?

THE WITNESS: It's -- the way computer systems work nowadays it is hard to be sure that you are there. Sometimes you are, sometimes you are not. They won't let you in were the computers are working. That's a highly classified security area.

MR. PORRO: Okay.

THE WITNESS: Especially if they're aerospace companies because they work for governments on secret information.

BY MR. PORRO:

Q You as the user deliver it, can you tell us briefly what youdid with Grumman?

A In this particular case some people take cards and give cards to the operator and the operator puts the cards in the machine. In this particular case the information was elaborated directly and then edited in a magnetic form, that is to say on magnetic tapes and discs, and that information was then transferred from one computer to the other and processed, often while I was there in the same building, but sometimes in the interests of economy I asked that they have it by the next morning, and you get a better rate that way.

MR. PORRO: Okay. That clears that up.

MR. RINDONE: See, my problem is this, your Honor --

THE COURT: Do you want the computer people right here? Theyare going to say that they took what he gave them and ran it through the computer.

MR. RINDONE: It seems to me that what we have -- the status of the proofs on this point is that this witness provided certain information to go into the computer with certain instructions as to how the project should be worked out. I don't know that much about it, quite frankly.

Then he receives data, charts

from the computer upon which he formulates his -- he reads them and concludes that they show a, b, c.

THE COURT: Well, he has a, b, c. Those charts are computer -- who drew those charts?

THE WITNESS: With the exception of this one, which was copied from the charts, the charts were drawn by a computer.

THE COURT: That's what I thought.

MR. RINDONE: They were drawn by the computer, and he says, "Ah, ha, they show this, they show that, they show the other."

And it just seems to me that there is a vital gap in the proofs in this case.

THE COURT: What did you give in your case that filled that gap that he hasn't given? You had a man here from the computer company, I believe, and he said, "This is the print out."

MR. RINDONE: I had the responsible officer of the company here ready and able to answer all questions concerning the computer hardware used, the methodology used within the computer process.

THE COURT: But I never heard it, did I? You never produced it on direct. It was never covered on cross.

MR. RINDONE: May I have a moment, please?

THE COURT: Yes.

MR. RINDONE: The problem there was of a slightly different nature, because, Mr. Yunghans points out to me we started out, we were dealing with a physical phenomenon something in being. We started with something that we knew and assumed was true and existing. We had the computer determine the metes and bounds according to the New Jersey Planning Coordinate System and it drew back a picture for us which we could compare with what we gave them originally, and it fit exactly.

THE COURT: That isn't answering my question though.

MR. RINDONE: There is nothing to compare this with the computer results.

THE COURT: It goes to the weight of it then, doesn't it? Even if we had the computer people here this is the point, there is lack of foundation. Now, you are off on a different tack now. How do you know that the people who operated the computer, how do you know that they -- do you know to be a fact that they actually programmed it according to your instructions, or do you just trust them?

THE WITNESS: The people didn't do the programming. I have the program.

THE COURT: You did the programming, but that programming is actually its instructions to a computer, isn't it?

THE WITNESS: Yes. And that information is fed into the computer and once it's in the computer as it goes in there are checks to make sure that -- certain errors are detected. There is a constant check.

THE COURT: How do you know

that? How do they know they checked yours? That's maybe more appropriate as far as this question of foundation is concerned. Frankly they are not here, granted this may affect the weight of the evidence, but I can't strike it on the grounds that the computer people aren't here. All he is going to say is, "We checked it out." I'm sure he is not going to say, "We didn't check it and make corrections."

BY MR. PORRO:

Q Did your calibration provide a check for you?

A Yes. Not only that, but in the elaboration of the cross sections, the schematization I have a program which instructs the computer to plot the cross section so I can look at the cross section and any error, any inconsistency which is obvious becomes immediately apparent.

THE COURT: Did you do that?

THE WITNESS: Yes, I did.

MR. RINDONE: I have nothing further in this connection, your Honor.

THE COURT: All right. I will

deny your motion. I will consider that one gap in the testimony, that is that your position is at least a better foundation should be laid then has been. I will treat it that way.

BY MR. PORRO:

Q Are you familiar with the equipment that was in fact used?

A. Yes, I am.

Q And you have worked with computer systems extensively in this type of modeling. Can you describe for us the equipment that was used?

A. They are IBM Model 360 computers. At the begining of the project it was a Model 36075. I think by the end of the project they had updated to have Model 370168. I can check by looking at --

Q Now, you referred to model numbers. Can you tell us what those model numbers reflect briefly? Is that good or bad?

A. Well, the 360 and then its replacement, the 370 is the type of IBM computer. It comes in different sizes and different powers. These are some of the biggest computers, the Model 75 and the Model 168 are some of the biggest computers and some of the most powerful.

Q Now, how are they in terms of their accuracy and functional abilities?

A Well, that is the aim of making a computer is to make it accurate and to make it functional, and this represents really a remarkable achievement in that respect.

Q One other thing on this Grumman equipment that you referred to. Have you used them before in other projects?

A Yes, I have.

Q And what has been your experience with them on the other projects relative to accuracy results and all of the things that would reasonably be anticipated from computer work?

A I think I could sum it up by saying that the -- any problems in the results other than just not getting anything back have been because I made a mistake in instructing the computer incorrectly.

Q Okay. So that your experience in the past with this particular equipment has been good?

A Yes, it has.

Q Insofar as its performance and

its function?

A. Yes, it has.

MR. PORRO: Your Honor, I'm ready to go into the subsidence issue and I don't know what the court's timing is.

THE COURT: Well, are you figuring on keeping him here on Monday or did you think you would finish him today?

MR. PORRO: I had hoped not to, but the way time has run --

THE COURT: Because we haven't had any cross. And I know I have held you up some.

MR. PORRO: I don't know what his scheduling is though.

THE COURT: Where do you come from?

THE WITNESS: I come from Long Island.

THE COURT: Well, it would be no great inconvenience to have him come back.

Off the record.

(There is a discussion off the record.)

MR. PORRO: Your Honor, before

we break, I'd like to have marked, Mr. Rindone and I have discussed this, a map that we discussed with the Mosquito Commission, and I guess we can give it the very next number.

THE COURT: What is the date of it?

MR. PORRO: 1935. It's of the Bergen County Mosquito Commission.

THE COURT: More than thirty years old, ancient document.

MR. PORRO: Mark it B-97.

THE COURT: B-97, where did that come from?

MR. PORRO: Bergen County Mosquito Commission as part of their records.

THE COURT: B-97 for Identification, Section Number 3, Tidal Marshes, Bergen County Mosquito Commission Map 1935.

(Section Number 3, Tidal Marshes, Bergen County Mosquito Commission Map 1935 is marked B-97 for Identification.)

THE COURT: Okay.

MR. PORRO: Your Honor, the other thing is that I am getting a little bit jumpy. We should get the proffer from Mr. Rindone as to what his witnesses are going to say from two standpoints. I want to know who to have here and that he is not going to retry the case and that they are truly going to be rebuttal of something specific, and he tells me he'll let me know that tomorrow.

THE COURT: Let him know that little secret, will you.

MR. PORRO: And lastly, Mr. Rindone has requested an affidavit, which I have now, relative to the cost of the project and the proof of the mean high tide line, the total cost being $207,960.

THE COURT: That's the cost for this case, for the Borough of East Rutherford?

MR. PORRO: Yes. I am going to submit it by way of affidavit to the court, supply one to Mr. Rindone. It has a breakdown by way of the various individuals, and there is plenty of backup by way of dates of vouchers. This is just a compilation.

MR. RINDONE: That does not

include because I did not request his counsel fees --

THE COURT: I understand that.

Am I going to get a copy of that?

MR. PORRO: Yes, it's the breakdown.

THE COURT: I will put this in today's testimony as being offered.

MR. PORRO: Okay.

The time period, by the way, involved is from 1973 to the end of 1976, as I say in the affidavit. I say that in the affidavit.

THE COURT: Well, actually it's into 1977.

MR. PORRO: Mr. Rindone points out that the addition as shown on the breakdown doesn't appear to total 207. We'll doublecheck it for [illegible] court.

THE COURT: That V. A. Carella, that's V. A. Caldarella?

MR. PORRO: Yes.

THE COURT: What was that, in depositions?

MR. PORRO: Yes.

What we tried to do initially was to break out what it cost to draw the line from the litigation aspects, but so many of the conferences were interwound that it was difficult to do.

There is also a Dr. Barghoorn, thatis not listed there. I think it was only $250.

THE COURT: Well, he was only in the Newark case, wasn't he?

MR. PORRO: We did have him initially as a consultant, but I'll represent to the court that that expenditure was no more than $500. I think it was in the area of $250.

THE COURT: Well, it sounds like a lot of money in total, but I've been here and seen these people and individually I'm not surprised. I think I will give this say a number even though it is a pleading. B-98 in Evidence Affidavit of Costs of -- I'm calling it the Costs of Suit. We'll know what that means, I am sure. I am going to take it in evidence.

(Affidavit containing Costs of Suit is marked B-98 in Evidence.)

MR. PORRO: As I said in the affidavit there may be some other items, but I don't think there are many that are missing.

THE COURT: All right. You can step down, Dr. Thatcher.

(Court is adjourned for the day.)

BOROUGH OF EAST RUTHERFORD
VOLUME XVII - January 12, 1977

CERTIFICATION

I, ALBERT R. AGOSTINE, certify the foregoing to be a true and accurate transcript of the testimony and proceedings in the above entitled cause.

Albert R. Agostine

Albert R. Agostine, C.S.R.
Official Court Reporter

A-3311-72

no B/J

A 1 0 1 SEP 1979

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
(On Remand to Law Division-
Bergen County)

CITY OF NEWARK, et al.,
Appellants,

-vs-

NATURAL RESOURCE COUNCIL,
et al.,
Respondents.

FILED
APPELLATE DIVISION
NOV 2 1978
CM
Elizabeth McLaughlin
Clerk

VOLUME I

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NEW JERSEY SPORTS &
EXPOSITION AUTHORITY,
Plaintiff,

-vs-

BOROUGH OF EAST RUTHERFORD
et al.,
Defendants.

SUPERIOR COURT OF NEW
JERSEY
LAW DIVISION - BERGEN
COUNTY
DOCKET NO. L-16799-72

FILED
SEP-21 1979
CLERK

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March 8, 1976
Bergen County Courthouse
Hackensack, New Jersey

B E F O R E:

THE HONORABLE THEODORE W. TRAUTWEIN, JASC

A P P E A R A N C E S:

For Natural Resource Council, et al.
WILLIAM F. HYLAND, ESQ.,
Attorney General of New Jersey
By: MORTON J. GOLDFEIN, ESQ.,
Deputy Attorney General

For Trustees of the School Fund
WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General

For City of Newark, City of Elizabeth, New Jersey Land Title, Esther G. Bertoni, et al
JOHN R. WEIGEL, ESQ.

I

Reported by: EDWARD SALBIN, C.S.R.
Official Court Reporter

APPEARANCES (Continued):

For Borough of East Rutherford
ALFRED A. PORRO, JR., ESQ.

I N D E X

WITNESS	DIRECT
ROLAND S. YUNGHANS	
Mr. Goldfein	1.31

E X H I B I T S

NUMBER	DESCRIPTION	EVIDENCE
R-1 through R-36	36 Maps	1.25
R-37 through R-72	36 Overlays	1.26
R-73 through R-108	Overlay Preparation Summary Numbers	1.27
R-109 through R-120	Overlay Preparation Logs	1.28
R-121 through R-154	Miscellaneous Items	1.29

THE COURT: There are a few preliminaries I would like to discuss with you gentlemen. This, as you know, is basically a remand from the Appellate Division to build an administrative record so that they can review properly the acts of the State. In view of that, we know that we are going to need transcripts. I have talked with Mr. Salbin and ordinarily there would be an original and five. I want one. That will make an original and six. Who is going to pay for this? He is going to get going on this as the trial progresses -- I'm not talking about a daily record now -- but we want the record done within some reasonable time after the trial concludes.

MR. WEIGEL: Could I make a suggestion?

THE COURT: Yes, Mr. Weigel.

MR. WEIGEL: That the State and I share costs on a 50-50 basis.

THE COURT: That is fine with me.

(Discussion off the record with the Court Reporter.)

MR. WEIGEL: Your Honor, I don't

know if I made my point clear. I was offering to pay half of the cost of generating the transcript, including necessary copies for the Appellate Division, one for myself and one for Mr. Goldfein, whatever that bill is.

THE COURT: Mr. Porro will take care of his copy and anybody else. We have built into this the Borough of East Rutherford, too.

All right, I think the first thing we ought to do is to mark as many exhibits by consent as possible. If you don't think that is reasonable, why tell me so.

MR. WEIGEL: I think that is fine.

MR. GOLDFEIN: Fine.

THE COURT: Or would you rather offer them as you develop the case because you are going to be doing this for the next week or two.

MR. GOLDFEIN: We have a great pile of exhibits here and it might be advantageous just to mark them all.

THE COURT: Are your exhibits all in one building?

MR. GOLDFEIN: They are in John's

room. They are not all here.

THE COURT: Is it worth doing it right now?

MR. GOLDFEIN: I think it is.

THE COURT: At least mark them for identification. You know where the exhibit itself demonstrates what it is.

MR. WEIGEL: Do you have any suggestions?

I did talk to Mr. Harris on Friday and he did indicate that the Court wanted to have the various exhibits marked. I have them in my car. In fact, I have a carload full of maps, documents and so forth and I will be glad to bring them in, in any kind of order that is convenient to the Court and I did have one early practical kind of request. Is there someplace where I can bring these various maps and documents and leave them with you more or less secure?

THE COURT: This is rather bulky, isn't it?

MR. WEIGEL: Yes, they are probably 50 photographs and maps and several cartons of reports and documents.

THE COURT: Are they in cartons?

MR. WEIGEL: I have some of them boxed, your Honor. What I was going to suggest this morning is that maybe the thing for me to do is to catalogue the items myself and then within the week I can give the Court and Mr. Goldfein a list.

THE COURT: Why don't you do that. Catalogue them and give Mr. Goldfein a list and see if he can consent to their being marked and Mr. Porro, Mr. Porro is really on your side. Do you have any exhibits?

MR. PORRO: Yes, your Honor, I think it would be advisable to proceed in the same manner as you suggested.

THE COURT: Why don't you do that. Catalogue them, make a list and submit it to Mr. Goldfein.

You say they are in your car, Mr. Weigel? Do you want to keep them there?

MR. WEIGEL: I don't know any other way to do it. I set the trunk up in my car as my file so my tidelands are in the trunk of my car and will stay until this matter is over.

THE COURT: Assuming at the break sometime -- I just thought of a place you might keep them in. We have closet space right out there. There is a file cabinet there and we might be able to dig up a file cabinet and put it over here. Are your exhibits in the room, Mr. Goldfein?

MR. GOLDFEIN: A good number of them are.

THE COURT: Why don't you go and get them. I think I would like to mark as many as possible now. It really makes the trial go faster. As I understand it, you are going to proceed, Mr. Goldfein, to introduce testimony not subject to cross-examination at this time, as to procedures followed by the State in promulgating these maps. Is that correct?

MR. GOLDFEIN: Right. Mr. Yunghans is here and Dr. Feinberg, who can start out in that regard today and it is our intention, as I indicated in the letter, to take Court and counsel on a field trip on Wednesday and I have to get a number of people who might be coming. So that we can order lunch and we made arrangement for a bus from Brick

Town on Wednesday morning and the Marine Police are supposed to take us about a bit and be back here by 4:30.

THE COURT: What am I supposed to do, meet you in Brick Town?

MR. GOLDFEIN: Wednesday morning at 9:00.

(Brief discussion off the record as to method of Court arriving at Brick Town.)

MR. PORRO: Your Honor, I would like to place an objection on the record. I hope it doesn't affect my lunch. I see no relevancy in viewing marshes in south Jersey in that the case involves quadrangles that have been completed in Hackensack and in Newark. Each quadrangle in each area can differ tremendously and under the statute, the ones that have been passed on in the issues here, it is Hackensack and the Newark Meadows.

THE COURT: We better have a little discussion about the whole thing.

MR. WEIGEL: That was one of the several questions I wanted to bring up. I have possibly five questions that I think are really preliminary. I have a slightly different objection than Mr. Porro. I don't really object to having field trips taken, I think field trips can be helpful to the Court. I, however, raise a very strenuous objection to having the State determine on its own, without consultation with us, where those field trips are to be taken.

THE COURT: Why don't we see what we are talking about. I will take a proffer from Mr. Goldfein right now as to what he proposes to do and what its relevancy is to the issues in this case.

MR. GOLDFEIN: Your Honor, this challenge to administrative action in the way in which the State, through the Department of Environmental Protection and the Natural Resource Council responded to the mandate of the legislature pursuant to the statute to map the State tidelands holding, those tideland holdings are not exclusively in Newark, Elizabeth, or Hackensack Meadows and it is our intention to give the Court, in proper context, the mapping procedure that was to be done to show there is not just one kind of meadowlands in the State. I think that is significant and the State's effort to develop a comprehensive scheme for mapping all the meadowlands in the State is mandated to do it by the statute. Mr. Weigel's objection about the selection of sites -- I would have no objection to a field trip when we get to the point of presentation of the appellant's case to go and look at sites that he wants the Court to see. It has been up until today represented by all counsel that the effort was to impress upon this Court the comprehensive nature of what we are about, and try and make the most complete record as possible. I think it is important for the Court to evaluate the kind of problem involved in mapping in order to evaluate whether the actions that the State did follow were, in fact, reasonable. And it is felt that getting out to see these kinds of problems on the ground is an important feature of that and that is the reason we have suggested it. It is, as mentioned in my letter, a trip this Wednesday to sites in south Jersey as well as a trip next Wednesday to sites in the Hackensack area.

THE COURT: What do you fellows conceive to be the outer limits of your appeal? Are you challenging the mapping techniques undertaken by the State in all areas?

MR. WEIGEL: Absolutely, your Honor. The record should reflect this.clearly, that this appeal clearly involves the mapping techniques which the State has employed in the 37 face photo maps and claims overlays it prepared and it has a statewide implication because we have been told that the State intends to employ certain or all of those same techniques in the balance of its mapping and the balance of that mapping involves the entire Atlantic coast of New Jersey and the Delaware Bay area and Delaware River as far as the bridge and Trenton.

THE COURT: Then it seems preliminary there is some relevancy to the field trip. You may ask the questions of Mr. Goldfein if you want to. You had about five, about this trip?

MR. WEIGEL: Not solely about the

trip. It was about this matter and where we are going. Some of the questions that I had don't involve this particular point. It would be very helpful to me, and I'm sure Mr. Porro, in preparing for each of the days that we are going to be here in court, to know who the witnesses are that the State expects to call because I have probably 30 volumes of depositions and I would like to read the depositions of the particular witness the night or two nights before we are up here listening to the individual. That is one request I have, that we be provided that type of a list. I think it is important that we fix a schedule because I happen to be a sole practitioner and it is very difficult for me to handle the balance of my law work when I really don't know exactly what kind of a schedule we are going to be working through.

THE COURT: I can tell you right now until I change it, I intend to try this case on Monday, Tuesday and Wednesday from 10:30 to 3:30 if that is helpful.

MR. WEIGEL: No Thursday or Friday

sessions?

THE COURT: No.

MR. WEIGEL: Is there going to be any break, your Honor, between the time when Mr. Goldfein completes his direct examination and when we have an opportunity to cross-examine his witnesses?

THE COURT: I'm wide open on that. I'll take any suggestions you want on that.

MR. GOLDFEIN: The way Mr. Weigel just put it seems to be inconsistent with the pretrial order. I think the way we proceed, as I understand, we are going to make a presentation and there might be a time lag at the end of that presentation before the burden shifts and he presents witnesses, not to start with cross-examination of the original witnesses.

THE COURT: There isn't going to be any cross-examination. I think he said he wants to read the testimony the night before so he could better understand and follow it.

MR. GOLDFEIN: That's fine. I can present a schedule approving when, as the case goes, but I think what he intends to do is what you and I understood at the end of our presentation, which I see as being the first three or perhaps four weeks of three days a week, that there might be a gap before the appellants present their case.

MR. WEIGEL: Just let me understand because I'm rather startled if I'm being left with the impression we are given at no point in this proceeding, whether it lasts for three months or six months, at no point, I assume from what Mr. Goldfein just said, are we going to have a chance to cross-examine his witnesses?

THE COURT: You are going to have a chance to cross-examine his witnesses.

MR. WEIGEL: I thought so.

THE COURT: Your right is reserved on that score.

MR. WEIGEL: I thoroughly understood that the desire of the Court, and I assume Mr. Goldfein's desire, was to have this first period of whatever, three weeks or however long, taken up with a direct presentation; in other words, he will call witnesses, they will give their direct testimony, there will at that time be no cross-examination, but we will have an opportunity for full cross-examination sometime during this proceeding.

THE COURT: That you will. It will be up to you as to whether you want to put your affirmative case in and then call some of his witnesses for cross-examination. I don't care how you do it. He is also going to have the opportunity to offer probably some of the same witnesses in rebuttal to your main case. We are in that odd situation.

MR. WEIGEL: I agree.

THE COURT: Where everybody knows there is no administrative record. We are trying to build it initially.

MR. WEIGEL: I have some very different views than Mr. Goldfein has of the burden of proofs in the matter. It may be after the Court has had a chance to read my trial memorandum that you would want to hear oral arguments on those matters and I would be prepared to argue orally.

THE COURT: Well, your trial memorandum isn't in yet.

MR. PORRO: It came in.

THE COURT: It came in this morning?

MR. PORRO: Yes.

THE COURT: I read the others. I don't know if I am going to be prepared at the beginning of the case to give a precise ruling on burden of proof. I don't know about that.

MR. WEIGEL: I think we will have a suggestion, your Honor, that there may come a point in time, and I don't think it has to be this week or next week, I think it could well be about the time they complete their direct case, where we ought to have an opportunity to argue these procedural questions.

THE COURT: I don't know why even it has to be argued before the end. You may want to argue at the end of the case. Every one of you fellows has an idea what your burden of proof is and you have to take your own chances on that and then I will have to ultimately make the determination. I'm not saying this is a hard and fast rule, Mr. Weigel, I think maybe at the end of the case I will hear arguments on it.

MR. WEIGEL: All right.

THE COURT: I'm not sure yet in my own mind.

MR. WEIGEL: I have no objection to that kind of procedure.

THE COURT: Are there any other questions about the trip?

MR. PORRO: Your Honor, I would like to place on the record, so there is no misunderstanding, I understood that the subject matter of this particular trial was kind of resolved at pretrial, that if we were going to affect properties outside of the properties in which there was administrative action, then we had a serious question of due process of law; namely, affecting the rights of property owners in south Jersey. This aspect of the case, as I see it, relates to specific administrative action under a given statute. The constitutionality of the statute is not being attacked, at least I don't think that is an issue here, and, therefore, the properties that are involved are the properties that are under the administative action, namely Newark and the Hackensack Meadows, and there is no question, we can stipulate that there are many different types of meadows throughout the State of New Jersey. On behalf of my client, I can so stipulate. We don't have to go to south Jersey to find out that their meadows are different. We don't have to go to south Jersey to find out, we will stipulate also that there is different vegetation in south Jersey as compared to the two different meadowlands, Newark and Hackensack. Therefore, the objection as to relevancy of the south Jersey meadows at this point is one that should be noted and I think that the trip is improper.

MR. WEIGEL: I think on the basis of the representation, your Honor, that was made by Mr. Goldfein, and I take it he would not object later on if we selected one or more locations and made arrangements for the Court to see it, I will withdraw any objection to going to the spots that they want the Court to see and the parties to see. I would be helped, however, to know if they can supply to us some very minor matters like the types of vegetation in general terms and also the tidal information in relation to when we are going to be there what the tidal condition is.

MR. GOLDFEIN: We don't have any trouble in supplying those kinds of details, your Honor. Say we do it tomorrow so you will have it to look at Tuesday night. We are going to go to three locations on Wednesday. I have travel direction by automobile on the Garden State Parkway available.

THE COURT: I want to hear and see everything that is relevant to this case. By the same token, I don't want to just waste my time and take a joyride, either. There are a lot of other things I have to do. I will have to let you know in a little while, I want to see what my schedule is, like I did get this letter, Mr. Goldfein, I acknowledge that and I thought about it. I figured we would be talking about it this morning. I just want to take a look at the pretrial. I can't see that there are any problems of constitutional dimensions, if indeed at the end of this case the maps are either upheld or knocked down, or upheld in part and knocked down in part. I don't mean your argument is specious, Mr. Porro.

MR. PORRO: I think the relevancy argument, your Honor, is very important. We all recognize that these are different meadows.

THE COURT: By the same token, there are a lot of people who own land right here in Carlstadt and East Rutherford who are not in this suit and they are going to be bound by it.

MR. PORRO: Your Honor, are we saying that we are attacking the statute? I don't think so.

THE COURT: No.

MR. PORRO: We are attacking administrative action and that administrative action to date only applies to Hackensack and Newark, different vegetation. The gravamen of the test is vegetation and we can all stipulate that the vegetation up here is different from the vegetation down in south Jersey. So, from the relevancy point, that is an important point.

THE COURT: I gather Mr. Goldfein thinks that I can better understand their tests and their application if I see the physical topography throughout the State and, further, I believe Mr. Goldfein represented that a lot of the techniques used in developing these 37 quadrangles are going to be applied to other areas of the State and I would imagine if the State is upheld, they are going to use those techniques and they develop them for the quadrangles. If they are not, they are going to have to think about it. So, on that score, I suppose there is some relevancy. I am inclined to make the trip and your objection is noted, of course.

MR. WEIGEL: Your Honor, I have another problem which I just want to present. Maybe with Mr. Goldfein's cooperation, some kind of practical suggestion can be made to the Court. I have two witnesses who have died since we started the discovery proceedings and I want to have their testimony available in the record. The State attended the depositions so there was, I think, the full protection that is provided for in the rule and yet I can appreciate that just to drop several transcripts on the Court really isn't fair. I think my suggestion would be that I could summarize the portions of those depositions -- I'm talking now about the depositions of Peter Gannon who was the chief of the Bureau of Navigation, and Jacob Kraft, who was the field supervisor of the Bergen County Mosquito Commission. Both of those gentlemen are now deceased and my suggestion would be, if the Court and State can concur, that I summarize the portions of those depositions that I consider relevant and then give Mr. Goldfein the opportunity to go through them and point out other portions that he may consider relevant.

THE COURT: I think that is an excellent suggestion or way to treat it. Certainly, the Court will be grateful for that and if you can agree that is fine. Very well, what I suggest is this: While I try to find a file cabinet and check out my schedule for Wednesday, show counsel your exhibits and see if you can line them up in some order. I will then come out when you tell me that they are ready and I will give them identification numbers with a brief description from my exhibit list. All right? I will wait for you to call me back.

(Recess)

THE COURT: We are on the record. For the record, these exhibits by the State will be Respondent's exhibits. They will be called R and numbered and they will be marked for identification or at this time, if you agree, they go in evidence. First one?

MR. GOLDFEIN: Your Honor, we have a list of base maps and overlays, I think I have the pile in front of me. Can we mark them individually?

THE COURT: Are these 37?

MR. GOLDFEIN: Thirty-six base maps.

THE COURT: How are they laid down now?

MR. FEINBERG: Numerically.

THE COURT: What do you call them? Let me see just one.

MR. GOLDFEIN: I will give you a copy of this list we prepared to use for this purpose. What we would like to do is mark the exhibit numbers right on this list and Xerox this list and circulate it to counsel and everyone will have the same copy.

THE COURT: All right, let's find out right now, we are looking at 36 base maps. They have a number and there is a map name that I think is fine for identification purposes. For example, R-1 in evidence will be 6862148, Passaic River. Then it goes down Hackensack River, Harrison, Newark Turnpike, et cetera, which I think is set up quite nicely. Can these be admitted into evidence for purpose of the State's work product and not that they are evidential of a claim? This is without prejudice to the appellant's right to attack their validity.

MR. WEIGEL: I understand. I have no objection except I would have this question. I notice there are some markings on at least one of the overlays and one of the base photo maps. Are those just markings that were put in or on by another Court Reporter?

MR. RINDONE: That is another trial.

MR. GOLDFEIN: I assume we used that in the course of the Parker trial, that's what it is.

MR. WEIGEL: There are no extraneous markings at all on those?

MR. GOLDFEIN: There wasn't such intention.

THE COURT: When we get to it, let's note it. 7212660, Walden Swamp. Let the record show it is admitted into evidence but the markings were generated in the Parker, Logothetis trial and they have no significance in this case.

Let the record show also that any evidence at this stage of the proceeding has nothing to do with the consolidated case, so that when we place no objection on the record it has nothing to do with any evidential value in the second aspect of this case.

Now I will mark these right now in evidence.

MR. WEIGEL: No objection.

MR. PORRO: No objection.

THE COURT: The Court uses the symbol check-marking for identification and a vertical line through it means in evidence. We will save a little time. The Court intends to mark these exhibits, the first 36 maps as R-1 through R-36 in that chronological order as in evidence this date. We will do that and we will affix the little stickers to the back of them someplace.

MR. PORRO: Your Honor, it might be advisable, from our experience in <u>Parker</u>, to have the overlay and the aerial with two different markings, namely A and B; in other words, if the exhibit 1A would be the overlay, or vice versa, and B --

MR. GOLDFEIN: On this list the overlays start with 37.

MR. PORRO: I see. So you are just putting in the base maps? Okay, fine.

(Whereupon R-1 through R-36, 36 Maps, marked in evidence.)

THE COURT: Then it is the Court's

intention to mark the overlays as R-37 through R-72 in evidence.

MR. PORRO: All right.

(Whereupon R-37 through R-72, 36 Overlays marked in evidence.)

THE COURT: Now, what are the overlay preparation summaries? What are those?

MR. GOLDFEIN: These are the completed form. There is one as to each of staff work that went into the preparation of the overlay.

THE COURT: What is the next one? I notice the first overlay preparation summary you handed me, Mr. Goldfein, was Map No. 7352172, that is the last claim overlay number. Are they in reverse order?

MR. GOLDFEIN: I think they are in reverse order. Why don't we put them in order now to accommodate maintaining the order you suggest.

THE COURT: All right, overlay preparation summary numbers -- has Mr. Weigel seen one of these?

MR. WEIGEL: I have seen all of them.

THE COURT: And Mr. Porro?

MR. PORRO: No objection for the same limited purpose.

THE COURT: Then the overlay preparation summary numbers will be marked in evidence as R-73 through R-108.

MR. WEIGEL: Of course, I understand, your Honor, that we will have a chance, when the various people who were the analysts are on the witness stand, to ask questions off of these exhibits?

THE COURT: Yes, you will, or even if the people are not called as witnesses on the State's case, you may call them as your witness but to cross-examine them.

MR. WEIGEL: Thank you.

(Whereupon R-73 through R-108, Overlay Preparation Summary Numbers marked in evidence.)

THE COURT: Now, the next thing -- I'm not going to do this actual marking now -- the next thing we come to is the overlay preparation log. Gentlemen, have you seen these logs?

MR. WEIGEL: Yes, I have, your Honor.

MR. PORRO: Yes, we have.

THE COURT: The logs are bound notebooks and they will be in the order set forth on the exhibit sheet. They will bear the numbers R-109 in evidence through R-120 in evidence. All right?

(Whereupon R-109 through R-120, Overlay Preparation Logs marked in evidence.)

MR. PORRO: No objection with the same limitation.

THE COURT: The same limitations will be extended to all these exhibits. Next?

What would you classify this generally as?

MR. GOLDFEIN: Miscellaneous; I think it gets into a kind of chronological list of documents.

THE COURT: All right, there are miscellaneous items which will bear exhibit numbers R-121 in evidence through R-154 in evidence. These are really provisionally entered in evidence. They are subject to the same limitation as I have said on the other exhibits; that is, they constitute a work product of the State's office. They were done by employees of the State. They are subject to being struck on the basis of cross-examination or any affirmative proof the appellants put in.

MR. GOLDFEIN: Your Honor, it may not be necessarily the work of employees, but contractors. I assume the same thing applies?

THE COURT: All right, employees and contractors or agents of the State.

MR. PORRO: They are not going in as to the truth of the matter as contained therein?

THE COURT: No, sir.

(Whereupon R-121 through R-154, Miscellaneous Items marked in evidence.)

MR. WEIGEL: Can we make arrangements with you to purchase a copy of everything going in except, of course, for your log books? The maps, the overlays?

MR. GOLDFEIN: I am just working out the logistics and getting it done. I don't know how quickly I can do that.

THE COURT: Mr. Goldfein, on your direct case now, you are going to be referring to these documents, are you?

MR. GOLDFEIN: Yes, sir.

THE COURT: I don't want this material just given to me for me to read.

MR. PORRO: That is a very astute observation.

(Laughter.)

That cuts out that procedure.

MR. GOLDFEIN: Your Honor, these are the exhibits through Saturday we were able to get into a list up through 154 items. There are going to be additional exhibits and hopefully the first of next week we would have additional numbers beginning with 155.

THE COURT: When you are ready, you let me know. We will do the same thing, but this is enough to carry us for a while, right?

MR. GOLDFEIN: Yes.

THE COURT: I would like to do the same with you people when the time comes.

MR. PORRO: Fine.

THE COURT: You are going to prepare a list, aren't you?

MR. WEIGEL: What I will do is try to prepare a similar list.

THE COURT: If you want to do it

ahead of time, you people are going to be with the A numbers.

MR. WEIGEL: I will try to follow this general form.

THE COURT: Yes. And then B is going to be the Borough of East Rutherford for your case and S will be you, Mr. Rindone. A, B, R, S.

MR. PORRO: Your Honor, we will have some exhibits that will be relevant to both cases, but I think we keep the B designation and put it on the record.

THE COURT: The thing is I want to do this carefully because this is going to go up *en masse*.

(There is a luncheon recess from 12:30 to 1:30.)

AFTERNOON SESSION

MR. GOLDFEIN: Your Honor, we are prepared to proceed.

THE COURT: You may do so.

ROLAND S. YUNGHANS, sworn.

MR. GOLDFEIN: If the Court please, consistent with the terms of the pretrial order wherein the State is to make a presentation of what and how and why the administrative action was taken which brought us here, we will endeavor in the course of the hearing in the next few weeks to present those State employees and contractors who have participated in the development of that administrative action and in an effort to make it as chronological as possible, we will be hearing first from Roland Yunghans who is chief of the Office of Environmental Analysis and initially given the assignment to accomplish this task and it is not my intention to conduct direct examination of Mr. Yunghans. He has prepared what hopefully will be a satisfactory chronology for the Court referring to as many of the exhibits which were marked this morning as possible and, hopefully, reviewing for the Court what numerous of those exhibits contain.

I would ask him initially to state for the Court his background, education and credentials prior to commencing the discussion.

MR. WEIGEL: Could I ask one general question?

Is this proceeding, your Honor, in

the same nature as a trial where we are concerned with rather carefully following the rules of the Court or do you consider this proceeding to be in the nature of an administrative-type hearing insofar as the rules of evidence are concerned?

THE COURT: I consider it primarily to be in the nature of an administrative proceeding as though Mr. Yunghans was seated in his office telling you people, "This is what we are doing."

Administrative tribunals are not bound as closely by the rules of evidence as our regular court trials. However, I think I am going to permit limited objection if you feel there is something that is so patently either incompetent or irrelevant or for some other reason does not qualify as evidence, so that at least I can flag it knowing that these are areas that you are going to explore later on. So I am going to permit that limited amoung of participation. I take it, Mr. Goldfein, this is almost going to be a narrative after you get done with qualifications.

MR. GOLDFEIN: Thank you.

MR. WEIGEL: I'm satisfied that that is a proper and fair way to proceed, but I wouldn't want the record to reflect the fact that because I don't raise specific objection on a particular point does not necessarily mean that I am in agreement that what is being testified to is even consistent with the prior record which is the depositions. I will try to raise as few objections as need be, but I will try to highlight the points that I think are major departures in our view of the case just so you could make to yourself that it is a point that we intend to pursue.

THE COURT: This is a little bit unusual, of course.

MR. WEIGEL: Yes.

THE COURT: I don't know of any time this has ever happened before. The remand says make a record. They also ask me to draw some findings of fact and conclusions of law and I would think that that area could cover that portion of this State case.

MR. PORRO: Yes, sir.

THE COURT: Where the rules of evidence might apply to some extent, at least the State is going to have the whole record and that is why I would like to do it unencumbered with cross or any other type of examination.

MR. WEIGEL: And, of course, we would like to have our case handled in the same way. We have operated, frankly, fairly freely when we were out in Minnesota we just had everybody sitting around the table. We thought it made better sense to have the experts ask questions directly of one another than having the experts pull their lawyers aside to inform them what questions should be asked, and I am satisfied that the kind of proceeding which you very broadly outlined is fair and we are certainly willing to participate in that spirit and try to limit the objections and I would make the suggestion, which I think we made to your Honor a year ago and I guess it was October when we first talked for some while about the pretrial order, and that is that I would hope that Mr. Goldfein would join me in this and Mr. Porro, that before the matter is finally submitted to you that we ourselves try to come up with the same kind of recommended I will call them findings of fact and conclusions much as we did in the Federal Pater matter.

THE COURT: I intend to ask that of all of you.

MR. WEIGEL: Fine.

THE COURT: Just for their plans, Mr. Goldfein, how long do you think Mr. Yunghans would be on the stand and your next witness will be whom?

MR. GOLDFEIN: My next witness is going to be Dr. Feinberg and I think Mr. Yunghans will -- are you going to hold to the 3:30 today? I think Mr. Yunghans would go through the morning and that Dr. Feinberg conceivably could get started tomorrow. I don't know that he would finish tomorrow.

THE COURT: Who is going to follow Dr. Feinberg, do you know yet?

MR. GOLDFEIN: The people from Mark Hurd in Minneapolis.

THE COURT: I know what I wanted to say, Mr. Weigel, about what we were talking about, whether this was on a remand or not, I always follow the practice, whether it is correct or not, in non-jury trials, to let almost everything in, number one, because I usually say you will know better at the end of the case when I give my decision what I have removed from the case and what I kept. That is number one. Rather than have constant proffers and review those, I would rather let it all come in so the reviewing Court sees everything in sort of an orderly fashion, but I'm preserving all of your rights to object to this testimony at some time in this proceeding any time you think it is incompetent or immaterial or irrelevant. That right is reserved.

MR. PORRO: Your Honor, might I suggest that we have the guideline that we are here to establish what happened and we are not here to have expressions of all kinds of opinions and I figure if we can follow that guideline, we are setting up what, in fact, has happened in the past.

THE COURT: I think that is a good suggestion. Okay. You may proceed.

DIRECT EXAMINATION BY MR. GOLDFEIN:

Q Mr. Yunghans, will you state preliminarily your background prior to coming to work for the New Jersey Department of Environmental Protection?

A Yes, I hold A.B. and M.A. degrees in chemistry and have had other formal courses in a number of different disciplines, including spectroscopy; that is, color, that sort of thing, toxicology, both industrial and otherwise, management and involvement in many kinds of air pollution matters.

Q How long have you been employed by the New Jersey Department of Environmental Protection?

A I will have seven years by the DEP as of the end of this month.

Q Slightly longer by the State of New Jersey? A Yes.

Q In what capacity?

A In the Division of Clean Air and Water for three years prior to 1967.

Q A total of ten years with the State?

A That is correct.

Q What did you do prior to that?

A I'm sorry?

Q Prior to joining the State, how were you employed?

A Chronologically, while still in college I was working in matters dealing with water pollution, water quality, stream pollution, industrial wastes. At the college, I went into government service in the State of Indiana dealing with industrial waste and industrial toxicology, after which I went to work in a large petrochemicals plant in Illinois and there I was responsible for all matters dealing with air and water pollution, primarily those dealing with organic and fluorine pollution.

I then came to the east coast to work in industry as a chief chemist in Paulsboro and during my time there I was made plant superintendent of a sulfuric acid and hydrofluoric acid plant, rather large, in fact.

At the same time I became New Jersey Manufacturers Association representative on the old Air Pollution Control Council and served with the Chamber of Commerce Air Pollution Control Committee.

Q When did you become in charge of the project that brings us here?

A Well, let me digress or go back a bit. After working for the State for three years and leaving, I went to the Federal Government and then I came back to the State of New Jersey under then Director Sullivan in the Division of Clean Air and Water within the Department of Health.

Q That is prior to the creation of the Department of Environmental Protection?

A Prior to the creation thereof, yes.

THE COURT: Your question was when did he become chief of the office.

Q When did you assume responsibility for this project?

A The Office of Environmental Analysis as a formal function was not established by administrative order of the commissioner until 1 August 1973. However, the functions of that office were assigned informally to me over a period of time during the early years of the evolvement of DEP; in other words, the work was going on.

Q What were those functions and what was the work that was then ongoing?

A Essentially, they deal with matters contained, I believe, in Exhibits R-121 and 122 which are here. These administrative orders, dealing with the functions of the Department, can be summarized reasonably. The first one, that is, Administrative Order No. 10, R-121, deals primarily with the internal procedures leading to the award and management of research and professional services, contracts within the internal management, procedures of the DEP, Department of Environmental Protection, which was, of course, formed on 22 April 1970.

The second administrative order, No. 34, R-122, is more complicated and it can be capsulated, I believe, with the following statements:

I will start with those pertinent to the matter at hand and then state some others. I do not want to leave the impression that at that time were we concerned only with tidelands matters; we were not. We were to maintain an aerial photographic remote sensing data bank. We were to provide technical and other support to the Office of the Attorney General on challenges to administrative regulations dealing with a variety of matters, including the coastal zone, wetlands and tidelands mapping projects.

Thirdly, we were ordered to initiate and complete mapping projects for wetlands, interim flood plains, the coastal zone and tidelands.

MR. PORRO: Could we fix a date?

Q The date of the order?

A The date of the order.

MR. PORRO: No, the date when you were ordered.

THE WITNESS: It's the date of the order.

MR. PORRO: It would appear to be after the administrative action in question, your Honor.

THE WITNESS: I will get to it.

THE COURT: He is talking about the day his office was ordered to do these things that he has been outlining.

THE WITNESS: Ordered formally, formally, to do so.

THE COURT: What is the date of that order, August 1, 1973?

MR. PORRO: The point is, your Honor, that day is subsequent to the administrative action in question in this case.

MR. WEIGEL: That's correct.

MR. GOLDFEIN: Your Honor, I think it has been Mr. Yunghans' testimony that

that was a formal order and that he had been engaged in these things prior to when he referred to the order in listing the functions of the office and not to fix the time.

THE COURT: Yes, this prior testimony was officially -- they finally gave the name to his office.

THE WITNESS: That's correct.

THE COURT: Called it the Office of Environmental Analysis and he was the chief and I think he said that merely formalized something that had been going on for some time.

THE WITNESS: That is correct.

THE COURT: Now, that order is marked R-122 in evidence. Is that order confirmatory to some extent of what had been going on?

THE WITNESS: It is, sir.

THE COURT: Particularly mapping projects?

THE WITNESS: It is, sir.

MR. WEIGEL: The only thing I would like to know for the record that the date of that order is subsequent to the filing of the notice of appeal in this matter.

THE WITNESS: Shall I continue with the functions of the office?

THE COURT: Yes.

THE WITNESS: We were to also prepare a variety of research proposals and attempt to get them funded not by State sources but by others. Primarily we were successful in two areas, one with the satellite photography, with NASA, and number two, in Hackensack itself with the Federal Government with regard to air pollution and land use. I shall not discuss that unless someone wishes me to.

Next, we were asked to develop surveillance programs and document statewide land use changes. We were also requested to draft environmental legislation and comment upon pending legislation and, finally, in general, we were asked to prepare and/or review administrative orders, rules and regulations of the DEP.

This completes the major functions assigned to the Office of Environmental

Analysis by the commissioner.

THE COURT: Incidentally, as far as documents are concerned that are in evidence, I want them back every night. I will keep them in custody, so as soon as a witness is done, I would appreciate it if you would hand those back to Mr. Rindone who will be the temporary custodian, all right. Any counsel who looks at exhibits, please return them to Mr. Harris and he will be keeping them.

BY MR. GOLDFEIN:

Q Now, you were engaged in a number of those functions prior to the entry of the order when you read the list of functions or engagements?

A Yes.

Q We are particularly concerned, of course, here with the tidelands mapping functions and those other functions which were related to it. Would you go back and begin to explain to the Court how you became involved in that and pick up the chronology from there as to how we got to this project.

A Okay. As an overview, Judge, the problem is a complex one and I thought that it would be helpful to explain in a few sentences how I will go about this in context so there will be as little confusion as possible.

THE COURT: You are going to talk now about the period prior to August 1, 1973, essentially?

THE WITNESS: Yes, I'm going back to the genesis of the problem.

THE COURT: Fine.

THE WITNESS: What I will do first is start with the 14th of January, 1970 and proceed forward in time chronologically through 1 August 1973 after which I would like to branch off the chronological order into two pieces, one, dealing with the activities with regard to this particular matter of Mark Hurd which began on 27 June 1972, and then, secondly, I would like to branch off on another matter dealing with the involvement of the National Ocean Survey, the Earth Satellite Corporation, and Storch Engineers, beginning in March of 1972.

Finally, I would like to bring the two branches back together again to tell you what we did, where we are now and where we hope to go if that is amenable.

THE COURT: All right. As far as where you hope to go, I don't know. I haven't given some thought to that. We are essentially testing these maps, but if it will help us understand what has happened, I will permit it. Do you think it is necessary to include where you hope to go in this case?

THE WITNESS: Not where I hope to go in the case, Judge. My words perhaps are not too well put. I mean how we intend to go about mapping the State or catalogue the State's holdings throughout the State.

MR. PORRO: I object.

MR. WEIGEL: I'm going to part company with Mr. Porro in that I think it is very important, your Honor, for us to know and for the reviewing Court to know where we are going on this project because what we are talking about here in terms of techniques are important not only in the 36 mapped areas but in the balance of the State, and I think it would be helpful in this regard to know where we are going. I don't intend to spend a lot of time probing about the future, but

I think it would be helpful in this regard to know where we are going and I disassociate myself from Mr. Porro's objection.

MR. PORRO: I will withdraw it until we get there.

THE COURT: When we get to that point, I would like to hear Mr. Yunghans for a while and then decide.

THE WITNESS: It will only be ten minutes.

THE COURT: Adopting my very liberal attitude, we will probably let it in. Okay, all right. I think I understand what you are going to do, Mr. Yunghans, so you may pick up.

THE WITNESS: Thank you, then.

THE COURT: You may pick up on that fateful day in August 1970 when you became a second-class citizen.

(Laughter)

THE WITNESS: From our point of view --

THE COURT: You don't mind my jesting.

THE WITNESS: Not at all.

From our point of view, the genesis of this problem; that is, from

Dr. Feinberg, Mrs. Stit, mine, not necessarily Mr. Scarpatulo's, the genesis of this entire problem began on the 14th of January, 1970 when the two-part Meadowlands map was introduced to this Court, I believe, by personnel within the then Department of Conservation and Economic Development. None of us excepting, I believe, Mr. Scarpatulo, were aware of that work, the past history of it, the statutory requirements, or any legal matters introduced after the 14th of January, 1970 and up to and even perhaps sometime after 22 of April, 1970. On 22 of April, 1970, as I indicated earlier, the Department of Environmental Protection was formed and Mr. Sullivan, Commissioner Sullivan, was appointed either in the late spring or early summer after April 22, 1970. I believe it was in July or August, I really don't remember.

Up until he was appointed and until he had been in office for a few weeks, Dr. Feinberg and myself resided within the Department of Health, within the Division of Clean Air and Water and we moved to the Department of Environmental Protection in the late summer of 1970 with the Division of Clean Air and Water and we were a part of that division until that move.

We were then placed within the Office of the Commissioner and began doing some of the work that I have discussed earlier, particularly dealing with air pollution and the Hackensack Meadows. On the 5th of November of 1970 the Wetlands Act was signed into law. That was shortly after the formation of the Department. None of us, as I remember, had any part in the machinations concerned with that particular statute.

As is probably well known by this Court, the act refers to the wetlands. It does not refer to any lands north of the Raritan River. It does not deal with ownership questions. It does deal with the regulation of land use after mapping and certain other matters were attended to as prescribed by law.

In late November of 1970 -- I will use the term office in my analysis if I may, was given the task of mapping the wetlands, that is, doing whatever was necessary to get the job done to draft the administrative regulations to be promulgated under the authority of that statute and to search out, if we could, either Federal or other sources of funding.

The original statute only allowed us $500,000 which was 400 percent short of the amount actually expended on the job. We then undertook a large amount of in-house work; that is, readings and discussions with knowledgeable people, legal, technical and otherwise, because we had very little pre-knowledge of the subject. In these preliminary discussions with others because the statute, the Wetlands Statute, did mention something about State tidelands along with wetlands in one early section of that statute, we did learn in a general sense about the need for tidelands delineation south of the Raritan River. We did learn about photomapping and aerial photography and we did learn something about wetlands, their uses and their fragility. From these discussions, in all of it, we concluded that an independent management study of all methods and combinations which could be employed to map coastal wetlands was needed prior to the development of what we call RFP's, requests for proposals, and pilot project contract plan. We have had experience with pre-study of problems. We have had experience with conducting of pilot projects. We have had experience with discussing matters with others and we have had experience in making decisions to get on with the task at hand.

Such a contract, that is, an independent management study, was authorized on the 24th of December, 1970 and it was designed to study methods for mapping, the methods used by other states, the availability of existing data, who had money that we could tap, the extent of wetlands acreage, and also information on the extent of the State's riparian lands residing within wetlands south of the Raritan River and to develop a listing of streams and tributaries, tidal reaches boundary, for inclusion in this work, again only in lands below the Raritan.

Why did we need tidal reaches? Because the Wetlands Act suggested that wetlands have to flowed by the tides and we were also aware at that time of the tidelands issue in New Jersey.

BY THE COURT:

Q Now, when you came to this conclusion that finally led to an authorization on December 24, 1970 to contract for some independent study, that independent study was limited to land below the Raritan?

A Yes, sir, by all means, and these are Exhibits 123 and 124.

Q I assume you come through your notes and you can see that what you are saying refers to an exhibit and I appreciate your telling that for the record.

A Okay. R-123 and R-124.

THE COURT: I have it, fine.

A In the second volume of this particular R-124, we also asked for bench mark and high water record data and on Page --

Q This is the study done by Storch Engineers?

A That's correct, an independent consultant. In Volume II of that study, again on Pages 65 through 69, we had our first independent information on the determination of mean high water. We were looking for requirements that, when fulfilled, would give us the knowledge for decision-making and provide a basis for developing a program which would meet legal restraints required by the Wetlands Act and supplementary benefits, such as tidelands delineation, wildlife management and so forth.

We knew by this time that we would at one point in time be involved in tideland matters. We were hoping to obtain materials to prove useful in tideland delineation, catalogueing of holdings, so that we would not expend monies unnecessarily.

THE COURT: I think the record should know or you gentlemen should know now, even though you can see it after, this report is dated May 28, 1971, the Storch report, R-123 and R-124. All right, Mr. Yunghans.

THE WITNESS: Okay. That work was completed in March of 1971 and the final report, as the Judge has indicated, was dated 28 of May 1971. Drafts were in the hands of my office in early March of that year. In Volume I on Page 3 in Section 1.2, it says that -- shall I read this into the record, Judge, or is that necessary?

MR. PORRO: Your Honor, unless it is part of the administrative hearing and was before the administrative body, I would object to that.

MR. GOLDFEIN: In response to the objection, there was no administrative hearing and this is as indicated earlier, this is a report furnished by one of the contractors representatives who is going to be a witness down the line. Mr. Yunghans can read into the record a section of it that he thinks relevant in his determination and how he arrived at it.

THE COURT: Which section?

THE WITNESS: Page 3, sir, Section 1.2, down at the bottom of the page.

THE COURT: I have it. I will permit you to read it.

THE WITNESS: I had several in there, but this one:

"Although the Wetlands Act requires a line above local extreme high water be established in conjunction with the upper boundary of vegetation, the likelihood of significant wetlands vegetation existing above this elevation is quite low. The vegetation limit would be the limiting line then rather than the elevation. The doubling of overall project costs required to repair this elevation would, in fact, impact on a relatively small portion of the total boundary," and so on, and further down "as much as tenfold increase in high water data might be required to provide an adequate defense in the courts which would still be of benefit only to a relatively small portion of the total boundary."

In Page 4 of that document on data acquisition methods, the same volume --

THE COURT: R-123?

THE WITNESS: Yes, sir. They mentioned ground surveys and there it states: "The highest costs and longest times are required for this method and would still be susceptible to challenge in litigation which would require even more cost and time to produce more refined engineering data for the specific area being challenged."

Page 5, the same volume, in Section 23: "The lowest costs and shortest time of the methods available with today's technology are required by this method," that is, aerial photography. "These benefits could be lost, however, by an inappropriate selection of season, film type or negative scale, in addition to the normal flight specifications established for aerial photography."

With regard to that, on Page 7 they came up with a series of recommendations and I would like to read Volume I, R-123, I believe.

THE COURT: R-123?

THE WITNESS: Yes, sir, Recommendations 1, 6 and 7.

"Wetlands should be defined only in terms of the vegetation species without incorporating an elevation criteria. Six, false color infrared photography should be utilized as a primary tool to define the vegetation limits. Seven, consulting biologists should be those with pre-existing knowledge of and field experience with the characteristics of the vegetation in New Jersey's wetlands."

BY THE COURT:

Q Now, Mr. Yunghans, these are recommendations of Storch Engineers?

A Yes, sir.

Q Are you reading them to us as saying you did indeed take these representations and implement them?

A Most of those which I have read.

Q I'm talking about 1, 6 and 7.

A Have been implemented, yes, sir.

Q Were implemented in the development of the 36 quadrangles that we have?

A Were implemented in the development of the wetlands work south of the Raritan which in turn was applied into Hackensack.

Q Is that the tie-up?

A It's the tie-up; it's a rather involved thing.

Q All right.

A From this management study, the State drafted and put on the street, so to speak, in March of 1971, an RFP for a pilot study of the wetlands.

Q What is an RFP?

A Request for proposal. That is R-125. It is a rather large document of some 26ppages. I would like to refer to several of the statements made by the State in that document to establish that we knew something about riparian lands at that time, at least in general, if nothing else. I am reading on Page 1, last paragraph: "Wetlands in general extend from an upland boundary" --

Q Which sheet?

A This is R-125.

Q Is this a copy?

A No, sir, I'm sorry, I don't have another at this point.

"Wetlands in general extend from an upland boundary incorporating the edge of ecological viable vegetation to the sea. This definition includes the State's riparian land. They extend from the line of mean high water to the sea and are washed by the tides twice daily."

This shows that we did know something about the problem, at least south of the Raritan River, in March 1971.

On Page 16 of this document, we make the point in Section 5.9 about tide gauges. We say we will give a consultant tide gauges and so forth and so on. This we did not do in the wetlands and I'll get back to that point a little later on. We did know about tide gauging at this point and R-123 is not absolutely that which is absolutely adhered to in the contract after contract negotiation.

Page 17 of the same document, we ask potential consultants, some 50 of them at that time, to include in his response to our RFP, all of the following information:

Detailed description of how he would go about determining mean high water. The accuracy of his method. Is the method new or has it been used before and what is the legal basis for acceptance of the resulting mean high water line by the Courts.

We were asking consultants to answer some of these kinds of questions in March in the response to March 1971's RFP.

If, for nothing else than the record, this document goes on, on Page 23 and following, to discuss the response requirements and the way in which the State would evaluate those responses and choose a consultant according to pre-established criteria. I need not, I believe, go into that in any great detail. This is R-125.

MR. PORRO: Your Honor, may I inquire if those responses from the consultants are going to be made part of the record?

THE COURT: No, this is a request

for a response.

MR. PORRO: He asked 50 consultants as to how they would determine it.

Q Are the responses in the record?

A They are not, sir.

Q So far they are not?

A They are not.

Responses to that RFP were returned to us in late April of 1971 and we evaluated them at least according to the criteria we established and it was approximately -- I do not have the exact date -- late April, May, 1971, where we in the State within the Office of Environmental Analysis first visited officials from the National Ocean Survey in Rockville, Maryland.

We went there for a variety of reasons. One, to seek advice on tides, tidal datums; data acquisition of tidal data; the reduction of that data and the use of it. We were also attempting to get a feel for map size, scales, border data and a lot of other things. We also were acquiring on opinions from the Federal agencies, opinions on vegetation matter.

Q What Federal agencies were those?

A National Ocean Survey and as an aside, the

U.S. Geological Survey prior to that date, that time, and as another aside on the matter, we were visiting with these other agencies to ask about some of these questions and to see if we couldn't, if we couldn't generate money to boot. We did not. We wanted to know if the N.O.S. would care to at one point in time participate in our wetlands program and we wanted them to look over our RFP specifications, some of our responses, for accuracy from a technical point of view with regard to wetlands viewpoint.

I would like to make the following statement with regard to these matters. Earth Satellite Corporation proposed on this wetlands RFP in their proposal, Earth Satellite and Dr. Richard Anderson, associated with Earth Satellite, offered the biological technique, using vegetative indicators where they could be found as a surrogate for the physical mean high water line.

Q When was this?

A It was in late April 1971 approximately, Judge. The RFP was out in March and they had 21 days to respond. The New Jersey Department of Health -- of Environmental Protection, excuse me, in these matters was not only looking for a good wetlands project, but was looking for cost effective ways to identify or to establish a surrogate for the mean high water line as part of the wetlands project, if possible, for a small cost increment. I wish to point out again only for lands south of the Raritan River.

We then, on the basis of our criteria, established in the RFP, asked Earth Satellite to come to our offices again in the early fall of 1971, late summer, for contract discussions, negotiations. At that meeting the National Ocean Survey [illegible] personnel were present to assist us with technical matters that might arise with regard to the contract or make changes to that contract and it was determined with the N.O.S. present that there was not enough time during the pilot project -- the pilot project was conducted in two areas, Tuckerton, New Jersey and in Salem, New Jersey, different kinds of marsh with different kinds of problems.

Q Who was conducting that survey in Tuckerton and where else?

A The person who would be chosen from the results of this RFP.

Q This is still prospective. Tuckerton and where?

A And Salem, but it was determined in discussions with N.O.S. personnel present in Trenton that there was not enough time during the pilot project for a full evaluation of the biological surrogate technique. We asked Earth Satellite at that time if they would do the biological high water line interpretation as part of the wetlands pilot project.

I may repeat myself, but I want to make it clear here. In any wetlands, in other words Earth Sat was finally given the job -- I'll get back to it in context, Judge.

Q Okay. Do I understand you correctly, though, that it was determined that the pilot project in Tuckerton and Salem was really inadequate to really test biological techniques?

A No, there wasn't enough time to do it.

Q That is what I mean.

A The area was okay, but there would not be enough time to do it.

Q Did you give a time allocation on the project?

A I did, 105 days.

Q It was inadequate timewise?

A Yes.

Q What was the next thing you said

about Earth Satellite?

A They finally got the job and I will get back to them, but I want to say with regard to their doing a biological high water line in the wetlands series, the land regulation versus ownership problem, that they have done it for some 900 plus maps of the same size and scale as was in Hackensack.

MR. PORRO: Note my objection, your Honor. That is pure speculation. If those 900 maps were not before that administrative agency, they have no proper place in this hearing. If he wants to say they were qualified in their general field and recognized as such, that is one thing, but to leave the implication that they mapped a mean high water line through this technology, this has no place in the case.

THE COURT: What does he mean by that statement; let's find out before you object.

Q You say Earth Satellite has prepared about 900 maps that show mean high water?

A No, sir, I did not say that.

Q Okay.

MR. WEIGEL: Your Honor.

THE COURT: Let's see what he did say so I'm not confused. Then you can object.

A I said they have prepared about 900 maps showing a biological high water line thereon as part of the wetlands series on lands south of the Raritan which have never been made public nor will they ever probably be.

MR. PORRO: I repeat that objection.

A They were made to aid the State in its internal discussions in the resolution of a variety of matters.

MR. WEIGEL: I think this is one of those points, your Honor, where I should put before you a major matter that is going to exist through this entire proceeding and it is probably in terms of technique from my standpoint the most important problem area that we have. I would ask the Court as the testimony is given to maintain the distinctions between the mean high water line as it is established by the N.O.S. and what Mr. Yunghans carefully has called the botanical or biological high water line, and I represent to the Court that when I took Dr. Anderson's deposition and I tried to repeat it, get Dr. Anderson to say that his botanical high water line was coincident with the N.O.S. mean high water line, he refused to do so.

THE COURT: All right, then I don't know why this is being offered except, I suppose, to demonstrate to the Court that the biological technique has been used in something other than mean high water as that test is directed to being employed in this case by O'Neill. They used it to establish a high water line which is another thing, is it not? Is this what you understand it to be?

MR. WEIGEL: I'm just trying to draw the distinction between what the appellants are insisting is the requirement of O'Neill and Title 13:13-1b-13-1 and following. That requirement we believe is in terms of a tidal datum plain of mean high water and having it located on the ground as opposed to what I believe Mr. Yunghans has been testifying to and that is solely this concept of a vegetational boundary. He calls it a botanical or a biological high water line, but he is really talking about a botanical boundary; that is what I would term it.

MR. GOLDFEIN: I think Mr. Yunghans has been very careful in his choice of words and perhaps it is appropriate for Mr. Weigel to call to the Court's attention that there is a distinction between the two references, but certainly Mr. Yunghans has been very careful in his choice of words. He is talking about the wetlands project. This goes back to the Bonelli discussion, the importance of using the right terms. We are all sensitive to that.

MR. WEIGEL: I wasn't critical.

MR. PORRO: I just want to raise the question of relevancy of something that is not public, not part of the record obviously before this Court because anything that that administrative agency utilized is a public record and obviously I join in Mr. Weigel's objection also.

THE COURT: Are you going to make this confusion worse?

MR. RINDONE: No, sir. I merely want to highlight for the Court that this is the first echo of a reoccurring disagreement among counsel, that I'm sure the Court will hear again and again, as to whether or not a mean high water line is going to be necessary to establish what are State tidelands and what the State owns.

THE COURT: All right.

MR. WEIGEL: There isn't a question in the world, your Honor, that this is a central point of dispute in this entire matter.

THE COURT: We have just finished now with your slipping in that vital bit of information.

THE WITNESS: It is vital, it is vital in fact.

THE COURT: I'm going to leave it in my notes. I put an asterisk on this to remind myself of what you fellows are talking about. All right.

THE WITNESS: Shall I continue?

Q You may continue.

A Thank you. The wetlands pilot project contract was let to Mark Hurd Aerial Surveys Incorporated, or Satellite, in approximately mid-May 1971. Photography for the two test sites; that is, in Tuckerton and Salem, was flown in mid-June of 1971 and the work was completed as far as the final projects were concerned, in August and September of 1971.

Q When you say it was let to Mark Hurd, did you say Mark Hurd and sort of hyphen Satellite, there is no question between the two?

A Two different companies.

MR. GOLDFEIN: Mark Hurd is the contractor.

THE COURT: What is that number?

THE WITNESS: Here it is, R-127. Is that the one?

THE COURT: New Jersey Wetlands Mapping Pilot Project.

THE WITNESS: I would like to call your attention first to R-126, Judge. This particular document was produced as a piece to get money and to get legislative support. It is a jazzed-up version of the final report and it has many varied and nice pictures of the State's wetlands in color, infrared, including you can see very easily the upper wetlands boundary along with the map and the rest of it. I believe there is not much point in reading this into the record and in the accompanying documents, it is R-127, which is the New Jersey Wetlands Mapping Pilot Project Final Report, this accompanies it, on Page 2 of that final report there are several statements I would like to read if I may.

THE COURT: The witness is referring to Exhibit R-127.

THE WITNESS: R-127, yes, sir.

MR. PORRO: May I just have a running objection as to any of the wetland matters we are getting into, one, it being wetlands and not tidal and, two, it being below the Raritan, not Newark or Hackensack.

THE COURT: Your objection is noted and I am reserving on it.

A I am reading the result of the contract.

Q What page?

A Page 2. "Mapping a mean high water line within densely vegetated wetlands is a difficult problem. Ground survey methods are inaccurate and too costly and time-consuming; aerial survey methods, used along open shorelines require complex ground-to-air logistics, and the mean high water boundary is difficult to discriminate when it occurs in wetlands vegetation." That is that one. Then on Page 5 I would make it very clear the term biological high water is used in this report. Studies are underway to establish the exact relationship between the physical and the biological high water lines.

"Establishing exact physical-biological relationships will require tidal studies based on mean high water (tide gauge) statistics from one year's observations. The National Ocean Survey and the U.S. Geological Survey are currently establishing this data base," this is on Page 5 of the Wetlands Pilot Project Final Report.

Q Just as a point of information, is this the background of what resulted and which Dr. Feinberg spoke about the other day as far as accuracy was concerned; that is, compared to the biological line with the N.O.S. and the geological tide gauge?

A Yes.

Q Datum?

A Yes, sir.

Q Are you finished with 127?

A I am, sir.

THE COURT: May I have that, then? We will recess until tomorrow at 10:30.

(Court is adjourned to March 9, 1976.)

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
(On Remand To Law Division -
Bergen County)

CITY OF NEWARK, et al.,
Appellants,

-vs-

NATURAL RESOURCE COUNCIL,
et al.,
Respondents.

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NEW JERSEY SPORTS &
EXPOSITION AUTHORITY,
Plaintiff,

-vs-

BOROUGH OF EAST RUTHERFORD,
et al.,
Defendants.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - BERGEN COUNTY
DOCKET NO. L-16799-72

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CERTIFICATION

I, EDWARD SALBIN, C.S.R., an Official Court Reporter of the State of New Jersey, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes in the above-entitled cause.

Edward Salbin

EDWARD SALBIN, C.S.R.
Official Court Reporter

A-3311-72

no Brf

A101 SEP 1979

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
(On Remand To Law Division-
Bergen County)

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ELIZABETH McLAUGHLIN
CLERK

CITY OF NEWARK, et al., :

Appellants, :

-vs- :

NATURAL RESOURCE
COUNCIL, et al., :

Respondents. :

VOLUME II

03

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY, :

Plaintiff, :

-vs- :

BOROUGH OF EAST RUTHERFORD, et al., :

Defendants. :

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
DOCKET NO. L-16799-72

FILED
SEP 21 1979
Stephen W. Townsend
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March 9, 1976
Courthouse, Hackensack, N.J.

BEFORE:

HONORABLE THEODORE W. TRAUTWEIN, J.A.S.C.

APPEARANCES:

For Natural Resource Council, et al.
WILLIAM F. HYLAND, ESQ.
Attorney General of New Jersey
By: MORTON J. GOLDFEIN, ESQ.
Deputy Attorney General.

EDWARD SALBIN
Official Court Reporter

APPEARANCES (Continued):

For Trustees of the School Fund:
WILLIAM C. RINDONE, JR., ESQ.
Deputy Attorney General

For City of Newark, City of Elizabeth,
N.J. Land Title, Esther G. Bertoni,
et al.:
JOHN R. WEIGEL, ESQ.

For Borough of East Rutherford:
ALFRED A. PORRO, JR., ESQ.

INDEX

EXHIBITS

THE COURT: All right, two additional exhibits have been marked into evidence, R-156, letter from Commissioner Sullivan to James O'Connor, dated May 31, 1972 and R-157 in evidence, letter from Allen Bock of Mark Hurd to Roland Yunghans dated May 25,1972.

Mr. Yunghans, you may resume the stand,

ROLAND S. YUNGHANS, previously sworn, resumed the stand and testified as follows:

DIRECT EXAMINATION BY THE COURT CONTINUED:

Q Mr. Yunghans, yesterday we left off where you were referring to Exhibit R-127, certain papers, page two and five, and you were talking about sort of a check on the biological line with NOS tidal datums. I think that is where we left off. I would like to again remind us all of what we are doing here at this stage and that is we are establishing what the State did in promulgating the maps and try to avoid as much what will happen in future as possible. Okay.

A Thank you. Yesterday I completed some discussions on the Wetlands mapping Pilot Project and as the Judge indicated, had talked about pages two and five of that document and in conjunction with that I wish to reiterate three points.

The DEP was looking for cost effective ways to identify again a surrogate for the mean high water as part of the Wetlands project for a small cost increment again south of the Raritan River. Prior to the completion of this project in Tuckerton and Salem, which began in June of 1971, the Department of Environmental Protection retained the U.S. Geological Survey along with the advice and help of the National Ocean Survey to install and operate and maintain fifteen tide gauges in the Tuckerton area and two in Salem, or the so called Mannington Meadows.

Q How many were in Tuckerton, thirteen?

A Fifteen and two in Salem, the Mannington Meadows.

MR. WEIGEL: Is it thirteen and two or fifteen and two for a total of seventeen?

A The latter, fifteen and two, under the supervision of the National Ocean Survey. The NOS agreed that any data we were to get from that survey would be reduced by them.

THE COURT: What does that mean, "would be reduced by them"?

A The data from any tide gauge, Judge, is "raw". It must be referred to a primary tide gauge station, that is, one which has been in operation for nineteen years, to adjust that data to the local mean high water datum, and in addition I wish to reiterate with regard to this matter the State plan from the very beginning of the Pilot Project in Tuckerton and in Salem to have the National Ocean Survey carry out an independent field check of the biological high water signatures versus the physically determined mean high water -- if I may have 128 please. With regard to the work of the U.S. Geological Survey, Exhibit R-128, which I have in my hand, shows that all of the Tuckerton tide gauges were installed and put into operation on 23 June, 1971. The Salem tide gauges were installed between June 25 and 29, 1971, and included in this June 30 letter, 1971, to me from the U.S. Geological Survey and appended to that letter are two maps showing the locations of those tide gauges.

MR. RINDONE: Your Honor, may I interrupt for a brief question which I think will give a fact to the Court that the Court may not be aware of?

THE COURT: Yes.

BY MR. RINDONE:

Q Mr. Yunghans, there are three types of gauges, primary, secondary and tertiary. Is that correct?

A There are three stages of stations, yes.

Q Right. Would you explain to the Court the difference?

A A rpimary tide gauge is one that has been operated for nineteen years and is defined and meets the definition of a tidal datum. A secondary type tide gauge is one that has been in operation for one year or slightly more than one year when reduced through a nineteen year station becomes a good estimate of the tidal data. A tertiary tide gauge is one that has been operated for approximately thirty to ninety days, or slightly longer, but less than one year, and is reduced to a nineteen year mean through a secondary station, which in turn is reduced through a primary station, a little complicated, but that is the way it is done.

If the Court will remember, we had initiated the Wetlands Pilot Project and I said we had completed in late August and early September.

On the basis of these, Earth Satellite, Mark Hurd's pilot efforts, the State awarded them, prior to the formal completion of the pilot project, a contract to proceed with the mapping of all of the State's coastal wetlands south of the Raritan again. This work was begun in August of 1971 and it is important to point out to the Court here that some, but not all, of the wetlands photography was acquired in the month of August, 1971, through about mid September of 1971.

BY THE COURT:

Q What evidence of this is there? Is there an exhibit, this new one?

A There is not sir.

Q You say they were awarded a contract or you have some agreement that Mark Hurd-Satellite would map all of the coastal areas south of the Raritan.

MR. GOLDFEIN: Your Honor, we will make that contract an exhibit and I think it will be helpful.

Q When was this done about? You said prior to the completion of the project.

A In August, in about mid August of 1971 we awarded them a job to continue with the mapping of all of the coastal State wetlands south of the Raritan River for the purpose of a 505, which goes back to 1970. In that contract the contractor was constrained to return and acquire any photography for the coastal wetlands that he did not acquire in 1971.

To put it simply, if he was given the job the contract said "you shall come back in August of 1972 to complete the work as far as acquiring the photographs are concerned and you shall not charge the State any more money to get the extra photos."

So at this point we knew that Mark Hurd had to come back in August of 1972 to acquire photography for our wetland work.

MR. WEIGEL: I don't follow that.

THE COURT: I don't understand that either, come back?

BY MR. WEIGEL:

Q Do you mean just if the work that was done in August and September of 1971 didn't turn out for some reason?

A All of the work done in August and September of 1971 did in fact turn out, was checked by federal agencies and found to be of the highest quality. The growing season stopped as far as the wetlands were concerned in about mid September, even though they were on site they could not acquire additional photography because it wouldn't have meant anything to us as far as our wetlands work was concerned. So therefore they had to return in the following year,at no additional cost,to do the work.

MR. PORRO: Your Honor, I'm beginning to understand it but I think it is completely irrelevant and I think we are really going far astray from the administrative proceeding that is in question here.

THE COURT: Well, I think it is relevant. I guess the State's object is to show or to demonstrate that they were using care.

MR. PORRO: For a completely different purpose, talking about mapping wetlands under the wetlands act, not mapping the mean high tide line under the act in question here, two different acts.

THE COURT: I think this is a

foundation for something that is going to follow. I will permit it, you may continue.

A Thank you.

MR. WEIGEL: Your Honor, I still don't understand it. Can you try it again on me, Mr. Yunghans?

THE COURT: Well, he says, I think, that those photos that they could not take after September because growth had stopped, they would have to come back the next year and show photos of those areas that they had not been able to photograph the year before. Is that correct?

A That is correct, sir, at no cost to the State.

THE COURT: At no cost to the State, in other words, if they had not completed the mapping when the growing season stopped, they would have to come back the next year with completed photos at no extra cost to the State.

MR. WEIGEL: So all you are saying is that they did a part of the project in 1971 and completed the balance of it in 1972.

THE WITNESS: That is correct, and the relevancy of this statement is important when it comes to the timing for work done in the Hackensack Meadows.

BY THE COURT:

Q All right.

A The next event of some consequence was in September of 1971 where I believe this Court ordered that the two part map, Meadowlands map, not be received into evidence for any purpose to prove ownership of land by the State of New Jersey. A copy of that order was circulated to me and the people working with me shortly after the order was made public. We took at that point absolutely no action with regard to that document in September of 1971. It was early in October of 1971 when the Office of Environmental Analysis was given a verbal order from Commissioner Sullivan -- I would like to interject here and state that Commissioner Sullivan did not work with written orders, he gave people veral orders to get a job done, gave them authority to do it and they were supposed to do it and if they didn't something else might happen -- but

Commissioner Sullivan asked us to become familiar with the Hackensack mapping of the State's holdings or cataloging of the State's holdings problem, attempt to develop methodologies for resolving the problem and, two, after we had done so, proceed with the recatologing of the State's claims to tidelands in Hackensack and the Newark-Elizabeth Meadows.

This was in about mid-October 1971 that we were given the order to do this work.

Late in October -- I do not know or remember the first, the exact date of 1971 -- there was a meeting held in the office of the Commissioner in Trenton with the Attorney General, Commissioner Sullivan, Deputy Attorney Generals, Dr. Feinberg and myself and at that meeting we reviewed a whole series of issues relating to the tidelands issue and we discussed in general terms alternative solutions which might be employed to resolve the problem and, as I remember it, including remote sensing work, or photography, historical data, engineering methods, and so forth.

No decisions of any kind were made at this particular meeting, it was only exploratory, and no constraints of any kind were placed upon the staff, that is, the staff of the O.E.A. with reference to what they were to do or not to do.

After this particular meeting, late in October of 1971, the staff continued with its research on the problem, which was begun in mid-October of 1971, and it included some of the following kinds of things: talks with people in our Bureau of Geology on the availability of old maps, records, and so forth, a review of on hand past materials, historical in nature, that were in the possession of the Attorney General's office, past depositions and the famous Fidopedalogical Study, and so forth and so on, and discussion with Marine Services personnel, our division of Marine Services personnel responsible for the administration through the Natural Resource Council, of course, of the sales of leases, grants, permits, and source review mostly of maps that they had on hand. In addition to this research I and Dr. Feinberg both explained in general this entire problem without regard to the Hackensack or the rest of the State, but the whole problem, to our wetland contractors, that is, Earth Satellite. They were busily engaged south of the Raritan doing their thing and we asked them, after giving them a very cursory briefing, if they would care to at their own cost submit a proposal or a program which might help the State to solve its problem. And we asked of them if they would care to at their cost present that program in writing and verbally to State personnel at a convenient time. We asked them at that point in time, November of 1971, if wetlands techniques could be used in the Hackensack and what methods might be used for determining, if they knew of any, both the existing and former scenes.

In December of 1971 Earth Satellite came to Trenton, late December, and gave us a speech and a document, for the purposes of the Court R-129, called "A Preliminary Program Plan for Mapping the Hackensack and Newark-Elizabeth Meadowlands."

In that document in general they furnished a general assessment of the following techniques. They talked about geomorphology. They talked about sedimentary and fossile studies, subsurface. They talked about historical analysis of maps, charts, photos and of forth. They talked about hydraulic models. They talked about tide gauging and mean high water datums at a point; also field observation stations; botanical successional trends; radar imagery, color black and white and color infrared photography; multi-spectral imagery; images, that is, a whole series of cameras with different kinds of filters to get different effects; thermal infrared; mathematical models and field spectrometry.

A whole series of candidate approaches and methods were included in this document, including maps. They even went so far as to show maps of phragmites in the Hackensack and I believe they were in the Hackensack. Also work done by Dr. Anderson priorto the fact in spectral reflectants studies of light hitting an object and then being bounced back from it. This is the document, R-129.

BY THE COURT:

Q Did it come to a conclusion as to what technique was the best or a combination of techniques?

A They came through and proposed a very, very comprehensive program for our review and drew no absolute conclusions of any kind with regard to the matter.

Attorney General representatives, staff, and others, were present when Earth Sat gave that little -- their presentation in Trenton in December of 1971, after which many of us thought about it, studied it, including the Attorney Generals, and arrived at a conclusion their program would not work, and early in January, based on this effort and our past work of 1972 we arrived at several, in my mind, major policy decisions.

Q This is early in January 1972?

A That is correct. We concluded from all of our effort to that point in time that the responsibility for preparing the materials needed to catalog State claims in the Hackensack, Newark-Elizabeth and other places could not reside in a single contractor no matter how well we drafted the working specs, that is, we couldn't say to a contractor "You go do the job and give us the finished product and we will give it to the Resource Council and we will go to the public hearing" and so forth and so on.

We also concluded that we would need the services of competent draftsmen, photographers and mapmakers. We also concluded that we would need the services of competent biologists with training in field work as well as in photographic interpretation and, lastly, we concluded that we would have to, prior to analyzing source materials from which we were to derive the State's claim to lands now or formerly flowed, we would have to maintain and insure consistency from area to area in our work by documenting in detail the reasons for our decisions on essentially a parcel by parcel basis. And, furthermore, we concluded that we would have to establish claims and analysis delineation criteria for both the existing and former scenes with regard to tidal maps. As a result of all of these deliberations and discussions internally and externally we arrived at a so-called first cut mapping program. We devised it and that program is discussed in a 17th January 1972 memorandum, I believe it is R-130, Exhibit R-130. It was a memorandum from me to Commissioner Sullivan with regard to the Newark-Elizabeth, Hackensack Meadowlands. As far as the statement of the problem is concerned we indicated in that memorandum that the Department and the A.G. office are in agreement that tidal issues in the Newark-Elizabeth, Hackensack must be resolved within a reasonable time frame at a reasonable cost and in a just manner. It says the Department and Attorney General's office jointly have developed a program to achieve these objectives.

Q Just let me see that for a minute please?

A Yes sir.

THE COURT: All right. Mr. Harris, each night before Counsel leaves I want you to check our files, our exhibit files to be sure we have everything, I just don't want to get something buried and lost by accident. All right Mr. Yunghans.

A In a portion of that document I believe you noticed, your Honor, that we mentioned a suitable pilot area for phase five. We did establish pilot criteria. They were established shortly after the Hackensack discussions and probably by the end of January 1972 and these priorities were devised to help us determine and list for mapping and for doing, if we were to get to do it, field existing scene biological studies. That is Exhibit 138, I'm sorry, they are slightly out of context, 138.

Q Yes, Hackensack Meadows Pilot Project Criteria.

A Yes.

Q Where is that?

A Right in my hand sir.

Q Let's just see that for a minute please. I don't see any date on this.

A There is none on it your Honor, I'm sorry, I failed to do so.

Q Can you estimate about when?

A The end of January, 1972, to the best of my recollection.

Q All right. Do you need it?

A Yes sir, I was going to make a point. We were trying to develop criteria so that we could delineate a number of test areas and study them before entering into full scale mapping and tidal resolution program for the area. Let me read into the record several of the more pertinent ones.

1. There had to be tidal flow. We hoped there would be existing tidal datums for the area. We were hoping to find populated areas primarily by phragmites communis, phragmites communis. We hoped to find areas that were covered with extensive landfills along with areas of relatively undisturbed marsh, areas where marsh adjoins major streams and areas where marsh had many minor streams entering into a major channel, and areas in which pressing legal or political problems existed at the time.

In addition to this particular memorandum for the development of a preliminary program for getting on with the work, there was a 30 of December memorandum, 1971, prior to this one, R-132, which was factored into the preliminary program just discussed.

This particular exhibit, R-132, was to me from Dr. Feinberg and the subject of it was Newark-Elizabeth Meadowlands mapping. To aid the Court in this phase we split out the Newark-Elizabeth from the Hackensack because of the obvious differences in the physical character between the two. One set of approaches applicable to the Newark-Elizabeth could very well not be applicable to the Hackensack and conversely.

MR. GOLDFEIN: I think this might be a good time to let the record indicate your view of what those differences are between the Newark-Elizabeth and Hackensack Meadows.

MR. PORRO: Objection.

Q Well, did this view prevail and did it affect what actually was done? Do you have a view as to the differences between the Hackensack Meadowlands and the Newark-Elizabeth Meadowlands, vis-a-vis determining which lands were one or are now tide flowed, how you would determine that?

A I believe your Honor, to answer this

question our 132 will answer it.

Q Does this represent your view?

A This represents Dr. Feinberg's view to me and it also represents my view.

Q You adopted it or agreed with it?

A I did.

Q Let's see what it says.

Was this, this opinion of Dr. Feinberg and yours, did this control what actually was done with respect to making claims?

A It was with regard to the Newark-Elizabeth.

Q It was? In other words paragraph one of Exhibit 132 says "It appears pointless to do anything at all with the Newark-Elizabeth Meadowlands for existing mean high water or vegetation mapping. Ecologically speaking the area has been totally decimated.

"The 'formerly flowed' question should be limited to tidal stream and shoreline location as shown on the 1890 map. These stream locations are quite well confirmed by 1930 photography."

It goes on to say "The following program is recommended for implementation in the Newark-Elizabeth Meadowlands area" which I take it is in some respects in stark contrast to what you did in the Hackensack Meadowlands?

A That's correct.

MR. WEIGEL: The only problem I have again is to point out discrepancies. The deposition records clearly show that very substantial claims were made off of the 1917 City of Newark Tax Atlas. Is that referred to anyplace in that document?

THE WITNESS: It is not.

THE COURT: No, it is not. You have alerted me to that and this may be the subject of an appropriate cross examination at an appropriate time. All right, R-132.

MR. WEIGEL: I just want the record to reflect, your Honor, that Mr. Yunghans' statement that this thinking is represented by that memo, he left in the record the impression that that was carried out in the program and it was only partially carried out.

THE COURT: All right, you use that on cross.

Q All right, continue.

A Your Honor, I had in my notes here points one and two of that particular exhibit were in fact implemented, as was 3(c) and 3(d), along with other sources, as will be explained in the State's technical presentation which will follow mine.

I am aware that not all of the --

Q I didn't read the entire 132, there are other points in this memo that cover how they intended to map the Newark-Elizabeth Meadowlands. I didn't want you to think that was all. I may have mislead you by just reading one and two and saying did you use this in making your claims in the Newark-Elizabeth Meadowlands. There are other things that were done too which I didn't want to spend the time reading, that may resolve the difficulty you have right now.

MR. WEIGEL: I don't know what is in the memo, that is my problem.

THE COURT: Counsel is free to look at it at any time, just be sure that you return the exhibit to Mr. Harris.

Q All right, Mr. Yunghans.

A After the date of this memorandum and prior to 20 August 1972, O.E.A. personnel, meaning primarily Dr. Feinberg and myself, adopted the following policies. We did not wish to become involved with the preparation of property ownership overlays for either the Newark-Elizabeth or the Hackensack work. We did not in fact prepare, nor was it involved, nor were we ever involved with the preparation of any overlay showing the status of any grant application or tideland violation with regard to the initial promulgation of either the Newark-Elizabeth map or the thirty-six maps for the Hackensack.

Q What does that mean? You were interested just in an area of land that was tide flowed if you could establish that. You didn't care about boundary lines or prior grants or anything else, you were interested in legal title?

A That's correct.

Q Or record title?

A That's correct. These matters were by design left to the appropriate personnel within the Division of Marine Services and we did this knowing and we have so stated on many occasions for only one reason, hopefully to assure that our claims analysis objective in cataloging the State's holdings in the Hackensack and Newark and Elizabeth, in other words, we didn't want to cloud any of the thinking of any of the people during the State's work with what was going on now or what was going to be happening in the future. We were doing it in a technical hopefully scientific manner without regard to the present flurry of issues involved. That was a policy matter. It was made by me and it was made knowingly.

On 26 of January 1972, O.E.A. personnel asked for and received a memo from Deputy Attorney General Clayton. That memorandum was acquired for three reasons and it has been referred to as R-121. We were looking for some legal justification for the acqusition and expenditure of funds. It always helps when going through the bureaucratic process to have Attorney General's office to be in concert. Secondly, to give us some sort of a preliminary judgment as to the legal problems associated with the work and C-2 points up the need for reasonable urgency in the resolution of the matter with regard to the Newark-Elizabeth and the Hackensack and I would like to read the last paragraph of a two page memorandum to me from Deputy Attorney General Clayton, R-131, if I may.

Q I will permit Mr. Yunghans to do this. I know these documents speak for themselves, but for purposes of at least from the

State's point of view for cataloging what they think are highlight relevant portions, I will permit them to do it.

MR. PORRO: May I have the exhibit number on that?

Q R-131. It is a memo from Joseph Clayton to Mr. Yunghans I believe, yes.

A "It is obvious that the State must act immediately. It must act both as a matter of law and as a matter of self-interest. At the present time, we are without the most basic information as to the location of the high water line in these areas an accurate map portraying the mean high water line would prevent the State from losing thousands of acres of immensely valuable land. The seven phase program proposed by the Department of Environmental Protection would appear to be a suitable program for achieving a legally sufficient inventory of State-owned lands in the Newark--Elizabeth-Hackensack Meadows."

Q This is how you hoped to get the Legislature to fund you and immediately?

A Not the Legislature, your Honor.

Q Who?

A To get the fund through the bureaucratic mill within the Department of Treasury, within the executive branch of government.

BY MR. WEIGEL:

Q Which of your exhibits was Mr. Clayton referring to in this seven point program, do you know?

A Yes, I do. The one you have in your hand.

THE COURT: I think it is R-138, is it not?

THE WITNESS: Yes.

Q Where is the seven points?

MR. GOLDFEIN: I think it was 130, wasn't it?

THE WITNESS: I'm sorry, that's the wrong one.

MR. GOLDFEIN: Wasn't it your memo to Commissioner Sullivan, 130?

THE COURT: I beg your pardon, I misled you Mr. Yunghans.

THE WITNESS: 130, R-130, yes, R-130, memo Yunghans to Sullivan.

BY THE COURT:

Q Okay.

A As I indicated in my first day's presentation, we in the O.E.A. staff of the Department of Environmental Protection were engaged in other work along with tidelands involvement, such as wetlands regulations, land use, flood plains and so forth, and between mid-January of 1972 and the 24th of March 1972 the staff personnel were busily engaged in other matters than tidelands and it was involved with defining and letting a flying contract to update land use throughout the State and to form a base for assessing the capability of land to react to different kinds of development, which in turn would hopefully provide a basis for a rational land use planning sometime in the future. This is Exhibit R-137, contract #2P-293.

Q I don't know what the relevancy of that is, if you tell us you were busy with other things, I'm impressed with that.

MR. GOLDFEIN: I think,your Honor, the intention -- I don't want to put words in Mr. Yunghans mouth at this point -- but I think this contract was, the photograph that resulted in this contract, was one of the sources that went into the mapping process.

THE COURT: Why bring it in at this time, to show they were doing land use surveys?

MR. GOLDFEIN: I suppose all of that was in his mind to give you an explanation of the other things they were engaged in, but this contract, one of the results of this contract was the map.

THE WITNESS: I believe that point was well made, your Honor. The point is that a portion of this work was used to do work in the Newark-Elizabeth related to this issue.

Q All right, R-137.

A The Mark Hurd Company are businessmen and during the course of this contract they showed us samples which related one to eighty thousand scale, which is very high up, forty thousand feet,in fact photographs could be enlarged accurately with very good resolution. We saw this work and Dr. Feinberg and I were both quite impressed and this led us to rethink some of our program planning aspects of our Hackensack-Newark-Elizabeth work, namely with regard to the Newark-Elizabeth task. We knew that we would need for that area a suitable base map, but we would not necessarily need one more precise than the precision that we could get from the data associated with that map. These matters will be explained in more detail later on in Dr. Feinberg's technical presentation. Also, we knew that time and public monies could be saved by proceeding with the Newark-Elizabeth work in this fashion. We had the photography, we had paid for it for another source and for another reason. We thought it might be applicable, after we had seen Mark Hurd's work. At this point I believe I will have to interrupt the chronological order. To date,we have to recapitulate slightly, we have started from the 14th of January 1970 and have gone through the 24th of March 1972, during which times the Meadowlands map was introduced, the Department of Environmental Protection was formed, we had the Wetlands Act; we had the wetlands contract, management contract; we had administrative order ten; we had the Wetlands R.F.P., the responses to it; the final report on the management contract; Wetlands pilot work; U.S.G.S.; NOS involvement with our work and with tide gauging in Tuckerton and in Salem; the verbal order of Sullivan meeting with the Attorney General and others; the presentation for Earth Sat on the Hackensack-Newark-Elizabeth matter, and finally the high altitude flying of the State in late March.

ninety-six hundred base map scale base map covering the Newark-Elizabeth areas, from the color infrared, one to eighty thousand scale photography now in the State's possession. That was the result of the high altitude flying done in March of 1972. This was option one.

They were also to produce certain overlays. Their second alternative was to do the same thing, excepting that they were to be in a position to produce a total of fourteen one to twenty-four hundred scale base maps, covering the Newark-Elizabeth area, in addition to the work in the Hackensack.

Q Oh, I see, in other words under option number one the base maps they would make would be predicated on infrared photography taken in March?

A That's correct, for the Newark-Elizabeth.

Q For the Newark-Elizabeth area, but in option number two they would do the thirty-six maps in the Hackensack Meadows and the base maps in the Newark-Elizabeth, but in addition they would do the same thing as they did in the Hackensack Meadows in the first instance?

A That is correct, that is correct. And to bring the context for your information, this work was to be done as far as the one to ninety-six hundred scale base map in the Newark-Elizabeth is concerned, was to be done prior to August of 1972, before they came back to finish the flying in the wetlands, which we had a discussion on earlier this morning.

So we wanted to know if we could get a good product and if we could we wouldn't fly the Newark-Elizabeth. If we couldn't we would fly it at no extra cost to us. That is what the options were on that particular document.

Q Document R-157.

A In addition to that matter document R-156, dated 31 May 1972, a letter to Director O'Connor of the Division of Purchase and Property, from Commissioner Sullivan, asking for a waiver of advertising to do the work just discussed. It is important to read the last paragraph of page two of that document.

Q Read it.

A "It is important to begin this project now. The Department cannot determine if the Newark-Elizabeth area is to be flown until the legal viability of the figures 1:9600 as scale map of the area is established by the Attorney General. The usefulness of that map must be determined while Mark Hurd collects Wetlands photography in July through mid-August (1972). If the figures 1:9600 scale Newark-Elizabeth products are not prepared and evaluated prior to the end of July (four weeks to prepare) the State might have to spend an estimated additional $16,000 to obtain the photography from which products are made."

I read that for your edification, your Honor, and partially for our justification of a waiver and proportionately for our justification of a waiver. This document, R-133 is the contract 2P-331, that we have been discussing to R-133, contract 233-P-1.

Q June 27, 1972, marked Hurd Aerial Surveys?

A That's correct.

Q The covering letter has a pretty good summary. It says they enclose the fully executed copy of the contract, the agreement. Under the terms of this agreement the contractor shall provide professional stereo-photography of the general Hackensack-Newark-Elizabeth Meadows areas in natural color and color infrared and maps of these general areas in order to show those lands which are claimed to be State owned.

A Shall I continue?

Q Yes.

A Prior to the tenth of August 1972 Hurd delivered the materials for alternative number 1, that is the 1:9600 scale base map, including the Newark-Elizabeth overlays and base map for that area. They were examined by the Office of Environmental Analysis, the personnel of the Attorney General's office whom I don't remember at this time, the personnel of Geology and we concluded that we would proceed when Hurd came east to fly the State's Wetlands south of the Raritan, that we would proceed with alternative one in this matter. This was partially predicated upon not only opinion, but fact and that is demonstrated in R-134, a memorandum to me from Mr. Peter Newsom, an assistant geologist, who on 9 August 1972 measured the accuracy of the Newark-Elizabeth base map and he had concluded that the mean apparent scale was 1 to 9600.3 with a standard deviation of plus or minus 35.7 scale units.

Q Does that mean it is pretty accurate?

A It is pretty good, yes sir. The accuracy is in fact better than this and it will be brought out in our technical discussions, in the technical discussion that it was checked twice more by Mark Hurd themselves and from work done by the National Ocean Survey at Newark Airport, and found to be very accurate and quite reliable, but I do not bring that matter up at this point.

Q This is an admission or stipulation that the aerial photographs taken by Mark Hurd Aerial Surveys, the respondent's contractor, accurately represents the physical conditions of the terrain so photographed on or about October 1972. You fellows have stipulated its accuracy?

MR. WEIGEL: I have filed with the Court a letter in which I qualified my agreement to that stipulation. It doesn't bear on the Newark-Elizabeth mapping as it bears on the Hackensack botanical mapping.

THE COURT: Oh yes, your qualification really doesn't go to this point.

MR. WEIGEL: Doesn't bear on Newark-Elizabeth I don't believe at all.

THE COURT: Okay. You will be Happy

to know that the respondents agree with your statement then.

THE WITNESS: Thank you, your Honor.

THE COURT: Your welcome, for that limited purpose.

MR. WEIGEL: I don't have any problem putting on the record a broad general statement that reaches the qualifications of the Mark Hurd company. I think the State did a very wise job in selecting Mark Hurd as their contractor.

THE COURT: Good.

THE WITNESS: The Hackensack was in fact flown by Mark Hurd on the 20th of August 1972 to acquire the photography. The Newark-Elizabeth was not flown because of alternative one and products we had received. We did not fly it at that time.

In October of 1972 an addendum to contract 2P-331 was executed. That is R-135.

Q That is an addendum to 133?

A That's correct, sir.

Q I have to keep these numbers, I want to look at them later.

A This authorizes Hurd to prepare intermediate overlays and composite overlays for the Hackensack Meadows as directed by the State of New Jersey and it is important to point out that Hurd prepared intermediate and final products as directed by the State, and I would like to make the following statement on this matter at this point if I might.

To our knowledge Earth Satellite Corporation as of 20 August 1972 was not aware of the work done by Mark Hurd in the Hackensack and Newark-Elizabeth Meadows. Hurd prepared final claims overlays, that which was published, as he was instructed to do by the State. He did not prepare them on his own or use his own decision making process, it didn't matter. Earth Sat was not involved or had not been involved with any of our deliberations or thinking with regard to either the Hackensack or the Newark-Elizabeth since December of 1971 when they came with their preliminary proposal to us. They were doing Wetlands work.

If you will remember, your Honor, I brought you through from January 14 of 1972, essentially to 24 of March 1972, then I said I was going to split and go to the work of Hurd.

THE COURT: Yes.

A I have gone to -- completed all the work of Hurd. From that point on, with the signing of these contracts, he did what he was supposed to do. He flew the Hackensack. He made the Newark-Elizabeth maps. He made the intermediate products and he made the final products which the State used for its claims purposes and he completed his work under the terms of those contracts and that is the end of his involvement, and he was guided by no one other than the State of New Jersey in these matters.

MR. WEIGEL: Are we someplace going to be given the dates of delivery by Hurd of its products to the State?

Q Are you prepared to do that?

A I'm not at this point your Honor.

MR. GOLDFEIN: I think we can at a future date.

Q Would you be prepared for that some time in the future if Mr. Weigel or Mr. Porro want to cross examine you on that as to when they did deliver their work products?

A I believe we can get that information, yes sir.

Q I suppose the dates would be almost on those. Do they have the date of mapping on it or does the date mean when they did the actual flying?

A We asked for the date of flying. That was important to us.

Q See if you can accommodate Mr. Weigel and Mr. Porro on that score. They must have given you bills at the time?

A They probably know.

Q Okay. Now where are we going back to?

A Now we are going to go backwards and deal now with Earth Satellite and their involvement, the National Ocean Survey and their involvement and Storch Engineers and their involvement in the matter chronologically.

Q Tell me again what was Storch doing in this without going back to my notes?

A You don't know yet, your Honor, I haven't told you.

Q I thought we had an Exhibit for Storch?

A For this particular --

Q Just give me a brief overview.

A What they are going to do in relation to the Hackensack, they are going to go out and get spot elevations in the marsh, measure its elevation and tell about the problems, the rest of it, and give us some indication of the slope thereof.

Q And NOS will be dealing with tidal gauges?

A Will be dealing with tide gauges and their work in Tuckerton relating finally the efforts to show correspondence between physical and biological methods.

Q And Earth Satellite?

A How they came into this whole picture in the Hackensack.

Q And what they end up doing in the Hackensack?

A They determined biological materials used by the State in making its claim.

Q So we have a brief overview now.

MR. PORRO: So there is no confusion for the purpose of clarification, the NOS did not do any work in the Hackensack.

THE WITNESS: They were not involved in any fashion in the Hackensack work, that's correct.

Q I understand down in Tuckerton they did the same thing and in Salem?

A That's right.

MR. PORRO: They did for East Rutherford, your Honor.

THE COURT: They did it for you, you mean.

MR. PORRO: Yes.

THE COURT: What are they going to do in this case, they serve two masters here.

MR. PORRO: No, they considered it all governmental.

THE COURT: I'm sure they weren't objecting.

MR. WEIGEL: The deposition record, just to clarify that point, your Honor, is pretty clear that the State did rely in the Hackensack, in its mapping of the Hackensack, on the project that was an undertaking by contract in the early 1960's between the State of New Jersey and the NOS, and there are in effect five maps that I am going to deal with in my case.

THE COURT: I understand that. I think right now Mr. Yunghans is saying who he dealt with for work that he wanted developed in this time period.

THE WITNESS: That is correct.

Q And I have always understood there were materials developed by NOS in prior years that you did use?

A That is correct.

Q Okay, fine. Now you can pick up, take your time. I think you are doing an excellent job in reviewing a very complex period of time.

A Thank you sir.

After our June 1971 Wetlands flying down in Tuckerton, we reflew it in August and September of 1972 along with the Hackensack, of course under option one of that contract.

At a point in time, I am speaking now with relationship only to the Wetlands work south of the Raritan, after October, mid-September in 1971 it is my understanding verbally from Earth Sat people that they compared photos for Tuckerton, that is, those flown in June and those flown in

August.

MR. PORRO: I am going to object to any hearsay. This is extensive hearsay, his understanding of Earth Sat. If it becomes important Earth Sat can tell us.

THE COURT: It really is hearsay but do you have something that evidences that? He has introduced a hearsay statement.

MR. GOLDFEIN: We will have testimony of the Earth Satellite representatives.

THE COURT: Then subject to that representation I will permit the testimony to stand.

Q You understand that normally hearsay is not permitted, but Counsel makes a representation that there will be competent testimony as to what you were told and I will let you tell us what you were told on that representation. Now, would you read that?

A Let me repeat that so you understand, sir. They flew the Wetlands photography in June of 1971 and the Wetlands maps for that area were prepared from that photography. They also got the contract for the entire Wetlands job and flew more of the photography in August and September of 1971 as well as in August and September of 1972. In other words, they did three flying tasks. At some point after August -- September 1971 Earth Satellite compared photos for Tuckerton, the June versus August 1971 photos and suspected errors in the State's so-called biological AB line on the Wetlands maps drawn for Wetlands purposes.

Having suspected this, Earth Satellite, without the knowledge of the State of New Jersey of any kind, obtained preliminary datums from National Ocean Survey personnel for the Tuckerton area. If you will remember, your Honor, we had the U.S. Geological Survey and the NOS program going on there and in March of 1972 Earth Satellite made comparisons on their own of positions between the physical mean high water and the biological Wetlands boundaries. The State was urged in a letter of 23 May 1970 --

Q That is not 1970, is it?

A I'm sorry, 1972, to have the Pilot area Wetlands maps corrected. This was not done and it was not done at my direction because of the following. The Wetlands series was not materially affected by the error. We were dealing with the regulation question and not a matter of ownership. Since that time -- excuse me.

MR. GOLDFEIN: That letter I think is an exhibit, it ought to be marked.

THE WITNESS: It is not. It will be brought up at another point or be referred to.

THE COURT: Okay, number one, the series was not materially affected.

A The purpose, I'm sorry, your Honor, the purpose of the series was not materially affected. We were not dealing with ownership questions, we were dealing with a regulatory matter and I chose at that time not to correct the map based on Earth Sat's information, primarily because I wanted to get other kinds of information that might be more substantial and less prejudiced. However, I might note for the record that since that time these maps in error have been revised in May 1975.

Q I take it R-150 is the letter from Earth Sat urging you to correct the maps?

A It is not sir, it is another letter that refers to that letter. R-150, your Honor, is the 29 May 1973 letter to me from Earth Sat answering an inquiry made by me on another matter and in that they discussed the following under point five:

"As described in our letter of May 23, 1972, the tonal and textural signatures for high and low vigor spartina alterniflora changed between the Pilot Study and the Statewide mapping program. The differences in signatures are described in item one above. Our previous letter indicated that the following sheets contained errors and should be corrected. We feel it is unfortunate that the State did not deem it necessary to correct the sheets before the current NOS project to compare physical and biological high water lines."

Q Who wrote that, Anderson?

A It was done by Dr. Frank Wobber, Director of Geosciences and Environmental Applications Division of the Earth Satellite Corporation to me at my request. I introduced that particular exhibit to document the fact that they did write me. It contains materials other than that, that exhibit, which will be brought out in Dr. Feinberg's technical testimony.

Q All right.

A Shall I continue?

Q Yes.

A I made the point that Earth Satellite

Corporation without our knowledge had gone into the field in Tuckerton and had made physical biological comparisons. Directly after March 1972 the State did purchase this unauthorized work on physical biological comparisons for its study and possible use.

I want to make certain that everyone understands that we were still attempting to get the National Ocean Survey to do an independent field check of the biological high water versus mean high water lines and knowing full well that the result of their work, if favorable, would not be subjected to great criticism and heavy challenges by whomever it might be. That document is R-151, comparisons of physical and biological Wetlands boundaries at Tuckerton, New Jersey. I will not go into great detail with that except to read one small paragraph on the result and indicate to the Court that it contains many photographs with red lines and dashed red lines showing differences between a contractor's mean high water line physical and biological work. Their results were as follows. Averaging differences between physical and biological boundaries are tabulated in table two. Both the photos and the tabulations show that the biological AB species boundary lies close to the physical mean high water boundary less than 2.6 feet seaward of the physical boundary on the average. The biological boundary varies from an average 6.2 feet landward to the physical boundary at Big Creek to 9.6 feet seaward physical boundary at the Old Coast Guard Station. Differences are least in ditched Wetland and greatest in marsh filled creek heads. You will see marsh filled creek heads in one area in the field tomorrow at Tuckerton where some of this work was in fact done.

BY MR. WEIGEL:

Q Mr. Yunghans, just so I understand the document, is what you are saying that the Earth Satellite people went out and in effect compared their own botanical line by doing some engineering of mean high water data?

A That is correct, with datums, preliminary datums received by them from the National Ocean Survey.

BY MR. PORRO:

Q Who drew the line? NOS didn't draw the line?

A They did not, nor were they a part or a party to it and that is the reason I made one of the statements that I did. We were still attempting to get the NOS to do this work.

BY MR. WEIGEL:

Q Is there a date on 151?

A March 1972, I believe on the front page. It is on the first page of the text, your Honor, I'm sorry, I forgot.

THE COURT: March 1972, that is the date of the investigation. Before we recess for lunch, we will still be going a while, Mr. Yunghans, I would like you to prepare yourself on this score. Before you leave the witness box today I am going to ask you to give me a brief overview, a brief review of every technique you know was used in promulgating these maps, in as simple language as possible. I think early in the game for this record I would like the Appellate Division to understand that. We are kind of talking biological line. It has not been explained, I know it will be later on, I think if early in the game we have it, it might be better for the record. Would you think about that a little bit and if you want to jot some notes down for yourself I would appreciate having a clear, concise and in as simple language as possible description of the various techniques used to establish the State's claim.

A Okay.

Q As you understand them. Now you may continue. I would imagine he is going to finish today?

MR. GOLDFEIN: I believe he will your Honor. Dr. Feinberg is prepared to go on if we have some time.

THE COURT: Good, all right.

A On May 5, 1972, prominent officials, including yourself, your Honor, laymen, lawyers and State personnel visited the NOS to gain information on mapping on historical maps, tidal boundaries, infrared photography, biological high water line opinions as well as costs and so forth. These discussions, I believe, were fruitful and did at least to some extent influence the State's thinking as to how they could best proceed with cataloging of State claims. This letter was written by the National Ocean Suvey on 9 May 1972, "Briefing of Prominent New Jersey Officials." I submit it.

Q What number is that?

A R-155. I believe as part of those discussions we also talked about time, late in the day of that day -- it is on tapes, I remember, and we talked about money costs in doing this kind of work.

Q Good. It says some nice things about people from New Jersey in there, it looks good.

A It may be well to point out at this time that up through this time Earth Satellite Corporation for this portion of the chronology was in no way connected with any of our work, deliberations, or thinking as regarded the Hackensack or Newark-Elizabeth, except for their preliminary program plan in December of 1971.

Now, in August of 1972, Doctors Richard Anderson and Mr. Deely of Earth Satellite were retained by the State to prepare a certain document called District Wetlands Overview for our use, that is, the Department of Environmental Protection's use, with regard to the assessment of the open space plan of the Hackensack Meadowlands Development Commission.

It is at this point in chronology that Earth Satellite again becomes involved with Hackensack work and is in fact the first time that any person employed with Earth Satellite saw or had field experience in the area. The manner that we asked them to undertake for us did not relate to State versus private ownership questions, it was done so that we within the Department could evaluate the HMDC work, using photo-maps and 1 to 80,000 scale photography prepared from the Mark Hurd work done in March and April of 1972. That is reference 136. Let me have it please.

THE COURT: All right, we will stop right there, that is a good point.

MR. WEIGEL: Can I ask one question before we break? You indicated that the State retained Mr. Deely and Mr. Anderson. Are you indicating that they contracted directly with Deely and Anderson?

THE WITNESS: No, we contracted with Earth Sat and asked that Earth Sat give us those two guys.

MR. WEIGEL: Thank you.

(Luncheon recess-12:30 to 1:30 p.m.)

AFTERNOON SESSION

THE COURT: Let's see Mr. Yunghans, we went off with Exhibit R-136, which is An Environmental Assessment of the Master Plan and Proposed Zoning Ordinance for the Hackensack Meadowlands District. Do we have to hear anything from that as it relates to the issues in this case?

THE WITNESS: There is one or two points your Honor.

BY THE COURT:

Q All right.

A On page five of that document, prepared in part for us for our use in drawing conclusions --

Q Who prepared it?

A I and Dr. Feinberg prepared this assessment plan using the work of others. As far as conclusions are concerned and to show that Earth Sat had a certain knowledge of the scene up there. "Many of the Wetland units in the disrict are small and they are frequently isolated from other units by either upland or development. Development and ditching, diking and filling have depressed Wetland unit ecological values. Phragmites (common reed) occurs in all Wetland units and is the dominant species of the district. Low marsh phragmites communities are flooded frequently by tides and contribute significantly to aquatic detritus export which determines the potential of a body of water to maintain a healthy and diverse aquatic population.

"Spartina alterniflora is located, primarily, in the Kingsland-Sawmill area and along the Hackensack River. This is a particularly valuable plant because terresterial as well as aquatic animals use it for food, such as wild fowl, muskrats," and so forth.

"District reconnaissance at low altitude by helicopter along with photo interpretation showed other species, and minor constituents, to be present in several Wetland units. The list includes cattail, water smart weed, marsh mallow, switch grass and salt meadow grass."

Then there are other pages in this document, particularly five through eight delineating the work done by Earth Satellite in this context, along with a Wetland ecological value map appearing just after page twelve which discusses high, moderate and low ecological value Wetlands.

MR. PORRO: Your Honor, I really don't see any relevancy to this document, or any of these documents along the same vein. I know your Honor wants to make the record as broad as possible, but I think we may find ourselves building a monstrous kind of record with very little relevancy and maybe we could give some thought, maybe not at this moment, but to make it a little bit easier in cutting out some of this stuff that is going in at this stage.

THE COURT: Well, he is going to finish shortly. I think I'm going to give some latitude still while the State is putting them in. I confess I don't know the relevancy just yet.

All right Mr. Yunghans.

MR. WEIGEL: One question that I had, your Honor, and maybe it is something that Mr. Porro has been thinking about. We have heard for a day and a half about Wetlands being south of the Raritan and now we are starting to hear about Wetland being applied up here in Hackensack

Meadowlands Development Commission area, and I don't quite understand that.

THE COURT: Well, I never got the impression that Wetlands were restricted to south of the Raritan. He said some of the study, he referred to the studies, were restricted to south of the Raritan River.

MR. PORRO: Wetlands does not apply to the Hackensack area.

THE COURT: It hadn't been so designated. I don't understand, maybe he is using the term loosely.

MR. PORRO: That is the exemption out of the effect.

THE COURT: What is the difference?

MR. PORRO: I don't think it is relevant at all.

THE COURT: I think, as I understand, and I can stand corrected, Mr. Yunghans is trying to demonstrate that the Earth Satellite Corporation had some orientation, some experience in the Hackensack Meadowlands district prior to its becoming involved at all insofar as fixing State claims were concerned, i.e., land now or formerly tide flowed. He wants to demonstrate that they were introduced to the Meadowlands in an area that might not really be relevant to the issues in this case, nevertheless, he wants to show its background. Is that correct?

THE WITNESS: That's correct.

BY THE COURT:

Q All right, I will allow it for that purpose.

A It was in conjunction with the work referred to in R-136 that Earth Sat representatives were first made aware of Mark Hurd's Hackensack involvement and were shown the photography generated by Hurd for the Hackensack, that is, in late August, early September. While performing the work just referred to in R-136 we happened to have in our offices the photography generated by Hurd for the Hackensack and we showed it to Messrs. Deely and Anderson at that time in our offices.

MR. PORRO: August 1972?

THE WITNESS: Yes sir. They

were interested in looking at the photography in the model colors, I believe, all of them which you have all seen at one point in time or another, that is, the pinks, the greens and the reds and the circular patterns and so forth and so on, and they were all knowledgeable about phragmites as well as reading the literature on phragmites from investigators in the Netherlands as in England, as was demonstrated in their proposal of 1971 which I showed early this morning, Anderson's work with phragmites in another area and his reflectance studies.

MR. PORRO: I'm going to object to all those remarks in view of your Honor's prior ruling, subject to being tied up and I object to somebody else's experience and so forth.

THE COURT: All right, your objection is overruled, subject to the opinion of Mr. Yunghans being connected with competent testimony demonstrating that degree of expertise and knowledge.

Q All right Mr. Yunghans.

A These exploratory discussions as far as the phragmites were concerned, the colors of the photography, their past work and so forth were explored further and on the 6th of October 1972 the Department and Earth Sat agreed to structure a Pilot Program for delineating a biological high water line in the Hackensack, where, of course, it was applicable, that is, it would have to be so looked at in an area where vegetation existed, not in an area that was filled.

THE COURT: Will you read that answer please?

(The reporter reads the pending answer.)

Q I take it that you agreed with Sat to undertake a pilot program to structure a high water line, that a technique was agreed upon?

A We did not agree upon any technique. We agreed to explore the matter related to biology at the relative frequencies of inundation of tidal waters with relation to the stresses placed upon that biology and I made an error when I said six of October, it was in fact 16th of October, I read my notes wrong in my hand.

Q Was that agreement memorialized

in writing?

A It was memorialized at a later point in time contractually, your Honor, and I will refer to that and give you the substance of it.

Q Was it at this time that you were becoming slightly enamored of a vegetation or a biological technique in the Meadowlands would you say?

A We believed that a vegetation technique in the Meadowlands, where applicable, would become a more viable tool than others.

Q You may continue.

A Thank you. Based on the State's previously chosen criteria, which I discussed earlier in my testimony -- I have forgotten the number -- the Walden Swamp was chosen for investigation. This program was completed on 17 November, 1972. I would like to refer to two exhibits, R-139 and R-140, with regard to that matter. R-139 is a 14 November 1972 letter to me from Dr. Wobber of Earth Satellite stating that they are transmitting herewith a high water delineation pilot program final report. They also talk about some of the problems that they have experienced and if we were to structure a larger program some of the things that they would in fact like to do with regard to it. And I have put notes along the side of the particular document R-139.

R-140 is the Hackensack Meadowlands existing Wetlands high water delineation pilot program report.

Q That is the result of the pilot?

A That is the result of that pilot program as transmitted by R-139, your Honor. The objectives of that report and the dates shown in figure two and figure three and page eight are particularly pertinent.

On the basis of this preliminary effort the Department of Environmental Protection entered into negotiating with the Earth Satellite Corporation of 28 of November 1972. The materials prepared by the Department for that negotiating session appear in R-141. I prepare and my colleagues with me prepare such documents, your Honor, to provide a basis for the drawing of contracts and the final form of any contract is, however, always slightly different than the points made in such a negotiating document. It is important to say that we would have at least from our knowledge as of that date, 28th of November, 1972, we will give them certain things to do the job. They will give us certain outputs that we hope to get from them.

We devised a production schedule. At time people wonder why does one put time constraints on a contract. We wanted to get on with the job and get it completed. We put time constraints on the contractor. We have always put them on him and will always continue to do so for the sake of getting the job done, and so forth and so on, and this is nothing more than a document showing that we held a negotiating session. On 19 of December, 1972, a formal contract was signed between the State and Earth Satellite. Certain pertinent points in that contract are important and it is R-143 for reference. In section three "The contractor shall establish in more than one test area of the Hackensack Meadows the meaning and transfer ability of photographic tonal signatures throughout the Meadows. The contractor shall relate photographic tonal signatures to phragmites performance in terms of water supply and other significant environmental factors, such as proximity to landfills. To perform 'this work' the contractor shall conduct intensive field sampling along sample transects totalling at least 1,600 lineal feet. The contractor shall provide the State with a written list of the criteria used to interpret photographic tonal signatures." The contractor shall complete all of the above and shall brief the State on all work and results within forty-five days from the day of contract signing. The State at that point shall determine whether to continue or terminate this agreement immediately following the briefing and shall notify the contractor in writing of its decision within three days."

That information was put into the contract. We wanted to see how they could expand upon this pilot project in the Walden Swamp, your Honor, see what they could do. If they could do something we wanted to continue, but we wanted a caveat left in to quit if they didn't do anything.

In addition to this work and essentially in the same time period, I'm sorry, I'm getting complex. The State engaged Storch Engineers to establish point elevations in the Hackensack. This contract was formalized in January of 1973. Their work began in the field on the 25th of January, 1973 and was completed on 22 February, 1973 and their report was submitted to the Department of Environmental Protection on 9 March, 1973 and this is Exhibit R-142. They were asked to describe field problems, note the weather conditions, when they were doing their work, obtain elevations for the marsh surface and I would like to point out to the Court, if I may, that they discuss in here a description of field problems along with other things which states on page three that the natural conditions at Walden Swamp created problems which often hampered the mobility of the observer and rodman. Maximum high tide submerged the entire Meadows surface under as much as two feet of water. Lower tides -- high tides peaked in channels and low areas at elevations that were only inches above or below the average meadow surface. During low tide water receded in the ditches to elevations that were three to four feet below the average meadow surface. Operating the boat and traveling by foot was quite difficult under these greatly varied conditions. There were occasions when the boat was stranded as the tide receded. It often was impossible to walk on the soft silt comprising the channel beds. At times when the Meadows were completed submerged, members of the field crew unexpectedly stepped into low or soft areas and the water overtopped their hip boots. However, footing on the thin layer of decomposing reeds that covered the black organic Meadows soil was relatively stable when the surface was unsubmerged and it was possible to discriminately select walking areas. In general,travel through the Swamp was hindered by dense vegetation or reeds going to the height of ten to twelve foot throughout the Meadows. During periods of extermely cold weather, ice layers formed on the reeds during high tidal stages. As the tide dropped, sheets of ice remained frozen throughout the reeds and subsequently compounded the difficulties of walking. Wind blowing across the Meadows created a problem in connection with holding the raised rod and prism steady. The interlocked rod and prism staff was often raised to a height of about twenty feet above the Meadows surface in order to clear the vegetation and provide a suitable sight for the instrumentman. Observations revealed that deflection at the top of the rod due to wind forces never exceeded a horizontal distance of one foot. The exact height of rod, measured from the Meadows surface to the prism, was noted at each point where spot elevations were obtained.

That is one portion of this report your Honor. I call your attention to the tables in which the points are identified, the dates surveyed, the time, the coordinates, the elevations, who did it, the topography adjacent to and near the points, to give the Court some idea that this is not a uniform surface, it is an undulating surface which might appear to be expressed as if you took an orange and peeled it and laid it out flat, it would look something like that in all probability, and it also gave the water characteristics at the point when surveyed and along with certain remarks on the matter when they were in the field, and many of the points, as you can see from looking personally at this thing, are from two-tenths to 1.9 feet the underwater at the time they were in the field at that point.

Q (The Court) Was Storch engaged without any formal contracts?

A They did have a formal contract your Honor, I have not brought that with me today.

Q Well, maybe it is not necessary.

A By this time we had a contract with Mark Hurd. We also had a contract with Earth Satellite to go on with work in the Hackensack-Newark-Elizabeth Meadowlands, and on 19th of January -- I'm sorry -- it's the 17th of January, your Honor, I wrote in R-144.

Q What is that, 1973?

A Yes sir. January, 1973, Exhibit R-144, I wrote a memorandum to Commissioner Sullivan explaining program needs and timing. I introduced this memorandum to show that Earth Satellite worked independently, Mark Hurd worked independently, the Department of Environmental Protection corelated the materials for transmittal to Mark Hurd's draftsman who drafted the work and then sent it back to us and we ended up with a final product. This shows the mapping schedule.

Q What is this report to your Commissioner as to just what was being done at that time on January 17th?

A I state that we were to proceed with claims overlays one and so forth. If you remember, in our contract, your Honor, with Mark Hurd, I'm sorry, with Earth Satellite Corporation, they were given forty-five days to come up with something and show us. At that point we were to terminate or continue. On 29 of January 1973 the Department of Environmental Protection met with Earth Satellite, reviewed their Hackensack work and authorized them to proceed. My letter of 29 January 1973 to

Mr. Dan Deely of Earth Satellite, R-145, authorizes them to proceed with the delineation of tidelands within the Hackensack Meadows according to the terms of contract 3P-288. "You may bill the Department for $19,500 as specified in Section 7.3 of that contract."

Q The reference 3P-288 and R-145--

A R-146, I believe your Honor -- no.

Q 146 is the addendum.

MR. GOLDFEIN: 143.

Q I just want the record to show it is 143.

A In early April of 1973 an addendum to 3P-288 was formalized with Earth Satellite Corporation. That is R-146. It allowed Earth Satellite to do more intensive field sampling in the Hackensack. It provided compensation for some work discussed previously for which they had not been paid or retained originally, namely, the ecological value map. We had not paid them and we included the monies in this contract to give them compensation. They did it on their own, they had no contract. That is reference 146, your Honor.

Q All right.

A In my testimony earlier today I believe that I indicated that we had been attempting to get the National Ocean Survey to make an independent check of vegetation versus physical mean high water in Tuckerton. We had been, up until early April of 1972, been attempting to get the NOS to in fact do this work and finally we were successful. On the 6th of April 1973 a memorandum of understanding was signed to perform the work. This is Exhibit R-152, which is that memorandum of understanding whose objectives were to determine the reliability of vegetation communities as indicators of the mean high water line as classified and shown on New Jersey Wetlands maps and to investigate and evaluate the capability of selected airborne sensors to identify and select the mean high water line where it is obscured by vegetation, for mapping by modern techniques. That memo of understanding was signed by me and by then Commissioner Sullivan and it is dated 4-6-73.

MR. WEIGEL: Was it signed by NOS?

THE COURT: No. It is a memorandum of understanding, their memo.

A On 11 April of '73 --

THE COURT: Excuse me just a

minute, Mr. Yunghans.

A I'm sorry sir.

Q This memo was sent to NOS?

A No sir, that was a memo from the NOS for us to sign.

MR. GOLDFEIN: It was prepared by the NOS?

THE WITNESS: It was prepared by them.

Q Well, this is a copy and apparently it has a place for a signature of Allen L. Powel, Rear Admiral.

A They send it to us first, your Honor, and we signed it and sent it back and we have a copy of that document. Shall I continue?

Q Yes.

A On April the 11th, 1973, a field instruction document was submitted to the State and most of the field work contained in that document was carried out between the 9th and 16th of April, 1973, and that reference is R-153. It is an instruction for field job CM7308 Cooperative NOS/NASA and State of New Jersey Wetland Mapping Investigation.

Q This is an implementation of the memorandum of understanding?

A This is the field instruction for that implementation, your Honor. After that work was completed, after 16 April 1973, we, that is the DEP, Office of Environmental Analysis, received an undated National Ocean Survey interim progress report memorandum and in that memorandum the NOS said the following as a preliminary summary on pages three and following:

"A detailed comparison has not been made of the biological high water line as revised by Dr. Anderson. However, a close examination indicates his placement of the mean high water line is in good agreement with the results of our field investigation. An incomplete analysis of the field work indicates the following: (1) The local tidal datum is essential for recognition and field identification of the mean high water line on the ground. (2) Interpretative keys created by photographic tones and hues were determined to be reliable indicators of the mean high water line on aerial photographs; either color or panchromatic, regular or infrared emulsions satisfactorily portrayed this information. (3) Some spartina alterniflora, as identified by New Jersey personnel, is not 'flowed' at mean high water. (4) Vegetative species identification is not necessary for field recognition of the mean high water line."

They then go on in part five on page four of this document to give us some recommendations for future work, which included establishing tidal datums, when to obtain aerial photography at or below mean high water, information on precompilation, that is, field inspection before everything is done, and field inspection or postcompilation after. We are doing that or following those recommendations in other phases of our work. This is R-154, your Honor.

Q Yes.

MR. WEIGEL: Your Honor, this is another one of the points where I would like to in the record and for your benefit make known to you that we have a position which I think the Court should understand and give particular attention to the totality of the document that you have and the totality of the record as NOS has made it on this Tuckerton project, because I think that what Mr. Yunghans has done is to pick out certain parts of that, that may be deemed favorable to the State, but has omitted other very important parts of that document which are important on our side of the case and just to tie the whole point together I think what we will see, as this record develops, is an effort to rely upon the NOS to a certain degree and then the very definite effort to downgrade the work of the NOS and to substitute for it the work of Dr. Anderson.

MR. PORRO: Your Honor, I think that I have a continuing objection and I think that this particular evidence reflects the complete irrelevancy of all of the Wetland work done in South Jersey. You will note that the report refers to plant species other than phragmites. This witness' own testimony was that the dominant species in the Hackensack, with very, very few exceptions, was in fact phragmites. I want it brought to the Court's attention in considering the relevancy.

THE COURT: Don't forget we are putting on a record now what the State did and why they did it, that's all. You are going to have your shot. Okay. I'm not deciding this case based on his testimony.

MR. PORRO: What I'm saying, this work that they are referring to now had nothing to do with the Hackensack Meadowlands and should not even be part of the administrative hearing.

THE COURT: I think it had a lot to do with the decision they make as to Hackensack Meadowlands, that is why they are bringing it, that is his purpose. Whether that was comporting with the legislative directives to conduct tests and studies and accurate ones, we will see.

MR. PORRO: I haven't heard him say that, maybe he will get to it, that what they did in South Jersey was the basis, or part of the basis for the decision up here. I guess he will get to that.

THE COURT: If he doesn't then you ask him later on.

MR. WEIGEL: Maybe to help with the fact that there is no date, is this the same document that we were able to pursue in the depositions down in Rockville and to get the NOS copy and then have a date recorded in the transcript?

THE WITNESS: The answer is yes.

MR. WEIGEL: I will try to get that date just for record purposes because we have the same problem, I was operating with a copy that was undated, as was the State, but when we got to the depositions in Rockville the NOS copy did have a date on it and I will supply that date to the Court.

THE COURT: All right, thank you.

BY THE COURT:

Q All right, Mr. Yunghans.

A From 29 of January 1973 on Earth Satellite and Mark Hurd continued with their work, as did the Department of Environmental Analysis continue with its, and on 30 April 1973 the first Hackensack and Newark-Elizabeth maps were made public at a hearing in this Courthouse I believe, yes, in this Courthouse. Much of the work described in this proceeding was -- strike that. Much of the work, or work is described in a document labeled R-147. We prepared testimony for that hearing and did present such testimony.

MR. RINDONE: Your Honor, may we go off the record for a minute?

THE COURT: Yes.

(Brief discussion off the record.)

A (Continuing) In our deposition -- rather in our statement before the Natural Resources Council we said on page six and following --

Q What are you referring to?

A R-147, your Honor, on page six and following: "About 6900 acres of tidal marsh exists today within the boundary of the Hackensack Meadowlands District. An individual high tide may completely cover the marsh vegetation, may cover almost none, or may fall anywhere between these extremes. Water depths, bottom topography, winds, atmospheric pressure, land morphology, and gravitational forces interact to produce fluctuating tidal levels.

The National Ocean Survey defines mean high water as the average of all the high tides over a period of about nineteen years. The NOS uses tide gauges to record tide levels and uses these data to calculate local mean high water tidal datum planes. The intersection of these datum planes with the land surface is called the mean high water line. The NOS has developed precise cost effective techniques, using aerial photography, to find the mean high water line on open shores and beaches. In a tidal marsh, however, the NOS approach cannot be used because vegetation obscures the land-water interface. In addition, a high spatial density of tidal measurements in marsh interiors is needed to obtain a reasonable approximation of the tidal datum: areas only several hundred feet apart can vary greatly in the time and range of the tides, and unless these data are known, the extrapolation of datum planes to land surfaces can be, and frequently is, in gross error.

"Conventional surveying techniques are not practical for determining the local mean high water line in large tidal marsh areas; varying tidal conditions hamper boat and foot travel and ten to twelve foot high reeds force surveyors to raise rod and prism staffs to heights of about twenty feet before an instrumentman can obtain sightings; also, wind forces can deflect staffs by as much as one foot in the horizontal and further compound the difficulty.

"Conventional surveys are not cost or time effective: almost three years of field time and two million dollars would be needed to develop spot elevation data at a density of near one point per acre in the tidal marshes of the Meadowlands district. Such data would be of some value; however, they could not be used to draw local mean high water lines in marsh interiors."

And I say "thank you for giving us the opportunity" to make our recommendations known and that was part of the State's statement to the Natural Resources Council on 30 April 1973.

On 19 of July, your Honor, 1973, I visited with Earth Satellite Corporation to review their final progress report and I wrote on 20 of July, 1973, a memorandum to Commissioner Sullivan entitled "Tidelands Claims - Decisions." I like to call it my memory sometimes failed memorandum. It is a decision --

MR. PORRO: Your Honor, may I object at this point, I believe that the Appellate Division is reviewing the action taken on June 13, 1973 and anything thereafter is immaterial. I am reading from the notice of appeal which fixes that date and reading also from the order of the Appellate Division which does not specifically refer to the date but is based on the notice of appeal and I believe the pretrial order also fixes that as the date.

MR. WEIGEL: I have in my bag, your Honor, the exact minutes of the meeting and the minutes of the meeting that we are talking about are June 13, 1973 and I have a note in the handwriting of Mr. Barker indicating that it was not until the July meeting that they got approval of the June minutes, so that really the cutoff date for purposes of Mr. Porro's objection would be June 13, 1973, which was the formal date on which the Natural Resources Council acted to accept Group One and I have minutes here in my bag if you want them.

MR. GOLDFEIN: Your Honor, as I think you are seeing, it is my recollection of the memorandum that Mr. Yunghans is not testifying or reviewing things that went on after the June date. It is things that came to the attention of the Commissioner that had gone on before.

Q When was the last map promulgated?

MR. PORRO: That was late in the year.

THE COURT: Aren't all the maps under attack?

MR. PORRO: No your Honor.

MR. WEIGEL: Yes they are.

MR. PORRO: Wait, I'm sorry.

THE COURT: Then the cutoff date should not be June 13, should it, that is the first date that maps were actually promulgated?

MR. PORRO: According to the pleadings that was the date -- I see what your Honor is saying -- at pretrial we incorporated the other quadrangles. Is that your point? We should have then the approvals of each and every one of those quadrangles and the public hearing on each and every one if we are going to expand it that wide.

THE COURT: I want a stipulation

from all Counsel as to when the maps were approved and published.

MR. PORRO: We should be able to give that to you, your Honor, without any problem.

THE COURT: Because even if the pretrial memorandum doesn't say it I want all the maps tested in this proceeding, hence, I think it is appropriate to hear testimony as to what this Department did administratively right up to the last publication date.

MR. WEIGEL: I can cover group one right here. This is Mr. Barker's memo. He sent it to me.

THE COURT: I would like to have a document.

MR. PORRO: In that document could we have minutes of each meeting on the quadrangles, what evidence was taken, if we are going to expand it?

MR. WEIGEL: I think what we are talking about there is an admission by the State that there was in fact no other public hearing, but the public hearing that was held --

THE COURT: Why is that relevant because you are not attacking the method of promulgation in this proceeding? You are not attacking the technique requirements of the statute.

MR. WEIGEL: Your Honor, the point, I think, is that that public hearing constitutes the only public record, the only administrative record beyond the couple of little paragraphs that are in these minutes of June 13th.

THE COURT: We know the record is sadly lacking, we are building one now. What is the relevancy of that?

MR. PORRO: It goes to the question of arbitrariness, your Honor. If in fact there was no evidence, no consideration by that Council in adopting other quadrangles as to the validity of the methodology, or anything like that, I think it goes to the arbitrariness issue.

THE COURT: If you are going at it that way I can say I see it is relevant, but you are not adopting a technical objection, as I understand it.

MR. WEIGEL: We are saying that the maps were not adopted, I'm not saying that.

THE COURT: Because there is a stipulation as to that.

MR. PORRO: No, on the issue of arbitrariness.

MR. WEIGEL: I agree with Mr. Porro, what we are really talking to is the manner in which the State acted.

THE COURT: Let's get the date when all the maps were published, let's get an agreement that July 30th, was the only time there was a public hearing, let's get copies of the minutes of the Council with respect to the adoption of these maps.

MR. WEIGEL: Good. I can point out, and I don't think there is a question at all about this, that the way these maps were adopted as to this first set, and I assume it is the same procedure that was followed as to others, there was a date upon which the Natural Resources Council acted. That date as to the first group of maps was June 13, 1973. It requires the approval of the Natural Resources Council of its own minutes before those minutes move over to the Commissioner's desk. Mr. Barker indicates by his handwritten note, and this is on handwriting, that the minutes of the June 13 meeting were not approved by the Natural Resources Council until July 11, 1973. So then you have the final approval on July 13th. At that point it moves over to Commissioner Sullivan's desk and Commissioner Sullivan approved the minutes of the Natural Resources Council meeting on,I believe, July 13, 1973.

So as to each one of these groups we have that kind of a need to move to official Council action, approval of minutes of the action taken and then Commissioner Sullivan's approval, because it is only with the Commissioner's approval that these maps are considered to be ready for filing.

THE COURT: Didn't you concede that in each instance there was a decision made by the Council and that the Commissioner approved. Do you concede that?

MR. WEIGEL: I concede that.

THE COURT: Why do you want to go through all that? If you want to show there were no further public hearings okay, but why do you want to do that part. I am open to it if you want to do it, but would it be helpful?

MR. WEIGEL: I thought you would ask for the state to supply the dates on which this happened.

THE COURT: Only so I can control the exhibits which come in. Here is an exhibit, July 20. At first blush I thought Mr. Porro made a valid objection. Suddenly it dawned on me these maps are being passed in groups. I am now going to permit this to come in evidence and stay in evidence.

MR. PORRO: I withdraw my objection, your Honor.

THE COURT: I'm not criticizing you for raising it.

MR. PORRO: No, I was of that

frame of mind. Now your Honor has pointed out what we are covering. You are absolutely correct.

THE COURT: Frankly what I would like to have is this, just the dates when different groups of maps were approved for publication, desemination to the public; a stipulation there were no other public hearings except the one in Hackensack, and I just want the last date so I can cutoff evidence that is proffered that goes beyond that.

MR. PORRO: If we could have the minutes of that particular meeting, because there may be, and I'm not aware that there is or isn't, it may be someone at that particular meeting raised objection or there were some discussions.

THE COURT: I think you are entitled to the minutes.

BY THE COURT:

Q All right, R-148, the memory sometimes failed memo. Okay?

A Yes sir.

Q Is Exhibt R-148. Have you

fellows seen this before? All right. I better make a note on what I want here. All right, Mr. Yunghans. When did you get your raise (laughter)?

A I haven't sir, I cannot tell a lie in Court, because I swore not to.

On 15 of September of 1973 the final botanical delineation report of the work done by Earth Sat was delivered to the State, that is R-149, 15 September 1973. This report I'm sure will be discussed in great detail by others and need not be discussed by me in this proceeding of mine except to point out to your Honor that it contains representative infrared photos, it contains field observations, results; it contains the criteria used for botanical mapping; it contains tidal access data to lands of the Hackensack; it contains map reports and a listing of all pertinent participants and along with their key work dates in here.

MR. PORRO: I would like the record to reflect my objection, subject to your Honor's ruling, that that would have to be tied in. That report is pure hearsay until tied in.

THE COURT: You have that

protection and that right reserved.

A I would also like to state --

THE COURT: So I am not to just handle this reverently yet. Is that right?

MR. PORRO: That's correct.

MR. WEIGEL: I have one further objection to that document, it has, if that is the one, colored photographs, prints that are stated not to be very good by the State itself and I would like and the people that I have here would like to see the original work from which those prints were made, however we make arrangements with them.

THE COURT: Talk that over with Mr. Goldfein.

MR. PORRO: If I could request this off the record, your Honor.

THE COURT: Off the record.

(Brief discussion off the record.)

A (Continuing) To recapitulate generally, we started with 14 January 1970, went up to 24 March 1972 in chronological order. We then proceeded to go to the work of Hurd, which started on 27 of June of 1972 and continued until they finished their contractual obligation.

We then proceeded within that Hurd 27 June until finished, we talked about two different things, the Hackensack and the Newark-Elizabeth, the difference in physiography, pavement versus water and marshes and fill, and we also then split off and talked about NOS, Earth Sat, another involvement which began in early March of 1972 and continued up to 15 September 1973. Since that time from my own personal point of view --

MR. PORRO: I'm going to object to any personal point of view, your Honor.

THE COURT: I will sustain that objection. All right, is that about it? Now we will take a short break and then Mr. Yunghans, I would like you to accommodate me by that capsulization of all of the techniques that were used in promulgating these maps just the way I wrote it, remember the perpetuities;in a nutshell. It was that thick. It's a real challenge but I would like you to just enlighten me and the record.

(There was a brief recess.)

BY THE COURT:

Q I believe I asked you if you would accommodate me and Counsel by giving us a sort of summary of what you understood were the various techniques and maybe broad based criteria that the Division of Environmental Analysis employed in finally cataloging the State's claims, vis-a-vis tide flowed lands with possibly a brief description. I think we all feel we have our own personal understanding of what certain techniques mean too, and I'm certainly wide open about hearing more on it later in this case, but if you understand my question I would like you to respond to it.

A I will try your Honor. I believe that early on in my testimony I mentioned the word "candidate techniques" with relationship to 30 of December, around that, in 1971, and we mentioned a whole series of things, but as I understand your question, other than candidate techniques you wish to know which was in fact used in preparing the State's claims for the thirty-six maps of the Hackensack and the one of the Newark-Elizabeth.

Is that correct?

Q That is correct.

A Okay. We used, as one technique, field resonance in two kinds of area, one, biological, and two in determining tide gauge and tidal access.

Q Tidal access?

A Access of the tides through breached or closed tidal gates. We did check all of those out and we did make an on the foot inspection of most of the vegetation of the area.

MR. PORRO: You are talking about each one of the quadrangles now?

THE WITNESS: Essentially all of them. They were field checked, Mr. Porro, and I believe in the map report it says that they were field checked by a given person on a given day.

BY MR. WEIGEL:

Q Just for clarification, do I understand you to testify that all artificial work, such as culverts, conduits, which would have an effect on either the introduction or the exclusion of tidal waters to the map, were field checked and identified?

THE WITNESS: Most of them were checked and we were looking primarily for those in terms of the existing scene in which tidal access was available, that is in the final report, the last exhibit that I spoke of before you adjourned.

MR. WEIGEL: You used the word "most." To me most is something less than all.

THE WITNESS: I'm sorry, Mr. Weigel, I can't answer the question, I don't know unless I would check the whole thing.

MR. PORRO: They will be designated though, is that correct, where there were field checks they will be designated?

THE WITNESS: They are in the final Earth Sat report, but we did field check, we did use historical photography, that is from the 1930's onward, and that was used to locate waterways which had been previously filled and for in-house analysis of vegetation. We did use all sorts of historical maps. I'm sure that Dr. Feinberg will discuss those as he relates the technical side of this matter and they were used to locate major waterways and shorelines primarily.

In addition to these historical

maps, we had tax maps, the 1971 City of Newark tax maps and so forth, the railroad tax maps and all of those in context were used to locate major waterways and shorelines.

We used vegetation analysis both on the field and from color infrared and natural color photography taken simultaneously.

There was attempts to calibrate these delineations with known mean high water data at the time, that is, the Earth Sat report in the Walden Swamp refers to mean high water datum at 3.1 feet and so on. So we did use vegetation. We did use, in conjunction with some of our work where the NOS information was applicable, established mean high water datums, the tide gauges, and time tide photography used in their '62-'64 studies in the area. We have used in conjunction with this surveying of datums on the ground, or through Storch Engineers or others,which didn't work, the staking of the high water line at the time of mean high water, at least we thought about it, except in reeds we couldn't see it so well, and, of course, the time tide controlled photography of the U.S. Coastal and Geodetic Survey. These are the primary sources that were used by us in developing the State's claim or cataloging its claim to ownership.

We did look at other data, as I indicated earlier in my testimony.

Q Mr. Yunghans, as far as your biological studies are concerned and your studies of vegetation, would you for the record briefly outline how those studies are used? I think most of us know it generally, but I think we should speak in terms of some eye reading this in the record, never having encountered this before.

MR. GOLDFEIN: Your Honor, I don't want to preclude his answering that question. I would point out it is our intention in Dr. Feinberg's testimony to discuss each of these further generally and to talk about how they are related.

THE COURT: I realize that. I understood he would, I'm just trying to get a very brief overview here. Don't compare your competency with Dr. Feinberg at all, you do the best you can with this. Do you feel capable of answering that question?

A Try the question once more, I was listening to someone else.

Q At least what this biological test briefly is all about. How do you employ a study of vegetation, or the color, or vigor of the plants to determine where mean high tide would be?

A We can show by the vegetation in the Hackensack, existing vegetation, particularly phragmites, of its relative frequency of inundation, that is, is it flowed very frequently, is it flowed not at all, or something in between, and couple, that with tidal access we can say with a good degree of certainty that the line we draw in terms of so called green phragmites is not the mean high water line per se, but is something at or less than it. It is a conservative estimate.

As far as the other kinds of vegetation, we used the work done in Tuckerton to extrapolate, your Honor, and the Newark-Elizabeth. We had data there on the overflow from spartina alterniflora.

We used it to obtain this so called ten foot overflow from the tidal creeks. That is how that was derived, but those are technical matters which will be discussed by Dr. Feinberg. One of them details with the work in Tuckerton and the ten foot overflow, the other details with the phragmites in Hackensack. One is Newark-Elizabeth, the other is Hackensack.

Q (The Court) When you speak of signatures, signatures used within the context of this proceeding and then the context of the studies conducted by the State, signatures mean certain things appear on photographs, primarily on photographs. Is that right?

A That is correct sir.

Q And using your infrared photography and your false color red photography, certain species of plants will come up, will show up with a different color?

A And tone and texture.

Q And tone and texture?

A Yes sir.

Q Which the State is contending is directly related to the degree of being flowed by water?

A Yes sir.

Q Tide water?

A Yes sir.

Q Is that correct?

A Tidal access is always a criteria in these matters.

Q And is it so that some species of plants will grow, not necessarily flourish, but they will grow to different degrées in different areas, growing as to where the high tide stops. Isn't that so?

A In a general sense.

Q Well, phragmites will grow in an area that is not flowed by high tide?

A They certainly will. They will grow on the side of the Turnpike.

Q And they will also grow where they are flooded by high tide?

A They certainly will.

Q What you mean by signatures, at least the State contends, that those that are regularly flooded by high tide have a different signature, i.e., a different color, a different tone and different texture?

A That's correct, your Honor, in a general sense.

Q In a general sense.

MR. WEIGEL: Botanically we don't agree with what Mr. Yunghans said for whatever purpose.

THE COURT: I said they contend.

MR. WEIGEL: To our botanical people it is one of the central issues, the phragmites communis is a contra-tidal indicator.

THE COURT: Is what?

MR. WEIGEL: In other words, phragmites will not withstand,by its nature, will not withstand regular tidal inundation.

THE COURT: That ought to be easy to resolve, let's take a look at the place where the tide is coming in and see if the phragmites is there.

THE WITNESS: That's right, your Honor.

MR.WEIGEL: We are talking about regular tide intrusion and one of the great problems in any kind of a field trip, your Honor, and one of the great problems that we have with any photography, is that it represents a view at an instant and unfortunately the law, as the Court knows, is something that is really a rather theoretical kind of thing. It is where nineteen years of data at mean high tide were, were bound with the land, given absoulte pure nature, with no changes in the water elevation, it is theoretical.

Q (The Court) Aren't there areas where we can see phragmites on a map, on a photo made in the 1930's? Let's say we can focus on a particular area and determine everybody agrees there are phragmites on that photograph at the certain location on a photographic map in the 1930's, and can't we turn to NOS and say to them, "Now in this area how often was the tide flowing?"

A No sir, not normally.

Q Not in any area at all?

A Only if it is adjacent to an existing waterway.

Q Well, adjacent to an existing waterway. It seems to me, maybe I'm oversimplifying, but we ought to be able to put this biological test to rest one way or the other in this case with certainty and I know what to expect, you are going to have experts and they are going to have experts.

MR. PORRO: You get different results from them.

THE COURT: I get upset sometimes by conflicting testimony by experts. You can have them in a condemnation case on evaluation and how one man can say 400,000 and another say 20,000 is very distressing to a Court and to a jury.

I think you've got to see the actual applications of these doctrines on a specific piece of property and actually see the application can be different. It is very frustrating I admit.

Thank you, Mr. Yunghans, you have been very helpful.

THE WITNESS: You are welcome, sir.

* * *

CERTIFICATE

I, EDWARD SALBIN, Official Court Reporter, do hereby certify the foregoing transcript.

Edward Salbin

3/17/76

A-3311-72
no Brf.

A101 SEP 1979

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A-3311-72
(On Remand to Law Division,
Bergen County)

CITY OF NEWARK, et al.,

Appellants,

vs.

NATURAL RESOURCE COUNCIL, et al.,

Respondents.

FILED
APPELLATE DIVISION
NOV 2 1978
CM
Elizabeth McLaughlin
Clerk

VOLUME III

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
Docket No. L-16799-72

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ELIZABETH McLAUGHLIN
CLERK

3C

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY,

Plaintiff,

vs.

BOROUGH OF EAST RUTHERFORD, et al.,

Defendants.

FILED
SEP 21 1979
Stephen W. Townsend
CLERK

March 15, 1976,
Courthouse,
Hackensack, New Jersey.

BEFORE:

HONORABLE THEODORE W. TRAUTWEIN, J.A.S.C.

Reported by:

EDWARD SALBIN,
Official Court Reporter.

I ___

A P P E A R A N C E S :

For Natural Resource Council, et al.:

WILLIAM F. HYLAND, Esq.,
Attorney General of New Jersey,
By: MORTON J. GOLDFEIN, Esq.,
Deputy Attorney General.

For Trustees of the School Fund:

WILLIAM C. RINDONE, JR., Esq.,
Deput Attorney General.

For City of Newark, City of Elizabeth,
N. J. Land Title, Esther G. Bertoni, et al.:

JOHN R. WEIGEL, Esq.

For Borough of East Rutherford:

ALFRED A. PORRO, JR., Esq.

WILLIAM B. SHEDD. Esq.

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THE COURT: Let the record show that by consent Exhibits R-158 through R-245 have been marked for Identification. The description of each exhibit as to what it is can be obtained from my exhibit list if you ever need it. Don't forget they are just marked for identification now.

All right, we concluded with Mr. Yunghans on Tuesday, I believe.

Mr. Goldfein, you can proceed.

MR. GOLDFEIN: Dr. Feinberg is the next witness.

EDWARD B. FEINBERG, sworn.

DIRECT EXAMINATION BY MR. GOLDFEIN:

Q. Dr. Feinberg, would you state your present position? A. I'm Assistant Chief of the Office of Environmental Analysis in the Department of Environmental Protection of the State of New Jersey.

Q. How long have you been so employed?

A. I have been with the department in the Office of Environmental Analysis since September 14, 1970, which was before it was a formal office.

Q. Would you state your academic background and other background leading up to this position?

A. I have a Bachelor of Science degree from

Massachusetts Institute of Technology, a Master of Science from New York University, and Doctor of Philosophy from New York University. These are in the general field of aeronautics and astronautics with specialties in fluid mechanics and space physics. I completed a remote sensing short course at Ohio State University in the fall of 1972.

THE COURT: What was that course?

THE WITNESS: A remote sensing short course.

Q Where was that? A. Ohio State University.

Q When did you take that course?

A. In the month of October, 1972. It was one week during that month, and I served in the United States Air Force. I was discharged in March of 1970 as a captain. My specialty was geophysicist and some of my duties involved photo interpretation.

THE COURT: Excuse me just one second. I think you gentlemen know, from other cases, just about what the areas are that Dr. Feinberg is going to testify in. Is there any challenge to his qualifications?

MR. PORRO: I would like to put on the record the challenge particularly relative to the interpretation of the -- photo interpretation, which I know he will get into and I would like that objection so noted, the interpretation, the vegetation interpretation from aerial photos.

MR. WEIGEL: I do not concede Dr. Feinberg's qualifications in photo interpretation, or in remote sensing.

THE COURT: All right, your objections are noted for now, so that you are not conceding this. There will be another time, another day, when you can go into that in depth if you wish to enlarge on this area you might at the present time.

MR. GOLDFEIN: The only point I want to make, your Honor, is consistent with the pretrial order I have asked Dr. Feinberg to state his background, not for the purpose of qualifying him as an expert today, but to give the Court some idea of his background prior to his involvement in the program he is going to discuss, and I am going to ask him now to give you a kind of outline which I thought was helpful in Mr. Yunghans's testimony last week, what it is he is going to talk about. I think you will see from that the intention is to give you the scientist's view of the program building on the chronology that Mr. Yunghans related last week, and it is not in his role as an expert that he will be presenting that, but rather as to his role as a scientist involved. He is going to present what went on. So I don't know that it is necessary he be qualified at this time. Of course, the objections are noted.

THE COURT: All right, it may be moot, I don't know.

Q. [By Mr. Goldfein] I think my question was, when did you become involved in mapping efforts with the State?

A. I was involved with these efforts from the inception within the Office of Environmental Analysis. The first involvement was with the wetlands mapping program which started in the fall of 1970, late fall of 1970, which was shortly after I arrived in the State and started to work.

Q. Were there elements or themes in the mapping of the wetlands which carried over into the mapping of tidelands?

A. Yes, there were.

Q. Can you give the Court some orientation as to what your testimony will be more or less in outline form?

A. I would start with a few definitions so that the terms that are used, as I am using these terms, are clearly defined in everybody's mind. Then I get into the background and experience of the Office of Environmental Analysis with such projects as wetland mapping as that pertained to the later program on tidelands mapping, but did precede it.

Thirdly, a discussion of the assignment of the tasks and the steps we took to start the program officially.

BY THE COURT:

Q When you say "start the program officially," you are talking about wetlands mapping now?

A. No, I'm talking about tidelands mapping, and finally a detailed explanation of how the program, the tidelands mapping program was conducted and how the maps were prepared from the work that the State did. Starting with the area of definitions, start with mean high water. This is defined and used by the State and by the National Ocean Survey as an average of all of the high tides at a point for a 19-year period, period.

Mean high water is a datum, it is a tidal datum. It is a particular elevation that is selected from a range of tidal measurements and these averages. Mean high water line is a projection of that datum to where it meets the surface of the land where this intersection takes place.

Biological high water line is a line that may be defined either on the ground or on a map, or through the use of photographs that is based on vegetation that occurs.

Tidelands are those lands generally below mean high water and flowed by the tides. Sometimes this is used interchangeably and in our common usage with the term, riparian lands, although in practice we have pretty much called tidelands the existing scene and riparian lands includes the existing scene of tidelands and former scene.

Remote sensor is a technique of gaining information about an object or a set of objects at a distance. An example would be, for a simple example, looking at the clock to tell what time it is. You are looking at a distance and using light to judge the position of the hands on the clock. That is one form of remote sensing. It is techniques in practice you usually use either a camera or some type of electronic equipment to record this information and it involves radiation other than just in the visible.

Photogrammetry is a technique--is a technology involved in obtaining reliable measurements by means of photography, and lastly, I would just like to distinguish briefly between two terms, precision and accuracy.

Precision has to do with the repeatability of a given set of measurements. If the measurement is repeated a dozen times and you get the same answer, or very close to the same answer, through this measurement process each time, you can expect you have a precise answer.

However, accuracy has to be measured against some standard, some known standard. It involves an outside standard in an absolute sense.

Precision is a relative term in repeatability of an operation, and accuracy is an absolute term.

MR. WEIGEL: I just want to indicate on the record that I don't accept for purposes of our moving through this entire proceeding all of the definitions by Dr. Feinberg as given. I consider some of them to be inaccurate.

THE COURT: He is telling us what they consider these to be in light of what they did. All right.

A. In the background of our work on the wetlands the first effort we made was a contract with Storch Engineering to do a preliminary analysis of possible techniques that could be used in wetlands mapping and the question was also involved with relation to mean high water to a degree. R-123 and R-124 that were marked last time and R-228.

THE COURT: R-123 and R-124 are really volumes I and II of Wetland Mapping Methods for the State of New Jersey, prepared by Storch Engineers. It is dated May 28, 1971, and 228, R-228 is a contract between the State and Storch Engineers dated December 23, 1970, for Systems Studies for Wetlands Mapping. I take it the contract produced the other two exhibits?

A. That's correct.

THE COURT: How did you get to Storch, Dr. Feinberg? Are they specialists in this type of thing, or what?

A. When the Wetlands Act was passed, signed into law, on November 5, 1970, a number of firms started to come in to see Mr. Yunghans, obviously looking for possible work in that area, and some 30 firms came in during this period of time and one of them early was Storch Engineers, and we had determined that we would like to have a civil engineering firm take a look at the possible techniques for mapping that could be used and they were selected, being a New Jersey firm at the time that we were familiar with, and they produced the study. This work was a preliminary step to a wetlands pilot project. One of the tasks was to estimate the tidal reach on the various streams and tributaries which flowed into the Atlantic, Delaware Bay, and Delaware River from the Raritan River south around to Trenton.

R-228 is the contract that specified the work that is produced and R-123 and R-124-- R-123 is a summary of results. On page A-65 of R-124 and the following pages there is included a discussion. It starts a discussion of methods of determination of mean high water, and I won't go into the details of this since they are in the report, but we did have information at that time from this work.

THE COURT: I would like you to continue that form of testimony wherever exhibits are referred to in your testimony, where you at least conclude that certain pages should be called to the attention of the Court and Counsel within the context of this proceeding. Do just what you have done. Of course, they can roam at will over these reports at a later time, but just within the context of this mini-proceeding, I would like that done.

A. If I could have R-125, please?

BY THE COURT:

Q Will you tell me when you are going from one area to another within your outline?

A. Yes, I'm still in background related to the wetlands work that has implications for tidelands delineation.

BY ?

Q R-125 is Wetland Mapping Pilot Project, March, 1971, D.E.P., Office of the Commissioner.

A. This request for proposal for a wetland mapping pilot project was based on the results that were reported to us by Storch Engineers, plus further analysis that was done by Mr. Yunghans and myself prior to the formal delivery of the Storch final report, but we had had the draft material by that date, and we produced this document which was sent to everyone, every firm who had come in to see us during the intervening period, to indicate an interest in doing wetlands related work. We also searched out some other firms and included them on the list, potential contractors, for doing the wetlands mapping. This document was a specification that asked for certain responses from the contractors, specifically related to mean high water, or at page 2, objective 4.1 was to develop a practical methodology to determine mean high water for New Jersey coastal wetlands. Objdctive 4.2 was to use this methodology to locate the line of mean high water throughout the project test site. We had selected two test areas that Mr. Yunghans mentioned previously, the Tuckerton area and Mannington meadows area in Salem and they were described in this document. On page 16, section 5.9 states that the State of New Jersey would provide the consultants with some tide gauges and that the consultant would be responsible for acquiring or reducing the data from these gauges. On page 17, section 5.12.1, asked the consultant in his response, potential consultant, in his response to the RFP to provide certain information regarding how he would develop his techniques and apply his techniques for mean high water. These include a detailed description of how mean high water would be determined by that consultant; a statement of the accuracy of his methods; a statement of whether or not he would employ the tide gauges which the State would make available; how would he employ these gauges; is the method he would employ new or has it been used before; has it been used by the consultant, and what is the legal basis for acceptance of the resulting mean high water line that he would produce, by the courts.

These were questions that we asked that the consultant respond to in replying to this.

THE COURT: What page was that on?

THE WITNESS: That was page 17, section 5.12.1. There were ten responses representing approximately 16 separate consultants out of this original group of over 30.

THE COURT: I'm sorry--

THE WITNESS: There were ten. Some of these were groups of consultants that got together to respond to the RFP because they felt that individually they didn't have enough expertise to do the whole range of requested tasks. These are R-206 through R-215. 206 is a response to proposal by Raytheon Corporation and specifically the areas dealing with mean high water responses, includes pages 9 and 10, page 13 and a portion of the Appendix. On page 9 they discussed time phase photography as employed by the National Ocean Survey, topographic determination, vegetation correlation, and on page 10 they discussed the question of legal acceptance as they see it at that time. Included in the discussion of time-phased photography and topographic determination is an estimate of the error that would be associated with these and in this instance they mentioned 0.5 in the vertical.

BY THE COURT:

Q What does that mean? Can you tell me what that means? I see they say the accuracy of this method is not really known, talking about time-phased photography. A. That's correct.

Q. [By the Court] But it is estimated that the vertical error of the boundary lines should not exceed a maximum 0.5 feet. That would mean automatically there is a horizontal error.

A. That's correct, which is unknown, depending on the slope of the land where it would be applied, but this is an outside limit.

On page 13 in section 3.3.2, under Biological and Physical Indicators, the report states that, "vegetation types are excellent indicators of true wetland conditions. Vegetation integrates many environmental parameters, it responds very sharply to slight changes in moisture and it is stationary and easily observable. Although little or no significance should be assigned to the isolated occurences of a single individual or small groupings of a single species, large stands of certain species and characteristic mixtures of other species are reliable indicators of such variables as wetland habitats, high salinity and human disturbance."

Further on, under seub-section 1 on Drainage Pattern and Density, "Drainage density is far greater below than above mean high water by virtue of the obvious fact that being covered twice daily by the tides, this terrain has more water to drain and responds by developing a denser drainage system."

And in the appendix section, Raytheon emphasizes the need for auxiliary tide gauge measurements to deal with the unpredictable aspect of the tides related to meteorology, and also in response to --

BY THE COURT:

Q Where is that?

A 12.1, it is where the paper clip is, the last paragraph on the first page of the appendix discusses the variation of the tide level depending on local topography and the hydrographic features of the particular waterway that is involved, and, finally, there is a discussion of the use of this technique with time tide photography, or tide controlled photography, by one of the individuals associated with Raytheon on the Patomac River, and that indicates that the precision of the technique is plus or minus 0.1 feet in the vertical or a tenth of a foot in the vertical, while the accuracy of that technique may be plus or minus 0.5 feet for reasons of unaccounted for constants and photo identification errors.

R-207 was the proposal by Grumman.

MR. PORRO: Your Honor, may I interject an objection at this point, if the intention is to go through with every one of the proposals, we all understand none of these companies he is referring to now were awarded any bid. First, I would like to make it clear that we object because it is pure hearsay, and what he is doing is expressing opinions.

THE COURT: He is not; he is telling us what is in the exhibit and what to look at.

MR. PORRO: Not only has he testified as to legal opinions, he has testified as to scientific opinions relative to accuracy and things of this nature.

Secondly, I think it is irrelevant. I think we are dealing with hearsay questions, I think we are dealing with an irrelevancy question.

THE COURT: Here is the problem. I think we have discussed this in the beginning. There was never a record as to what they did at the administrative level. They are simply telling us what they did. The fact that they looked at something or read something does not in and of itself establish its validity. The challenge here is whether or not it comported with legislative mandates to make studies. They have to tell us what they did and that's all they are doing here is telling us what they did, what they went through in their minds.

MR. PORRO: The problem obviously with this type of thing, what you are saying it is not coming in for the truth of what is in the report.

THE COURT: I am accepting it for the truth of the matter asserted, "This is what we did." This is not being offered at this time to prove the truth of the matter asserted, i.e., these excerpts that he has read are not proof at this time that they are valid, number one, and recognized as an acceptable technique. Keep that in mind. I don't know. I know what you fellows are thinking about this coming in without cross, but I'm not going to make up my mind in this case at this early stage. I want a record here of what they did, now.

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Mr. Weigel?

MR. WEIGEL: Your Honor, my objection is slightly different. I am concerned because I see the stack of books in front of Dr. Feinberg and I think it very important for us to know not what is in these books today and what they have gone through after the fact, pulled out to support some other propositions that we are going to get into, I think it is very important, however, to know what in fact they did to go through these books at the time the proposals were made, what they drew out of the books at that time, what they didn't draw out, and I think it is very bad in this record to allow Dr. Feinberg to go through after the fact and to draw out what happens to be in those books, with no indication at all in this record that they were aware of these facts at the time the proposals were made, that somebody reviewed and analyzed them, that they gave consideration to it and tied it together.

THE COURT: Mr. Weigel, that is what you are going to do in your case. You can put your case in, you can call him back to the stand if you want to on your case and cross-examine him. We have to get a beginning point someplace here and I think that is what we are doing. They are opening their files to you and saying, "This is what we looked at, this is what seemed to be important to us at this time, no matter how sketchy, at least we have a beginning point here. It is not necessarily sketchy, because I noted a look of shock on Dr. Yunghans's face there. They are telling us what they did. I assume they did a lot more and a lot more talking than what they are going to talk about right now, but at least I want to get some base to operate on. I can appreciate your concern, I can. We are going to try to do the best we can here. We are on R-207?

THE WITNESS: That's correct.

THE COURT: DEP, a proposal from DEP from Grumman on Meadowlands Mapping Project, April 21, 1971.

THE WITNESS: On page 2 of the Grumman proposal, R-207, there is a discussion over the methodology and they also would use time tide photography and they discussed the accuracies obtained by NOS with one year's worth of data at tidal stations. They listed this as 0.1 feet vertical and in a period of less than three months they expect the accuracy to be no more than plus or minus 0.25 feet in the vertical on page 5.

BY THE COURT:

Q. Don't they say .25 feet?

A. Yes.

Q. I thought you said zero.

A. No, I said 0.25 feet.

Q. I beg your pardon.

A. On page 5 the last paragraph they discuss the problem with locating the line in marshy water, the line of mean high water in marshy areas is based on the tidal control photography technique. On pages 6 through 10 they list the details of the steps that they would follow in proceeding with this mean high water line, and particularly on page 10 in the middle of the page they state, "The accuracy of the charted mean high water line is a function of the tideland slope as well as the error in tide level at the time of charting. The Little Egg Harbor - Mullica River test site"--which is our Tuckerton test site, has a particularly shallow gradient, with a planar change in tide line often exceeding 100 feet per 0.1 feet change in tide elevation.

Pages 11 and 12 also include responses to particular questions of the RSP.

R-208 is a proposal of Earth Satellite Corporation. At the beginning of the volume bound into the volume is an addendum dealing specifically with the mean high water question. Earth Satellite proposed a test of a biological technique. They include this statement at the end of the second paragraph, "We do not believe any potential consultant can justify wetlands mean high water determination as being fully operational."

This was at the time that these proposals were submitted. They proposed an approach to test in this pilot program a biological technique by making measurements with tide gauges in the area and locally placing points of mean high water on the ground.

On the second page of the addendum at the bottom, they also discuss the problem of horizontal accuracy in a flat marsh area, and some of the problems of defining what the surface of the marsh is.

The third page of the addendum also discusses the accuracy of tide-controlled aerial photography and they state it is estimated at better than plus or minus 0.5 feet vertical. They have no statement as to horizontal accuracy at that point.

And, finally, under 65.12.1, in the body of the report, which is also clipped because this report did not have numbered pages, the 10 pages following that discuss biological high water and mean high water measurements that they proposed to make as part of this project and describe their techniques.

R-209 is the proposal by RCA. The area of that proposal that dealt with mean high water specifically was pages II-37 through II-39. They also generally proposed to use a tidal control photography approach, but they do mention biological indicators that would be tested.

R-210 is the proposal of Storch Engineers, together with Photo Science Incorporated and Coastal Zone Resources Corporation. One pag- 3 of that report they discuss the problem of mean high water determination and raise the question of how accurately one can interpolate elevations of mean high water between tidal stations. One page 5 they discuss the objectives of the program related to mean high water, and on page 8 they get into a detailed technical discussion of the mean high water techniques. Pages 8 through 10 contain this discussion. They would use time tide photography for part of their work to photograph the high water line and section 5.12.1.2 on page 9, they discuss the accuracies of the method, and it is based on a hypothetical grade of 3/10th per cent, they expect a tolerance horizontally of plus or minus 48 feet.

Q [By the Court] Forty-eight feet horizontally?

A. That's correct.

Q You didn't hire them, did you?

A. Finally, on page 31 they discuss anticipated problems.

THE COURT: Weigel, Porro, and Gladstone.

[Laughter.]

THE WITNESS: You must be reading my mind.

A. They discussed the problem, first of all, of obtaining black and white IR photography on a time tide controlled basis, need for proper weather, the proper time for photography determined by on-ground observation of the tides and the right time of day for sun angle and problems such as this.

Second of all, they state determining the mean high water line with accuracy is also a problem. The elements contributing to the accuracy were discussed in section 5.12.1.2. "To insure the validity and supportability of the technique basis for establishing the line of mean high water, our procedures will be reviewed by the team's legal consultant, Alfred A. Porro, Jr., Esquire, who has specialized experience regarding tidal problems in the tidelands."

THE COURT: I wonder what would have happened if Storch was ever hired?

MR. PORRO: We wouldn't be in conflict, we wouldn't have the lawsuit, everything would be done right.

[Laughter.]

A. [Continuing] R-211 is the proposal of Aero Service Corporation. On page 2 they state that "The tidal information is to be obtained from tide gauges."

On page 3 they state that "Photo interpretation, supplemented by field investigation, is expected to be the preeminent tool in the determination of the mean high water line and the upper boundary of the wetlands."

On page 10 they refer to a study that they did for the New Jersey Department of Conservation in the Hackensack Meadows in 1969, and they attached a copy of this report as an appendix, which is included with the exhibit. This dealt with electrical resistance measurements to determine areas of former tide marsh.

On page 14 they describe the photography they would use and on page 24 they discuss field observations related to the so-called trashed line which is left by the generally last high water that was in an area or early ones; if the last one was not as high as the early ones that left a deposit along the shoreline that would be a possible field indicator to help in the analysis.

On page 32 they stated, "In conjunction with the issue of riparian rights, Dr. McNamara of Lehigh University, who was associated with Aero Service in this proposal, has utilized aerial photographic interpretation of plant communities to locate the boundaries of tide flow in the Hackensack Riverlands district."

On page 35 at the bottom there is a statement that the "applicable plant community associations for saline and brackish tidal marshes are rather well documented, however, this is not the case for tidally affected fresh water marshes. In the latter, the water level variation-plant relationships are less than perfectly known."

Q [By the Court] You know, I'm interfering and not giving them a chance to do it, but I have always been curious about this. Where any kind of a stream or a watercourse is affected by the tides and you can trace those tides to salt water, do you ever have water that is completely fresh? I guess you would.

A. You can.

Q You would have to, wouldn't you?

A. On the Delaware for example, yes.

Q I was just thinking of the Delaware. There is a point where there is probably no salinity at all, nevertheless, if the water is going to rise at one point in the river it is going to have to rise further up. A. There is a salt wave that moves up and down a portion of the river in Philadelphia and rarely gets up as high as Philadelphia, where the intakes are for the water supply of that city. However, the tidal effects are felt upstream all the way to the Route 1 bridge in Trenton, because the tide coming in pushes on the water coming down that is fresh water and raises--

THE COURT: Beyond that there hasn't been any measurement of tide?

A. It is my understanding they haven't been able to measure tide beyond that.

[Off the record discussion between the Court and Mr. Scoppetuolo.]

A. On page 36 at the bottom there is a statement that "Within saline and brackish marshes, those under consideration (the majority) in this pilot project, salinity, depth of inundation and frequency of inundation exert tremendous influences on the distribution of plant associations. While other factors, such as tide range, P.H., substrata characteristics and turbidity, are all important within the saline and brackish marshes, salinity is the greatest single factor. The diversity of plant associations is inversely proportional to salinity."

On page 39 under Delineation of the Mean High Water Line, there is a discussion that, "Values of mean high water at two tide measuring stations will differ, but it is not necessarily true that interpolation between the stations will provide accurate data for points between the two stations. The configuration of the shoreline, the exposure of the shoreline to prevailing winds and other factors will affect the height of mean high tide. Meteorological conditions will, of course, greatly affect the height of the tide in relation to the normal predicted tide at any given time."

Page 40 and page 41 continue and they state that they will make independent determinations of mean high water to check against the photo-interpretive work.

On page 42, section 5.12.1, item 2, on Accuracy, the statement -- there is a statement that, "It is not possible to predict the accuracy with which we will position the mean high water line. Vertically, we can obtain accuracies of one- or two-tenths of a foot by ground survey and of 5/10ths of a foot photogrammetrically. The horizontal accuracy of any given contour will be a function of ground slope."

R-212 is the proposal of Lockwood, Kessler and Bartlett, Inc. The pertinent pages are pages 3 through 5. On page 3 under section 5.12.1, they describe how mean high water will be determined. They state, "By photographic interpretation to delineate the perimeters of key marshland vegetation species which can only thrive in an environment subjected to alternate flooding and exposure during the lunar months at a frequency which meets the requirement of mean high water frequency of flooding."

That is one technique. Also by photography interface for areas not covered by vegetation. Under the accuracy of the method, they state"the accuracy of this method in tidal marshlands which have developed on tidal flats exceeds the accuracy of conventional field survey or photogrammetric mapping in such an environment. Conventional methods would attempt to locate the intersection of a specific horizontal plane with a near horizontal plane to a questionable degree of accuracy, in an area densely covered with marsh grass and meadow matte. The accuracy of establishing a mean high water line by establishing perimeters of indicator species would depend on the width of mixed zones between tidal and upland species and the viability characteristics of both upland and tidal species within this mixed zone. High water shorelines located by tide controlled photography in exposed shoreline areas should meet national map accuracy standards, assuming that there is no wave runup, or that a correction has been made for wave runup."

On page 4, they discuss the use of the supplemental tide gauges and the legal basis. That carries on to the top of page 5.

R-213 is the Proposal of William A. Gould and Associates. A portion of this proposal was prepared by Dr. Blair Kinsman, a hydrologist,and deals with the question of the definition of mean high water. The fourth paragraph on this page states, in relation to determination of high tide levels, the following discussion is given: "The extension of this concept of a high tide level to a coastal marsh is entirely inappropriate and unrealizeable."

It goes into some detail about the Mannington Meadow and discusses the complexity of the surface representing mean high water within the test site,"its elevation will change from point to point depending on the energy dissipation which in turn depends on the frictional drag of the bottom. Whatever the form of the mean high water surface, it certainly is not a plane. When one remembers that three points are necessary to establish a plane, the proposal that so complex a surface be established with precision from brief records made at five points can be seen for what it is: arrant nonsense."

The indication of this to us was that five tide gauges would not be enough to define mean high water within the test sites. He continues within the following paragraph to state, "However, assume that the mean high water surface could be well determined. To generate the high tide line would require the determination of its intersection with the ground surface. In coastal marsh and adjacent areas the ground surface, itself, is not sufficiently well known to permit a useful determination. Because the slopes of both surfaces are so flat, an error of as little as a centimeter in the elevation of either surface would lead to a lateral displacement error of hundreds of meters. A line this uncertain is hardly the kind of thing that could be expected to stand up in court."

He continues then to describe an alternative approach that he recommends which does not involve the delineation of mean high water.

R-214 is the Proposal of Edward H. Richardson Associates, Incorporated. Their discussion on pages 3 and 4 involve a technical response to the subject of mean high water delineation. They would use a time tide approach. On page 4 in the second paragraph they state, "The problem of the horizontal delineation of such a line on some parts of the tidal marshes is very difficult. Large areas of the order of 1,000 feet in extent or more have mean elevations essentially level with local variations of two or three inches above and below the mean. Where the mean is at the mean high tide level, the actual mean high tide line would show a maze of small islands varying from a few inches to many feet in horizontal dimensions which would be impossible to locate in detail by any practical means and equally impossible to show at a scale of one inch equals 200 feet.

Such areas would have to be marked and labeled as 'at mean high tide.'"

They also claim at the top of that page an accuracy of 2/10ths of a foot vertically for their method.

Finally, R-215 is the Proposal of North American Rockwell Space Division. On pages 18 and 19 they discuss their proposed techniques and propose essentially a photogrammetric method to plot a contour of mean high water using the tide gauge information.

These reports were evaluated through a detailed point scoring system which checked each aspect of the problem and derived compsoite scores. We also had outside assistance from the National Ocean Survey to help guide us in this evaluation.

We reviewed, in preparing this, the request for proposals and reviewing the proposals themselves, certain technical literature which is relevant to the problem at hand. If I can have R-202 and R-203.

R-202 is *Shore and Sea Boundaries, Volume I,* by Aaron L. Shalowitz, and R-203 is Volume II of the same publication. These are publications 10-1 of the U.S. Department of Commerce Coast and Geodetic Survey and they are provided as exhibits for convenience of the Court, since I am sure they will be referred to many times in the proceedings that will take place. These were consulted by us at the time that we were reviewing the other proposals that we were talking about and at later times.

Exhibit R-204 is another coast and geodetic survey publication, special publication number 135 entitled, "Tidal Datum Plans by H.A. Marmar."

MR. WEIGEL: For the record, I am willing to stipulate R-202 and R-203 and R-204 are probably the best, most accurate, reliable documents of their type.

A. [Continuing] R-205 is a third coast and geodetic publication number 30-1, "Manual of Tide Observations."

We also consulted and reviewed certain publications with regard to aerial photography, photographic interpretations and photogrammetry. These included the "Manual of Photographic Interpretation," published in 1960 by the American Society of Photogrammetry, the "Manual of Photogrammetry, Third Edition," which is two volumes, published in 1965 by the American Society of Photogrammetry, and the "Manual of Color Aerial Photography," published in 1968 by the American Society of Photogrammetry.

MR. WEIGEL: Are they exhibits?

THE WITNESS: I did not bring these as

exhibits, but if they are desired, I can bring them.

A. [Continuing] In reviewing the wetlands maps and proposals we had a meeting in Trenton that involved the prospective consultants, Earth Satellite Corporation, which finished at the top of the rating list, and also involved in that meeting were Mr. Cravat and Mr. Thurlow of the National Ocean Survey, who came up to provide the State with technical assistance in arriving at a contract.

BY THE COURT:

Q. Mr. Cravat was with NOS, was he?

A. That's correct. Both Mr. Cravat and Mr. Thurlow. In the course of the discussions of the scope of work for this contract, NOS emphasized that there would not be sufficient time within the period of time of the pilot project to get accurate enough tidal datums, to test out fully the botanical theory that was proposed by Earth Satellite to be tested as part of this project. So that portion was divorced from the project, the pilot project itself, and made a separate study with the NOS and the State of New Jersey.

Earth Satellite Corporation was requested, however, to do a botanical delineation the best that they could do with the information available as part of that wetlands pilot program, to come up with a biological high water line which they felt was reasonably related to the mean high water line.

Exhibit R-229 is Contract 1P-356 between the State of New Jersey and Earth Satellite Corporation with Mark Hurd Aerial Surveys, Incorporated, as the subcontractor--I believe they were the subcontractor on that to Earth Satellite Corporation--to carry out the pilot work.

THE COURT: Let's take a brief recess.

[Court adjourned for lunch at 12:30 to 1:30.]

AFTERNOON SESSION

THE COURT: All right, just before we start I want to enter on the record, unless there is an objection, that I intend to accept into evidence R-123, R-124, R-228, R-125, R-206, R-215, R-207, and if I repeat, why, pardon me; R-208, R-209, R-210, R-212, R-213, R-214, R-215, R-204, R-202, R-203, R-205, R-229.

Those are accepted into evidence. These are now marked in evidence not for the truth of the matter asserted therein as being evidential of truth,or having probative value, but solely for the purpose of this hearing, that is, they are offered to show what steps were taken by DEP in the promulgation of the maps. That is, if there are references in those exhibits either that you can perceive by reading them or because of added emphasis by Dr. Feinberg reading them, those matters are not accepted for the truth of the matter therein asserted as being of probative value, but something that DEP thought about, considered and read themselves, vis-a-vis what was done in preparing these maps, and that is not to say some of that material eventually will be accepted by the Court for the truth of the matter asserted. That will depend on what happens during the trial.

MR. WEIGEL: I think I understand what the Court said. I understood that all of this information was considered by the State with reference to the wetlands mapping project. Do I also understand that this same material was reviewed and considered at the time that you were doing tidelands mapping?

THE COURT: I don't want to get into any confusion now. I have permitted, as you know, testimony about wetlands and wetlands pilot projects as being a beginning point in the State doing any mapping at all.

MR. WEIGEL: Right.

THE COURT: And I have permitted it because there has been a representation to me that a lot that was learned during the wetlands pilot project in preparation thereof became part of the State's consideration, vis-a-vis tidelands mapping, and that this is all one long story.

MR. WEIGEL: This is in effect part of the learning process, is that it?

THE COURT: I think that would be a good expression, yes.

MR. WEIGEL: With that understanding, I certainly don't object.

THE COURT: Any objection, Counsel, to that kind of a limitation at this stage?

MR. GOLDFEIN: No, your Honor.

MR. PORRO: Your Honor, the relevancy objection has been noted and is continuous?

THE COURT: Oh, yes, absolutely, you have protection on that score.

MR. RINDONE: Your Honor did not mention R-211 in the list of exhibits accepted.

MR. WEIGEL: No.

MR. RINDONE: I thought they were all

included.

THE COURT: I intended that all of the responses are in evidence starting with Raytheon, R-206, everything that Dr. Feinberg referred to by way of exhibits this morning is in evidence at this time and should be so marked.

Now, additionally, there has been marked for identification R-246, sample phragmites communis, R-247 sample spartina alterniflora loisel; R-248, sample spartina alterniflora loisel low-growing form; R-249, sample spartina patens; R-250, sample typha angustifolia. Where are these samples?

MR. PORRO: Your Honor, on that basis alone it should be irrelevant. [Laughter.]

MR. WEIGEL: Your Honor, I am prepared to stipulate that those grasses are what they are represented to be.

THE COURT: They are only marked for identification.

All right, Mr. Goldfein.

BY MR. GOLDFEIN:

Q Dr. Feinberg, do you recall where you concluded your testimony this morning? You were referring to R-229, the agreement with Earth Satellite

Corporation?

A. Yes. R-229 is Contract 1P-356 between the State of New Jersey and Earth Satellite Corporation for the wetlands pilot project in Tuckerton and Mannington Meadows. The contract spells out the specifications for that project, including the requirement to produce a biological high water line in both areas.

One of the products of this was a number, I believe, of about 26 samples of the vegetation that were used in the program. These were packaged and preserved, dried and preserved, and were brought in. Five of those that represent species related directly to this process of biological high water as opposed to just general wetlands mapping. And these are R-246 through R-250 and R-221 through R-227. The final report was prepared for the wetlands pilot program, which has previously been submitted as R-127, in the fall of 1971, the late summer, actually, in August, early August.

It was determined that having evaluated the products from the pilot program that the State-wide wetlands mapping program should continue. A contract was entered into with Earth Satellite Corporation and Mark Hurd Aerial Surveys to go into State-wide operational mapping of the wetlands on the same basis as had been demonstrated in the pilot program, and along with this

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THE COURT: You are talking about R-127. Is that correct?

THE WITNESS: The contract would be R-221. I was going to be on that, I was just cross-referencing that report which is already in evidence.

THE COURT: Fine.

THE WITNESS: The contract for the State-wide mapping work is Exhibit R-221, State contract 2P-83. This contract represented a portion of the continuance of the wetlands mapping based on the funds available in that fiscal year, and there was another contract in the following fiscal year, Contract 2P-301, which is R-222, and subsequent to that contract, as addenda to Contract 2P-301, and as exhibits R-223, R-224, and R-225, are continuations of the contracts in ensuing fiscal periods for the mapping program. We only had--we had a limited appropriation in each fiscal year, based on the amount of work that could actually be completed and then we would get them funds for the next fiscal year.

THE COURT: All right, R-221 through R-225 will be received in evidence on the same basis as heretofore without repeating those conditions.

THE WITNESS: In getting each of these contract extensions, they were all done on a waiver of competitive bidding, and each time an application had to be made to the Director of the Division of Purchase and Property by the department.

R-226 is an example of such a letter from Commissioner Sullivan to Mr. Frank M. Papale, who was then the Director of the Division of Purchase and Property since July, 1973. This is one example of this type of process.

THE COURT: R-226 in evidence for the same limited purpose.

THE WITNESS: And accompanying this would be a statement from the proposed contractor that he would perform the work stipulated in the contracts which we would prepare, for the given price.

An example of this that went with the previous letter is R-227. It is a letter to Commissioner Sullivan from Earth Satellite Corporation.

THE COURT: R-227 in evidence, same limitation.

THE WITNESS: Each of the contracts, P-229 and R-221 and the addenda, R-222 through R-225, were accompanied by similar letters.

As I mentioned earlier, when Earth Satellite was up in New Jersey to negotiate the first wetlands contract, R-229, on advice of the National Ocean Survey, the State determined that a check could not be made of the biological line within the time period allowed for the pilot project and that time period had been set by the requirements to meet the time constraints within the wetlands act, to complete State-wide mapping. Consequently, we determined to do a separate check with the NOS. However, Earth Satellite Corporation at that time at no cost to the State determined to go ahead and make the check on their own as soon as it was feasible. Contract R-221 specified the flying for the wetlands photography for the State-wide mapping program to begin in August of 1971, mid-August, and continue through the growing season, at which point if the photography was not completed they were to come back in the following year and complete the photography of the wetlands mapping.

During that first photographic phase Earth Satellite - Mark Hurd flew tide control black and white, infra-red photography for the Tuckerton test site. They subsequently obtained tidal datums from the National Ocean Survey from the tide gauges which the State had put in place, and proceeded to run their own tests. The report of that was R-151. So Earth Satellite did continue to do their testing, but at that point it was outside the scope of the State wetlands mapping program.

Right now, I will move to the second part.

THE COURT: All right, R-229 in evidence, same ruling and purpose.

THE WITNESS: The wetlands pilot project was completed in terms of the project report in the late fall of 1971. In that time period the so-called gray and white map for tidelands claims in the Hackensack had been submitted to and suppressed by the Court for probative purposes and Mr. Yunghans was asked and communicated to me that we now had an assignment to see if our techniques that had been developed in the wetlands program were amenable to solving the tidelands delineation problems that the State had been charged with. In this time period the late fall of 1971, we met with Mr. Clayton and Mr. Greenberg of the Attorney General's Office to determine in a general sense what the legal requirement were and what the framework was within which we were working.

This is a similar process to that which we had followed in the wetlands work with relation to the wetlands act identifying what those requirements were, the intent being then to translate these into technical constraints or a framework within which to work.

The first point that was made to us was that the *O'Neill* decision stated the claims would be based on mean high water, principally the existing scene, and that anyone that wanted to challenge the existing scene had the burden of proof. The point was made about trying to distinguish between the impacts of natural and artificial changes.

The second point that was made said the wharf act was repealed finally in the time period in 1891, and that the rules were essentially the same from that point forward as to the rights of individuals to go in and either fill or otherwise disturb or build structures within tidelands.

The third point we looked at was the requirements of 13:1B-13.2 through 13.4, which set forth the present mapping requirements that the Council had to meet, and the particular section on which we focused was 13.3. That was the principal focus to take into account the mean high water line as established by the U.S. Coast and Geodetic Survey, the nature of the vegetation on the lands, artificial changes in land or water elevation, and other relevant historical or scientific data.

A distinction was made between the existing scene and the former scene. The problems in the existing scene were to determine what the existing scene was, what was the representation. On the former scene, the question was how do you reconstruct and to what extent can you reconstruct what existed before the condition of the property had been altered?

The second step that we took was to review materials related to tidelands in the Bureau of Navigation and the Bureau of Marineland Management within the Division of Marine Services. We were shown the vermuele maps.

BY THE COURT:

Q I am writing this down now. Now, you are step three of your original outline, are you not?

A. Yes, I am.

Q And that, gentlemen, is where Mr. Steinberg called it, "Steps taken to start the program in tidelands mapping." Okay?

A. They were reviewed, the Vermuele maps that were in their possession. Our focus was principally on the Hackensack area at this time because the statute stated that the study should start in this area.

Secondly, we saw the 1930-32 photographic atlas sheets and were told that that was the closest time period within which they could be pinned down as having been produced.

We were shown aerial photography covering approximately ten-year intervals from 1940 through 1971; this is panchromatic photography. We were shown special studies that have been produced, one of which was the Aero Service study on marsh resistivity, which I mentioned earlier is attached to their exhibition their wetlands proposal and that would be R-211.

Another document which we reviewed at that time was the fidopedalogical study, R-241. We also looked in the files.

THE COURT: Let's mark it if it isn't, I will receive that in evidence for the limited purpose.

THE WITNESS: We also looked in the files of the Bureau with regard to riparian grants and permits and saw the type of application, the information that would normally be supplied and the type of survey that would be included. We were shown the Coast and Geodetic Survey report produced in 1964 of a mean high water survey for part of the Hackensack Meadows, and a set of five maps that accompanied thatand these are exhibits, 181 through 185 of the maps.

THE COURT: When you use that survey, I would like it understood it is both inclusive of 181 through 185.

MR. WEIGEL: Do you know whether those maps are the colored copies of maps?

THE WITNESS: Yes, these are the colored paper copies that we are showing.

THE COURT: You don't have to take them out if you don't want to, unless you are going to refer to them specifically.

THE WITNESS: No.

THE COURT: Just leave them over there and they will be marked in evidence, R-181 through R-185, both inclusive, maps in evidence for a limited purpose.

MR. PORRO: You Honor, he said that they were shown those maps. Can he identify who showed it to him?

THE WITNESS: James Johnson, the Supervisor of the Riparian Section, took us through and showed us the various materials that they did have, the report that accompanied those was R-200. I have a copy of that.

THE COURT: R-200 will be received in evidence for the same limited purpose.

THE WITNESS: We also were shown an elevation survey produced photogrammetrically by Fairchild for the Army Corps of Engineers, covering the Hackensack Meadows. I have two samples, two sheets of that survey, which consisted of 18 sheets. One is R-178, which is Sheet 7, and the second is R-179, which is Sheet 8. I plan to use those later in my testimony as an example of how this material was used.

THE COURT: All right, I will leave them just for identification. You are saying that you did use them?

THE WITNESS: Yes, they were.

THE COURT: Let's mark them in evidence for that limited purpose, R-178 and R-179. What about did we mark R-200?

CLERK: Yes.

BY THE COURT:

Q. Do you have them, the surveys?

A. They are also in the same tube.

THE COURT: All right, we will mark them later. They're received in evidence.

MR. WEIGEL: May I ask do we have the contract documents under which the NOS worked for the State in this 1962-64 project, including the modification agreement?

THE COURT: I thought Mr. Yunghans said there never was a contract.

MR. WEIGEL: I have seen one. It was modified. That modification is very important. Do you have those documents?

THE WITNESS: I don't; I have never seen them.

THE COURT: Maybe you have them, that is why they don't have them?

MR. WEIGEL: I possibly have a copy.

THE COURT: Do you know it to be a fact that there was a contract? I thought NOS was sort of dealing informally with you fellows.

MR. GOLDFEIN: This was years before these fellows got on the team, 1962 or 1963.

MR. WEIGEL: I can represent that the State imposed constraints on the National Ocean Survey. I have seen information.

THE COURT: What period of time are you talking about?

MR. WEIGEL: I'm talking about 1962 to 1964, the project, the one that produced the five paper copy maps and these were the maps, your Honor, and I'm sure you have heard this in the past, that we couldn't get. We went to Washington to get them and they claimed that the State had the only copies. And we went to the State and the State passed it off to the NOS. We spent literally a couple of years trying to get copies of these documents.

THE COURT: And these documents are what?

MR. WEIGEL: What I finally did obtain, I obtained five paper maps plus I have in my possession and I will have them marked, five stable base maps that , of course, have no color on them except they're, in effect, a black printing, a marking on the chromo paper, plus I finally did see the contractual documents and I think I may have copies of those.

THE COURT: Let's try to find out something then. You know where we are in this case. And we heard Mr. Weigel refer to certain maps that were the product of NOS workings in 1960 to 1962, thereabouts. He was referring to some. Have you ever seen them, to your knowledge? Those, the maps I just placed in evidence, the R-181?

I beg your pardon. You're talking about the contracts?

MR. WEIGEL: Yes, sir.

THE COURT: Have you ever seen the contracts?

A. No, sir.

THE COURT: Mr. Yunghans, have you to your knowledge?

MR. YUNGHANS: I have not, your Honor.

THE COURT: They are not part of the State's case.

MR. WEIGEL: I think the report very clearly refers, however, to the modification that the State insisted on.

THE COURT: Which report?

MR. SCAPPATUELO: R-200, your Honor.

MR. WEIGEL: I think Mr. Scappatuelo, as I recall the earlier deposition, probably is the person who knows more about it than anybody in the room.

THE COURT: Does this report refer to contracts? This was all started by your asking if they had the contracts, and he said he didn't.

MR. WEIGEL: Right. It is my understanding, your Honor, that there were fractured documents, including the modification, and I think the report, and it has been a long time since I read it, but I believe the report refers to the fact that the State did, and I think it was largely because of cost and time considerations, did limit what they wanted to NOS to do and this was developed on the deposition that was taken of Mr. Scoppetuolo, a good many years ago.

THE COURT: You said something about this report. If there is something in here that refers to contracts and addendums to contracts then I will entertain your bringing it in during their case, but they say they haven't considered it, unless there is something in this report that says they have.

MR. PORRO: It would be right up in the beginning if anywhere, your Honor, in that report.

MR. GOLDFEIN: Your Honor, Mr. Johnson, Chief of the Bureau of Marineland Management, who

Dr. Feinberg has said showed him these various things, is going to testify, and it might be appropriate to ask him about the contracts.

THE COURT: Okay. I think they are right in this sense. The R-200 says in the introduction "This project was undertaken by the Coast and Geodetic Survey at the request of the State of New Jersey." * * * * "This project was both cooperative and reimburseable." And the State of New Jersey reimbursed the Coast and Geodetic Survey for the greater part of the total cost under two reimburseable agreements with the Photogrammetry Division, Coast and Geodetic Survey.

Is that what you are referring to?

MR. WEIGEL: Yes.

THE COURT: Is it relevant?

MR. WEIGEL: I am very clear on that, although it has been a long time back, it is very clear to me that Mr. Scoppetuolo's testimony was that there came a point in time when I could even recall him talking about a trip up here and going around in boats.

THE COURT: During the tenure of these gentlemen?

MR. WEIGEL: No, this is prior to Feinberg and

Yunghans, but it bears on the exhibits that are being presented and being accepted by the Court in evidence.

MR. GOLDFEIN: It might bear as part of Mr. Weigel's case, but it doesn't bear at all in the presentation of what these gentlemen say they looked at.

THE COURT: Be that as it may, they don't have it, at least now. Okay.

THE WITNESS: Our conclusion from the legal background we obtained from the Attorney General's Office and the review of the materials in the Bureau of Navigation and the Bureau of Marineland Management on the data were as follows:--

MR. PORRO: Your Honor, I'm going to object to conclusions. I think he is testifying as to what they did and I don't think we should get into legal conclusions now. Maybe he can make a proffer, but it seems they are talking to the Attorney General, now they are talking conclusions administratively as to what they did and what steps they took.

THE COURT: The conclusions are a part of the administrative deliberations.

Yes, Mr. Goldfein?

MR. GOLDFEIN: I think it just comes down to his choice of words. I think he was about to say what he did, having received guidance from the Attorney General and the Bureau of Marinelands Management.

MR. PORRO: If that is so, I will withdraw the objection.

THE COURT: This is a conclusion as to steps being taken starting the tidelands mapping. Okay?

MR. PORRO: I will withdraw that.

A. [Continuing] The first of these was that we should use the uniform data base whenever possible to cover all of the properties involved.

The second was that since the Vermuele maps were generally promulgated and published in the time period approximating the repeal of the Wharf Act, that as to the locations of the streams shown thereon they showed the conditions at that time and were the best representation available of that information.

THE COURT: Stop there for a minute.

MR. WEIGEL: YOur Honor, you asked me to make an indication to the Court when there were substantial points of disagreement. I totally disagree with the statement that Dr. Feinberg just made. We exhibited at the public hearing, which was held on these maps across the way, through the testimony of the Engineer of Hoboken, that the 1890 Vermuele map showed features in the Town of Hoboken which had not existed later than the year 1865. We are talking now about the 1890 Vermuele map showing in existence features which the records of the town of Hoboken showed had been eliminated and remodified at least 25 years before, and I would ask that when you listen to the testimony, and frankly look at the exhibit and the very careful legend that is on it which describes the fact that it refers to other local surveys and reports--it is right on the legend of the map--that you bear in mind that we don't accept what Dr. Feinberg just said, that the 1890 Vermuele map does in fact show physical conditions as of 1890. We will develop testimony through the NOS that what Vermuele did in many instances was simply lift NOS information and put it on his map and it is so qualified. There isn't a question in my mind that Vermuele doesn't even purport to stand behind each and every feature in terms of he having done the work.

THE COURT: I will keep that in mind and I have so noted, but remember what the limitation on what he said he was using Vermuele for was.

MR. WEIGEL: Your Honor, he was very careful and I heard him and I think the record will reflect to say that they accepted the 1890 map as showing the features being in existence at the time of the Wharf Act.

THE COURT: To be more specific than that, go back and read it, Mr. Reporter.

[The Reporter reads the preceding answer.]

THE COURT: That is what I put in my notes as far as Vermuele was concerned, they were going to use Vermuele to show the location of streams at that time and nothing else. Yours was much broader as to how you interpreted what he said.

MR. WEIGEL: What I'm saying including what I'm saying, is that the Vermuele map does not show the existence of creeks or streams as of the time.

THE COURT: That is a little different than what you said before.

MR. WEIGEL: Well, it is included within it.

THE COURT: Don't attribute to their statements something broader than they are saying, otherwise we are going to go round and round forever, Mr. Weigel. I think there was a precise limitation there and I took it at that and to say it correctly, but you dispute that even as a proper reference work for the location of streams.

MR. WEIGEL: Absolutely.

THE COURT: All right.

MR. WEIGEL: I am having communication problems.

THE COURT: That is more precise than the existing scene or the scene as it existed then. There is a lot more on Vermuele that they, I take it, disregarded.

MR. WEIGEL: Of course, but included in what I said, what I wanted this record to indicate, is that I do not accept that the 1890 Vermuele map shows the existence of creeks and streams as of 1890, because it does not.

BY THE COURT:

Q All right. Using a uniform data base whenever possible, the use of Vermuele and now what?

A. We also concluded that when we had older maps they were of sufficient quality to be placed on our present base maps for other areas, they would be used as aids for interpreting photographs and possibly locating some old streams that might have been filled on Vermuele, but that would be a case by case basis in that instance.

Generally we were not going back earlier as a source then to the Vermuele maps. We also came to the conclusion as to the accuracy of surveys that were in the files of the Bureau of Marineland Management and the Bureau of Navigation with respect to mean high water, and this is as opposed to the precision of those surveys. The problem was in the actual measurement of the determination of mean high water that went into the surveys in placing those lines in the first place. We felt that historically there was not sufficient information available to justify fitting all of those individual surveys together to gain much more than was shown on Vermuele itself and we were therefore going to work with the limitation of Vermuele. We also concluded that the stream boundaries shown in Vermuele generally represented the edge of vegetation on these waterways, or the known shoreline where it was bare, and did not go back into the marsh and draw the line someplace back in the vegatation.

Q. [By the Court] What does that mean, the stream boundaries of Vermuele were limited to where vegetation started or did not include vegetation? Is that what you mean?

A. That's what I mean, yes. During this time period of November, 1971, we requested that Earth Satellite Corporation, which had been working in the wetlands mapping program with the biological high water line, give us a suggestion, a suggested methodology or a cook book of possible techniques that could be used to solve this problem in the Hackensack Meadows. The result of this was a proposal, 281, which is R-129, previously placed in evidence, which provided a large number of techniques. Earth Satellite also came and made an oral presentation in December of 1971 to the Department of Environmental Protection. Mr. Yunghans had previously testified to this point.

Q [By the Court] Does Earth Satellite have a satellite flying around?

A. Not specifically, but they were formed initially to deal with analysis of data from spacecraft, and they chose their name from that. They are principally a remote sensing company.

Q I thought they actually had some kind of earth satellite they launched. A. No.

Q Were any photographs or any other kind of data that you considered at any time obtained by some satellite taking pictures as it passed around the earth?

A. Yes.

Q It was used in the mapping?

A. No, they weren't used, but they did look at them to see what they showed, but we found they were not of good enough resolution to be useful in putting a boundary line.

MR. PORRO:Your Honor, it is our contention that the report came from the satellite, from the moon. [Laughter]

Q [By the Court] I'm sorry to interrupt you, R-129 was one of the results of your inquiry to Earth Sat, "Give us some kind of suggested technique," then they also had an oral presentation?

A. Yes, that's correct. Based on that report.

Q Based on what was going on?

A. Yes. Without going into the details of that report at this time, I just characterize it by saying they were told to let their imagination go completely on anything that they thought might possibly be of assistance, they should do some prevaluation and put it down to give us a chance to look at it. There were no constraints put on them financially or time-wise. We wanted to know what might potentially be of value of the possible techniques.

We also had expected them to come up with a concrete proposal to proceed in some fashion and they were not able to at the time, they left it very generally and this required much more work onthe part of the State to come up with a workable program. So that immediate

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proposal did not lead to any contractual work with Earth Satellite, the corporation, on this topic.

In the same time period we were considering from the aerial photography the condition of the Newark-Elizabeth meadowlands and I prepared a memorandum on this subject to Mr. Yunghans, I believe the date was 30 December 1971, and that is Exhibit R-132.

MR. GOLDFEIN: Already been marked?

A. It has already been marked. I was hoping to refer to that.

THE COURT: You want to refer to it? There you are.

THE WITNESS: R-132 is a memorandum dated 30 December 1971, from myself to Mr. Yunghans and entitled Newark - Elizabeth Meadowlands Mapping. It reflects our thoughts, my thoughts principally, after having discussed the matter with Mr. Yunghans, as to the conditions in Newark - Elizabeth at that time and what our programs would be to map that area.

I stated that it appeared pointless to do anything at all in that area for the existing mean high water or vegetation mapping because the area had been so altered from its original condition that the mean high water line that existed would be at the outward limits of large filled areas.

Also, from the data that we had available we should limit the formerly flowed question to tidal streams and shoreline locations as shown on the 1890 map, the Vermuele maps, and confirm these with the 1930 photography, recommended that we fly a one to twelve thousand scale color and color infra-red photography of the area such as we flew for the wetlands mapping, to generate base maps and to prepare the base maps from the color infra-red, not for vegetation analysis but for the uniform process of map preparation.

We should also prepare overlays from the Vermuele maps showing the tide marsh boundaries, streams and shoreline locations at the scale of the base maps, one to twenty-four hundred, prepare an overlay from the 1930 photography showing tidal streams and shorelines; to prepare an overlay for present property ownership for the entire map for all tracts greater than half an acre. To prepare an overlay showing status of all grants, grant applications, and violations, and use the overlays to claim State ownership of appropriate areas and assess penalties of high enough amounts to cover questionable areas.

BY THE COURT:

Q What does that mean?

A. To be honest at this point in time I don't recall. I know it is here. I presume that would have meant questions of areas that had been filled within the marsh that they claim was questionable. This was very early in the process.

MR. WEIGEL: Your Honor, I know we are going to have cross-examination, but that startled me when I saw that, to me that is so totally outside of anything and everything the record up to this point indicated was their purpose.

THE COURT: Which, that last statement of his?

MR. WEIGEL: Yes, it almost looks like they are the law at that point and they are going out and assess people penalties, which seems to have nothing to do with mapping.

THE COURT: But it is a fact that happened, it is right there in the documents.

MR. WEIGEL: Yes, it is in the documents.

THE COURT: If there is something that is spurious here that is another thing, but it is a representation here from a man under oath, this is things he considered to affect them. I was curious as to what that meant. It is a way of getting a little money in for the State, if you have kind of a half-baked claim, try to raise the money and support the claim.

THE WITNESS: The final statement was a historical search of State and Federal records. I might add that not all of these were implemented in the program and some of the items were implemented in a different fashion. I will get into that at a later point.

THE COURT: YOu have to remember this is December 30, 1971, almost five years ago. Dr. Feinberg is just getting into this, I'm sure he has learned a lot since then, haven't you?

THE WITNESS: I hope so.

THE COURT: But they are honestly telling us what they were doing at that time in trying to meet what the State directed them to do. Whether it was right or wrong is another thing.

THE WITNESS: In the time period of early spring of 1972, Mr. Yunghans testified earlier to a high altitude flying contract with Mark Hurd Aerial Surveys to update the 7-1/2 minute geological survey quadrangle sheets for the whole State, 172 maps, for purposes of analysis of land use and general environmental planning. This was other work that we were involved in, in our office.

Exhibit R-137 is that contract I believe.

THE COURT: Yes, that is in evidence.

THE WITNESS: As part of that contract one of the frames that was taken covered the Newark-Elizabeth area. Mark Hurd Aerial Surveys in the process of trying to demonstrate the quality of their product to us and also to possibly generate further business, enlarged that imagery not only to the 1-to-24,000 scale called for in the contract, in black and white reproduction of the color infra-red photography, they also went to 1 equals 12,000 scale or 1 inch equals a thousand feet, to demonstrate to us that they could generate a product of that quality which was the limit in one step of enlargement that they could do with their equipment. They gave us a sample for the Weehawken quad, a paper print, not the stable base from which that was made, but a paper print for our examination. When we saw this we asked them if it would be possible to go larger and how much larger they could go from that imagery to produce a base map. We thought that possibly we could use such a base map in the Newark-Elizabeth area because the data that we were using came principally from products of a scale that did not warrant of itself going to a much larger scale base map.

For example, if you have a map say 1 inch equals 2,000 feet from which you are taking data, you can enlarge that map say to 1 inch equals 200 feet. You won't know anything more in terms of accuracy though your precision may be improved in making measurements as to where you are placing surveys, objects, relative to one another. In absolute accuracy you have a limitation on the original data sources. We felt with the data source from the Newark-Elizabeth meadows with that base of the physical status and that we were not going to any existing scene, that a base map of 1 to 9600 scale or 1 inch equals 800 feet, would be about the limit that the data would support, and, therefore, we asked them to try to produce this base map for Newark-Elizabeth. At the same time, we knew we were producing or would have to produce claim maps in the Hackensack area and we would need base maps. Our experience in the wetlands mapping led us to the conclusion that 1 inch equals 200 feet was a practical scale that combined manageability in looking at data and handling maps with sufficiently large scale to get a reasonably accurate representation of the data for the existing scene.

So we went, we wanted to fly the Hackensack and still at this point possibly the Newark-Elizabeth, as recommended in my memorandum of December 30 to Mr. Yunghans, so we put an option into the contract and Exhibit R-133 is Contract 2P-331 that covered that work.

Also, R-135 is the addendum to that contract.

THE COURT: You want it?

THE WITNESS: Yes.

THE COURT: While you take a look at them, let's take a short break.

[Recess.]

THE WITNESS: R-133 is Contract 2P-331 between the State and Mark Hurd Aerial Surveys for work related to production of base maps and overlays for Hackensack and Newark-Elizabeth meadowlands. The technical portions of the specifications of this contract were prepared by Mr. Yunghans and myself and submitted to the Purchase Bureau. Mark Hurd Aerial Surveys was due to come back in the fall of 1972 to complete the wetlands photography, using the same materials essentially as were used for the wetlands work in the Hackensack photography, so that we could get a better price for this project, and this contract also went on waiver of advertising. The contents of this contract involved the major Hackensack area and an optional area in Newark-Elizabeth meadowlands for flying these areas are defined in Section 3:0.

In Sections 5 and 6, the contractor was required to provide ground controlled and paneling and flying of photography in both the Hackensack area and the Newark-Elizabeth area, except that the Newark-Elizabeth area was listed as an option which had to be exercised only upon written authorization by the State.

Section 7, the contractor was instructed to prepare a 1:9600 scale base map for the Newark-Elizabeth meadowlands from frame CNO-IRC-136 of 1:80,000; 1:80,000 scale aerial photography taken on March 25, 1972. This was the frame of the Newark-Elizbeth area at 1:80,000 scale, color infra-red. Specifications for the map were included and the contractor was asked to provide a detailed written report stating the description of the method by which the photography was rectified and the inherent accuracy of that method and the actual metric accuracy of the final map product.

Also specifically in Section 7.4, Mark Hurd was asked to prepare three base maps of the Hackensack meadowlands area at scale of 1:2400. These were to be sample products for the Hackensack. We had originally flown, we were flying 36 and we were going to prepare three so we could see what the product would be initially.

Specifications were included for those maps and as an option in Item 7.6 there was an option to prepare three 1:2400 scale base maps for the Newark-Elizabeth meadowlands if the option to fly that area were to be exercised.

The Contractor in Sections 8 and 9 was requested to prepare map indices and the photo indices for both areas and in Section 10 certain overlays were requested for the 1:9600 Newark-Elizabeth map. An overlay was to be prepared from the 1890 Vermuele map, from the 1932 aerial mosaic and a final overlay composite would be prepared showing the riparian lands based on an analysis by the State and information submitted to the contractor.

The same three overlays would be prepared for each of the three Hackensack meadowlands maps at 1:2400 scale and similarly for each of the three Newark-Elizabeth maps at 1:2400 scale. Specifications for these various overlays were included. Specifically, with regard to the riparian lands overlays, the State in Section 10.8 of the contract, "Shall furnish information on the location of riparian lands for the base map, singular, and the contractor shall draft the lines on the overlay showing these locations."

We also asked that the contractor prepare--

BY THE COURT:

Q Where did the State get that information from? A. That would be from analysis of the various data. We would do our analysis and submit information to the contractor to make the final drafting of the overlay.

Q You were going to use other sources though, outside of the photographs themselves?

A. Yes. We were going to use specifically two of the overlays that had been prepared, one for the 1890 Vermuele and one for the 1930 photography. We also asked the contractor to prepare composite map where the final overlay in the base map would be superimposed and printed as one unit for our examination to determine whether the best procedure would be a separate map and overlay or a map with the overlay information printed right on the map.

As an aside, we found we could not see the line adequately when we printed them together, so we went the separate route. That is the general scope of our R-133 and what was expected at that point in time. Once a decision was made not to refly the Newark-Elizabeth and simply to use the 1:9600 scale base map that had been prepared in this contract, there were naturally funds left over in the original contract which were supplemented with additional funds and an addendum exhibit, R-135, which is the addendum to Contract 2P-331, to produce the full set of base maps and a set of three overlays for each of the Hackensack maps, and this addendum occurred in October of 1972. The original contract was June of 1972. During this period of time Earth Satellite Corporation had been continuing their comparative work with the biological high water line in Tuckerton, using the interim datums supplied by the National Ocean Survey from a selection of the gauges in the Tuckerton area. There was a point I don't believe I covered fully with regard to the timing in that Tuckerton work. When it was determined that NOS invites that the comparison of mean high water and biological high water could not be made within the time frame of the pilot program wetlands mapping, an agreement was entered into between the NOS, the State of New Jersey, and the U.S. Geological Survey, that the U.S. G.S would at the expense of the State install and operate 15 tide gauges in Tuckerton and two in Mannington for a period of 12 to 13 months, and that the NOS would reduce the data from these and determine the tidal datums. NOS would inspect the sites to be sure they met NOS specifications, but the actual installation and operation of the gauges was to be done by the U.S. Geological Survey.

So this was ongoing and parallel with the wetlands mapping project. There were datums available on a preliminary basis to Earth Sat in the late fall of 1971 and they proceeded during that period up through March of 1972 to conduct their on-the-ground comparison in Tuckerton. The report has previously been submitted as R-151 The State was kept apprised of the work of Earth Sat during this period, but up to that point in time it had not purchased this work since they were doing this on their own for their own confirmation.

They did learn that there had been an error in original mapping in Tuckerton with regard to the signatures for the biological high water line. They did notify us of these errors in May of 1972, I believe, were the dates, but they did carry out this comparison and we were apprised of the progress of this comparison. I believe this report does speak for itself sufficiently. A portion of it consists of photographs with overlays that are hard to verbalize.

In this time period, starting generally in that late spring, a group of organizations, including the Elgibar Fund, the NAACP, the NEA, were looking into whether the state would be claiming sufficient land from their viewpoint on the basis of these biological techniques,and gradually brought us to the point of purchasing this report from Earth Satellite so that it would become public information and available for public inspection. We had seen during this interim, however, and now have in our possession, which I have not brought at this time, the back-up data for this work. These included the field notebooks and the leveling notes, the photo record, staking notes, and staff readings that were made in the field, notes on water table, field maps, the time tide photography that was taken, index of the time tide photography, information on tidal bench marks, NOS hourly tide data, including Earth Satellite readings and computations, Earth Satellite tidal survey computations in September of 1971, tidal survey plots and various working overlays and prints with overlays.

So we had more than just this report to look at and we have subsequently purchased the entire work, the data and the report became official State documents for consideration in this program.

MR. WEIGEL: Your Honor, it is understood, I think, that we object to the characterization of the documents as official State Documents.

THE COURT: As an indication of what?

MR. WEIGEL: As a characterization Dr. Feinberg gave to these documents as official State documents.

THE COURT: All right, I will reserve on that objection, better make a note of it if it becomes critical.

A. [Continuing] In the spring of 1972, specifically May 9th, there was a briefing by the NOS to a group of New Jersey officials and attorneys and citizens which took place in Rockville, Maryland. This was a continuation of our contact with NOS as far as the State was concerned on this project. Exhibit R-155 includes a record memorandum by the National Ocean Survey as to the people that attended this meeting and the presentation is made by the NOS. At that meeting, the computations in September of 1971, tidal survey plots and various working overlays and prints with overlays.

So we had more than just this report to look at and we have subsequently purchased the entire work, the data and the report became official State documents for consideration in this program.

MR. WEIGEL: Your Honor, it is understood, I think, that we object to the characterization of the documents as official State Documents.

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THE COURT: All right, I will reserve on that objection, better make a note of it if it becomes critical.

A. [Continuing] In the spring of 1972, specifically May 9th, there was a briefing by the NOS to a group of New Jersey officials and attorneys and citizens which took place in Rockville, Maryland. This was a continuation of our contact with NOS as far as the State was concerned on this project. Exhibit R-155 includes a record memorandum by the National Ocean Survey as to the people that attended this meeting and the presentation is made by the NOS. At that meeting, Mr. Yunghans did inquire of the NOS as to what it would cost and how long it would take to do their normal mean high water survey in the Hackensack. We did not receive a definitive answer at that point in time even in very general numbers. We had earlier made this same request of the NOS and also had not received a definitive statement, except that the NOS did not have much experience in working in tidal marshes to delineate mean high water because their mission did not require them to do so. Their time tide photography technique, which they normally used, they told us, would not work in marsh because of the vegetation.

MR. PORRO: I object, your Honor, that is pure hearsay.

THE COURT: The ground?

MR. PORRO: That is pure hearsay, they told them. It isn't even the subject matter of a report.

THE COURT: I know it is hearsay. I am not accepting it for the truth of the matter asserted.

MR. PORRO: YOur Honor, I could see the ruling when it comes to a document. This document was considered. But I will--

THE COURT: All right, objection overruled. You may continue.

A. They told us that the methodology would not work in a marsh because the land-water interface was obscured by the vegetation and that normally they would use the edge of vegetation in place of the mean high water line in such circumstances.

MR. WEIGEL: YOur Honor, I'm going to enter a different kind of objection. I was at the meeting and I will identify the person, it was Senior Captain Phillips who called this method the quick and dirty method and said the way, and the only way, to do it was to have it engineered on the ground.

MR. GOLDFEIN: Is there an objection or testimony?

MR. WEIGEL: It is an objection.

MR. GOLDFEIN: If Mr. Weigel wants to call someone to say this was not said, fine; but Dr. Feinberg's recollection stands.

THE COURT: I think Mr. Weigel taped this.

MR. WEIGEL: I did. You were present I think, weren't you, Judge?

THE COURT: I know I was.

Mr. Salbin, will you read that last answer?

[The Reporter reads the pending answer.]

THE COURT: What do I do with your objection?

It is your recollection versus his. I don't recall it. I made some notes but I don't know whether I made any about this.

MR. WEIGEL: If you just noted it in your papers I would say that is to me a complete misstatement of what was said at the meeting.

THE COURT: Wait a minute.

Does everybody agree that the Captain said that he wanted to comment on the friendly and congenial attitude of the New Jersey people?

MR. PORRO: It was undisputed.

THE COURT: And that "we learned much from your spirited and open discussion."

Okay, we will get to it some time later.

Your objection is noted, Mr. Weigel, I'm not going to rule on it at this time. You can have an opportunity to say something in the defense of Mr. Weigel out in the hall later on if you want to.

[Laughter.]

THE WITNESS: Can I say something on the record, your Honor?

THE COURT: Go ahead.

THE WITNESS: I'm confused as to one point, since my testimony was as to the technique employed by the National Ocean Survey, which is time tide photography and why they don't use it in a marsh, and they have documented this in numerous publications also. That is why I'm confused. I believe that Captain Phillips's remark, which Mr. Weigel was correct, he did mention that was asked as to the biological method, not as to their own method, just to clarify that point for the record.

THE COURT: Now, maybe you two misunderstood each other.

MR. WEIGEL: Yes, I did not understand that that was what he was talking about.

THE COURT: All right, fine. It is 3:30.

Can you give me an estimate of about how long you will be tomorrow?

THE WITNESS: I expect to be all day.

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I, EDWARD SALBIN, Official Court Reporter, do hereby certify the foregoing transcript.

Edward Salbin

March 20, 1976.

A-3311-72
no Brf

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A-3311-72
(On Remand to Law Division,
Bergen County)

FILED
APPELLATE DIVISION
NOV 2 1979
Elizabeth McLaughlin
CM
Clerk

A101 SEP 1979

CITY OF NEWARK, et al., :

Appellants, :

vs. :

VOLUME IV

NATURAL RESOURCES COUNCIL, et al., :

Respondents. :

:

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
Docket No. L-16799-72

FILED
SEP 21 1979
Stephen Wilkinson
CLERK

RECEIVED

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY, :

Plaintiff, :

vs. :

BOROUGH OF EAST RUTHERFORD, et al., :

Defendants. :

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0-3C

March 16, 1976,
Courthouse,
Hackensack, N. J.

B E F O R E :

HONORABLE THEODORE W. TRAUTWIN, J.A.S.C.

Reported by:

EDWARD SALBIN,
Official Court Reporter.

APPEARANCES:

For Natural Resource Council, et al.,

WILLIAM F. HYLAND, Esq.,
Attorney General of New Jersey,
By MORTON J. GOLDFEIN, Esq.,
Deputy Attorney General.

For Trustees of the School Fund,

WILLIAM C. RINDONE, JR., Esq.,
Deputy Attorney General.

For City of Newark, City of Elizabeth,
N. J. Land Title, Esther G. Bertoni, et al.,

JOHN R. WEIGEL, Esq.

For Borough of East Rutherford,

ALFRED A. PORRO, JR., Esq.

WILLIAM B. SHEDD.

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EXHIBITS IN EVIDENCE

THE COURT: I think we left off yesterday in a little colloquy about a quick and dirty method at our NOS meeting. We can leave that area, can't we?

THE WITNESS: I would just like to read one paragraph of our 203, which is Volume II of Shalowitz.

On page 176, Volume II, the section dealing with High Water Lines in Tidal Marshes. And paragraph 4432 deals with the surveyed line - outer marsh. "Obviously, it would be an extremely difficult task to identify the actual high water line in marsh areas. The marsh may be in various stages of growth, from its early beginnings, when it is mostly in a submerged stage, to its latest development, when it is close to or slightly above the plane of high water. Between these two extreme conditions, marsh areas may be entirely submerged at low water, may be exposed at low water and submerged at high water, or may be partially exposed at high water. From the standpoint of the Bureau's topographic surveys, this means that where there are marsh areas, the actual high water line might start at the water's edge in one portion of the marsh and meander through the area in irregular fashion, terminating at another portion at the water's edge or at the edge of firm ground in the interior.

"In surveying such areas the Bureau has not deemed it necessary to determine the actual high water line but rather the outer or seaward edge of the marsh, which to the navigator would be the dividing line between land and water. Therefore, from the topographic survey alone, and in the absence of any corroborating collateral information, no conclusion could be drawn as to the exact location of the high water line, nor as to the condition of the marsh area with reference to the tidal plane of high water; that is, whether the ground itself was above water, or whether only the marsh grass was above water, and the ground below water at the time of high tide."

And under the section on Modern Practice in that same paragraph: "On modern planimetric, shoreline, and topographic manuscripts, where the actual shoreline is obscured by marsh grass, mangrove, cypress, or other similar marine vegetation, the outer edge of the vegetation is mapped as an apparent shoreline and is shown by a thin, solid line, the change from the line marking the actual shoreline being abrupt and not gradual."

BY THE COURT:

Q Have you read much of Shalowitz or just a little? A. I have read it all at one time.

Q Where is he from?

A. He was from National Ocean Survey, and he compiled this two-volume set as essentially a history and statement of mapping practices, historically, and at the time that was written--

Q When was it written and published?

A. The date was 1964, second volume.

Q Anywhere in those two volumes did Shalowitz ever discuss where the ownership of tide flowed lands should lie? Does he discuss that, the sovereign right to own those lands? A. My recollection is the main emphasis of this pair of volumes was on the Louisiana dispute and it was mainly concerned with offshore ownership of lands and determining the base line from which that offshore ownership should be measured. In other words, if it was a three-mile limit and it was supposed to be taken from mean high water line, or a twelve-mile limit in that case, I believe.

Q Does he cite any law, any cases in the volumes and if he does, is there any reference made to

New Jersey cases? What I'm getting at is I would be interested in knowing whether or not he agrees with our unitary test of just tide flow, or does he subscribe to indicate a dual test, navigation?

MR. PORRO: There is discussion in the volume.

A. Volume I is a legal discussion but I don't recall that specifically. It is four years since I read Volume I. The volume deals mostly with techniques.

THE COURT: Can I see Volume II?

Just in his introduction he is dealing more with states versus the federal government, but on page 5, "State sovereignty over such lands," tidelands, " . . goes back to the early days of the Republic. State and Federal Courts have repeatedly expounded the theory on which such sovereignty rests. For centuries the title to the beds and shores of navigable waters within the territory or jurisdiction of England was owned by the Crown as an incident of sovereignty subject to the public right of fishing and navigation. This was true of the English possessions in America.

"After the American Revolution, the Thirteen Original Colonies became sovereign states and, as successors to the Crown, became vested with the title to all lands within their boundaries over which the tide ebbed and flowed and to the beds of inland navigable waters."

There is no citation on this because it is not the main objective of this book, but it is heavily laced, his language, with the navigability theory. Oh, yes, he does cite Martin v. Waddell and Pollard's Lessee versus Hagan.

Thank you, Dr. Feinberg. It may be a case of just loose language, too, I don't know.

MR. WEIGEL: I don't think so. I think that that is a consistent point.

THE COURT: I'm sure you would say that.

All right, Dr. Feinberg.

BY THE COURT:

Q Where are we at now in your narrative here?

A. We are wrapping up the background portion or the initial portion of starting the project, initial implementation.

Q Now which project?

A. I'm sorry. The tidelands mapping. As I mentioned yesterday, when we met with the NOS and spoke with them on several occasions, including the meeting in May of 1972, we asked if they could do mean high water lines in the marsh in New Jersey, and we asked for an estimate of costs and time. The most explicit response we were able to receive from the NOS was that we could do anything we wanted given enough time and enough money, but nothing more definitive than that in the way of any kind of ballpark estimate at all.

Q. Wait a minute, in other words, they said they could fix a mean high water line in the marsh given enough time and enough money?

A. That's right.

Q. Is that what they said?

A. They said it was possible given enough time and enough money, but when we asked how much and how long they would never answer the question even in just a very general estimate and understanding, they would not be held to that estimate in a contract, but we were trying to ascertain what the scope of the problem was.

MR. WEIGEL: I was present, your Honor, during that and that is substantially my recollection of what was said.

Q. Was that at the meeting I was at?

MR. WEIGEL: I believe so.

Q. I don't remember that.

Just a point of information, NOS is a Federal charted agency, is it not? A. It is.

Q. Are they permitted by their charter to contract themselves out for this consideration?

MR. WEIGEL: Yes, sir.

A. With governmental agencies.

Q. With other governmental agencies, whether they be state or federal?

A. That's correct.

Q. Or any other form of political subdivision?

A. I believe so, that is my understanding. I would think they should be available to all citizens of the country.

THE COURT: Mr. Yunghans, can you answer something?

MR. YUNGHANS: I would like to enlighten you a little bit on that; as long as that which they are doing for that governmental entity in some respect enhances their primary mission of determining tides and tidal datums and aids to navigation, that has been their standard approach to the problem for years and years.

MR. PORRO: They contracted with the Borough of East Rutherford.

THE COURT: Did they?

MR. PRPORRO: Which you will/eventually hear.

THE COURT: I knew you had done gauging and stuff like that, I didn't know who you used.

MR. PORRO: Yes, it was the NOS.

THE COURT: All right.

THE WITNESS: Coupled with the NOS response was the fact, as documented in Shalowitz and other publications of the NOS, they did not and had not as a general rule gone into tidal marshes to delineate mean high water. They would do it on open shorelines, but not in the marsh areas. Instead they were concerned for navigational purposes with the edge of vegetation. With our other analyses from talking to a number of engineering firms and in relation to the wetlands mapping program where we had the proposals and our discussions with NOS, we concluded that placing a mean high water line in a tidal marsh that is vegetated was very difficult, very expensive, and of questionable accuracy. The precision might be repeatable in that if you defined a procedure that was applied you could get to the same answer again and again within reasonable tolerances. However, what the relation of that answer really had to mean high water was of question in a marsh.

Q. Are you saying that you concluded that placing a mean high water line in a marshy area that was vegetated was too expensive and of questionable accuracy? Placing it how? What was too expensive?

A. Using tide gauges.

Q. Using civil engineers?

A. And engineering it onto the ground.

Q. In other words, you are talking about tide gauging and using surveying instruments on the ground?

A. That's correct. We also determined that you would need--it could be done but it would require a very high density of tide gauges and a very high density of points on the ground in order to locate the local datum.

We had looked at vegetational analyses through the wetlands mapping. We were familiar with this work and had looked at the preliminary analysis of the Hackensack Meadows that was produced by Dr. Anderson and Mr. Deely in the ecological evaluation which Mr. Yunghans referred to earlier, and that report was Exhibit R-136.

We had looked at aerial photography, historical maps, such as Vermeule maps and had looked at the surveys of the mean high water lines done in many marsh areas in the records of the Bureau of Navigation and Marinelands Management. The problem with those surveys in terms of accuracy was an imprecise knowledge of where mean high water actually was. We, therefore, determined that we needed to look for a reasonably accurate alternative method of finding or approximating the mean high water line that was within a reasonable cost, and by reasonable we meant -- I mean now a cost that does not exceed the value of the land itself. If it costs you as much as the land in order to find the line, you haven't gained in the process.

Q. You might have lost money, is that what you are saying, if you found that the mean high water line was further seaward than everybody ever thought? You just proved title for the other guy.

A. Even at very high prices, even if we found it where we thought it was, we wouldn't be gaining anything in the process, nor would the individual property owner were he to do it.

Q. Was there any thought ever given of just throwing up your hands and saying, "This can't be done," and instead of an alternative method just take whatever streams you can see with the naked eye and say, "This is what we own"?

A. There was such a thought at the time, but we had access also in that same time period as we reach these conclusions, we had access to the work being done in Tuckerton with vegetation by Earth Satellite Corporation and the report, R-151, was in our hands at that time, and we felt there might be an alternative that was worth investigating before we did so, before we would throw up our hands.

Q. Did Environmental Analysis ever sit down with the Attorney General and tell them about all of these factors that you were considering, that is, cost to develop a line without even knowing if you could, or whether it would be reasonably accurate? Was there ever any discussion with the Attorney General's Office as to the possibility of entering into a comprehensive program of what our good old friend, Mr. Greenberg, used to call pragmatic settlements?

A. I would say only in the sense that when we originally arrived at the decision to hatch certain portions of the previously filled land, that was the type of intent that was in our minds to resolve those issues in the most timely manner.

Q. Because of that, you could save a lot of money, the school fund could be enhanced and there would be a lot of advantages. I think you are familiar with the Federal Pater case? A. Yes.

Q. That infamous case that seems to suggest that where you have a genuine controversy the State had the power and the Court had the power to participate in the settlement and agree that this is where the line is, whether it comported with what actually existed as far as mean high water is concerned, or not, that has always been a troublesome theory.

Okay. A. I would like to backtrack on one exhibit I missed yesterday on 17 January 1972, Exhibit R-130, which is a memorandum from Roland Yunghans to Commissioner Sullivan on the Newark-Elizabeth-Hackensack Meadowlands and on a statement of the problem the department and the Attorney General's Office are in agreement that title issues in the Newark-Elizabeth-Hackensack Meadowlands must be resolved.

MR. PORRO: This is getting redundant. Mr. Yunghans testified as to this memo, portions were read at that point. I'm not trying to, you know, I think it is becoming redundant.

Q. Is this cumulative as far as Mr. Yunghans's testimony is concerned? A. It was dealing, one, with the issue you just raised, and the start of the program. This is a memorandum to the Commissioner laying out the money needs and time needs in the seven-phase program that we had actually started. The early memorandum that I wrote to Mr. Yunghans was in December, and this is a further distillation of that, of our thinking at that time.

Q All right, go ahead, you can cover what you want. I have in my notes Mr. Yunghans's testimony.

In January, 1972, several policy decisions were made--I'm looking at my notes on Mr. Yunghans's testimony--the conclusion, responsibility for cataloguing State's claims could not reside in a single contractor, needed specialists in all fields, mapping, engineering, photos, et cetera. Result, first cut mapping program set forth in Exhibit R-130. Is that it?

A. That's it.

THE COURT: These are my very cryptic notes.

Let's hear what you have to say about that.

A. The statement of the problem concludes title issues must be resolved within a reasonable time frame, at a reasonable cost and in a just manner. Then the memorandum goes on to delineate a seven-phase program.

Phase 1, it was to collect precise photography in the Newark-Elizabeth-Hackensack areas covering an 80-square-mile area. Phase 2 was preparation of base photo maps in the Newark-Elizabeth- area. At that time we were still considering the 17 base photo maps on 1:2400 scale.

Phase 3 involved the preparation of overlays for the Newark-Elizabeth area and it also included the statement, "This area is a concrete jungle; the State has the best chance to resolve title issues and exert its claim if it restricts itself to stream bed areas adjacent to stream bed, and shoreline claims. Deputies within the Attorney General's Office agree with this constraint."

The Phase 3 maps of Newark-Elizabeth would be used, one, as a basis for out-of-court negotiations, and, two, to develop, if necessary, a series of official maps depicting the State's interest in these meadowlands.

Phase 4 of the program would be to perfect, to prepare official Newark-Elizabeth maps for court filing. It states, "These products will not be produced if the Attorney General's Office deems their filing would be either unnecessary or not in the best interest of the State."

Phase 5 is to examine photography of the Hackensack area, apply several of the procedures developed in the other four phases to selected small areas of the Hackensack and mesh these investigations with proposal materials now available to "one, develop methods for the resolution of the Hackensack area problem. (2) Choose a suitable pilot area for field testing the methods developed. And (3) prepare realistic cost-time estimates for the pilot area."

Phase 6 would be "Perform a pilot program in the Hackensack Meadowlands. Refine the methodology, if necessary, and revise the cost-time estimates for completing the Hackensack work."

Phase 7 was to "Initiate and complete the work required to resolve title issues in the Hackensack Meadows."

A time frame for the Newark-Elizabeth meadowlands work was set forth of 120 days from the date of contract signing and covered Phases 1 through 4 of this work. Within an additional 30 days following that, a program for the pilot phase of the Hackensack meadowlands will be completed and the pilot program could begin and a sum of $90,000 was requested to fund this.

Also, there is a comment at that point in time that with regard to vegetation photography in the Hackensack the department believes such photography to be necessary. However, there is no way of knowing until the data collected in the preceding phases of the program are evaluated. If such photography is necessary, it can be collected only in August and early September, and we felt we could meet that time constraint. This was the game plan at that point in time for the following work in terms of the initial elements which included the

Hurd contract which I referred to yesterday, Exhibit R-133.

Q. Do you want it?

A. No. I just wanted to tie it into that.

Q. I think Mr. Yunghans covered that.

A. In the late summer we received the base map for the Newark-Elizabeth on 1-9600 scale.

Q. Late summer?

A. Of 1972, Exhibit R-134 is an evaluation of that base map prepared by Mr. Peter C. Newsome, Assistant Geologist in the Department of Environmental Protection. He evaluated, made measurements as to the scale of that map and estimates of its accuracy. The result of Mr. Newsome's evaluation, I believe that Exhibit also was testified to by Mr. Yunghans, so I won't go into it any further.

Q. Yes, all right.

A. But that evaluation led to the decision not to refly the Newark-Elizabeth at a larger scale and produce the larger scale base maps.

We then proceeded to develop criteria for selecting a pilot project site in the Hackensack Meadows and also if you recall, Mark Hurd Aerial Surveys was under contract to fly the Hackensack Meadows and did so on 20 August 1972 in color infra-red and natural color imagery.

The criteria that was set down for the pilot project area involved the selection of three one-and-a-half square mile test areas in the Hackensack as pilot areas. These three areas were to have been the three base maps listed in Contract 2P 331, which is Exhibit R-133 for the Hackensack. The criteria included tidal flow; (2) where applicable, existing NOS tidal datums, tidal flow and biological high water indicator species; (3) areas in which pressing legal or political problems exist; (4) areas which are tidal but are populated primarily by phragmites; (5) areas which are tidal but are populated primarily by normal high water indicator species; (6) areas formerly believed to be tidal, or marsh, but which are now covered with extensive land fills or developments; (7) areas of relatively undisturbed marsh comparable to marshes of the coastal wetlands, ditched and/or not ditched; (8) areas where marsh adjoins major streams; (9) areas where marsh has many minor streams entering into a major channel; (10) where possible, choice for these sites to be made in different sections of the meadows, and (11) areas identified by the other studies as viable marsh.

Q. Where are you reading from, R-149?

A. This would be R-138.

Q. R-138? A. Yes.

Q Okay. A. One of the three pilot area sites selected was the map sheet 721 2160, Walden Swamp. As it turned out we had sufficient funds left over by not reflying the Newark-Elizabeth and we were able to get additional funds through addendum R-135, I'm sorry, through Exhibit R-135, which is the addendum to P-331. We determined to go ahead and produce the remaining base maps and just start with the first and just end up with a single pilot project area which was Walden Swamp map and produce all 36 base maps instead with the funds. The topography provided by, taken by Mark Hurd Aerial Surveys was delivered to the State on September 29, 1972. I reviewed that and Dr. Anderson was in the area to produce the work with regard to the environmental evaluation or assessment of the marshland in the Hackensack regarding the HMDC Land Use Plan, and he also took a look at the map--at the imagery at that time. If I might have Exhibit R-216, please. I have gotten together all the shipping memos from Mark Hurd Aerial Surveys and Earth Sat as to the end products delivered to the State. These are included in this exhibit and the shipping memo with regard to the photography for the Hackensack is one of those and those bear the signature of Mrs. Joanne Stitt as to the date received in our office, the date shipped is also indicated on it.

THE COURT: Any objection to receiving this in evidence?

MR. WEIGEL: None.

MR. PORRO: None, your Honor.

THE COURT: R-216 in evidence with the same limitation as heretofore.

A. [Continuing[The photography was reviewed. It was returned to Mark Hurd Aerial Surveys for final stamping. It was accepted by the State, it was then stamped, the frames were stamped by Mark Hurd and photo index was prepared and then the originals were shipped to Earth Satellite for use in compiling that environmental assessment and also to provide them with an opportunity to view this photogtaphy in more detail in their offices with their equipment and to provide us with an estimate of whether this photography might be useful in arriving at a biological determination of areas below mean high water in the Hackensack Meadows. Up to that point, they had not seen the photography, did not know we were flying it until that date on the 29th of September.

On October 16th I went down to Earth Satellite Corporation to discuss the design of a possible program for the pilot area. Exhibit R-140 is the report of that program.

Q. That is in evidence. Do you want it?

A. Yes, please. I have another copy. On page 1 of that report there is discussion of the start of the project and selection of the Walden Swamp area as the pilot project. Walden Swamp had been selected by the State prior to going down -- prior to my trip to Earth Satellite Corporation. The objectives of the program were to determine the feasibility of establishing a biological based high water line within wetlands characterized predominantly by phragmites communis, using remote sensing methods, ground techniques, or any combination thereof. Specific objectives were to determine what relationships exist between morphological characteristics of phragmites communis, to classify and map the stands of phragmites communis within Walden Swamp and vicinity based on such relationships determined during the program.

Page 3 describes the sampling procedures that were employed and the factor characteristics of the plants that were evaluated. The report also presents the data obtained and a discussion of that data.

On page 5 there is a statement the signature classes for each of the phragmites samples were identified on a 14 point color scale, ranging from pure green through various combinations of green, yellow, brown, orange and pink to pure red. The plant characteristics were analyzed against the signatures and certain conclusions were drawn. On November 2, 1972, Mr. Yunghans and myself went down to Earth Satellite Corporation to have a presentation of the data that had been arrived at, at that point in the program.

We brought with us and presented to the Earth Satellite scientists for the first time the pertinent sheets of the Corps of Engineers maps of elevations in the Hackensack for the Walden Swamp area, prepared by Fairchild, two of which I referred to. Two of the sheets are referred to yesterday for a different area of the meadows. I don't recall the numbers at the moment, but they were in regard to the Cronakill Creek.

The elevations were at our request compared to the infra-red signatures and botanical field data and on page 8 there is a table of results. In areas that were identified the conclusion was that they were above the mean high water datum which was estimated from staff gleanings of the NOS in the 1962 to 1964 project as 3.1 feet in the vicinity of Berry's Creek near Walden Swamp. At that time, this was only an estimate.

There has been later work done through Mr. Porro's contract with the National Ocean Survey that nas provided the datums for that area. The conclusions reached were that in the phragmites signatures, which were divided into pink, red, and green signature classes, 9 points in the pink were above mean high water datum, and 16 points below. Three points in the red were above and none below. Three points in the green were above and 12 were below.

On page 10 the conclusions of the report are presented and the significant conclusions were that, number one, differences do exist in the performance of phragmites communis which are correlated with color infra-red tonal signatures. The second conclusion was that these differences are related to the water supply of growing sites, and third, the three major tone signatures slants on plant performance groupings exist, namely, pink, green, and red, and fourthly, the green signature class was demonstrated to lie at or below the mean high water datum.

Q. What does performance mean in this?

A. It's basically the health of the plant and how well it grows in its environment.

Q. Well, the green signature indicates low performance and then it concludes the green signature class was demonstrated to lie at or below mean high water.

A. That's right.

Q So they didn't thrive as well when they are inundated?

A. That's correct, that particular plant.

And overlays were provided, there are some additional conclusions that are stated, but those are the significant ones on which we determined to proceed with a further test in the mapping program.

Exhibit R-139 is a letter from Dr. Wobber to Mr. Yunghans and this included several recommendations for further work. These recommendations dealt with certain procedures, which included, one, determining the difference between two classes of the pink signature, one of which appeared to be below mean high water, and the second one above; to investigate in the field the validity of the spot elevations on the Fairchild work which had been done photogrammetically and not by field measurements; to collect more botanical data in the field and to evaluate more objective tone signature recognition and classification methods through some form of automation and photographic techniques to determine if they would aid in the mapping process.

Most of these were carried out either in the general mapping of the biology in the Hackensack, or on independent programs by the State with another contractor.

Our conclusions at this time were that, one, the area did not lend itself to a reasonable cost conventional mean high water mapping, using tide gauges and surveying. Number two, that the biology had a potential for success that should be investigated further. Number three, that to obtain tidal datums in the area would have taken approximately two years from that point in time before any surveying work could have been done. That is based on the requirement for the tenth of a foot accuracy or tenth of a foot precision in the data to use 12 to 13 months of continuous data. The contracting times on the front end of this would have taken at least two or three months to have gotten to the point where the National Ocean Survey would have been able to do the work, and, finally, the time to reduce the data on the other end would have made a time period of at least an additional two years before any work could have been done in existing areas if we elected to go in that direction, plus the time that would have been required to survey a line.

MR. PORRO: Your Honor, could we ask the witness to fix a time as to these determinations, who made the determination and where it is recorded?

THE COURT: I put down November, 1972, just a guess, but I don't know what it was; it was shortly after this report from Earth Satellite about further work?

THE WITNESS: That's correct. It was in the period between November 2nd and, I believe, slightly later than that at the start of the pilot project, which I believe was around mid-November or late November that we actually went down, got together with Earth Satellite to negotiate.

MR. PORRO: Your Honor, I think it is important when evaluating administrative action whether these conclusions were conclusions of of individuals, whether it was formal conclusions, so if we could fix who made the determinations and where it is recorded or if it isn't, you know. I think that should be on the record for evaluation when we are talking.

Q [By the Court] Do you have an answer to those questions? A. The determination was made through discussions between Mr. Yunghans and myself and there was no formal record of those determinations, rather the formal record that ensued was the continuation of the biological project. We felt that the data that supported that had been amply recorded by NOS or other persons in the literature.

MR. PORRO: So there was no administrative action formalizing those determinations?

A. In the sense of a formal record of those, there was not at that time.

MR. PORRO: I'm starting to cross-examine, your Honor. I didn't mean that.

MR. WEIGEL: I think it is also important to know whether this was done informally. Did the Natural Resource Council informally give you a green light at this point?

THE COURT: That is a hard question to answer, isn't it, because he has to say just yes or no. Suppose DEP gave him a green light?

Q. [By the Court] Did you talk about it with anybody else other than Mr. Yunghans before you committed yourself to continuing the pilot project and further emphasizing or further studies of using or developing the biological theory?

A. During this time we were generally in contact on this project with our Deputy Attorney General, Mr. Clayton, and beyond that I don't know who Mr. Yunghans specifically might have talked to. I did not talk to anybody specifically that I can recall.

Q All right, you went ahead and did it anyway? A. That's correct.

Q We will check the testimony of Mr. Yunghans. I think there was dialogue in writing between himself and possibly Commissioner Sullivan, I don't remember, but we will see. A. There was some, there were several written documents at a later date, but we are talking about in this time period.

Q All right, you may proceed--let's take a short break.

[Recess.]

Q [By the Court] All right, Doctor.

A. As I stated, following the November 2, 1972, meeting, Mr. Yunghans and I determined to proceed to further botanical delineations in the Hackensack Meadows. There was a contract negotiating session 28 November 1972. The document has been submitted by Mr. Yunghans as Exhibit R-141. The contract from that work is Contract 3P-288, which is Exhibit R-143. That contract set forth the technical requirements for the mapping program, the remaining maps in which there were existing marshlands in the Hackensack. The contract did include certain check points at which we would review the progress of the work and determine if we would go further, or not, and Exhibit R-145 was a letter to

Mr. Deeby from Mr. Yunghans authorizing him to continue, dated 29 January 1973.

Since Mr. Yunghans has testified on those three exhibits, I won't go any further into them at this point.

Q Okay. A. May I have Exhibit R-158, please?

One of the determinations made for the full-scale mapping project was that the source of tidal water access for any areas which were identified as below mean high water, or as areas that were flowed by the tides, should be identified. Exhibit R-158 is a letter to Mr. Chester Matson of the HMDC staff in Lyndhurst from Roland Yunghans asking that Mr. Matson provide us with assistance in obtaining this information. We enclosed 36 paper prints, one of each of the base maps, and asked that information on sluice gates and culverts and other tidal information be provided. This was to supplement and assist the Earth Satellite scientists in their delineations.

THE COURT: I propose to mark this into evidence with the same limitation, demonstrating just what was done, R-158 in Evidence.

A. [Continuing] Exhibit R-146 is an addendum to Contract 3P-288, which also included the preparation of overlays and I believe Mr. Yunghans also talked about that.

Q Which one is that? A. R-146.

Q Yes. A. And Exhibit R-149 was the final report that was prepared by Earth Satellite Corporation and delivered to the State in September of 1973 following delivery of all of the individual overlays.

Q That is already in evidence?

A. That's correct, sir.

Exhibit R-144 is a letter or memorandum dated 17 January 1973 from Mr. Yunghans to Commissioner Sullivan outlining the steps that we were prepared to take in the mapping program and requesting the assistance of the Commissioner and cooperation of other divisions in the department to provide certain personnel.

Q Well, to the extent that this is a written memo to Sullivan, that is some memorialization of the decision that was made prior thereto?

A. That's correct.

Q And I take it Commissioner Sullivan by either his silence or acquiescence affirmed if he agreed to this. Is that so? A. There is an attachment in this exhibit, dated 28 January 1973, to Directors Goodenough and Pike from Commissioner Sullivan that states that Mr. Yunghans's memorandum is attached and is a high priority operation deserving of "our fullest support," and requests the assistance of the two Directors in accommodating the personnel requested.

Q Who were the Directors?

A. Mr. Goodenough was Director of the Division of Marine Services, and Mr. Pike was Director of the Division of Water Resources at that time.

Q Was the Natural Resource Council in on any of that stuff? A. I really don't know.

MR. YUNGHANS: I can answer that question for you, your Honor. The answer is no.

Q But you had conferred with Clayton from time to time, I take it?

MR. PORRO: Mr. Yunghans and Greenberg.

THE COURT: And Greenberg?

MR. PORRO: Yes, sir.

THE COURT: Who were the deputies assigned to the Natural Resource Council, at least I knew them as Resource Council attorneys.

MR. PORRO: I assume they were, yes, sir.

MR. RINDONE: Your Honor, Mr. Greenberg was Assistant Attorney General in charge of the litigation and he had overall responsibility in terms of all litigation and he came into this matter as precursor of litigation that would arise out of it to quiet title, et cetera.

THE COURT: Well, does the Attorney General assign a Deputy Attorney General to be legal counsel to the Natural Resource Council, other than just for purposes of litigation?

MR. GOLDFEIN: Sure.

THE COURT: Does he, Mr. Goldfein?

MR. GOLDFEIN: Yes.

THE COURT: Is that your job now, more or less?

MR. GOLDFEIN: I'm chief of the section, responsible for providing legal services to all of the bureaus, their counsel and agencies within the Department of Environmental Protection, and we do provide legal services to the Natural Resource Council.

THE COURT: Thank you.

Mr. Porro has agreed we can continue in his absence. He has to answer a phone call.

MR. RINDONE: At that time, your Honor, Mr. Clayton was the section chief predecessor once removed to Mr. Goldfein, but his particular interest was the Natural Resource Council in this mapping project.

THE COURT: All right.

THE WITNESS: Also attached to Exhibit R-144 is Table 1, which was a copy of a mapping schedule that was laid out for the Hackensack mapping, which included schedule delivery dates from Earth Satellite Corporation for certain of the botanical overlays and a delivery date of our final analyses to Mark Hurd for preparation of the final overlays representing the State's claim and a scheduled date for receipt of these final overlays from Mark Hurd, and Table 2 is an attachment, an estimate of the scheduled workdays per map that we had laid out for the State work on this project to produce the final maps.

MR. WEIGEL: What is that exhibit number?

THE WITNESS: R-144.

Q. That is also in evidence?

A. Yes, sir. As you recall, we had available the Coast and Geodetic Survey maps for the Hackensack Meadows area that showed mean high water lines where they had been drawn by National Ocean Survey. These maps were not provided to Earth Satellite Corporation for their botanical delineation.

Since this was the only mean high water line information we had in the area, it was our intent and we did use this information as a check to evaluate the

the botanical delineations of Earth Satellite Corporation. If we had had the time in this overall process, ideally we would have gone out and have placed tide gauges, run them for the year, taken that two-year period I referred to earlier. In the absence of that, we were able to utilize the maps made in 1962, 1963, to provide a check on the determination of the signatures that were done by Earth Satellite.

I would like to refer briefly to several points in Exhibit R-149, which is the final report for the Hackensack meadowlands botanical delineation program. Most of the details of this will be referred to next week by the witnesses from Earth Satellite Corporation and I don't see any point in just repeating that.

Q Right.

A. The first part is on page 1, which is the major conclusion of the Earth Satellite scientists that color infra-red phragmites signature phenotypes are valid indicators of relative tidal inundation within tidal phragmites marshes of the Hackensack Meadows.

BY MR. RINDONE:

Q Doctor, I don't think we have had a definition of the word, "phenotype," on the record, and you just used it. Would you define that for us?

A. The term is used in a context of this report on page 19, where it first appears. It first appears in this context in the phragmites intimately associated with tidal creeks, mud flats, spartina alterniflora, high vigor, and the lower more frequently inundated marsh area shown in the bottom right-hand portion of the photograph, manifest a predominantly green signature on the color infra-red photography and will be referred to hereafter as signature Phenotype 1 Phragmites.

I don't know what the word, phenotype, means. My understanding is that it refers to a growth form of plant. Dr. Maddux, our staff biologist, is in the courtroom and he could elucidate on that term directly. It is an area that is of specialized mechanical terminology that is outside my knowledge.

BY THE COURT:

Q I will leave that to Mr. Goldfein sometime today to put someone on the stand for that definition.

MR. GOLDFEIN: If it would help to be consistent with the record and have the question raised now and answered, rather than at another time, if he doesn't have to be sworn for this.

THE COURT: You better come up here so we can hear you. What is your name?

WILLIAM MADDUX: William Maddux.

THE COURT: What does the word, phenotype, mean?

MR. MADDUX: The word derives from the same Greek root that gives rise to phenomenon and it means that which is apparent or to be seen, visible, and in this sense or in a biologist's sense it is the appearance of an organism as it is to be observed directly, as opposed to the genotype which represents some biological competence which isn't necessarily revealed. Plants can show different growth habits under different conditions of growth, even though they come from the same seed. Well, what you actually see is the phenotype, it is what is there. The genotype is the whole range of things that might be there if you change the conditions of growth and so on.

MR. RINDONE: Is phenotype a term of classification?

MR. MADDUX: No, it is a descriptive term, I would think, to distinguish the observable plant, a particular plant.

Q. Since this was Phenotype 1, is there a Phenotype 1, 2, and 3, each having different characteristics?

A. Yes, but they are distinguished on the basis of what the plant actually does as a phenomenon, rather than what it might do, because it has some range of growth capacity.

THE COURT: Thank you, I am going to have a rather long call to Trenton now, so we will adjourn to one-thirty.

Thank you, Doctor.

[Recess 12:30 to 1:30.]

AFTERNOON SESSION

BY THE COURT:

Q All right, we finished with phenotype and genotype.

A. In R-149, which is the Hackensack Meadows, the report of the details of the program by Earth Satellite Corporation under contract to the State of New Jersey are included, the types of botanical observations and the field work are described and there are two particular appendices that I would like to refer to. Number 1 is Appendix A, on page 167, which describes and records the information on Tidal Access in various portions of the maps and Appendix D, on page 199, which contains the map reports on each map. They were provided to the State by Earth Satellite Corporation. These map reports identify the map and the photography that was used, the analysts, the field investigators, and dates, describes the area mapped, discussed the tidal conditions, and includes any additional remarks that the analysts felt were pertinent.

THE COURT: Counsel, I commend this exhibit, R-149, to you and particularly those pages that Dr. Feinberg has referred us to. This might be helpful to you in cross-examination, plus it might eliminate a lot of cross as to what was done and when. I think the chronology appears to be excellent on Appendix A on 167 as to what was done and when, and that is Appendix A, 167, and Appendix D, 199. Appendix D is the map reports and Appendix A is tidal access information. For example, it shows a map sheet number, the grid square, location, the source of information, the approximate date of information acquisition, and the type of information. An example would be map so-and-so, the source of information is the Hackensack Meadowlands Development Commission. The approximate date the information was acquired in 1973, the type of information, tide gate. Others will say what culvert, bridge, open tidal channel, and so forth.

A. On page 3 of the report, Table 1.1 also is a historical summary of the major dates that occurred of the events in this program with regard to Earth Satellite's participation, 3 and 4. In this time period of

December, 1972, the State, particularly Mr. Yunghans and myself, felt that we needed some independent levels, elevations, taken in the Walden Swamp marsh to check against the Satellite work and rather than have Earth Satellite do these elevations we went to Storch Engineers because there was an existing contract for assistance in matters related to tidelands claims for the Natural Resource Council, and this would shorten the time period we would need to get a work order, and Exhibits R-243, 244, and 245 relate to this work.

Storch Engineers was asked to go out and take a sample of elevation points. They were asked what this would cost and we had a sum available to spend for this at the time, remaining in our contract, of approximately $16,000, and with this amount of money we were able to get 40 points from elevations in the Walden Swamp area. Exhibit R-245 is a letter to Commissioner Sullivan from Director Goodenough of the Division of Marine Services recommending that the Storch contract for the Natural Resource Council be renewed. This was dated October 19, 1972.

THE COURT: R-245 in Evidence, same limitation.

A. I also have a December 7, 1972, letter to me from Sam Deneka of Storch Engineers, transmitting some cost estimates with regard to the project.

Q R-243 in evidence, same limitation.

A. And, finally, I have a letter dated March 9, 1973, to Mr. Yunghans from Richard McDermott of Storch Engineers, transmitting their report of their work, of the Storch work, and the overlay that accompanied that and this letter refers to the date of the proposal, their detailed work proposal of January 23, 1973. It was that approximate time frame that we formalized the work. The actual contract was a contract with the Division of Marine Services and it was not in our possession and we were obtaining a copy, but it is in the archives of the State in the warehouse and it will take some time to get the contract itself.

THE COURT: 244 in Evidence, same limitation as heretofore.

Q Do you have 242 which relates to all this procedure, point selection for survey?

A. Yes, I do. I have that.

Q Let's mark that and you can tell us what it is. Now, who prepared R-242?

A. That was prepared by Mr. Yunghans and myself and Mrs. Stitt within the Office of Environmental Analysis. We did not want to preselect the specific points that would be surveyed since we wanted a random check on the botanical delineation work. We selected two of the 1,000-foot by 1,000-foot grid squares shown on the maps for work by Storch Engineers. We took a small overlay and divided that into those squares, into a hundred squares each. We then--I'm sorry, it was 400 squares each. This report states, Exhibit R-242, states the procedures that were used within these smaller squares and with the detail of random numbers we selected the squares by grid coordinants within which Storch Engineers was directed to go to make the survey. They were to go within a square 50 feet on the side and within there they had the choice of exactly where to survey, and this report records the numbers that were generated and the directions that were given for the points. This study at this point involved more than the 40 points, it involved 60 points that were generated, 4 points were duplicated because we were only working within 50-foot grids and we had 56 distinct points. In the end it came down to 40 points that were actually used because that was the limit of the funds to get a sampling of the data.

Q And that was to be used to check out Earth Satellite? A. To be used to evaluate Earth Satellite's work. To evaluate the results based on some sampling of the underground of the marsh surface.

R-142 is a copy of the report of Storch Engineers. That is in evidence. It describes the surveying work that they did carry out. On page 3 is a discussion of the field problems which they had to overcome.

Q Oh, yes, Mr. Yunghans testified to this. I think the report speaks for itself, doesn't it?

A. They also included observations of conditions in the field at the time they were there making the elevation surveys, including weather conditions and water levels. They were instructed to record the precise coordinates of the survey point. They were directed to go somewhere within the square. When they went there they were to measure exactly where they were and also to give the elevation so we would be able to plot this on our maps.

In the time period of January, 1973, I completed a paper on the determination of lands now or formerly below mean high water, which set forth our thinking as of that time as to the technical problems and difficulties and approaches to the delineation of the State's claim. It includes some background discussion on a description of the problem, a definition of mean high water, and the problems of determining mean high water in a tidal marsh, a general discussion from the scientific point of view of what the legal requirements were.

Q To whom was this disseminated?

A. Eventually it was included in distribution with the first group of maps that were issued to the public in an information kit that went for the press conference. It was also available to anyone who asked for it to get details on what we were doing.

THE COURT: Any objection to receiving this in evidence? Not for the truth of the matter as asserted therein, but just as something that was happening intra-departmental in the preparation of these maps.

MR. WEIGEL: No.

MR. PORRO: No.

THE COURT: All right, that will be received in evidence, R-163. I don't see any markings on these. Has this been part of discovery?

MR. WEIGEL: Yes.

THE COURT: You have had a lot of this stuff already.

MR. WEIGEL: Yes, I have a copy of that right in front of me.

THE COURT: Good.

MR. WEIGEL: I guess the only question I would have on that is whether or not that is all Dr. Feinberg's effort, or whether or not it incorporated some work from one of the Deputy Attorneys General because it has some legal materials in it.

Q In preparing that report, did you consult with the Attorney General as to any part of the report?

A. I did show that report to Mr. Clayton and asked him if there were any changes which he would recommend, or inaccuracies, where he felt it should not be put out, and he said I could go ahead and issue it. That was the extent of it.

During the winter of 1973 we received from the Hackensack Meadowlands Development Commission a draft of a historical report that they did, that they compiled for the Hackensack Meadows. We reviewed this for applicability to the marsh we were working on. At the time we received it we had already completed several of the maps and this was just hand-delivered to our office during that winter, and we used it from that point on to review for historical data. I do not have a documentation of the date which we received it, this report, however. It is R-240.

THE COURT: That is not in evidence--oh, here it is.

MR. WEIGEL: I have a question on that.

THE COURT: Go ahead.

BY MR. WEIGEL:

Q. That is the report that Mr. Rosensweig, the Counsel to the Hackensack Meadowlands Development Commission, provided me a photocopy of, but he told me at the time he did that the Hackensack Meadowlands Development Commission was in the process of compiling that material in some kind of a report that was going to be made generally available, in other words, to finalize that information. Do you know if that was ever done? A. I don't know. We have never received a copy.

MR. PORRO: My information, your Honor, is that it has never been completed, and I would like to object to its admission at this point because it certainly doesn't carry with it the credibility of the report of any particular agency.

MR. GOLDFEIN: Your Honor, it has not been offered as a definitive statement by the Meadowlands Commission. It has been offered by Dr. Feinberg as something he consulted in its present form.

THE COURT: Yes, the testimony is that they did refer to this thereafter for a review of any historical data that was contained therein. Whether or not this touches on whether or not it is reliable, you can test at another time.

Just one minute,please.

R-240 in Evidence with the same limitation.

A. I will move to the next part of my presentation, which would be an explanation with an example of the technique and approach that was used to prepare the claims overlay from the various data we reviewed.

First of all, when Mark Hurd flew the photography they had paneled ground control points on the ground that would be seen from the photography, for use in preparing and positioning and rectifying the base maps. This was Exhibit R-165, which is a copy of those control sheets.

MR. WEIGEL: Are you talking now about Hackensack only?

THE WITNESS: The Hackensack, yes, for that photography, yes.

THE COURT: R-165 in Evidence. Same limitation.

A. In analyzing the various types of data we had certain rules that were followed by the analyst. There were three analysts working on the project most of the time and a fourth analyst for two maps, portions of two maps. The rules we have are a handwritten copy which I wrote, it is undated and describes the procedures.

Q. [By the Court] Does it have a number

on it? A. It is R-160.

BY MR. GOLDFEIN:

Q. When was it prepared?

A. This was written at the time that we began the analysis.

Q. When was that? A. We began analyzing -- I would have to check exactly the dates, it was either January or February of 1973, I would have to check. I think it was in January that we started the analysis of the historical sources. I have the books and the books would record the dates of analysis.

THE COURT: R-160 in Evidence with the same limitation as heretofore.

A. I have the base map and claim overlay and the data sources for this map here,if you feel they would be helpful I would take them out.

BY THE COURT:

Q. I don't think so, Dr. Feinberg. Does that have a number on it?

A. There are various exhibits in there.

Q. That are numbered? A. Yes, I will go through and name them.

Q. All right.

A. The base map I'm going to use as an example is 714 2172, Cronakill Creek in Hackensack Meadowlands, and that base map is Exhibit R-23. The claim overlay for that map is R-59. Along with the claim overlay and the base map, our final product included an overlay preparation summary. That listed the sources that were used and described which source a given portion of the claim line came from. It is a summary report, R-95, it is the overlay preparation summary that is involved with Cronakill Creek.

According to this report the sources that were used for the Cronakill Creek map were VM, the atlas sheet, number 71899, which is Vermeule, number 71899. VO, VO 1877-1887, topographic manuscript map overlay No. 714-142172.

Perhaps as I go through these I should correlate them against the exhibit numbers.

Q Yes, you should.

A. Atlas sheet number 7 is R-191.

The COURT: R-191 in Evidence. Same limitation.

A. The Vermeule overlay, VO, is R-189.

THE COURT: R-189 in evidence. Same limitation.

Q That is Vermeule, is it?

A. It's an overlay prepared from the Vermeule map. We obtained the original manuscripts for the Vermeule map from the Bureau of Geology and Topography and had contact negatives on stable base material made of these and these contact negatives were shipped to Mark Hurd Aerial Surveys and they enlarged the negatives to make overlays to fit the various base maps representing the Vermeule material.

Exhibit R-190 is a negative of the 1890 negative manuscript map sheet number 24, which includes the area of Cronakill Creek map.

THE COURT: R-190 in Evidence, same limitation.

MR. WEIGEL: Can I just ask the question, why was Cronakill selected?

THE WITNESS: Just to have one to use. There are 36 maps. I just picked one that had enough materials on it and different examples. P-32 is 1930-32 airplane photograph of atlas sheets numbers 56 and 69, enlarged versions. The originals that we used for this determination, sheet number 56, is R-187, and sheet number 69 is R-188.

THE COURT: Both are marked in Evidence with the same limitation.

A. PA is an overlay prepared from the 1930-32 photography for this map by Mark Hurd Aerial Surveys.

Q What is PA? A. That would be R-186.

MR. WEIGEL: Your Honor, can I just make a suggestion for the poor judges that are going to have to read this. PA's and the VO's and all the other stuff doesn't mean an awful lot,frankly, I don't even follow it.

THE COURT: If you just give us the R numbers.

MR. WEIGEL: They are called Vermeule, Vermeule.

THE COURT: Well, the exhibit list is pretty good the way he set it up. For example, 186 is 1930-32 airplane photographic atlas sheets overlay for map 7142172.

MR. PORRO: The problem, your Honor, in all justification, he is reading off a source list that is part of the record, and that source list has the exact letters he has given you, VO, PA. In order to tie it together, as a suggestion, I think the witness -- if they are following the source of this and his testimony is referring to an exhibit, they are going to be in a complete state of confusion. He is reading off a source list and that source list uses VA, VO, and so forth.

MR. GOLDFEIN: The list is R-95.

THE WITNESS: That's correct.

MR. RINDONE: It also has merit, your Honor, if he misstates a number you have the initial equivalent mentioned before it, so that error can be caught, whereas if you just have numbers, he might misstate a number and then you would have no way of knowing he misstated it.

MR. PORRO: It may not matter.

Q. Go ahead, do it any way you want.

A. As Mr. Porro said, I am reading the data source designations from the overlay preparation summary, R-95, and correlating those with exhibit numbers on the list.

P-40 involves panchromatic photographs, number 12-168, 12-198, and 12-199, produced by Aero Service on April 6, 1940. The exhibit R-192 is photograph 12-168. R-193 is photograph 12-198, and R-194 is photograph 12-199.

Q. Those are all marked in evidence with the same limitation.

I wonder if I could make a suggestion on this. What you are doing now may take an awful lot of time. If you are not going to make any remarks about them, why can't you just stipulate that the material set forth in our exhibit list were considered by the division--what is your department? A. Office of Environmental

Analysis.

Q The Office of Environmental Analysis, they were considered by them in staking out the State's claim and then if there is something in particular about any one of them, I will hear you on it; but what you are really doing is reading what is on our exhibit list.

MR. PORRO: I stipulate that the source materials that are listed -- you see, different source materials are listed for different quadrangles. They did not consider all source materials on each quadrangle or perhaps they weren't relevant on that particular quadrangle. So I think what we can stipulate to is that the source materials that are listed for that particular quadrangle are materials that in fact were considered as related to that quadrant. I think it would be dangerous for us to make the stipulation that they considered all source materials as to all quadrangles because that is not so.

THE COURT: Well, I am sure he could take a group of these. These are related to chronicles, I understand. Is it important that we do know that?

Do you fellows know what they say they considered?

MR. PORRO: YOur Honor, the documents in and of themselves speak for themselves.

THE COURT: They would speak for themselves.

MR. PORRO: Rather than go through each one of the documents there, he already has in evidence a source sheet on each quadrant or sections of quadrangles as a matter of fact.

THE COURT: Why can't I mark--we are up to 250--why can't I just mark these all in evidence?

MR. PORRO: Your Honor, with the stipulation you put on that before, I certainly would go along with it.

THE COURT: I just propose to say that everything that is set forth on the list submitted by Mr. Goldfein should be marked into evidence on their representation that they considered these materials and these documents in making their claims on maps and then if you want to highlight any portion of it to beef up your administrative record, I will permit you to do it, rather than have you read all this. So everything through R-250 is received in evidence under the same limitation that I have given before.

I don't want you to feel hurt, Dr. Feinberg, I really enjoy your dulcet tones but I know you don't mind, do you ?

THE WITNESS: Not at all.

MR. GOLDFEIN: Your Honor, it was not our intention to belabor the Court's time or the record with an exposition of every document that was considered, but we thought it would be helpful for the record to reflect the process of analysis.

THE COURT: That I want to hear.

MR. GOLDFEIN: And with that in mind, I think Dr. Feinberg can save us time.

THE WITNESS: The maps are divided by a grid into 42 squares, 6,000 feet in the east-west direction and 7,000 feet in the north-south direction. Every 1,000 feet a grid line occurs.

Q [By the Court] Seven thousand feet a grid line occurs?

A. That's correct. So the map consists of 42 blocks. We anlayzed the data sources by block. Following the rule set forth in the instructions to analysts, we would start with the existing scene and work backwards in time in terms of our analysis and decision making process, but we would look at every source listed for the given map for each block and we would record the observations in a log book, dated and signed, or initialed by the analyst that made the observations.

In this way systematically it would help not to overlook any pertinent data on these sources for a given map, because we break down into a small enough unit.

Q. Did you number the blocks?

A. Yes, the blocks, the maps themselves are numbered on the basis of State plane coordinates. For example, map 7142172 represents 714,000 feet north, I believe, and 2,172,000 feet east, but I have to check again on the way it broke down, I haven't looked at that in about four years now to worry about that, but each southwest corner of the block is numbered, By the coordinates of that block. A thousand feet dropping off the last three zeros of the coordinate provided a three-digit number; the 714 was north-south. The three-digit number north-south and then the four-digit number east-west, so that each block is uniquely numbered by a southwest corner. The sources are recorded at the beginning of the section of the log book for Cronakill Creek on page 101 of Exhibit R-118. That is the pertinent log book for this map. The section on Cronakill Creek begins, the observations are recorded for each of the sources, a preliminary decision is arrived at by the analyst who did the analysis, in this case, Mr. Whitney Steven. I also note that Mr. Scoppetuolo did some of the analysis on this map, his initials appear here and then this preliminary analysis decision was reviewed by myself and I looked over all of the sources for each block and either concurred in the preliminary discussion or decision, or else discussed it with the analyst and usually all of the analysts involved would discuss this and we would come to a decision based on a mutual decision on the source materials, based on the rules, and the final decision would be recorded in the book for that block.

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Q [By the Court] But the final decision actually rested with you, did it not?

A. Yes.

Q You ran it like a democracy, you listened to people, but you guided essentially what it is.

A. Essentially.

Q Can I see that? All of these are pretty valuable, aren't they? A. They are. There are 12 -- 7 log books for the 36 Hackensack maps. Three maps are included in each log book.

THE COURT: The witness is referring generally to Exhibits R-109 through R-120.

Q Is that right?

A. That's correct.

THE COURT: Those are exhibits R-109 through R-121, and this one that I'm looking at is R-118

The witness says he used this as an example.

A. The overlay preparations summary, in this case R-95, is essentially a listing of the data sources that were used, the dates of review of the maps and the overlays and delineations and a summary of the final decisions expressed by block as to the source of the line for that block or portions thereof.

In the delineation process once the decisions were made for each block and the source overlays were determined, either the overlays prepared by Mark Hurd Aerial Surveys for the various sources or individual Mylars prepared by the Office of Environmental Analysis by the analysts from the historical photography, of which R-197, R-198, and R-199 apply for Cronakill Creek for this particular map, a paper print of the base map would be taken and color coated. R-162 is the particular map for Cronakill Creek. The color-coat version is in the Exhibit tube and the color-coated is used to transmit information to Mark Hurd Aerial Surveys as to which source to use for which portion of the map by source. There are also written instructions that accompany this map, R-161 is that exhibit, and in this manner we would transmit the information, along with the source materials, to Mark Hurd to prepare the drafting of the final overlay.

Upon return of the final overlay from Mark Hurd the analyst would check it carefully to be sure that the instructions were complied with and the lines are shown in the proper areas from the proper sources.

That generally is the delineation process that was used.

The Newark-Elizabeth map was of a different scale and partially was the prototype for the determination of the techniques and development of techniques from historical sources and partially was completed after we were well along in the Hackensack mapping. Mark Hurd Aerial Surveys had been asked to prepare the base map and certain overlays and to provide letters, better reports, describing the procedures that were used and the accuracies of the various products.

Exhibit R-166 deals with an overlay prepared from the Vermeule map. It includes a description of the procedures. Appended is the pertinent contract section for which this overlay was prepared and under the accuracy assessment they state that errors in the position of the data on this overlay in relation to the features on the 1:9600 scale photo base map did not exceed 0.2 inches at map scale, or 160 feet on the ground. "In our opinion, average error in the position of the data should be considerably less than 160 feet, data does not exist by which we could derive a number value for the average error."

Exhibit R-167 is a similar letter describing the procedures and accuracies of the 1:9600 scale Newark-Elizabeth meadowlands base map. Both R-165 -- I'm sorry -- R-166 and R-167 are dated September 5, 1972.

Exhibit R-168 is a similar report and an error analysis of the 1930-32 airplane photographic atlas sheet overlay for the Newark-Elizabeth, also, I believe, dated September 5th, 1972.

Exhibit R-169 applies to an intermediate product termed lands now or formerly below mean high water overlay.

This was our first attempt at generating a claim overlay using the previous sources, namely, the Vermeule and the 1930-32 data. This is the first product that we then compared in-house and discussed with Mr. Clayton and Mr. Greenberg in an attempt to determine if the procedure were viable. This letter is dated September 18, 1972, that is R-169. We continued to look for additional data sources for the Newark-Elizabeth map beyond the two that we used in the first prototype study and we produced another intermediate overlay, called it Combined Overlay, which included the 1930 photographic atlas sheet reductions of the 1917

City of Newark tax maps and a copy of riparian Exhibit DL-2. This letter report on those sources is dated March 30, 1973.

THE COURT: That is Exhibit R-170.

A. And finally Exhibit R-171 is a letter report on the accuracy and preparation procedures for the final claim overlay for Newark-Elizabeth entitled, Areas Now or Formerly Below Mean High Water, which was delivered to the State June 29, 1973.

THE COURT: R-171.

A. The overlay preparations summary for the Newark-Elizabeth meadowlands map, final date 4 April 1973, the approval of the overlay signed by Mr. Yunghans. This map went out through the final approval step as did all of them after I had approved the delineation and we had reviewed the information and prepared the color-coated map to go to Mark Hurd Surveys. We presented this data to Mr. Yunghans for review and approval before it went out to Mark Hurd. So we had a double check on the overall delineations.

The Newark-Elizabeth map includes not only the waterways and shorelines from the sources but it includes a statistical average overflow of 10 feet beyond the waterway banks. This is stated in the map report, R-176.

The reasoning behind this technique is described in Exhibit R-163, which is the paper I prepared in January of 1973 and represents the 10-foot overflow that that map scale represents the width of the delineation line. It was arrived at by looking at marshes north of Tuckerton on Barnegat Bay, or actually Little Egg Harbor, and determining that in our judgment, since the Newark-Elizabeth marsh was a salt marsh in this area and similar bay environment, that this would be a reasonable area to use for comparison.

Our bases for this conclusion as to the Newark-Elizabeth marsh were two sources. One was statements in Exhibit R-217, which is a deposition of Edward J. Grassman in the matter of Port of New York Authority, plaintiffs, versus Alfed J. Lippman, et al., defendants, as to the conditions that he had observed in the past in that marsh area. We also had a description of that marsh as a salt marsh in a report prepared by Dr. Smith of the Agricultural Experimental Station and published in 1904. This report has not been marked because we just got it from the library. Again, we had to keep returning it. It is an old book.

Q Which library is it from?

A. This is the State Library in Trenton.

MR. WEIGEL: Any particular pages in this book by numbers?

THE WITNESS: Yes, I believe the marker is in at the appropriate page.

Q. Page 365, part Roman Numeral IV, Local Problems in Surveys.

A. And that ensuing portion there is a description of the conditions in the Newark-Elizabeth meadows also.

MR. WEIGEL: Judge, can I ask if it isn't too much trouble and isn't too long to have the relevant portions read into the record, because it will save us all the trouble of having to go to the library in Trenton and try to get the book.

Q. It isn't long? A. Not too long.

Q. It can be Xeroxed, I guess. How many pages?

A. I think the immediate pertinent parts are very short.

Q. All right, go ahead, read them in.

A. In being concerned with the mosquito problem in the Newark Bay area on page 365, Chapter I, it is entitled, "The Newark Bay Problem." It states, "This divides naturally into two parts, the salt marsh area and the city breeding places." I will skip now to page 369 which talks about the marsh portion.

"The salt marsh line within the limits of the City of Newark covers an a rea of about 3,500 acres, beginning on the Passaic River at a point about one and one-half miles east of the Pennsylvania Railroad, crossing and extended southwesterly to the mouth of Bound Creek where it empties into Newark Bay. Bound Creek is the dividing line between Newark and Elizabeth, all to the south of the creek belonging to the latter city."

Then it proceeds to describe other conditions about the ditching and other creeks on the marsh generally, but it did describe it as a salt marsh very specifically.

MR. WEIGEL: That is what you relied on, just the reference to salt marsh that is in there? That is the pertinent portion of that book?

THE WITNESS: That is the key portions. There are some additional vegetative descriptions later plus the Grassman deposition.

MR. WEIGEL: Your Honor, here is another one of these points that we want brought to your attention. We take very strong exception to what the State has done here. They have, in effect, asserted a claim to the equivalent of 20 feet, 10 on either side of the bank, as shown on the Vermeule map, the filled-in creeks or streams in the Newark-Elizabeth meadows, on the basis of statistical information drawn from the Little Egg Harbor meadow, which is miles and miles and miles away from this Newark-Elizabeth meadows, and the position of the appellants is that whatever validity this statistical information may have as to any area, it is absolutely irrelevant to the issue of where the State's claims fall in the Newark-Elizabeth meadows, and if I am a property claimant down there, it is irrelevant as to the State's claim on my property wherever the claim may fall on somebody else's property.

I am concerned about where their claim is on my land and if their creek or stream is in effect one foot back from where it is shown on Vermeule that is what is important to me, not what some statistical average is down in Little Egg Harbor.

THE COURT: All right. We will take a short recess.

[Recess.]

THE WITNESS: Your Honor, I was discussing the statistics that we utilized for the 10-foot overflow in Newark-Elizabeth. We selected the Little Egg Harbor marsh on the basis, number one, of it also being salt marsh and, number two, on the basis of a similar effect in terms of tides, namely, being on a bay not directly on an ocean, without a major river system flowing through the marsh, but rather a series of moderately sized streams. On this basis we selected six maps in the Tuckerton area and the area on those maps relevant to the biological high water line based on Spartina Alterniflora, namely, the edge of this Spartina Alterniflora, the apparent edge of the vegetation on the waterways was measured and that area was statistically analyzed. The measurements are described in R-174. The statistical analysis was described in R-175. The results of the analysis were that the point on the average 10 feet from the edge of the apparent vegetation came out to be the median value for the overflow and represented a 50 per cent probability that the actual mean high water at a given location would be either landward or seaward of that distance.

Our reasoning was that the Newark-Elizabeth meadows had been substantially destroyed. Much of the evidence for locating the actual boundary was gone by the time we had photography. The earlier mapping didn't have the benefit of the mean high water analyses included in it, but rather generally mapped the edge of apparent vegetation, an equitable solution would be to establish a distance of overflow of equal probability that it would be either greater or less than a given amount at any particular place you would go on the line to average out the equities between the State and the private property owners.

That was the concept involved in going to the statistical analysis.

THE COURT: What happened to Mr. Weigel?

MR. PORRO: He is on the phone, but he did advise me to tell the Court it was perfectly all right to continue without his presence.

Your Honor, on these statistical analyses, I would like to inquire if we can get photostats of those, so our statisticians can review them.

THE COURT: Surely, you can come in at any time and just give us a receipt for these exhibits and reproduce them or use the machine here.

MR. PORRO: That is fine.

THE COURT: All right?

MR. PORRO: Yes, sir.

THE COURT: I guess you are particularly interested in --

MR. PORRO: R-174 and 175.

THE COURT: R-174 and R-175 is what he just referred to, yes.

A. We were aware of the fact that the firm of

Grassman, Kreh & Mixer had done extensive surveys in the Elizabeth portion of the meadows over a number of years, and we attempted to obtain this information for use in our analyses. I have a copy of letter R-201, dated December 11, 1972, to Mr. Grassman from Harold Barker, Chief of the Bureau of Green Lands Management at that time, who at my request tried to get this information. He also followed up with a telephone call and we were not able to get this information from that firm. They would not provide it. They did not even provide us with a written response.

MR. PORRO: I'm going to object to this going in. Certainly, this does not reflect any data whatsoever and I think it is certainly no proof that these people even got that letter, plus it is irrelevant. A letter that went out with no response, I don't see administratively how it could have any bearing whatsoever on the determination that has been made.

MR. GOLDFEIN: I think at the least it is a copy of a letter, and it is by this witness's testimony an indication of an effort by the State to inquire into available sources and for that purpose alone it seems to me it is highly relevant, and I understand, I can represent to the

Court that representatives of the Grassman firm were included in Mr. Weigel's list of supposed witnesses, and I suppose they might be able to explain why, if no response was forthcoming.

MR. PORRO: If they received it.

MR. GOLDFEIN: Or if they could even indicate they had not received it; I think a copy of the letter at that point would stand for an effort to inquire.

THE COURT: All right, I will overrule the objection now. It is in for the limited purpose of what they did in preparing for these maps, subject to further cross and motion to strike.

THE WITNESS: Exhibit R-148, which was previously admitted into evidence, is a memorandum by Mr. Yunghans to Commissioner Sullivan, dated 20 July 1973, detailing the use of the botanical data and the significance of the Storch Engineers' data for the Hackensack Meadows. I just want to emphasize that as to the status of the maps that were promulgated.

Exhibits R-232 through 239, with the exception of R-237, which is a different exhibit, are excerpts of minutes of the Natural Resource Council regarding their actions on the various maps for the Hackensack meadowlands and Elizabeth meadowlands.

THE COURT: Mr. Weigel, you might make a note that Exhibits R-174 and R-175 deal with the fixing of the 10-foot delineation line.

MR. WEIGEL: Thank you.

THE WITNESS: Exhibits R-218, R-219, and R-220 are transcripts of the hearings, of the public hearings, held by the Natural Resource Council prior to the promulgation and adoption of the various maps for the Hackensack Meadows and the Newark-Elizabeth. Every map that was adopted went to public hearing and these are the transcripts of those hearings.

THE COURT: You fellows contend otherwise, don't you?

MR. GOLDFEIN: I think there was a discussion about it last week in the colloquy. It seemed Counsel were only aware of one hearing, and our research produced those three transcripts, and indicated three hearings that covered all of the maps, and we would ask we enter into a stipulation as to just which maps went in on which days and as to when, as if they were here, and the transcripts are the best evidence.

MR. WEIGEL: I know the hearing I testified at the only maps that were in issue there are what I understand are called Group 1, which would be Newark-Elizabeth, plus the first six of the Hackensack maps.

THE WITNESS: These transcripts were reviewed by the Office of Environmental Analysis prior to recommending to the Council final adoption of the maps and no changes were made in the map delineations based on the transcripts.

THE COURT: This one starts out, "Good morning, and welcome to this public hearing," and the map numbers are on the outside. Let's see.

MR. PORRO: It will give us something to stick our teeth in. [Laughter.]

THE WITNESS: There were several maps up here twice because there was a question on the public notice on two of them, I believe.

THE COURT: There are 36 maps on here.

MR. WEIGEL: Well, the only point that I really have, I didn't even know they had it.

THE COURT: You fellows asked for this.

MR. PORRO: Yes, your Honor.

MR. WEIGEL: Yes. I was informed by Dr. Feinberg and Mr. Yunghans of the first public hearing. As a matter of fact, I received an invitation to present a paper, and I did. I was not aware that there were other hearings.

THE COURT: April 30, 1973, was the first one over here in the Freeholders' room; April 30, 1973, that is R-218, and then November 8, 1973, fourth floor Freeholders' room, Bergen County, and then May 9, 1974, in the Freeholders' room, 10:45 in the morning, 10:30 in the morning, ten after ten in the morning.

Okay. Did you say you appeared at the first? Which one?

MR. WEIGEL: I believe it was April 30th. I remember spending a whole weekend writing about a 30-page tome and then delivering it to great silence.

THE COURT: You are not even listed as appearing on here. Did you get up and say something?

MR. WEIGEL: Mr. Porro is my witness, it was like 30 pages long.

MR. GOLDFEIN: Your Honor, I read it this weekend. Ther is substantial testimony by Mr. Weigel and witnesses that he brought along.

MR. WEIGEL: I brought Dr. Barkhorn and

the City Engineer from Hoboken and Mr. Sprouls, I believe.

THE COURT: I see Sprouls in here and Barkhorn. You'd better check the accuracy of this thing. It has you, Mr. Weigel, saying, "I agree that the biological test can be an exceedingly accurate indicator of the ebb and flow of the tides--"

MR, PORRO: He was delirious. [Laughter.]

BY THE COURT:

Q How are you doing, Doctor?

A. I'm on the last one.

On December 20, 1973, Mr. Seestrom of Mark Hurd Aerial Surveys sent a letter report to Mr. Yunghans regarding further accuracy tests of the Newark-Elizabeth base map. These tests were performed using National Ocean Survey data for airport control at Newark Airport and had come about through discussions that had taken place during discovery and taking of depositions of Mark Hurd's people for the particular action of the City of Newark case when we were out there in October of 1973, and those results confirmed the earlier accuracy statements as stated in Mr. Seestrom's report.

Q Is that it?

A. I believe that covers the preparations.

THE COURT: Anything further, Mr. Goldfein?

MR. GOLDFEIN: No, your Honor.

THE COURT: Now, tomorrow you don't have anybody lined up, is that it?

MR. GOLDFEIN: I don't, your Honor. I was counting on good weather in the meadows.

THE COURT: All right, we will pick up Monday at 10:30.

[Adjourned to Monday, March 22, 1976.]

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I, EDWARD SALBIN, Official Court Reporter, do hereby certify the foregoing transcript.

Edward Salbin

March 25, 1976.

"A-3311-72

ns Brf.

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SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
(On Remand To Law Division
Bergen County)

CITY OF NEWARK, et al., :
Appellants, :
-vs- :
NATURAL RESOURCE COUNCIL, et al., :
Respondents. :

VOLUME V

FILED
APPELLATE DIVISION
NOV 2 1978
Elizabeth McLaughlin
CLERK

NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :
Plaintiff, :
-vs- :
BOROUGH OF EAST RUTHERFORD, et al., :
Defendants. :

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
DOCKET NO. L-16799-72

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March 22, 1976
Courthouse, Hackensack, N.J.

B E F O R E:

HONORABLE THEODORE W. TRAUTWEIN, JASC

A P P E A R A N C E S:

For Natural Resource Council, et al.
WILLIAM F. HYLAND, ESQ.,
Attorney General of New Jersey
By: MORTON J. GOLDFEIN, ESQ.,
Deputy Attorney General and
STEPHEN E. BROWER, ESQ.,
Deputy Attorney General

A P P E A R A N C E S (Continued):

For Trustees of the School Fund
WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General.

For City of Newark, City of Elizabeth,
N.J. Land Title, Esther G. Bertoni,
et al.,
JOHN R. WEIGEL, ESQ.

For Borough of East Rutherford
ALFRED A. PORRO, JR., ESQ.

Reported by: EDWARD SALBIN
Official Court Reporter

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EXHIBITS

THE COURT: This date the Storch Survey-Walden Swamp has been marked for identification as Exhibit R-251.

Mr. Goldfein?

MR. GOLDFEIN: Good morning your Honor. If the Court please, our witnesses this morning are representatives of Storch Engineering Firm and with the Court's approval Mr. Rindone will conduct this portion of the case.

MR. RINDONE: May it please the Court, I call Mr. Deneka to the stand.

SAM DENEKA, sworn.

DIRECT EXAMINATION BY MR. RINDONE:

Q Mr. Deneka, by whom are you employed?

A I'm employed by the town of Bloomfield.

Q In what capacity?

A As assistant municipal engineer.

Q How long have you been so employed?

A Eighteen months.

Q And your prior employment?

A Storch Engineers.

Q How long were you employed

by Storch?

A Ten years six months.

Q In what capacities were you employed by Storch?

A I was a supervising engineer and in charge of land survey work.

Q And would you outline for us your technical background?

A I have a bachelor of science degree in civil engineering from the Newark College of Engineering, graduated in 1957. I was employed by consulting engineers and construction contractors for the seven years prior to my employment with Storch Engineers, commencing in 1964. The work included land surveys, engineering surveys, design engineering, engineering design work, calculations.

Q Have you had any engineering experience other than in connection with the report prepared by the State in tidelands relative to tidelands?

A We were design engineers, Storch Engineers was the desing engineers for the construction of groins which are in effect stone jetties that extend into Long Island Sound at Long Beach-Stratford, Connecticut. As part of that work it was necessary to ascertain the location of tidal lines, mean high water lines, low tide water lines on the beach for the geometric configuration of these stone groins.

BY THE COURT:

Q You said Storch was involved in that. Were you involved in the project also when you worked with Storch?

A Yes, I was.

Q Any other experience in tidelands matters?

A No.

THE COURT: What is this witness being offered for?

MR. RINDONE: In connection with the report in evidence, your Honor, 142.

MR. PORRO: Your Honor, on the qualifications would you mind if he stated on that what his previous experience of what method was used to establish the line, just by way of background?

THE COURT: All right, don't forget now, we are still establishing this record and you will have your shot one of these days, but I think Mr. Porro's question might be appropriate.

What method or methods were employed by Storch to establish these various lines, including mean high water lines?

A There were soundings taken in Long Island Sounds to locate, determine the elevation and configuration of the Sound bottom as well as conventional leveling techniques to ascertain the configuration of the beach surface.

In my qualifications I neglected to indicate I am a licensed land surveyor, professional engineer of the State of New Jersey, licensed land surveyor and professional engineer in Connecticut, Massachusetts and a registered professional engineer in the State of New York.

THE COURT: Well, did you employ tide gauges?

A There was a tide gauge in existence adjacent to the project that we were able to utilize data and refer that information to the site.

THE COURT: What have you got, the original exhibit, Mr. Rindone?

MR. RINDONE: Yes sir, 143.

THE COURT: Was there a copy?

MR. RINDONE: Yes.

THE COURT: I would like to have one in front of me. Do you have another one?

MR. RINDONE: Yes sir.

THE COURT: All right, you may proceed with your direct testimony and the rights of the appellants are reserved with respect to their case and whatever they want to do about qualifications at that time.

BY MR. RINDONE:

Q May I ask one additional question in the prior vein to clarify the situation in the Court's mind?

Mr. Deneka, what was the character of the Long Island property that was involved in your survey work?

A It was a beach area that was used for recreation purposes. It was very flat and regular. There we no -- there were very minor irregularities in the configuration of the tidal lines; that there were no streams, jetties, or irregularities in the condition of the surface.

THE COURT: Were there any marshlands there?

A There were not.

BY MR. RINDONE:

Q Was there any vegetation?

A There was not.

Q It was all sand?

A Correct.

THE COURT: All right.

Q I show you S-142 in evidence. Can you identify that?

A Yes, this is a survey report submitted by Storch Engineers in 1973, survey work we performed in Walden Swamp.

Q I show you R-251 for identification and ask if you can identify that?

A Yes, this is an overlay prepared by Storch Engineers that depicts graphically the data obtained and presented in this report.

Q By this report you mean R-142 in evidence?

A Yes.

Q Finally I show you R-26 in evidence and ask if you can identify it?

THE COURT: It has been identified, I don't know why you have to go through this? It is in evidence. It is a base map number 721-2160, Walden Swamp.

MR. RINDONE: I just wanted to orient the witness, your Honor.

A Correct.

MR. RINDONE: If we could have those affixed to the easel.

THE COURT: Yes.

BY MR. RINDONE:

Q Now, Mr. Deneka, in connection with that report what was your relationship to the work done by Storch that culminated in that report?

A My work involved several phases. The first portion was the negotiation of the contract or terms under which we were to do the work. I prepared a proposal of that,outlined to the State what it was we proposed to do, how we proposed to do it, how long we expected to take to do it, what the cost would be and my work involved the selection, obtaining of the necessary equipment.

THE COURT: Maybe you better establish this. Was he in charge of this project? What was his role? He said "we" did this.

Q Within the hierarchy of the project what was your position?

A My position was supervising engineer, supervising surveyor. There was a project manager, Richard McDermott who was in charge of the project and had overall responsibility for it. The nature of obtaining the field work and the way our office was set up internally I was involved with, as I said, the preparation of the proposal and coordinating equipment and field crews to actually do, accomplish the field work.

THE COURT: Did you participate in preparation of R-142?

A In preparing portions of the technical data and reviewing the text when it was completed. I did not write the report or take prime responsibility for its format or text.

BY MR. RINDONE:

Q I call your attention to page one of that report, one, the paragraphs numbered 1, 2, 3 and 4, under the heading of objectives. Does that summarize the contractual arrangement between Storch and the State of New Jersey in this project?

A Yes.

Q Now, what consideration went into the establishment of these objectives?

A The objectives were a result of a request by personnel from the New Jersey Department of Environmental Protection.

Q Do you know their names?

A Yes, Mr. Roland Yunghans and we worked closely with Mr. Ed Feinberg and the objectives were set forth by them, and paragraphs one through four summarize what it is they wanted.

Q If you recall was there discussion of a mean high water line survey in this location?

A In the preliminary conference, attended by Mr. Herbert Storch, Mr. Yunghans and Mr. Feinberg, there was a question, exploratory question to the extent based on our experience could we ascertain the mean high water line and present that data to the State. It was our opinion that with the standard survey techniques that we were familiar with, our familiarity with the site as a result of preliminary site inspections, that it was --

MR. PORRO: Can you fix the time?

A Yes, there was site inspections prior to Christmas 1972, I don't know the exact date.

THE COURT: What was that date?

MR. RINDONE: Christmas 1972,

you Honor.

A It was our opinion that the definition of the mean high water line by standard surveying techniques was a practical impossibility at this particular site due to the irregularity of the numerous streams and ditches and channels and the contours of the surface, that it would be physically or practically impossible to define the high water line.

Q Now, for the record, you have mentioned conventional leveling techniques and the phrase "standard surveying techniques." What do you mean by these designations?

A Standard surveying techniques to present an elevation contour, which could be interpreted or reduced to a high water or low water line. Standard surveying techniques determine elevation and location of a particular point or points and connecting data from these points by use of interpolation or in effect extending the data that is obtained. The data obtained beyond the initial measurements or the initial point measurements is assumed. It is assumed that things are regular, they change in a regular degree from one point to the other, and this site did not lend itself to that type of assumption.

MR. WEIGEL: Your Honor, I think it is important in the record, since we have had through this gentleman's testimony the word "we" used, that we identify who specifically from this firm takes responsibility for the conclusion that this area could not be practically mapped in terms of the mean high water line.

THE COURT: All right, I think that is a reasonable request and let's explore that.

BY MR. RINDONE:

Q Was this your conclusion solely?

A There was discussion between Mr. Storch, the owner of the firm, and myself at this meeting along the lines of what the problems were and it was agreed between the two of us that we could not do that in that manner.

Q And to the extent that it is relevant, your Honor, do you know Mr. Storch's qualifications?

THE COURT: Let's not go into that. We are not going to hear the witness testify to someone else's qualifications. He is an engineer I take it?

A Correct.

THE COURT: All right.

Q What implements would be used in that type of analysis, conventional leveling, conventional surveying techniques?

THE COURT: Well, that is all covered in the report, isn't it? He describes in great detail the method of obtaining raw data.

Q Now, in the course of the acquisition of the data upon which this report was based were observations made of the physical characteristics of the property in question?

A Yes.

Q By whom and under what circumstances?

A The data was obtained by determining the elevation at a specific point. It was noted at the time of that observation the time of the observation, what the character, surface characteristics of the ground surrounding that point was and noted, it was observed whether the ground was the same elevation, a higher or a lower elevation, and this was done in a standardized pattern and noted for the area to the north, east, south and west and it was noted if the point was under water at that time and what the depth of the water was at that time, if there was any other points of note that were recorded and there were certain remarks made as to whether physical things, such as "covered by reeds, covered by ice, the extent of a low area, the ice formation on reeds above the ground, how high above the ground."

THE COURT: Are you able to come back here at another time? I presume you are? Are you able to answer any questions with respect to this report?

A Pertaining to the survey aspects.

THE COURT: Anything that is in this report.

A Yes.

THE COURT: All right. I don't think we have to go into too great detail. This report speaks for itself. I don't say I understand everything, but I'm hoping that respondents will in their cross examination clear up a lot of areas here, but we are more or less at a prima facie stage right now unless there is something you think that this man can add to this report that isn't in here now that might alert Counsel to areas they want to explore at another time, why I don't think we have to go into any great detail.

MR. RINDONE: I have one further question of this witness.

THE COURT: I have one question I want to ask him.

Can you in a nutshell explain to me what is meant by the expression "New Jersey Plane Coordinate System"? I have an idea as a layman what it means, but I think we ought to have something in the record on this because it is going to come up from time to time. Can you give me sort of a textbook definition of the meaning of that phrase as it relates to civil engineering and surveying in particular?

THE WITNESS: A plane coordinate system refers to a rectangular grid set in a horizontal plane, and the points traveling horizontally and vertically being numbered consecutively and the grid lines, the intersection of any grid line can be defined by the numbered line, the intersection of the numbered lines.

This in effect is the grid system. We have a grid pattern and each of the horizontal-vertical lines are numbered. Now, the State of New Jersey has a standard numbering and location for this grid system. It begins at a point on the western side of New Jersey and a coordinate value is assigned to it and traveling east every thousand feet there is another grid line. Also, at that point traveling north every thousand feet there is a horizontal grid line. Now, the vertical and the horizontal intersect and a point can be defined by the number or the number of thousand feet that the point is east or north of the base point.

THE COURT: The New Jersey Plane Coordinate System is a system in existence?

A It is a standard system that the entire State is referenced to.

THE COURT: You refer to that,

don't you surveyors refer to that?

A Correct and there are monuments throughout the State whose coordinates, whose north and east distance from the standard point has been determined and by relating any given point to these monuments the coordinates of that point can be determined. It extends over the entire State.

THE COURT: And one of your jobs was, I believe, there was some forty points located in this Walden Swamp area that you were going to get elevations and when you got those elevations they would be expressed in terms of their relationship to the New Jersey Plane Coordinates System. Is that correct?

A Correct, by establishing our control within the New Jersey Coordinate System we could calculate what the coordinates were of any point that we located from the control.

THE COURT: All right, thank you.

BY MR. RINDONE:

Q Did you have discussions with personnel of the Department of Environmental Protection during or after the field work was accomplished?

A We reported almost daily the progress of the work and some of the problems, physical problems we encountered in the performance of it.

Q To whom particularly?

A To Mr. Feinberg.

Q And you speak of physical problems, can you indicate to the Court the nature of these problems?

A Times when the tide was such a height as to prevent getting onto the site to work.

MR. PORRO: I object your Honor, unless we establish date and time. He could be describing a situation with an extreme high tide and he just happens to be talking about the East Rutherford area and I don't want anything prejudicial in the record.

THE COURT: The report, R-142, has detail on weather conditions and dates.

MR. PORRO: Your Honor, the specific time is very very important on a particular piece of property. It could be at a time when there is an extremely high tide which it has no relevance.

I'm most concerned now relative to his testimony that could be prejudicial to the East Rutherford case because he is talking in that area.

THE COURT: Well, you are not cross examining him on this. This is direct.

MR. PORRO: I guess so.

THE COURT: I will allow the answer to stand.

A Other problems such as bad weather problems at a particular site location, physical, gaining access to the points limited the progress of the work and general remarks of that nature.

BY MR. RINDONE:

Q Were there any conversations with personnel of the Department of Environmental Protection after the field work was concluded?

A No, not with myself.

BY THE COURT:

Q R-142 is an accurate summary of the work that was done in the Walden Swamp area under your contract with the State of New Jersey. Is that what you're saying to me?

A Yes.

Q You reviewed it, you said you

did review the text and you are prepared to answer questions in connection with that report?

A Yes.

THE COURT: In essence you have a witness under oath verifying the accuracy of this report as it relates to the work that was done in the field.

MR. RINDONE: No further questions of this witness, your Honor.

THE COURT: Thank you Mr. Deneka. I guess that is all.

MR. PORRO: Your Honor, before this witness leaves the Courtroom would it be proper at this point, since he is no longer employed by Storch according to his testimony, to have it understood that this particular witness will be able to be recalled without going through any technicalities of subpoenaing and that in conjunction with his being recalled, the Storch records, the field notes and so forth, will be made available? Can we stipulate to that so we don't have to go through subpoenaing Storch, subpoenaing him.

THE COURT: Was it necessary to subpoena Mr. Deneka?

MR. RINDONE: No sir.

THE COURT: What does your contract cover, defending reports? Is that it?

MR. RINDONE: Not as a matter of strict contract, no sir.

BY THE COURT:

Q You are in Bloomfield, is that it?

A Correct sir.

THE COURT: Mr. Goldfein and you Mr. Rindone, have you got any trouble producing this man when we want him?

MR. GOLDFEIN: I don't think so, your Honor, I think his appearance today is proof.

THE COURT: You will have to coordinate his appearance with records of Storch sometime or other.

MR. GOLDFEIN: We intend to do that now, we have another witness here from Storch as well.

THE COURT: Give him reasonable notice.

MR. RINDONE: I will call Mr. McDermott.

RICHARD JOHN MC DERMOTT, sworn.

DIRECT EXAMINATION BY MR. RINDONE:

Q Mr. McDermott, by whom are you employed?

A Storch Engineers.

Q In what capacity?

A At the present time I'm the chief engineer in the Florham Park office.

Q How long have you been employed by Storch?

A Five years and ten months.

Q Have you served in that employment in other capacities?

A Yes. I had been a project manager prior to being chief engineer.

Q What is your educational background?

A In 1960 I graduated from Newark College of Engineering with a bachelor of science degree in civil engineering. I am a professional engineer registered since 1965 in New Jersey. I have experience in design and survey work for engineering projects such as roadway development, subdivision work, sanitary and storm sewer design and similar type work.

Q I call your attention to R-142 in evidence. What was your involvement in the project which resulted in the submission of this report?

A It was my assignment to be the project manager for this project, which involved coordinating and directing survey work and the preparation of a report which is this item, describing our survey.

THE COURT: Did you write 142 and its applications?

A Yes, I did.

BY MR. RINDONE:

Q Did you have a role in the preparation of R-251 for identification which is the overlay on the easel.

A Yes I did.

Q You can step down and examine it if you wish.

A Yes sir.

BY THE COURT:

Q What was your role?

A I directed and checked the mapping as it was prepared by the technicians and engineers in our office.

BY MR. RINDONE:

Q Were you involved in the proposal offered to the State which culminated in the report in question?

A Partially involved in that.

Q To what extent was your role in that?

A I had an understanding of what the work would involve and provided my comments on what would be required to perform the work and did meet with the representatives of the State of New Jersey, Department of Environmental Protection, to discuss some of the work to be performed.

Q And who were those persons from the State of New Jersey by name?

A Mr. Roland Yunghans and Mr. Edward Feinberg.

Q And would you recount for us the general tenor of the conversations you had with Mr. Yunghans and Dr. Feinberg?

A The discussion involved what the work would require and we discussed that a precision survey was necessary, obtaining spot elevations and the coordinates of these elevations and documenting the work that would be performed in the field to do this and preparing a report summarizing the project.

Q Was it revealed to you in these discussions the purpose for this precision work?

A It was indicated that it was to be utilized to proceed with some sort of tidal investigation. That was about the extent of my knowledge.

Q Was there discussion of the construction of a mean high water line or the elimination of that possibility as part of this project in your discussion?

A Not that I can recall.

Q What information did you utilize in the preparation of this report?

A The information that was utilized was obtained in the field by survey forces under my direction, whereas I transformed, with assistance, the field data into values for elevation and coordinates and related observations for locations surveyed in the field.

Q Do the objectives stated on page one of the report reflect the general tenor and thrust of the proposal that was accepted by the State of New Jersey?

A Yes.

Q Were there discussions after the report was submitted, or during the formulation of the report, with State employees?

A There was periodic liaison with State employees to discuss the progress of the work and the type of conditions that were encountered in proceeding with the work. At the conclusion of the report my only contact was to deliver the report and briefly comment on having completed the work.

Q Referring to R-251 on the easel, does that accurately portray the data that was included in the report and that was required in the field work referred to in the report?

A Yes, that is a supplement to the report containing the data that is contained in the report.

Q Would you describe briefly for the Court and the record exactly what is intended to be portrayed by R-251?

A R-251 contains a layout of grids, each small square in two particular areas containing about a quarter of an acre or ten thousand square feet. Within forty of these small squares an elevation is shown for each of the forty squares. The elevation is the result of our survey at that particular point that is marked with an X. The tabulation to the right of the grid contains the elevation and coordinates of the various points that are referenced within the grid.

Q How are the points chosen?

A The squares in which the points were to be obtained were specified by Mr. Feinberg. His selection of the points was performed prior to our meeting with him.

THE COURT: This portion of R-251 that has the grids on it, can someone show me how this relates, Mr. Porro, to the mini-case within this case, the East Rutherford case? Now we will have to speak up so the reporter can hear.

MR. PORRO: East Rutherford's property is in the area, the northerly boundary starts at the easterly side of Berry's Creek where there is a designation of a smaller creek and it runs to the south, which would include areas that these elevations have been taken on, your Honor, but we are in the area of where the elevations were taken.

THE COURT: Is your East Rutherford property the conflux on the grid on this map?

MR. PORRO: Yes, particularly the grids in the most northerly section, the northerly quadrants would be affecting our property directly.

THE COURT: Berry's Creek is running roughly what, north and south here?

MR. PORRO: Yes, your Honor.

THE COURT: And than what is this tributary off Berry's Creek?

MR. PORRO: Anderson's Creek.

THE COURT: Anderson's Creek and the grids are just to the south of Anderson's Creek and to the east of Berry's Creek and to the west --

MR. PORRO: Of the ditching.

THE COURT: -- of the ditching. I don't know if there is a name on the ditching.

MR. PORRO: No, I don't believe there is any name on the ditching. It is the major artery of the ditch though in the area.

THE COURT: Okay.

BY MR. RINDONE:

Q Mr. McDermott, is there a point located in each square of the smaller grid on R-251?

A No.

Q How many points are there?

A There are forty points, each in a separate small square.

Q And were the points locations specified by the representatives of the State of New Jersey?

A The square was specified in which the point was to be obtained. The point is at a random location within that square.

Q Who selected the point location?

A The man operating in the field with the rod and prism equipment selected the point when he was within the square by simply stopping at a convenient location.

BY THE COURT:

Q On the scale used what are the dimensions of each square? I know Dr. Feinberg described it once before, but let's have it again.

A The scale is 200 feet to the inch for destroying and each grid, the smallest of the grids is 100 feet by 100 feet.

BY MR. RINDONE:

Q Mr. McDermott, if you can answer this question with that information available, within the one hundred foot grid system can you draw a mean high water line?

MR. PORRO: I object.

THE COURT: Wait a minute now, did he?

Q Did you?

A No, I didn't.

THE COURT: What is the relevancy of that question?

MR. RINDONE: Is there any reason why you didn't?

THE WITNESS: Based on my experience I couldn't.

Q Why couldn't you.

MR. PORRO: I'm going to object. This has nothing to do with the City of Newark aspect. He is into my quiet title, if we want to do that, that is fine, but I want to cross-examine him right now then.

THE COURT: You will have him back again.

MR. PORRO: I wouldn't want him back after he has a couple of months to prepare your Honor.

MR. RINDONE: Aren't we interested in what was done by the State?

THE COURT: Yes.

MR. RINDONE: And if that information was available during the period we are exploring is it not legitimate to inquire what was not done as might reasonably have been done as opposed to actually what was done, to give us perspective in this matter?

MR. WEIGEL: Your Honor, I have an objection different from Mr. Porro's. My objection is that this gentleman has already testified pretty clearly about what he understood the project to be and using his own words he said he didn't recall whether the project involved any requirement for drawing a mean high water line.

THE COURT: I think if you examine page one of R-142, Mr. Rindone, the four objects do not relate at all to the fixing of a mean high water line.

MR. RINDONE: It might be an appropriate question as to why not, your Honor.

THE COURT: He was told by Mr. Yunghans, or he, Storch Engineers, were given a job to do and they were told what the objects were going to be in this field work and report an overlay.

MR. RINDONE: There is also the testimony of the prior witness, your Honor, that there were preliminary conferences as to the scope of the work to be done and the reasons why certain things were selected as being project objectives and reasons why other things were not done and my making reference to the specific physical circumstances as they ultimately evolved I think brings into sharp focus for the Court and the record the reasonableness and the viability of the initial conclusions that the project should go in a particular direction, namely not to undertake a mean high water line.

THE COURT: Well, I know we are

just laying the groundwork here for a record for Appellate review, that is, what did the administrative agency do in promulgating these maps and these witnesses are going to be back another day to be cross examined. All right, go ahead, ask them why they didn't try to fix a mean high water line.

MR. WEIGEL: Your Honor, can I ask because I think it is very important if you allow this to proceed in this fashion, ask this gentleman to indicate who, whether it was the State or whether it was Storch Engineering, was coming up with these conclusions and making recommendations?

THE COURT: All right.

MR. WEIGEL: I think it is important that we know that it was Storch that made a decision as opposed to Roland Yunghans and then Feinberg.

THE COURT: If you know that already why do you want to have it said? You seemed to know, you have explored this in depositions, have you?

MR. WEIGEL: I have never had this gentleman deposed.

THE COURT: Okay, ask the question relating to why they were never given the responsibility of fixing a mean high water line or any kind of a water line.

BY MR. RINDONE:

Q Given the data that was developed in connection with the thousand foot grid square and the elevations that were developed, was it your testimony, do I recall correctly, that a mean high water line was not undertaken with that information?

A Not by Storch Engineers.

Q Right.

A Yes sir, that is correct.

Q And would you state for us what the reasons were why that was not undertaken, if you know?

A I really don't know why. We were assigned the work that we did do and that work specifically, without any additional work.

MR. RINDONE: It seems we had a tempest in a teapot. I have no further questions of this witness, your Honor.

THE COURT: Thank you, you can step down sir.

(Witness excused.)

MR. RINDONE: Your Honor, I would like to offer R-251 in evidence. I don't think it has been received as yet.

THE COURT: R-251 will be received in evidence with the same limitations as heretofore expressed.

MR. RINDONE: Thank you your Honor.

MR. GOLDFEIN: Your Honor, the next scheduled portion of our presentation will deal with testimony of James Johnson and the resources of his office that were incorporated into the mapping project and I think perhaps we could complete that before lunch.

THE COURT: Good.

MR. GOLDFEIN: And Deputy Attorney General Brower is going to handle part.

JAMES R. JOHNSON, sworn.

DIRECT EXAMINATION BY MR. BROWER:

Q Mr. Johnson, would you give your address and age?

A I reside at 17 Yorktown Road, Bordentown, New Jersey. My age is thirty-six years old.

Q By whom are you employed, Mr. Johnson?

A I am employed by the Department of Environmental Protection, Division of Marine Services.

Q For how long have you been so employed?

A I have been employed by the State for sixteen years.

Q What is your present position?

A Presently I'm supervisor Riparian Section with the Division of Marine Services.

Q How long have you been in that position?

A I have been in that position since May of 1971.

Q Could you state the duties and responsibilities of that position please?

A Duties and responsibilities would be to accept and review applications dealing with riparian lands, that is, applications for grants, leases or licenses for the tidelands owned by the State of

New Jersey; also to accept and review and process applications dealing with waterfront development permits, that would be any development that is to be done on those tidelands would be subject to an application and a permit from the State of New Jersey before the development is commenced. And also custodian of any and all files dealing with those applications as well as maps of record, surveys that come in with the applications, aerial photography. Also I serve as staff member to the State's Natural Resource Council, which is the State tidelands agent, in dealing with the sale, lease, license, or development permits of any riparian lands or tidelands of the State.

Q With specific regard to tidelands and the subject matter that is before the Court, can you tell us what additional records are maintained within your office?

A As I indicated before in my office would be all the application files that date back to the State of New Jersey being in this business. In those files would be copies of the applications and other supporting data that came in with the applications, such as deed of record, surveys made by licensed land surveyors. In the permit application files would be copies of construction, daily drawings, plans and specifications made by professional engineers in the State of New Jersey.

We also have in the office atlas sheets, riparian atlas sheets that cover and sort of are used as an index to indicate any and all tidelands of the State that have heretofore been conveyed, either conveyed or leased or licensed. These atlas sheets are updated by my people in order to keep a current record of what has been conveyed by the State and more or less what lands have not been conveyed by the State.

BY THE COURT:

Q You mean you have a map that is readily available that can show every grant that was ever given, within reason?

A In most cases we did have. On some of the major waterways we do have maps which are on the order of a tax map, that delineate plots of land that have been conveyed or leased by the State of New Jersey.

Q And you can look at this map and see where a grant was located and then do you have some system where you can go to the file and pick up the application and show the procedure that was followed in making the grant?

A Yes sir. What you would do would be to refer to the atlas sheet. On the atlas would be a reference to whom the grant was made, or lease or license. It would indicate the date of that transaction and it would indicate the recording data of that transaction in the Division's own Liber, you might say. You might say the Division maintains its own hall of records insofar as riparian sales, leases and licenses are concerned.

MR. WEIGEL: Your Honor, I can indicate, for whatever assistance it may be, that I have the intention in our case to ask Mr. Johnson to bring to Court the two series of atlas sheets which the State has and I think just for illustrative purposes we might use those sheets for Newark-Elizabeth and the Hackensack, and I was going through them over the weekend and compiling the list of requests for specific grants to bring along and I know these are in books and if it is needed that they be copied. I am willing to pay the cost of copying them.

THE COURT: You know what I'm

interested in and that was a portion of my order that said at your request they were to indicate what grants they were now seeking to invalidate.

MR. PORRO: Yes.

THE COURT: That has never been complied with but I understand the notice of appeal was amended to include an appeal from that order. But I believe I would like to hear even at this preliminary stage what, if any, input came from Mr. Johnson to Environmental Analysis when they selected their claims and as to why are we to take it that where a grant is not recognized that they made some kind of a decision that they would not recognize the grant. I think I would be interested in that, vis-a-vis preparation of these maps.

MR. WEIGEL: You are correct your Honor. Your order of October 15, 1975, which I had urged was a final order, was conceived by the Appellate Division apparently as being part of the overall actions that they wanted to consider on appellate review. So that they have allowed the State, as I understand the orders from the Appellate Division, that I have to amend the notice of appeal which was filed in April of 1975 to include an appeal from your October 15, 1975 order and your December 23, 1975 order.

MR. RINDONE: May I be heard your Honor?

THE COURT: On what?

MR. RINDONE: With reference to your Honor's question as to the grant overlays and the matter of what grants, if any, the State contends are invalid. I think the record at this point would have a gap which some factual information would bridge.

THE COURT: I didn't intend that there was to be any gap. I didn't want to intrude myself too much in Mr. Brower's plans for his orderly development. I think you ought to talk to him but I just want to know what was available by way of grants. It was interesting.

MR. RINDONE: There is the

Smila case which your Honor indirectly was referring to specifically.

THE COURT: Yes.

MR. RINDONE: That case was conceived by the mind of Counsel in this Courtroom and there was no research done in the Division of Marine Services along conceptual lines to line up potential grants that might be suspect by virtue of the factual configuration regarding consideration. Actually there were two cases the Smila Rutherford and the Borough of East Rutherford, which Mr. Porro was involved in. Those were the only two cases where any investigation was made concerning consideration and it was intended to defer further investigation until the viability of the legal concept had been determined. So you are going to get a no answer.

THE COURT: Thank you. We thank you, but I would like to get it from his lips.

MR. RINDONE: Of course, your Honor, but he wouldn't know about that.

THE COURT: Then he doesn't.

MR. RINDONE: I didn't want the record to be confused.

MR. PORRO: Your Honor, just by way of comment, when Mr. Rindone talked about the viability of the legal concept is he talking about that one in Smila and East Rutherford?

MR. WEIGEL: And do I understand that Mr. Rindone is representing something that represents a decision of the Natural Resource Council and the Attorney General, or is this Mr. Rindone's view.

THE COURT: Well, you might as well answer that question. You said it was determined not to go any further beyond Smila and East Rutherford until the legal viability of any principles that I relied on were tested.

MR. RINDONE: As I indicated to the Court, your Honor, the concept was conceived in this Courtroom and permission was requested to file a cross claim.

THE COURT: Right.

MR. RINDONE: That cross claim

was filed. There were motions pertaining to the cross claim and decided.

THE COURT: Mr. Rindone, you and I know all that, we know that.

MR. RINDONE: It never went beyond that point. There is an appeal pending in the one case where the order was signed.

THE COURT: You misunderstand Mr. Weigel's question. Was there a decision by the tidelands agent, by the Department of Environmental Protection, or whoever, that said "in staking our claims we will stay away from a recognition or nonrecognition of prior grants." How was that decision arrived at, outside of the fact that there were two cases here and that I ordered it to be done, which doesn't mean anything?

MR. RINDONE: To the best of my knowledge, your Honor, the areas that were mapped and the tidelands designations that were made, the matter of property lines and ownership and grants were not considered. They considered the existing scene as they found it, or where the scene had been altered through fill the areas were hatched and your Honor is fully aware of the circumstances of that situation.

THE COURT: There was some prior testimony from either Dr. Feinberg or Mr. Yunghans that they didn't consider ownership. I do recall that.

MR. RINDONE: It was undertaken in the nature of zoning, your Honor, broad brush, rather than with respect to individual parcels.

THE COURT: If you look at the statute and you read O'Neill the Stateis abjured to stake its claim, forget about who owns what. If the State has given a grant to somebody of land that was once tide flowed and they publish a map and they say "we claim this land as once being tide flowed or presently tide flowed" there is a nonrecognition of a grant, isn't there, and what the respondents are interested in is did the State proceed responsibly when it prepared these maps and in particular what does it do about prior grants and we are told they were not considered.

MR. RINDONE: That's right sir.

THE COURT: Mr. Weigel said who decided they would not be considered? Isn't that your question?

MR. WEIGEL: Yes sir.

MR. RINDONE: To the best of my knowledge, your Honor, that was in the nature of a policy decision made in the Department of Environmental Protection presumably in conjunction with the Attorney General.

THE COURT: You know this, that is one of the issues in this case. The maps are under attack.

MR. RINDONE: I know, your Honor, that one of the circumstances that counsel for appelants has endeavored in various ways to force upon the State is a requirement that the State undertake surveying of entire areas that were mapped so as to delineate property boundary lines and on various occasions we have addressed this point to the Court and indicated that it is completely impossible from a financial point of view. The State does not have the manpower, does not have the resources to survey the entire Hackensack Meadowlands.

THE COURT: I'm not talking about surveying. Mr. Johnson says he has a couple of maps that show where the grants are. He has custody of the files. Presumable you can go back and check within some reasonable period of time the basis for the grant.

MR. RINDONE: But he was careful to state, your Honor, those atlas sheets are in the nature of tax maps. Now, your Honor knows, I'm sure, that tax maps --

THE COURT: I don't want to get into that.

MR. RINDONE: It is not intended that this compendium of grants, if you want to call it that, in gross be a survey of the entire area with metes and bounds descriptions, bearings, and distances.

THE COURT: I'm not even talking about --

MR. RINDONE: That's what they are talking about.

THE COURT: -- Wait just a minute. Conceivably as a beginning point there could have been some kind of addendum or supplement to these maps to say the following grants by book and page number are not claimed by the State of New Jersey, don't even put them on the overlay. That was not even done.

MR. RINDONE: That could have been done, your Honor, I will concede that.

THE COURT: I just offer that by way of example.

MR. RINDONE: But where a party has made a deed to the property --

THE COURT: Mr. Rindone, you're arguing with me about why it wasn't done, okay? All I know it is a fact it was not done.

MR. RINDONE: That's right.

THE COURT: There was a policy

decision not to do it, okay?

MR. WEIGEL: I understand the answer also to identify the Attorney General of this State and the Commissioner of the Department of Environmental Protection as two individuals who supported and approved that action.

MR. RINDONE: Your Honor, I cannot speak of my own knowledge. Mr. Weigel's associate was on the scene at that point and he can speak of his knowledge. I was not with the office.

MR. WEIGEL: For the record I have no associate.

THE COURT: All right, you may continue Mr. Brower.

BY MR. BROWER:

Q Mr. Johnson, I believe to refresh your memory you had just testified about some of the documents that are maintained in your office. You went into the grants, files and you also talked about atlas sheets which record prior conveyances of State owned tidelands, as well as a system of Libers which you said recorded all of the instruments of conveyance of these tidelands. Are there are there any other historical documents which you maintain in your office?

A Yes. They would be the so called,historical documents would be the aerial photography which the State has in its files and we also have surveys done by previous applicants that were too large to put into the files and these were put into our map files, so they could be lain flat and not have to be folded in any way. We also have files, we now maintain files on all enforcement matters dealing with the enforcement of the State's riparian laws particularly in the light of development. Part of the enforcement program, or in fact all of the enforcement program dealing with riparian wetlands, CAFRA Laws -- that means Coast Area Facility Review Act, all of these laws. I have people that enforce those laws and make sure that people are conducting activities that fall within these laws rightfully, that they have the proper permits, that they are not in violation of any of the conditions or limitations of the experiments.

Q Could you then give us a breakdown of the number of personnel under your supervision and their various responsibilities?

A I have about twenty-five people under

my supervision and my section is broken up into three units. I have the Grant and Lease Unit in which I have two secretaries and a drafting force of seven people, plus one supervising draftsman. In my Permit and License Unit I have two engineers and two permit reviewers, one of which has a biologist background. In my Enforcement Unit, which is broken down into three districts, in the Trenton district I have one inspector, which covers Mercer, Burlington, Camden, Gloucester Counties, he also covers Middlesex and all the northern New Jersey counties, one inspector for that area. I have a field office in Toms River where there is one chief inspector and two senior inspectors under his supervision, and they cover the Counties of Ocean and Monmouth, take in a little bit of Middlesex County, and I have the other office in Atlantic City at the State Marina. There, there are one supervising inspector and two senior inspectors under his supervision and they cover the Counties of Atlantic, Cape May, Cumberland and Salem Counties.

In the permit section also I forgot to mention there is one secretary in that section.

Q Are you familiar with the tidelands delineation project?

A Yes sir.

Q When did you first become aware of that project?

A Oh, as I recall I think it was in late part of 1971, late part of 1971 maybe early part of 1972.

Q In its early stages did you have any input into the tidelands delineation project?

A At that time as I recall there was no written memorandum or written direction asking me to participate in this program, but I did meet with Dr. Feinberg and Mr. Yunghans to more or less show him around my office and to show him the things that I would make available to him as he needed those items on an ad hoc basis, you might say, in dealing with his responsibility and his program.

BY THE COURT:

Q You never had anything to do, have you, Mr. Johnson, with making policy decisions anywhere within the Department of Environmental Protection or the Division of Environmental Analysis, have you?

A In dealing with tidelands map your Honor?

Q Yes.

A No your Honor.

Q Is this true, your important role is of course, being the custodian of all these records that I assume from time to time DEP has relied upon; I believe your Division also does some of the analysis of lands in the Meadows to determine percentagewise what is upland and what is riparian. Is that correct?

A That's correct your Honor.

Q You have been on some of the affidavits yourself?

A Yes your Honor.

Q Incidentally, are you an engineer?

A No your Honor.

Q You are part of the staff for the Council. Is that correct?

A That's correct your Honor.

Q Do they seek your advice when it comes to making grants or denying grant applications?

A Are you asking do I recommend whether or not there should be?

Q Yes.

A No your Honor.

THE COURT: All right Mr. Brower.

BY MR. BROWER:

Q Mr. Johnson, can you briefly summarize the information that you indicated you were making available to the personnel conducting the tidelands delineation project?

A I guess you could start off with the 1890 topo maps of the State of New Jersey, sixteen or seventeen in all.

THE COURT: These are the Vermuele maps?

A These were the Vermuele maps, yes your Honor.

MR. WEIGEL: Could you indicate when you provided this information to the people making these policy decisions?

THE WITNESS: This would be at the time they came to meet with me, which would be the late part of 1971, early part of 1972.

Q Go on.

A Also next in line I guess in date would be the 1930-32 aerial photography. Then you would have the 1940 aerial photography, which was done by Aero Service out of Philadelphia.

The 1954 aerial photography, 1953-54 aerial photography done by Jack Ammann and Associates I think it is.

After 1954 would be the 1962-63 survey done by USC and GS, which is a five map set with a report, a written report. Then we also had in our files a set of prints done by Fairchild and done for the U.S. Army Corps of Engineers. They also had spot elevations on those aerial photo prints.

THE COURT: When was that done about, the Fairchild, do you have it?

THE WITNESS: About 1963 your Honor. Then you have the 1968 photography, but that photography covers from the Raritan River south, more or less covers the south half of New Jersey.

You have the 1971 aerial photography done by A.C. Jones out of Mount Holly, which covers the Raritan River north and you would include the areas along the Hudson River and the Hackensack Meadowlands area. These were aerial photographs on the scale of one equals four hundred feet I believe.

MR. PORRO: What is the date on those?

THE COURT: 1971.

MR. PORRO: Is there a date?

THE WITNESS: 1971, yes and of course you have the riparian atlas sheets, the Libers and of course the files of the Division wherein those files are housed, all of the applications and the supporting data and correspondence that goes with each and every one of those files. In number it is a lot of files.

BY THE COURT:

Q All of this is kept where, in Trenton?

A In Trenton, yes, in my section.

THE COURT: Am I going to see this, Mr. Goldfein? Is this one of the trips you are going to take?

MR. GOLDFEIN: Yes.

MR. BROWER: Your Honor, at this time I would like to review some of the items.

BY MR. BROWER:

Q Have you finished with the

information you had available?

A Yes.

BY THE COURT:

Q What is with you? Do you have the Mark Hurd photos? Is an official copy filed with you?

A Yes, I also have in my files copies of the State's tidelands maps and the claims overlay just in case any of the public want to come into my office and sit down and discuss the status of a particular piece of property, or ask for assistance, my office is available for that consultation.

MR. WEIGEL: Your Honor, can I ask about a couple items which I have been looking for.

THE COURT: Yes.

BY MR. WEIGEL:

Q Mr. Johnson, do you know where that earlier set of riparian sheets, the so called atlas sheets, is located in your department? I was down the other day and I wasn't able to gain access to them, the one that Mr. Freeman identified from the old sheet that he identified during his depositions a few years ago?

A Would they be called manet (phonetic)

atlas sheets perhaps?

Q I really don't know.

THE COURT: Is there a date you have in mind.

MR. WEIGEL: These would predate the current set of atlas sheets, so called riparian sheets.

MR. SCAPATILLO: They are Mounted atlas sheets.

BY MR. WEIGEL:

Q Do you have control of those and know where they are located?

A Yes sir.

Q The other items I was looking for, do you have all of the Harbor Commission reports starting in the year 1914?

A The Harbor Line Maps?

Q The reports they had, annual reports of the Harbor Commission?

A I don't know their whereabouts.

Q How about the annual reports of the Natural Resource Council and its predecessors, going back to the Riparian Commission?

A All the minutes of the Natural Resource Council?

Q Yes.

A Yes.

Q They had an annual report at one time.

A I'm not familiar with the annual report.

Q Where are the minutes of the meetings?

A They would be in the director's office of the Division of Marine Services, Director Graham.

Q Mr. Graham's office.

A Yes.

Q So far as you know they go back to 1869?

A Whenever the Riparian Commissioners came to be.

THE COURT: Do you have much further to go?

MR. BROWER: Your Honor, I just have a series of exhibits that have already been introduced into evidence. There are approximately sixteen or seventeen of them and I'm going to ask Mr. Johnson to identify them and if they come from his files.

THE COURT: Wait a minute, which

exhibits are they?

MR. BROWER: Number 178.

THE COURT: I just want to look at them here. 178? Well, each one of the exhibits is fully identified. What do you expect his answer to be?

MR. BROWER: These are the documents that he just testified that he supplied to them. We have them here by number for his inspection so he can verify these are in fact the ones he supplied.

THE COURT: Will you stipulate that?

MR. PORRO: I certainly would.

MR. WEIGEL: Yes.

THE COURT: Okay, Exhibit 138 --

MR. BROWER: No, 178, 179, 181, 182, 183, 184, 185, 187, 188, 191, 192, 193, 194, 195, 196, and 200.

THE COURT: Would that be it then with the witness on the stand?

MR. BROWER: As I indicated previously, before the discourse with Mr. Rindone concerning the overlays, I was going to ask Mr. Johnson if he had any participation in preparation of any such overlays.

THE COURT: Mr. Johnson, before you leave today will you look at the Exhibits that are on the Counsel table and unless I hear from you to the contrary those Exhibits did come from your office and they are what they purport to be as far as my list is concerned, okay?

THE WITNESS: Yes, your Honor, I will.

THE COURT: All right, ask your question then Counsel.

BY MR. BROWER:

Q Mr. Johnson, is your office conducting any type of a contribution to the tide-lands delineation project wherein you are in the preparation of any overlays which set forth the prior riparian conveyances of the State of New Jersey of its tidelands?

A Yes sir, in fact it is an on-going process and still being worked on as of today.

BY THE COURT:

Q What overlays are these, the ones that recognize grants?

MR. BROWER: Yes your Honor, any prior riparian conveyances.

BY MR. BROWER:

Q Could you descirbe briefly for the Court the manner in which it is being conducted?

A Well, it is being done by the draftsmen in my section and where they are starting at first is taking out of the Libers and the companion grant file, or application file that goes with each and every conveyance or lease, all the data necessary in order to plot the particular land that the State conveyed, or leased, or licensed, on an overlay which will overlay one of the tidelands panels.

THE COURT: Where have you been Mr. Rindone?

MR. RINDONE: I beg your pardon your Honor?

THE COURT: That they weren't doing this?

MR. RINDONE: That they were not preparing grant overlays?

THE COURT: That is the impression I got, that there was a policy decision not to do it while they tested this.

MR. RINDONE: I understood the thrust of the questions why were not the original claims overlays, the original claims overlays, reflective of the State's conveyances of tidelands?

THE COURT: That was the original question and then we were told by you that was a policy decision not to do them and I inferred that there was no intention to do anything about preparing an overlay pending the appeal.

MR. RINDONE: I'm sorry if I misunderstood the Court or misled the Court, I apologize.

THE COURT: Then I misled you.

MR. BROWER: Your Honor, if I may explain through the next part of Mr. Johnson's testimony he will be indicating some information which would clear up the discrepancies there. It appears it was not part of the original process and the difficulties they are encountering now we will explain that.

BY MR. BROWER:

Q Now I believe you were at the

point where you were explaining how the draftsmen under your supervision were extrapolating certain evidence from atlas sheets and putting it onto overlays?

A Yes. The first thing they were instructed to do was to plot any and all riparian conveyances that were made to date and then from that and working with a combination of tax maps for the various municipalities that lie within this Hackensack Meadowlands area, Department of Transportation right-of-way plans, New Jersey Turnpike Authority right-of-way plans, we were attempting to make a composite plan that will show not only lands that have heretofore been granted within the Hackensack Meadowlands area, but also show properties that are either being laid claim to in whole or in part because of the new tidelands maps. It is a very difficult task to do because you are working with various maps, The right-of-way plans for New Jersey Turnpike Authority and the Department of Transportation and of course one of your basic tools you are using is again a tax map which is not a survey. The scale of the maps leave a lot to be accounted for. It's just impossible to pull abstracts for each and every property to check the Borough

Engineer that prepared the tax map, to make sure that he didn't make any errors in writing down a distance or a dimension. The tax maps again do not show bearings. They do not show angles and the draftsman was instructed to try to piece everything together to do the best we could to show what had been granted and what is left ungranted, or still owned by the State of New Jersey.

Q Just briefly could you give us an estimate of the span of years that these grants cover which you would be placing on such an overlay?

A Some of the grants date back to the legislative grants made in 1869. The descriptions in some of those cases there were not even maps submitted with the applications, they were metes and bounds descriptions and in our Libers they are written in longhand. The draftman had to read the longhand writing in the Libers in order to prepare his own little sketch of what the metes and bounds description was to portray in that legislative grant or old conveyance. They date back to 1869 in some cases.

Q So the difficulties you are encountering have to do with the information that is made available to you on the basis of these historical grants and then plotting or trying to plot them somehow so they could coordinate with an overlay to be placed on the maps which have been prepared by the State which used the most up to date technology?

A That's right.

Q These difficulties notwithstanding, Mr. Johnson, at what juncture are you in point of indicating the grant on the overlay?

A We are dealing with thirty-seven maps, thirty-six of them cover the Hackensack Meadowlands area and one map which covers the Newark-Elizabeth Meadowlands area.

BY THE COURT:

Q As far as your personal knowledge is concerned you would not be involved in that, would you as to whether or not the State is going to challenge the validity of the grants? You don't know anything about them?

A No, your Honor, I'm plotting every grant of record. That is the instructions given to my draftsmen, not to determine whether or not the State was adequately compensated, or whether or not we were dealing with the owners of lands who were not the upland owners perhaps in some of the cases. We have the Hackensack River frontage grants.

MR. BROWER: That's all I have your Honor. The only thing additional that I would indicate is that each of the claims overlays which have been prepared by the State have a specific disclaimer in one of the corners with regard to prior conveyances. I just wanted to make that indication at this time. Those that have been marked as Exhibits so far in the proceeding each contain a specific disclaimer against prior conveyances, so I just wanted to present that.

THE COURT: You are talking about these?

MR. BROWER: These have the disclaimer on them and, of course, that information would be provided by the overlay about which Mr. Johnson has just testified. Thank you.

MR. PORRO: Your Honor, just one clarification. Is it his testimony that in this compilation process there has been no compilation of considerations, it is just the property outlined? It was left a little bit up in the air when it came to "the consideration question."

THE COURT: He is preparing an overlay, their office is, to show where the grants are.

MR. PORRO: Which is physical lines.

THE COURT: To show the physical lines of the grants. I presume in most instances there is a supporting file or jacket or book.

THE WITNESS: Yes sir.

THE COURT: I guess in more recent ones the application is there, the consideration and the appropriate resolution and whatever was necessary?

THE WITNESS: Yes, and all the correspondence going up to that.

THE COURT: But he is not doing any analysis that relates to the validity of the grants.

BY MR. BROWER:

Q Just one thing further, I think I might have cut you off when I asked you the question about your progress on this overlay. Can you give us an estimate what stage you are in?

A Well, we are dealing with all thirty-seven maps and we plan on checking the maps and making sure that each one does show each and every grant that falls within those panels and verifying that the lines more or less show the property lines taken from the various tax maps, and we are even attempting to update those tax maps because of the changes that are made every year on the tax assessment maps. We are going to have to go back over all thirty-seven maps and make sure there were no subdivisions or lot consolidations which might lead us to revising the maps. As a matter of fact, we are about seventy-five percent complete on the total project. There are a couple maps that are a hundred percent complete but all in all I would rather see everything go out as a package, all thirty-seven sheets.

Q In other words, you don't have some that are a hundred percent completed and could be release, you are continually updating them?

A Continually updating them, yes.

Q So at one point you have seventy-five percent of the work done?

THE COURT: That is only half

the question, I'm sure everybody would be interested in seeing where these grants are, but the critical question is are they going to be recognized and apparently nothing is being done on that score, is that correct, Mr. Rindone?

MR. RINDONE: To the best of my knowledge, your Honor, nothing is being done until the legal principle is determined viably.

MR. PORRO: I could be happy with that.

(Laughter.)

THE COURT: I don't know what that means.

MR. RINDONE: Well, if there is no legally recognized basis for challenging the grants, your Honor, all that work that would go into investigating the grants, files and statistical analysis would be wasted.

THE COURT: I don't think you will ever get that question answered. I decided <u>Smila</u> on the facts in <u>Smila</u>. I think the Supreme Court is going to say to you you can never challenge a grant or you can. I think it is a case by case basis and there is a tremendous job ahead of you. What do you think, Counsel, I haven't look at Smila at a long time.

MR. PORRO: I agree with you, your Honor. You cannot just generalize, just as you couldn't generalize as to a particular piece of property in the Meadows and generalize the whole Meadows as to title, you couldn't generalize on the grant either.

MR. WEIGEL: Let me suggest another major problem, your Honor. Let's assume they recognize what Mr. Johnson was very careful to call the riverfront grant. There is no question that on these overlays that they have prepared and filed, that even if you allow for the so called riverfront grant, there is land immediately behind that the State is laying claim to. So in effect what they are doing is they are challenging the mean high water line which was the basis upon which they made their own grant.

THE COURT: Right. All right, thank you very much Mr. Johnson.

(Witness excused.)

THE COURT: I will adjourn this case until Wednesday at 10:30.

* * *

CERTIFICATE

I, EDWARD SALBIN, Official Court Reporter, do hereby certify the within transcript of my stenographic notes.

Edward Salbin

3/28/76

A-3311-72
no Brf.

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A-3311-72
(On Remand to Law Division,
Bergen County)

A101 SEP 1979

FILED
APPELLATE DIVISION
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CM
Elizabeth McLaughlin
Clerk

CITY OF NEWARK, et al., :

Appellants, :

-vs- : VOLUME VI

NATURAL RESOURCE COUNCIL, et al., :

Respondents. :

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
Docket No. L-16799-72

NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :

Plaintiff, :

-vs- :

BOROUGH OF EAST RUTHERFORD, et al., :

Defendants.

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Stephen Townsend
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ELIZABETH McLAUGHLIN
CLERK

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March 24, 1976
Courthouse
Hackensack, New Jersey

BEFORE:

HONORABLE THEODORE W. TRAUTWEIN, J.A.S.C.

APPEARANCES:

WILLIAM F. HYLAND, ESQ., Attorney General of New Jersey
BY: MORTON J. GOLDFEIN, ESQ.,
Deputy Attorney General
For Natural Resource Council, et al.

APPEARANCES: (Continued)

WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General,
For Trustees of the School Fund.

JOHN R. WEIGEL, ESQ.,
For the City of Newark, City of Elizabeth,
New Jersey Land Title, Esther G. Bertoni, et al.

ALFRED A. PORRO, JR., ESQ.,
For the Borough of East Rutherford.

Reported by: Edward Salbin,
Official Court Reporter

INDEX

MR. GOLDFEIN: Your Honor, we have Dr. Anderson and Mr. Deely of Earth Satellite Corporation here this morning and a number of visual aids to accompany their testimony.

THE COURT: I want to put this on the record while we are waiting. Four more exhibits have been marked for identification, R-252, paper copy of Weehawken Quadrangle; R-253, wetlands ecological value overlay; R-254, wetlands plant species overlay; R-255, spot elevation overlay for base photo map number 714-2172. Would there be any objection to these ~~objections~~ being marked into evidence with the same limitation?

MR. PORRO: With the same limitations.

THE COURT: All right. They are accordingly also marked into evidence with the same limitations as heretofore.

MR. PORRO: Your Honor, the limitations is that they are basically hearsay, they are not going in for the truth of the matter and I have another continuing objection as to the relevancy which I had overall, and that is just continuing.

THE COURT: Yes.

(Discussion off the record.)

THE COURT: All right, we are on the record, let's go.

MR. GOLDFEIN: I call Richard R. Anderson.

RICHARD R. ANDERSON, sworn.

DIRECT EXAMINATION BY MR. GOLDFEIN:

Q Dr. Anderson, where do you reside?

A In the State of Maryland, Hyattsville.

Q And would you state your present position?

A Yes, it is an associate professor of biology at the American University.

Q How long have you been so engaged?

A For nine years.

Q Are you affiliated in any manner with the Earth Satellite Corporation?

A Yes, I'm a consultant to Earth Satellite Corporation for wetland related projects.

Q Now, you are going to have the opportunity to, as we have indicated, make a presentation of your involvement in the work which you and Earth Satellite Corporation did for the tideland delineation project for the State of New Jersey. However, prior to your commencing that, I would appreciate your stating for the record and for the Court edification your background, your training and your involvement in like projects.

A I received my Doctorate of Philosophy in Botany and Aquatic Ecology in 1967, my Doctorate thesis involved comprehensive survey of the wetland of the Patuxent River, Maryland. Subsequent to beginning my work at American University, I became associated with the U.S. Geological Survey in a funded project which involved the use of aerial photography in delineating wetlands and wetland species. That project was funded approximately two years. After that, the project was funded by the National Aeronautics and Space Administration and the work continued primarily in the Patuxent River, Maryland.

As a result of that work, I established techniques by which one could use color infrared photography to delineate the boundaries of tidal wetlands and also discriminate species, plant species within tidal wetlands. I currently have two grants that are funded, one by the National Aeronautics and Space Administration to continue work with remote sensing in viewing and interpreting tidal wetlands and I also have a project funded by the National Park Service which involves the use of remote sensing to define resources within national parks.

THE COURT: They are still in existence, these projects, you are still working on them?

THE WITNESS: Yes, these are funded through the American University.

Q Aside from the tideland delineation wetland projects, that you have worked on in New Jersey, have you engaged in any other work with the Earth Satellite Corporation?

A Earth Satellite Corporation is involved in resource inventory in many areas in the United States and also some areas overseas. Some of these projects have involved wetland delineation in areas other than New Jersey. A project has just or is near completion in the State of New York where all the tidal wetlands were mapped.

THE COURT: I thought the question was are you involved in anything else with Earth Satellite? Are you so involved in these projects?

THE WITNESS: Yes, sir, I am.

The tidal wetlands project in New York State is very near completion and all of the tidal wetlands have been mapped and classified. There is currently an ongoing project in the State of Wisconsin where we are involved in delineating and classifying wetlands. We were involved in the State of Maryland also in their tideland mapping program.

Q Briefly, what has your function been in the other state projects, New York, Wisconsin, and Maryland I think are the three you have mentioned?

A I have been a consultant to Earth Sat, to develop techniques and criteria for mapping tidelands. Each of these states also actually participated in the mapping program itself in each of these areas.

Q I would like you to direct your attention to the work you yourself were involved in, in New Jersey, with regard to original wetlands-tidelands delineation.

MR. WEIGEL: Your Honor, before we get into that, can I just ask, because I think it is important to have it in the record, I have made throughout a distinction in my own mind between what the law in New Jersey imposes by way of wetland delineation as opposed to the burddn that is involved in mapping the boundary between public and private lands. I didn't hear the Doctor indicate beyond the wetlands projects that he works for Earth Sat, what experience he has, if any, in the delineation of the boundary between public and private land.

MR. GOLDFEIN: I'm going to object to that, your Honor. That is cross-examination and the Doctor has testified as to what he did. The purpose of this phase of the case was to talk about what the State did. Now he is talking about what he does not -- what he did no' do.

THE COURT: Well, you see, I conceive this portion of the case to be, number one, an unobstructed without cross-examination building of a record to demonstrate what an administrative agency did in this State. Secondly, I think we have to try to build it in such a way that we include everything possible in this, so that there is some sort of a proper foundation for cross-examination. Now, thatis not to say that I agree with the precise wording of Mr. Weigel's suggested area, that is what did he do to determine the boundary line between public and private lands. I would think I would like to know what, if anything, he did to determine where mean high water lines meet, the fixed, rather than get into that dichotomy of public and private lands, did he do anything on that score? I think we ought to have that in the record.

MR. GOLDBEIN: I have no objection to ask that question, certainly any question the Court wants.

BY THE COURT:

Q Did your work involve in New Jersey on behalf of Earth Satellite any kind of a project that attempted to fix the line of mean high water?

A Yes, sir.

Q In the Hackensack Meadows?

A No, sir.

Q NEWARK-Elizabeth Meadows?

A No, sir.

Q Tuckerton-Salem?

A Yes, sir.

THE COURT: You want to ask anything

that you think should be in here?

MR. PORRO: How about anyplace other than New Jersey?

Q Yes, that is a good thought. Did any of your work in anyplace other than New Jersey involve attempts to fix mean high water?

A No, sir.

MR. WEIGEL: I didn't hear the answer.

THE WITNESS: No, sir.

THE COURT: Let me just make a note of this. All right, Mr. Goldfein.

BY MR. GOLDFEIN:

A Dr. Anderson, I believe I was asking you to describe for the Court in as chronological a manner as you can what you have done in the State of New Jersey particularly as it led to your work which has culminated in tidelands delineation projects?

THE COURT: All right, will you think about that question for a minute please? You want to do this in a narrative fashion, Mr. Goldfein, you think that is the best way?

MR. GOLDFEIN: I would prefer that.

THE COURT: I will permit you to

occasionally interrupt, gentlemen, if
you think there is something that ought to
be filled in. All right, sir.

A Since our work involved principally interpreting color infrared photography --

BY MR. GOLDFEIN:

Q Excuse me, Doctor, would you keep your voice up, I think somebody is having trouble hearing.

A Since our work involved principally interpreting color infrared photography, I thought it would be appropriate to just run briefly through how this particular film works and then go into some of the basics of what led up to the Hackensack project. I can show some transparencies here, your Honor.

THE COURT: Very well. What do you
call that instrument that is projecting
that on the screen? Does that have a
particular kind of name? What would you
call it?

A Overhead projector.

THE COURT: Overhead projector?

THE WITNESS: Yes.

THE COURT: How do you get this
in the record on appeal anyway?

MR. PORRO: Your Honor, it is on page ten if we ever let this report go in as a final report and I suggest we tie in those slides to that report. I don't know the exhibit number.

MR. GOLDFEIN: Your Honor, we have attempted to have the narrative reflect the page numbers and exhibit numbers in each case. There are some photographs which are not already included in the exhibits, large copies of which are being made and which we will be able to mark hopefully next week, by reference.

THE COURT: All right, because I don't want a void in the record on this. Which exhibit is this tied into, do you know?

THE WITNESS: Your Honor, I believe I have numbers.

MR. PORRO: It is the actual final report itself, I think it is R-149.

MR. GOLDFEIN: The final report is R-149.

THE COURT: All right.

BY MR. GOLDFEIN:

Q Dr. Anderson, we ask you to refer to the page numbers in R-149 as you demonstrate these pages to the Court.

THE COURT: Let the record show the witness is using an overhead projector and it is projecting on the screen portions of R-149. All right, sir.

A Yes, sir. This is page 10 from Exhibit R-149. It shows a portion of the electromagnetic spectrum.

MR. PORRO: Speak up, please.

A Yes, I'm sorry, it shows a portion of the electromagnetic spectrum which we have used, I have used principally in my research and also we have used for projects in the State of New Jersey. The spectrum that is of most interest for color infrared film goes from about 500 nanometers down to about 900 nanometers. The difference between color infrared film and natural color film is the range of the electromagnetic spectrum to which it is sensitive. Color film is sensitive basically to this portion of the spectrum.

THE COURT: You better indicate that portion, 400 to 600?

A 400 to near 600.

THE COURT: Nanometers?

THE WITNESS: Nanometers, yes. This film has an emulsion layer that is sensitive to the near infrared portion of the spectrum between 700 and 900 nanometers, so the difference between these films is basically the sensitivity to the electromagnetic spectrum.

BY THE COURT:

Q On top of that projection of the screen, there seems to be three categories, ultraviolet, visible spectrum and infrared. Now, are some of the colors, that color infrared film picks up, are they visible to the eye? I'm confused. If I looked at the Meadowlands and saw something that was red, would it be red on the color infrared film?

A No, sir.

Q What does the visible spectrum mean, that category, which seems to overlap?

A The electromagnetic spectrum is -- has divided into several layers. This shows only a portion of the electromagnetic spectrum. The ultraviolet, the visible spectrum, is that portion of the spectrum that we sense with our eyes. We do not see any infrared.

Q Well, didn't you say that the infrared nanometer ran from what, 600 to 800?

A Infrared runs basically.

Q 500 to 900?

A From about in here, the line is maybe a little bit off, but it is basically here, the infrared portion of the spectrum.

Q What confuses me on the bottom you have the alleged color infrared film and then two lines go up vertically.

A Yes.

Q Is that significant?

A Yes, sir, that shows the range of sensitivity for color infrared film.

Q My question then is this. That range of 500 to 900, part of it seems to be roughly from 500 to 750, which is under what you call "visible spectrum."

A Yes, sir.

Q But I thought you said that visible spectrum your eye sees the color?

A If I may, your Honor --

Q Is the color infrared film false color?

A Yes, sir, it is false color and becomes false color fim through filtering. I think if I present the next transparency here it might be a little clearer. If we were to draw a line for sensitivity of the natural color film, it would be basically from here over to about here, something like that.

Q When you say "here" you have to say for the record, Doctor, what you are pointing to.

A It is blue around 450 out to about 650 nanometers.

This is Exhibit R-149, page 13.

Q What is a nanometer, how would you define that?

A It is a wavelength, measure of a wavelength. What I try to show here, your Honor, is that the image color that one sees on color infrared film we see these colors and as a result of electromagnetic spectral return in this or these wavelengths. The most important aspect of this with regard to vegetation is that if we see red on the photography, the color infrared photograph, it is the result of electromagnetic radiation in the infrared exposing that part of the film.

Color and natural color film, of course, is composed of three emulsion layers and each of these are sensitive to certain portions of the electromagnetic spectrum. By exposing certain dyes, we combine those that are not exposed and that comes out as color on the photograph or transparency.

Q Why do you want to do that?

A In the research that I did, that I have done for the last six or seven years, we have shown that the way objects are imaged with color infrared film provides more contrast and better viewing than with natural color film. Also with color infrared film it's filtered so that the shorter wavelength in the blue specific layer are not recorded on the film therefore it becomes a clearer image of what is on the ground; in other words, we filter out those wavelengths that are involved principally with haze, air pollution, and other atmospheric problems that might degrade film. These wavelengths are filtered out with colored red film, so that we provide a clear image and also a contrast image with color infrared film.

This is a transparency for which there is no current exhibit, your Honor. It can be identified at this time and entered into the record.

MR. PORRO: I think we ought to have the slide marked.

THE COURT: That is what I was going to do. Can you take it out? Exhibit R-256 is entitled figure 1, cross-section of a leaf of a typical broad-leaf plant with annotations indicating its response to incident energy in various spectral zones in the visible and infrared regions of the electromagnetic spectrum.

MR. GOLDFEIN: Off the record, your Honor.

(Discussion off the record.)

THE COURT: R-256 in evidence with the same limitations as heretofore. Again, this is being shown on the overhead projector.

A Since we are most concerned about identifying vegetation, types of vegetation with remote sensing technique, I thought it would be appropriate to show what happens when incident radiation strikes the surface of a leaf and then is reflected back to the lens of a sensor, in this case, it would be a camera, in an airplane, or some such thing with color infrared film in the camera, and, of course, in this region of the spectrum we are concerned mainly with that part of the electromagnetic spectrum which is reflected by the leaf surface back to the lens of the camera.

This shows various portions of the spectrum and what happens to it. The green light we know comes down and strikes the surface of the leaf, mainly the chlorophyll layer of the leaf and is reflected back up to the sensor as is some blue light or red light, although this is mainly absorbed. The chlorophyll in the leaf absorbs blue light and red light and this is used in photosynthesis and so forth by the leaf. The green light is principally that portion of the visible spectrum that is reflected back to the lens in the sensor. That is why, when we use natural color film, we see leaves in shades of green, when we use or when electromagnetic radiation in the near infrared region strikes the leaf, it goes through this chlorophyll layer and is most affected by the spongy mesophyll layer of the leaf and also the spaces between the cells in the leaf. So that when infrared energy strikes the leaf, it goes through this chlorophyll layer into the bottom surface of the leaf and then is reflected back up to the sensor and, of course, with color infrared film we have an emulsion layer that is sensitive to this electromagnetic radiation and is recorded as red tones, there are shades of red and pink on the film in the aerial camera.

Now, this particular film color, infrared film, has been used principally up until 1968, had been used principally to look at or look for plant diseases and also to detect differences in the vigor of plants as a result of having disease. It was found that plants that were diseased or lacked vigor for some reason or another were imaging differently on color infrared film than with healthy plants. So that if a plant had some kind of a problem, disease or stress, or some such thing, it apparently is recorded inside the plant in this spongy mesophyll layer either by loss of water, or some other aspect of the leaf which affects the amount of infrared radiation that is reflected by that portion of the leaf.

Therefore, if we looked at the same plant species that was healthy and compared to a plant that was diseased, or lacked vigor, the infrared reflectance would be different in that same plant species because or due to the stress that that particular plant was under.

Q You used the expression "or lack or vigor," what did you mean by that? Do you mean that literally? By the way, I understand the word vigor. Does it mean it looks healthy or strong or stunted?

A It can be expressed in a number of ways. It can be detected by looking or comparing the growth form or the amount of growth that the plant will undergo during a certain period of time. If it looks vigorous or if it is stressed, the growth may be stunted to the plant and you can measure the stress or lack of vigor in this way. If it is severe, it will begin to affect the appearance of the leaf, it may lose water, become wilted; it may also begin to affect the chlorophyll layer so that the plant looks bronish or takes on a color other than the one that one would normally expect from that particular plant. The term "vigor" relates to a whole variety of things that would be related visually and quantitatively in terms of growth of the plant.

There is a machine called a spectroradiometer that is built by Isco Corporation that can be taken into the field and one can measure the amount of electromagnetic radiation in various portions of the spectrum from plant --

MR. PORRO: Your Honor, I would like to object unless he can tie this in to something that specifically was done in this particular project and that particular machine was used. I think the record should so reflect, otherwise we are talking about speculative items that have nothing to do with the practical question.

THE COURT: Mr. Goldfein?

MR. GOLDFEIN: I think the witness can explain how the machine has been used, if it was used.

MR. PORRO: You should start with "if it was used."

MR. GOLDFEIN: I think you are asking him to explain the application of that machine.

BY THE COURT:

Q Was a spectroradiometer, is that what you call it?

A Yes.

Q Was that used in your work with Earth Satellite?

A It was used indirectly, your Honor, to do an interpretation of aerial photography in the Hackensack Meadowlands. We did not use the spectroradiometer directly in Hackensack Meadowlands.

Q Why are you telling us about this then? Is it so that I can better understand other testimony that you are going to give?

A Yes, sir.

THE COURT: Then I will permit it. Objection overruled.

MR. PORRO: Can we ask, your Honor, what he meant when he said it was used indirectly? I don't understand that.

THE WITNESS: We were able to see tonal differences, color tonal differences on color infrared photography in phragmites population in Hackensack Meadowlands. The same color tonal differences were detected in other areas in the State of Maryland and the Patuxent River precisely with respect to my research on phragmites and other plant species. We attempted to relate the color tonal differences on the color infrared photography to the spectral return of the phragmites vegetation in

Hackensack Meadowlands.

MR. WEIGEL: Do I understand that to mean that you used spectroradiometer on the film as opposed to using it out in a natural condition by looking at the growing grasses?

THE WITNESS: No, sir.

BY THE COURT:

Q What did you mean when you said it was used indirectly?

A It is information that indicates to us why we are seeing color tonal differences on the film, in other words, when we see these kinds of conditions on color infrared film we feel there has to be a physical reason why we see those tonal differences. One of the factors that relates to the display of color tones on the photography is the spectral return of that plant to the sensor and we attempted to relate the spectral return from the vegetation by measuring it in the field and lay that to what we see on the film.

MR. PORRO: That was not done?

THE WITNESS: That was done.

THE COURT: In the Hackensack?

THE WITNESS: It was not done in

Hackensack, it was done in other work.

MR. PORRO: You just said it was not done?

THE WITNESS: No, it was done.

MR. PORRO: In Maryland?

THE COURT: Let him finish.

THE WITNESS: The spectroradiometric work was done in Maryland in phragmites population that were similar in color tone to those that we see in Hackensack Meadowlands.

BY THE COURT:

Q So that are you telling us you related your experience in Maryland to the Hackensack Meadowlands project, that you didn't have to go out with this spectroradiometer and actually measure the amount of electromagnetic radiation because are you telling us you knew why from the experience you had in Maryland as you measured it and saw there were different amounts of radiation and hence this was why the different colors appeared?

A Yes.

Q So you didn't have to actually do it over here in the Hackensack Meadowlands. Is that about it?

A Yes.

Q Don't let me oversimplify it. All right, I think I understand indirectly. You may ask any questions you want.

MR. WEIGEL: The Doctor is very clearly leaving with me, and I believe in the record, the impression that this spectroradiometer was not used in the Hackensack because of the fact that it was used in Maryland and in effect the reading in Maryland in his view is support for using the same kind of reading in Hackensack.

THE COURT: I don't know if he is saying that the reading in -- what is going to happen in my findings here, and you correct me or correct Mr. Weigel, I think you are satisfied that what turned up on color infrared film in different colors, the reason could be verified by using a spectroradiometer in the Hackensack Meadows, you could have done that, but you didn't have to because you knew that the reason for the different colors appearing was the amount of electromagnetic radiation given off by plants or objects, you verify that in

Maryland or someplace else. Is that correct?

THE WITNESS: Yes, sir, in general it is correct. We felt that that was the case.

MR. WEIGEL: Since he has qualified it, your Honor, I think the record should show the qualification. You used the phrase "in general." If there is an exception, I think the record ought to show that exception, what it is.

THE COURT: Don't destroy his beautiful pattern here by making this adversarial at this time.

MR. WEIGEL: Your Honor, I think Mr. Porro and I both have tried to do that but we are really at the critical part of this whole case from our standpoint.

THE COURT: You are going to examine him some day, aren't you?

MR. GOLDFEIN: Also with the opportunity to put witnesses on the stand. I didn't object when you got up and testified you understood what was said and felt that was wrong. He has testified. I think some of the questions go beyond efforts to have him clarify what he said. It is cross-examination.

MR. PORRO: Your Honor, I would just like to request, so that we are in a position to adequately cross-examine this witness, that he make available to us this indirect method that he has used by supplying to us all of the Maryland experiments. It is easy to generalize, but so that we don't have to be put in a position of cross-examining him at a later position and not having that data available, and, further, so we could make it available to our experts.

THE COURT: Well, you make that in a formal application. I don't want to get into that completely.

BY THE COURT:

Q Just one last shot at it, Dr. Anderson. Why didn't you use a spectroradiometer in the Hackensack Meadows or anyplace else in New Jersey? Did you use any, anyplace else in New Jersey?

A No, sir.

Q Just tell us once more why you

didn't.

A I think part of it may come out when Mr. Deely presents his testimony. The timing of the project for one thing was such that quite a bit of the information that we did collect was collected at a time when we could not be in when the vegetation was in such a state that we could use a spectroradiometer to get this kind of information.

Q Okay, proceed.

A I believe I was saying, your Honor, that we have a spectroradiometer that can measure the amount of reflected energy from the surface of the leaf across a relatively wide range of the electromagnetic spectrum. This includes the visible and the infrared portion of the spectrum.

Q In what terms does it measure nanometers? I never had anything more than high school biology and I want you to know that.

Is this in R-149?

A No, sir, this is an exhibit, R-129, appendix M.

Q The witness's projecting appendix M of R-129 on the screen.

MR. PORRO: I think that is R-149, isn't it?

THE WITNESS: No, sir, R-129. This is a demonstration of the kind of information that we get from a spectroradiometer. This shows the percent reflectance that is recorded by the spectroradiometer and this shows the wavelength here in microns, could be in nanometers, depending on how you put it. This again begins with the visible portion of the spectrum. At about this portion of the spectrum, we enter the infrared.

Q You better indicate what this is.

A It is at about .7 microns on this exhibit. The key here is that we measured spectral reflectance from phragmites in two seasons of the year, July and October, and in two different color signature populations of phragmites in October, designated by one and two on this exhibit.

Q Where was this done?

A This was done in the Patuxent River, Maryland, in about 1969. The curves that one sees here, what the spectroradiometer does is record the amount of reflectance at various wavelengths. These are plotted on a graph then and we draw a line that corresponds to the reflectance from the leaf surface. The solid line represents information, large, solid line represents information that was taken in July. The dotted line represents information that was taken in October and a phragmites population that imaged in a red color on color infrared film, a narrow solid line on the exhibit represents that information taken from a green signature population of phragmites at the same time.

What this exhibit demonstrates, I believe, is that there are differences in spectral reflectance of phragmites as the season changes and also that there are differences in the spectral response of phragmites between green population phragmites and red signature population phragmites.

What this tells us is that the different color signatures that we see on the color infrared film are in fact real, they are not artifacts of the film, that they can be demonstrated by using a physical measuring technique on the plant itself, in this case a spectroradiometer, which measures the amount of reflectance from the leaf surface.

Q What you are saying is you are satisfied from those experiments in Maryland that the signatures on color infrared are trustworthy, that they indeed show differences?

A Yes, sir. They can be demonstrated that there are physical differences in reflectivity that are shown on the color infrared film in a visual manner. I would like to enter two more exhibits into the record, your Honor, that demonstrate some of this work in the Patuxent River. These are also not currently part of the record. There are two.

Q Two?

A Yes, sir.

THE COURT: R-257 and R-258.

Q I am having difficulty with this for just a minute. Well, this man did work for DEP, and he is telling us through these exhibits part of what he relied upon in doing what he did in this experience. So I guess I am going to let them come in as exhibits in evidence with the same limitation and I know you are going to have a healthy argument on this for me later on. When I say I'm letting them come in, in evidence, it also means you have the right to reserve onto yourself to have them stricken at some time if you can demonstrate, either their irrelevance or materiality or otherwise some incompetency.

MR. WEIGEL: I can see no relevance on his credentials, but I see no relevance on the issue before the Court.

THE COURT: Part of this I think the Doctor is tring to orient both you fellows on and myself, in some of the techniques that are employed in using color infrared photography and to that extent I find it helpful at this time. I'm not ruling otherwise on its relevancy at this time. All right, R-257 and 258 in evidence. We have to go slow but I want to do this carefully.

THE WITNESS: It would be the same title for both exhibits, your Honor, I just had to put them on two different boards.

THE COURT: Do you want to come up and see this? The witness has R-257.

THE WITNESS: One of the reasons I would like to offer this in the testimony is to demonstrate that we have some of the same kind of signature classes in phragmites populations outside of Hackensack Meadowlands, that we are not dealing with a unique situation in Hackensack with regard to the way phragmites images on color infrared film. This is work that was done in 1969 and 1970 with regard to the projects that I related previously with the U.S. Geological Survey and with NASA and at that point in time we were basically interested in using the film to develop techniques or defining plant species in wetlands; also boundaries in wetlands.

At that time we did notice that phragmites communis, shown here and here on the photograph, I'm not sure how to get "here and here" into the record, your Honor.

Q Well, it is the darker portions of the two lower pictures?

A The darker portions. That is phragmites. At that time we were studying seasonal changes in phragmites populations. The two top photographs are ones that are taken in the spring of the year. The bottom two photographs were taken in the fall of the year.

Q And this is color infrared?

A This is color infrared film, yes, sir. What is demonstrated here is that color infrared photography taken in the spring of the year does not show these color differences. Col or infrared photography taken in the fall of the year does show these color differences in phragmites populations in the Patuxent River, Maryland.

These are copies of transparencies, so the colors are not as they might be if you were looking at the original transparencies, but I think you can see at least two signature tones in phragmites in the fall of the year, one that might be designated as green, our Hackensack project, and the other designated as red signature phragmites of the Hackensack project.

Q R-248.

A We also experimented with other types of film with these projects. We also experimented with going relatively high in altitude, in this case 20,000 feet, which was higher than we had tried to do it before, to record information in wetlands. What I wanted to demonstrate with this exhibit is that firstly, there is a film that is called black and white infrared film. By filtering this film is only sensitive in the electromagnetic range from about 700 to 900 nanometers, so we filtered out all of the visible and recorded only the infrared reflectance in that range. What we saw on that film is that within phragmites populations, the same phenomenon was exhibited, the light tones on the black and white infrared photography would correspondence with the red tones on color infrared photography and the darker tones on the black and white infrared photography correspond to what we could call green signature phragmites.

Now, on the black and white infrared film the more reflectance that one has from the vegetation the lighter the tone. The light areas that are shown on this top photograph are all trees. This is not wetland. They are all trees. They sho very white because trees have very strong infrared return.

The red signature phragmites also shows up in lighter tones, indicating that it has a greater infrared reflectance than does the green signature phragmites and that is also shown in our work on the spectroradiometer also, again demonstrating that using different film media we can show the same kind of phenomena that we see on color infrared film, that is, that there are real physical differences between these phragmites populations as is shown by different signatures on color infrared film.

Beginning in June of 1971, we, meaning Earth Satellite Corporation, were asked to apply the techniques that had been developed basically by myself up to this point, apply these techniques in a statewide tidal wetland mapping program. The project began in, as I say, June of 1971. A pilot project was completed in September of 1971 and soon after that we began a statewide mapping program.

MR. PORRO: Your Honor, is that New Jersey or Maryland?

A This is New Jersey. Part of the purpose of doing this work in New Jersey was to attempt to use color infrared photography to define what would approximate a mean high water line if one were to draw this line using engineering techniques. Part of my work up to this point had also resulted in observing signature differences in a salt marsh grass called spartina alterniflora. Spartina alterniflora grows in at least some places three -- grows as, excuse me -- spartina alterniflora grows as two or possibly 3 different height classes in most of the eastern coastal salt marshes. These height classes when viewed on color infrared film - showed color differences among the spartina alterniflora populations, the shorter growth form imaged in greenish and brownish tones, the taller growth form in bright tones.

We used these signature differences in spartina alterniflora to estimate a mean high water line for the coastal and tidal marshes in New Jersey.

Q Now you used the expression "coastal tidal marshes." You are talking about what we call wetlands?

A Yes, sir.

Q All right, in New Jersey, and was this in the Tuckerton area?

A The work began in the Tuckerton area and then in the statewide mapping project applied these techniques in all areas where we had spartina alterniflora growing. This estimation of mean high water line that we drew in the Tuckerton area and other areas with spartina alterniflora was tested against an engineering method in Tuckerton and this is Exhibit R-151 in the record.

Q This being Storch?

A The statewide wetland mapping project for

New Jersey did not include Hackensack Meadowlands by statute, so, therefore, my first visit to and experience in Hackensack Meadowlands occurred after or during this other statewide mapping project. In August of 1972, Mr. Dan Deely and myself were requested to take a helicopter trip through Hackensack Meadowlands to view the Meadowlands and to communicate certain pieces of information to the State about the Meadowlands.

I have some slides, your Honor, if I may introduce these at this time.

Q Well, what kind of photography is this?

A These are slides that were taken by myself with a 35 millimeter camera in the helicopter. They are low altitude slides. This demonstrates the things that we saw in Hackensack Meadowlands as a result of this helicopter trip.

MR. PORRO: I think we are getting the record overburdened with this type of collateral thing. These are certainly not items that the administrative agency relied upon in coming to its conclusion I'm sure.

THE COURT: This is part of his

work for the State.

MR. PORRO: They are pictures of the conditions of the Meadowlands under ordinary photography at a given point.

THE COURT: Can you make me a proffer on this? Do you know what he's going to get in?

MR. GOLDFEIN: Your Honor, it is just what he stated. It seems we are asked for both sides.

THE COURT: We have seen the Meadows, I have flown over in a helicopter, not the State's but a friend of mine's. I know what they look like, I don't want to in any way diminish the importance of his testimony.

MR. GOLDFEIN: I feel it is critical to his testimony.

THE COURT: Maybe it might be at that to these people who review the record up above. Let's see what they look like.

MR. WEIGEL: Can we have a date and time for this trip?

Q Yes, when did you take this trip, Doctor?

A August 29, 1972.

Q These are 35 millemeter slides?

A Taken from a helicopter, natural color photography.

Q At about what height?

A The altitude varied. We were occasionally near the surface and usually no more than about 200 feet above the Meadowlands where we were doing the photography.

MR. PORRO: Could we identify the type film used?

THE WITNESS: Ektachrome.

MR. PORRO: Ektachrome?

THE WITNESS: Yes.

Q All right.

A I wanted to demonstrate some of the conditions that we observed and also some of the plant community that we observed in the Hackensack Meadowlands at the time. You see the point -- this other thing doesn't work.

Q You can go down if you want to.

MR. PORRO: Can he identify the particular time of day that was taken?

A We were in the air between approximately ten o'clock in the morning until about four o'clock in the afternoon. I couldn't give you a particularized time, Mr. Porro.

MR. PORRO: It might make a difference if these do go into evidence, as to where the water and tide was at that particular time. Would you mind relating a time to each particular picture if you can.

Q Are these slides going to be offered to prove where mean high water is?

MR. GOLDFEIN: No.

Q Okay, they are not going to be offered for that.

A Our initial observation of the Meadowlands indicated that it was predominantly phragmites communis and a little later on it wasestimated that it was about 85 percent phragmites communis. There are other plant species that grow in the Meadowlands. However, one of them is spartina alterniflora, the high-vigor form of this grass and this is the same grass that I mentioned previously, your Honor, that we looked at in other wetland areas of New Jersey and related that the work that was done indicated that this tall form of spartina alterniflora did occur below a mean high water line.

MR. PORRO: Objection.

THE COURT: That doesn't relate to this slide, he is giving us something else. I will let it in evidence.

BY THE COURT:

Q Now the witness is pointing to slide number one and apparently he indicated that in his opinion spartina alterniflora is the lighter color higher growth adjacent to the bank of the River. Is that correct?

A Yes, sir.

Q The remainder, the next, if you will do it the way I'm doing then I don't have to interrupt you, the next growth. I have it with respect to an object, so whoever looks at this knows what you are talking about.

A The darker green plant shown in the slide here is phragmites communis and most of the rest of the vegetation that is shown in this particular slide is phragmites communis.

Can we have the next one? We did make several observations.

Q Slide number two.

A Slide number two.

Q You've got a garbage dump in the lower part.

A Yes, sir. We tried to observe various conditions. One of these were garbage dumps and the relationship of some of the vegetation communities. This also shows predominantly phragmites communis with a zone of spartina alterniflora, a very thin band of spartina alterniflora along the stream bank.

MR. PORRO: Could we have an identification on these slides as to what section of the Meadow they are taken, the east side of what river or tributary?

Q Do you know, can you tell that?

A No.

Q Do you recognize the bend in the river?

MR. PORRO: Yes, your Honor.

THE COURT: Where is it?

MR. PORRO: It appears to be in Lyndhurst on the westerly side of the river, I may be mistaken, it is hard to say. You will find that is on the east side of the Hackensack River just south of the Passaic.

THE COURT: Keep in mind he is using these for illustrative purposes. It has no significance, as far as I'm concerned these slides do not demonstrate mean high water in any area. He is using it to demonstrate a technique that they employed.

A Next.

Q Slide number three.

A One of the purposes of the trip was to attempt to view the water conditions in the Meadowlands where the water was, how it distributed through the plant communities, and, of course, then relate that eventually to our signature classes as we did later on. This again is predominantly, in fact that is all phragmites communis, I believe.

This is slide number four. I think this particular one shows that the tide was out because there are rather significant mudflats showing in the picture. Again large expanses of mostly phragmites communis with natural waterways and some apparent ditches that had been dug in the Meadowlands as well. That is all the slides.

THE COURT: Would you mind if we mark them 1, 2, 3, and 4?

MR. GOLDFEIN: It is our intention

for the record to have 8 x 10 enlargements, prints, made and I hoped to have those today. They were not ready but I hope to have them.

THE COURT: Will you remember I will give them numbers now?

MR. GOLDFEIN: Fine.

THE COURT: For the purpose of a Exhibit number, the slides that were just shown, the four slides, will be R-259, 260, 261 and 262.

THE WITNESS: As a result of this helicopter trip, Mr. Deely and myself wrote a report and presented that to the State of New Jersey. This report was incorporated into a report that the State of New Jersey produced and it is Exhibit R-136 in the record.

MR. WEIGEL: Is your report in the record?

THE COURT: What did you say?

MR. WEIGEL: I understood the Doctor's testimony, your Honor, to be that he and Mr. Deely produced a report that went to the State and the State produced a report which is R-136. I asked him where his report was.

Q Do you know? He said his report was incorporated into R-136. Does that help you?

MR. WEIGEL: Your full report is included in 136?

THE WITNESS: I'm not sure how the report was incorporated. Most of what we reported as the result of this trip was incorporated into this exhibit is my understanding.

MR. WEIGEL: I will make a formal request, your Honor, that we be shown the report that Mr. Deely and Dr. Anderson made after a helicopter flight.

Q Do you want to take a look at page 5, Doctor? This looks familiar, it is on what you testified to. Is this the portion you incorporated talking about photos by low-flying altitude?

A Yes, sir, that is the portion of the report that incorporates what we did.

THE COURT: Page 5 of R-136, District Wetland Overview, the witness believes this portion is predicated on his report that resulted from his flight on

August 29, 1972 and the observations he made and the pictures he took. All right.

MR. GOLDFEIN: Your Honor --

THE COURT: Excuse me, I think I am going to honor Mr. Weigel's request though, that that report, if possible, be given. Do you have it here?

MR. GOLDFEIN: I was going to speak to that. Apparently, the State had it misplaced and fortunately Dr. Anderson has copies today we can distribute it and enter the copies.

THE COURT: Would you distribute it at some time later?

MR. GOLDFEIN: Yes, sir.

THE COURT: All right, I think we better recess for lunch to 1:30.

(Luncheon recess from 12:30 to 1:30.)

THE COURT: Do we have more projections to make here?

MR. GOLDFEIN: I think so. May we proceed, your Honor?

THE COURT: Yes.

BY MR. GOLDFEIN:

Q Dr. Anderson, I believe at the end

of this morning's session, you were talking about the report you prepared and submitted to the Department of Environmental Protection as a result of your August overflight by helicopter. Could you pick up the narrative at that point?

A Yes. The result of this overflight was a report to the New Jersey Department of Environmental Protection. This report was used to produce a report, a large report, which has already entered into the record, R-136. However, the report that we presented to the New Jersey Department of Environmental Protection contained two overlays that have already been entered as exhibits and these are Exhibit R-253, Wetlands Ecological Value Overlay, and Exhibit R-254, Wetlands Plant Species Overlay.

This work I will emphasize was done prior to the beginning of the regular mapping program in Hackensack Meadowlands. In August of 1972, Mark Hurd flew over Hackensack Meadowlands and obtained color and color infrared photography. This photography was viewed in the offices of the New Jersey Department of Environmental Protection after the report I just mentioned was written. At that time the photography was given an initial value judgment by myself, and Mr. Daly with regard to its use in doing a mapping project in Hackensack Meadowlands. It was at this time that we did observe the fact that phragmites populations in the Hackensack Meadowlands had some of the same color tonal signatures on color infrared photography as I had observed in other areas, Maryland, and also in other areas along the Delaware River.

In October of 1972, we began the pilot project in the Hackensack Meadowlands. The purpose of this project was to develop criteria by which the wetlands in Hackensack Meadows could be mapped using aerial photography.

Secondly, it was to determine whether there was a relationship between phragmites signature classes and relative tidal inundation. I have some visuals I would like to display again. These are already in the record, your Honor.

BY THE COURT:

Q Just refer them to the number on them.

A These are all from R-149. I refer to them by page number as I talk about them.

As a part of the pilot project, we reviewed a considerable amount of work that had gone on previously in phragmites with regards to kinds of research that were done, strictly botanical research, and also some arial photographic work that I had done previously. We also reviewed some area photographs that had been taken for the New Jersey wetlands mapping project in which we were alredy engaged at that point in time.

One of the photographs displayed what we thought was very well -- what we thought was part of what we were seeing in the Hackensack Meadowlands and this is presented in the final report and I just refer to it again for reference here with regard to the phragmites phenotypes. Page 20 in R-149.

What we can see here and this is a tidal marsh off the Delaware River in New Jersey, what we could see here and as I mentioned before in Maryland and also in Hackensack Meadowlands, was an apparent relationship between the signatures of phragmites communis and the relative tidal inundation. You can view this and also it is in the report and can see the tidal water would be coming in from what is the bottom of this photograph into these creeks and flow up through these creeks as the tide came in and, of course, would flood a certain amount of this area and then on receding tide, the water would go out. So what we knew initially from this particular area was that those phragmites populations that had what we later called a green signature on color infrared photography appeared to be those populations that would be under the most frequent tidal inundation, in other words, these populations would receive a greater frequency of tidal inundation than those populations fartheraway from these tidal creeks. The green signature here I think is quite illustrative. It ends or terminates at about the point where these tidal creeks terminate in the photograph. At that point, the signature changes and there is a zone here which we have basically designated as pink signature phragmites. Again, this zone begins just above the green signature phragmites zone and continues for a point them beyond termination of these tidal creeks. The next general zone that one can observe here is that part of the phragmites population, which is farthest removed from tidal flow, one can see a general signature change from pink to what we have designated as red signature phragmites in the report. Basically, what we could see from this and from other work in Maryland as we viewed that again and also photographs of the Hackensack Meadowlands was that we could identify three general population types of phragmites and we designated these Phenotype 1, which was the green signature phragmites, Phenotype 2, which was the pink signature phragmites and Phenotype 3, which was the red signature phragmites.

Q Did yousay this is a photo of someplace in the Hackensack Meadows?

A No, it is not, it is off the Delaware River.

Q Oh, this is the one from Delaware River?

A Yes, sir.

Q Did you people ascertain that those creeks were indeed tide-flowed?

A Yes.

Q You mean you physcially determined that?

A I was physically on the ground and observed that they are tidal creeks, yes, sir.

Q Excuse me. You mentioned these Phenotypes as being phragmites. Is the photograph in R-149 opposite the photograph you have been looking at, is that the same region?

A Yes.

Q You are not relying on any

characteristics tone-wise of spartina alterniflora, or am I anticipating something?

A We did observe that spartina alterniflora, the high-vigor form, is associated with phragmites Phenotype 1, which is the green signature phragmites.

Q And what if anything does spartina alterniflora indicate to you in the pictures?

A From our previous work in the Tuckerton, which I have already mentioned, we determined that the high-vigor spartina alterniflora occurs below mean high water line. That was also indirect evidence that this region would be more frequently flowed by the tides and would be pink signature -- or red signature phragmites.

There are two exhibits here that are prints from photography in the Hackensack Meadowlands. This is taken from page 16 in R-149. What this demonstrates is that we have these three same general signature Phenotypes in Hackensack Meadowlands as we observed in the Delaware River site and also in Patuxent River, one that images generally as a green signature in approximately the center of this photograph, one that images basically as a pink signature, as shown to the right of the photograph as I face it, and one that images as basically a red tone to the left of this photograph as I face it.

As I mentioned, Mark Hurd aerial surveys also obtained color photography of the Hackensack Meadowlands. There is correlary evidence. This is also page 16 in R-149. We show this to indicate that the signature differences can be detected on color photography, but they are more difficult to observe than they are in color infrared photography and this is the reason that we basically used color infrared photography in our study.

This is page 3 in R-149.

It shows the date,the event, as we have called it, or the part of the project that was undertaken at that point in time, and also a brief description of what we did. As is shown, the pilot project initiation occurred 16 October, 1972. The results of the pilot project were presented to the New Jersey Departmentof Environmental Protection on 2 November, 1972. During the pilot project, as I mentioned, we reviewed as much background information as we could on phragmites communis. Part of this was what I mentioned about aerial photography that was available over other areas that showed phragmites.

Also, we reviewed the literature for the kind of botanical data that had been obtained in phragmites populations over the past few years. We reviewed a considerable amount of work. Three people have done a considerable amount of work with phragmites and I will mention their names and the references are in R-149, Mrs. Haslam, Mrs. Vandertoorn, and Filia and Kvet. All of these individuals have collected botanical information for varying reasons in the phragmites population. One thing they had in common was attempting to determine if there was a relationship between water supply and what they call performance on phragmites communis. By performance, they meant the height of the plant, the width of the leaves, the number of stems that are produced per unit of area, the shape of the rhizome and other factors which are stated in R-149. As a result of reviewing the area photography, reviewing past botanical work in phragmites, which related to water supply, performance in water supply, we undertook a botanical sampling program in Walden Swamp which was the test area for the project. We collected botanical information which I have just cited. We related that to the signatures that were shown on the color infrared photography and concluded at the end of the pilot project that we thought there was sufficient evidence to demonstrate that there was a relationship between plant performance and color tone on color infrared photography and relative tidal inundation. At this time, the New Jersey Department of Environmental Protection also presented us with some Corps of Engineers spot elevation data that had been taken in Walden Swamp. We were asked to determine the relationship between the spot elevations data and the signature classes that we viewed on color infrared film. This is page 129 from R-149.

Table 10.5 on that page presents results of this spot elevation data. This was further correlary evidence that there appeared to be a relationship between relative tidal inundation and signature classes in the phragmites communis. This again is page 3, R-149.

On September, excuse me, November 17, 1972, we completed the pilot program and presented our conclusions to the New Jersey Department of Environmental Protection. On December 15, we were asked, we being Earth Sat, were asked to initiate a study by which we would determine if what we had discovered in Walden Swamp could be transferred to other swamps -- excuse me -- to other wetlands within the Meadowlands. We presented these data and the conclusion of these data to the New Jersey Department of Environmental Protection January 29, 1973, and as a result of that, we were given approval to proceed with a mapping program in Hackensack Meadowlands. Your Honor, Mr. Dan Deely was the project manager for this study at Earth Sat. He is intimately aware of the procedures and techniques that were used to gather the information that is presented in R-149 and I would like to have him pick up at this point and present that information.

THE COURT: All right, you can step down.

MR. WEIGEL: Could I ask one question? The phrase the Doctor used throughout of "relative tidal inundation," what does that phrase mean?

THE COURT: Relative to, he said tidal inundation. Maybe he didn't. Go ahead, let him answer.

THE WITNESS: If we look at the three signature Phenotypes, we have identified in phragmites, we have concluded that phragmites Phenotype 1 would be more frequently inundated by the tide than phragmites Phenotype 2 and phragmites Phenotype 2 would be more frequently inundated by tidal water than would be phragmites Phenotype 3. The term relative here refers to the other Phenotypes we worked with in relation to one another.

MR. WEIGEL: It doesn't relate to a twice daily tide?

THE WITNESS: We have no information or gathered no evidence that could relate it to that.

MR. GOLDFEIN: Mr. Deely, would you take the stand?

DANIEL J. DEELY, sworn.

DIRECT EXAMINATION BY MR. GOLDFEIN:

Q Mr. Deely, where do you reside?

A I reside in Virginia and I work in Bethesda, Maryland.

Q By whom are you employed?

A Earth Satellite Corporation.

Q In what capacity?

A I am the deputy director of the environmental applications division.

Q What are your responsibilities in that position?

A I have varying responsibilities, but one of these is that of management of remote sensing and natural resource inventory projects.

Q How long have you held that position?

A The official designation that I now carry I have only had for a few months, but I have done this work for approximately four and a half years under Earth Satellite Corporation.

Q How many years in total have you been in Earth Satellite Corporation?

A Four and a half years.

Q What did you do before that time?

A For three years prior to that, I was an officer in the Army Corps of Engineers.

Q What were your responsibilities in that regard?

A My responsibilities were supervision of troops on engineering construction projects.

Q Would you state for the Court your academic background?

A I have a Bachelor of Science in Forced Science and a Master of Science in Forced Resources from the Pennsylvania State University.

Q During the four and a half years that you have been employed in Earth Satellite Corporation, have you had occasion to work on other projects similar to the New Jersey delination projects you have heard Dr. Anderson testify to?

A I had worked initially on the statewide New Jersey wetlands mapping project prior to becoming involved in the Hackensack work. Since that time I have had some involvement in wetlands working in Maryland, New York, Louisiana and interior freshwater wetlands mapping in the State of Wisconsin.

MR. WEIGEL: Can I ask is this all after you worked on this project here that resulted in R-149?

THE COURT: Yes, you can ask that.

THE WITNESS: The work that I have done in assocation with the Maryland-New York and Wisconsin followed the work done and described in R-149.

Q What have your responsibilities been with regard to the New Jersey wetlands?

A You are talking now about statewide programs?

Q Yes.

A My responsibilities there had been interpretation of color infrared aerial photography for biological mean high water lines in tide marshes, as well as identification of plant species, composition, from interpretation with associated field checking.

Q And particularly with regard to the tidelands delineation project, what have your responsibilities been?

A Here you are now referring to the Hackensack?

Q Right.

A My responsibilities on the Hackensack work were both technical and administrative. On the technical side, I collaborated with Dr. Anderson in formulating a work plan and in directing the activities of others in accomplishment of the work, both that which was done by the corporation at its offices at that time in Washington, D. C., and also the work that was done by myself and others in the Hackensack Meadowlands as field work.

Q In line with the concluding statements of Dr. Anderson with regard to your programmatic supervision of this project, I would like you to, if you can, describe for the Court in as chronological a way as possible your involvement, the nature of the work that was done, referring to the exhibits that have been introduced and other things you brought with you?

A I think the chronology of what has been done will emerge from the presentation. There are some materials in R-149 which relate to the chronology of field work and the overall chronological sequence from the inception of the pilot study through the completion and delivery of the final report.

This is page 31 of R-149. It shows the general logical sequence that was followed in reaching the point of operational mapping on the Hackensack Meadowlands project, much of what Dr. Anderson has already described. He has related down to about this point where we have collected, developed a plan for collection of and collected supporting evidence. He has described the appearance of tone signatures on phragmites and when these are compared with what is known from ground studies of relative tidal inundation within marshes, there is an apparent correlation between those signatures and relative or varying degrees of tidal inundation.

Also emerging from simple viewing of the photographic data is the hypothesis that the tones the signature differences as shown on the photography, bear some relation to the performance or the vigor of the plants being imaged and that this would not be in the case of phragmites something that had not been previously studied and observed, at least in one other plant, by Dr. Anderson, that being spartina alterniflora, and from just looking at the photographic evidence prior to even collecting detailed supporting field data, emerges the concept of phragmites signature Phenotypes with a bearing of possible relation to plant vigor and also a relation to relative tidal inundation and from that point we developed a program plan for acquisition of data to support an actual operational mapping program that would effectively classify tidal phragmites marshes into areas that were wetter and more frequently inundated, and separate those areas from other areas within the same tidal marshes that were drier and less frequently inundated.

The botanical data and the physiobiological field observations which were made and described in the report were obtained for the purpose of providing support for the general hypothesis which emerged from simple viewing of the photographic data at an early stage. I could refer back to page 20 that appeared in R-149 and if I were nothing more than a plant ecologist, interested in doing a vegetation study in the Meadowlands that had no relevance to legal issues, I would be able to look at the evidence such as this and conclude from that evidence that because the plant species is the same, the phragmites is growing here and here and that this does have a lower infrared reflectance, that this is a lower vigor, lower performance form of phragmites than this and that is evidence for just viewing of this illustration and that because from associated ground studies we know that this area is dry and we know that this area is frequently flowed by tides without reference to local mean high water datum, but on a relative basis, and that this area is flowed by tides, but relatively less flowed than this area, and relatively more so than this area. (indicating)

THE COURT: Can I just interrupt you for the minute for the record. I understand it because I can see what you are doing, but you use pronouns just to identify them. I know you pointed to the green, the pink and the red and in that order, there is less relative inundation as it goes from green to pink to red and you are more than a plant ecologist, interested in doing a vegetation study in the Meadowlands that had no relevance to legal issues, I would be able to look at the evidence such as this and conclude from that evidence that because the plant species is the same, the phragmites is growing here and here and that this does have a lower infrared reflectance, that this is a lower vigor, lower performance form of phragmites than this and that is evidence for just viewing of this illustration and that because from associated ground studies we know that this area is dry and we know that this area is frequently flowed by tides without reference to local mean high water datum, but on a relative basis, and that this area is flowed by tides, but relatively less flowed than this area, and relatively more so than this area. (indicating)

THE COURT: Can I just interrupt you for the minute for the record. I understand it because I can see what you are doing, but you use pronouns just to identify them. I know you pointed to the green, the pink and the red and in that order, there is less relative inundation as it goes from green to pink to red and you are pointing that out on that exhibit, okay?

THE WITNESS: All right, but the hypotheses that we are testing as to vigor of the plant as to the presence and relevance of the signature Phenotypes as a means of determining which portions of tidal phragmites marshes may be more versus less frequently inundated, these hypotheses are subjected or suggested in evidence produced by the very nature of this photograph and the associated grand-work and the evidence which we developed and data which we collected were gathered for the purpose of demonstrating that these conclusions, which might have been derived without that collection of supporting data, were in fact valid, and not only were valid in one area, but were valid throughout the Meadowlands area.

BY THE COURT:

Q Mr. Deely, Dr. Anderson testified that he and other people in your organization somewhere during the pilot project, or shortly before or shortly afterward, I forget which, said that they studied some papers that had been published let's see, I forget how he expressed it -- gener on the subject matter of the relationship of water supply to performance. Did you study some of thos texts or papers, or treatises?

THE WITNESS: Yes, I did.

THE COURT: Yourself. In your research and in your general exposure to this type of work, have you ever known of any project that was ever undertaken by anyone to fix a mean high water line using this general color infrared photography and studying tonal signatures to determine where that line could be fixed or approximated?

THE WITNESS: I think my only knowledge of such a program was the statewide New Jersey wetlands mapping project.

THE COURT: Would you say that you are in your organization pioneers in this with all pardonable pride? Can we say that you are?

THE WITNESS: I would have to say yes. I think that Dr. Anderson was one of the earliest, if not the earliest investigator who was looking at that particular relationship.

THE COURT: Have you or Dr. Anderson to your knowledge, have you ever testified in court before in any kind of a case testing the use of color infrared photography as it relates to tonal patterns and shades of vegetation?

THE WITNESS: I myself have not. I could not speak for Dr. Anderson.

THE COURT: Have you, Dr. Anderson?

DR. ANDERSON: Yes, sir.

THE COURT: You have?

DR. ANDERSON: Yes, sir.

THE COURT: Do you know the name of the case? Was this explored in discovery, Mr. Weigel or Mr. Porro?

MR. PORRO: No, your Honor.

MR. WEIGEL: I don't recall.

THE COURT: Do you recall the name of the case, Doctor?

MR. ANDERSON: This involved the state of New Jersey and the American Dredging Company and I don't recall the judge who was involved or any other factor.

THE COURT: Was it in a New Jersey court?

MR. ANDERSON: Yes, sir.

THE COURT: Do you have anything you can refer to at home? Do you know Mr. Goldfein?

MR. GOLDFEIN: I think I might be able to pin it down. Was that before a hearing officer named Thompson?

DR. ANDERSON: Yes, sir.

MR. GOLDFEIN: That was a remand from the Appellate Division and recently decided I think by Commissioner Bardin I think on a permit and that case was handled by a deputy who is no longer in our section. I never read the record, but the file happens to be in my office, it's lying on the floor, been there for some time.

DR. ANDERSON: This was after the deposition, your Honor.

MR. GOLDFEIN: It was after the depositions in this case.

THE COURT: Would you be interested in that file for your portion of the case, gentlemen?

MR. WEIGEL: I would think so.

MR. PORRO: Yes, sir.

MR. GOLDFEIN: I can just add that counsel for the applicant was Grover Richman and there was an appearance by an attorney for the local environmental commission whose name was Delusil and Deputy Attorney General Theodore Brewer handled the case for us with the file, our file, which is available in my office.

THE COURT: Fine. I won't go into it any further, but this might be worthwhile looking into. All right, I'm sorry I interrupted you. You go right ahead.

THE WITNESS: This is a reproduction again from R-149, I don't have the page number apparently. It is figure 9.1.

BY THE COURT:

Q That is good enough. Figure 9.1.

A This shows the general study area that was the subject of the investigation and mapping program. It shows the locations of botanical data, collections points and physiobiological field observations throughout the Meadowlands and that information is superimposed on the grids of some

36 maps, I believe for the whole area. So the data that I will be referring to and discussing was collected at the points approximately shown on this illustration throughout the Meadowlands.

Q Just a minute, maybe we can fill in something in the record. That figure 9.1 that is being projected on the screen is found on page 41 of Exhibit R-149, Existing Wetlands Data Collection Sites and Map Sheet Index. Okay, sir.

A This illustration is page 185 of Exhibit 149, Appendix B and this summarizes the field activity during which all the botanical data and physiobiological field observations were obtained. It gives the names of the people involved, the dates in which they were in the Meadowlands, and the map sheets where they did their principle work on each of these trips. So the data again that I will be referring to was collected at the places shown on the previous illustration by the people and on the dates shown in Appendex B.

This is a copy of page 43 in R-149, the botanical data collection sheet that was used in Walden Swamp and these along the left edge are the botanical variables that Dr. Anderson had determined from a review of the literature might yield information that might be relevant to performance of phragmites in relation to water supply. These included plant height, leaf width, internode length, depth of rhizome, width of rhizome, shape of rhizome, and at bottom water table depth.

One of the issues relevant in collection of the data was to make sure that the variations in signature Phenotype, not only within Walden Swamp but within other areas during a late collection of more botanical data, following the pilot program, that these data were representative of all the varying patterns that could be found in phragmites signatures throughout the Meadowlands and part of the rationale for the selection of data collection was based on this kind of information that we were able to see, differences in signature patterns based on the types of marshes and the amount of relative tidal inundation, or relative openness to tidal flow.

This is a copy of I believe it is page 50 in R-149. This is the botanical data sheet that was used for acquisition of data across other areas outside of Walden Swamp following the pilot program, and the data gathered in this case were dominant plant height, density, and stem basal diameters.

So that we had made a modification, based upon what we learned from that first set of botanical data gathered in Walden Swamp, or the kinds of information that might yield the most meaningful result.

This is a reproduction at page 59 in the report. It summarizes the botanical data collected throughout all the Meadowlands. It gives the transect numbers and the map sheets to which they corresponded, the length of sample transects used in each area, and the number of sample points, quadrats, and the number of actual observations of botanical characteristics made on each one of these transects.

BY THE COURT:

Q I understand the tidal, what is a transect?

A A transect is a sample line along which observations are made at random sequence so that we would lay out transects across signature patterns and then move on the ground with a data collection crew along that transect, making observations at intervals based on random number tables.

Q Does that mean this table 9.2 you just had up there is the approximate number of individual botanical observations, 6,821? Does that mean that literally?

A Yes.

Q By human beings?

A Yes, it means some form of measurement of botanical dimension, whether it was adopted to the first horizontal rhizome, width of a leaf, length of an internode.

Q The rhizome is the root or bulb, whatever you call it?

A Yes. This is page 55 -- 56, rather, from R-149. This shows a standard phragmites along the edge of a landfill and I'm just showing this as an example of a place where we have located a transect approximately in this area through a Phenotype 1 area phragmites, and the botanical data when analyzed later did show that this particular standard of Phenotype 1 phragmites was the lowest vigor stand and lowest performance stand that we measured anywhere in the Meadowland.

MR. PORRO: Is there an identification on the location of that photo?

THE WITNESS: This is page 56.

Q Did you mean the location in the Meadowlands? Is that what you meant, Mr. Porro?

MR. PORRO: Yes, I'm sorry, that's what I did mean.

A Is this that Snake Hill? Are you familiar with it?

MR. PORRO: If the witness knows.

THE WITNESS: Yes, it is down in the southern portion of the Meadowlands.

MR. PORRO: It is not in the test area that you were describing?

THE WITNESS: It is in the Meadowlands.

MR. PORRO: It wasn't in the pilot project area.

THE WITNESS: No, no.

BY THE COURT:

Q Someplace in the Hackensack area?

A Yes.

Q It could be Snake Hill, but the Turnpike runs right alongside of Snake Hill, doesn't it?

MR. PORRO: Yes.

Q I don't see it. Okay.

A This is page 65 of the Hackensack report. It shows the ranges and the meanings of the botanical variables that were measured in Walden Swamp during the pilot study. This data effectively demonstrated two things, that the measurements of botanical characteristics made did show differences among groups of phragmites clones which were classified on the basis of signature Phenotype, but they also demonstrated that the variables, which were measured, by and large were not responsible for producing the infrared signatures observed. So that what we in effect found was that, for example, in the case of stand density Phenotype 1, Phenotype 2 and Phenotype 3 could all have the same density and yet have very different color infrared signature appearances; plants of different height or I should say plants of the same height, Phenotype 1, 2, and 3, could still have this signature differences and yet be of the same height so it was not a direct -- the signatures themselves were not a direct reflection of density, height, the width of leaves, the length of internodes, et cetera.

Sir you could do a spectro on a living plant [illegible] around area + get a sig like a sign upon [illegible].

Q Did your crews run across any exotic animals out there?

A We ran across many muskrats and muskrat trappers.

Q There used to be trapping down there.

A This is a copy of page 70 of the Hackensack report and it shows what was found in terms of shape of rhizomes by signature Phenotype in Walden Swamp, and it indicates that Phenotype 1 had generally flattened rhizomes; that Phenotype 2 had varying from 50-50 to 33 to 67 percent rhizomes that were more cylindrical or half-cylindrical, or half-flattened.

Those found in Phenotype 3 were by and large cylindrical predominantly and this is one of those botanical variables that had been previously reported by Dr. Haslam to have been reported to growing site water supply with flattened rhizomes being indicative of a wetter site and cylindrical rhizomes being indicative of a drier site or drier growing site conditions.

Q What does this word clone mean, group?

A I think ideally a clone is one individual phragmites plant and because of the growth habit of the plant, phragmites clones may be variable in size, but normally they are large. In our work we have used the term clone to refer to a defineable signature Phenotype representation, because, you know, unless you were to go in and unearth the entire plant you would not be able to establish its boundaries. The plant extends itself by horizontal rhizomes beneath the surface, so that one phragmites clone, which is one individual plant, may have many thousands of stems and it lives on from one year to the next.

Q Are you going to get to the size of the rhizomes in one of these tables or not?

A I think this illustration mentions the depth of rhizomes. This is page 72 of the Hackensack report and this discusses the variation of three others, measures plant height, density, and rhizome depth in relation to signature Phenotype in going from a Phenotype 1 to a Phenotype 2 clone, and as we go from Phenotype 1 to Phenotype 2, the data show a gradual increase in plant height, a decrease in density and an increase in rhizome depth, rhizome depth as another botanical characteristic identified by Dr. Haslam's work as being related to growing site water supply, in that the shallower the rhizomes, the wetter the growing site. So that those rhizomes, which are deeper, are indicative of drier site conditions, and those that are shallower are indicative of wetter type conditions.

Q It seems to make sense, doesn't it?

A The other variables show a relationship.

Q Excuse me, I'm sorry, I shouldn't have said that.

A The other variables here show a relationship to plant vigor in that as the plant becomes more productive and vigorous, its height increases and the number of stems per unit area decreases because those stems are larger. So that the effect of **the rhizomes** in theless dense and larger stem stand is greather than in the smaller stem but more dense stand.

THE COURT: This is fascinating, isn't it, Mr. Weigel and Mr. Porro?

MR. PORRO: It sure is.

THE COURT: Seriously.

MR. PORRO: It is.

A These represent phragmites inflorescences that were collected in Walden Swamp along tidal marsh transects and they effectively demonstrate that inflorescences in abundance are not well related to signature Phenotypes and can be effectively eliminated as causes for producing the signature differences which are apparent. We have got some Phenotype 1 clone such as this one with a very small inflorescence and we can compare that with a

Phenotype 1 in another transect which had a very large inflorescence, and the property in terms of size and abundance of inflorescences demonstrate no relation to signature Phenotypes; that we have inflorescence characteristics across the full range demonstrated in each of the signature Phenotypes. So that there can be no major signature influence caused by the inflorescence characteristics.

This is page 78 of the Hackensack report and this shows the range of phragmites clone height values, that is, the height of the stems above the ground surface as they were measured along sample transects across varying environments in the Meadowlands.

THE COURT: Will this witness be able to finish today by 3:30?

MR. GOLDFEIN: We hope so, your Honor, he has to get back to Washington, we have a real problem.

THE COURT: I have to cut off at 3:30, I don't want to rush you, but I'm trying to be thoughtful of your own commitments.

THE WITNESS: What this illustration demonstrates is that there are major differences in sites from one area to another in that the tallest plants measured in one area are frequently much smaller than the smallest plants measured in another area. So that as we go through the Hackensack marshes looking at the range of botanical data it is clear that some of the environments in Hackensack are excellent places or better places to grow phragmites and other areas are apparently much poorer growing sites for phragmites. There is also a demonstrated that the ranges of botanical values in some of the marshes are much larger than they are in others.

Q Is that tied up with inundation at all, or are you just talking about soil conditions and so forth?

A Well, in terms of our understanding and gathering of the data that supports development of a set of delineation criteria, in order to understand what those measurements mean from area to area we havd to in a general plant ecological sense, we have to understand the growth of this plant in the phragmites -- throughout all the phragmites marshes in the Meadowlands. When we say that a plant is more or less vigorous on a relative basis within one marsh, we must confine ourselves to an area where all environmental conditions, including water, temperature regimes, water chemical content, soil substrate properties, et cetera, are relatively equal except for the major variable of relative tidal inundation, and that in order to interpret these data, particularly if you are to use gross performance measures, such as plant height, the only way that they can be sensibly interpreted is to separate them by environment, in other words, each marsh has its own manifestation of relative clonal vigor within that marsh and direct comparisons of gross performance measures cannot be made between marshes because the marshes themselves in terms of the soils and the operative local environments are too dissimilar.

Q So you could, for example, your green phenotype 1 in one area could be a good deal different in another area, but both of them could be flowed regularly by tide?

A When you say different, they could have different sizes.

Q Yes.

A Correct. So that in order to make comparisons the comparisons must be made when all or most important environmental variables are kept relatively constant so that the relative differences which emerge are dependent on a local environment similarity.

Now, Dr. Haslam has developed a technique of getting around this which represents something of a problem in dealing with data as directly as gross performance measures in using a population type curve which gives you a frequency versus size measure and in this case, we have culm basal diameter as a means of determining the vigor or performance of a phragmites clone from gross performance measures. But this will enable you to see the similarity between two lower performance plants which appear to be very different in characteristics; when they are merged in this way in a tight curve they can demonstrate relative or varying degrees of plant performance that supercedes the actual sizes involved.

Q Where do you find that in the chart?

MR. PORRO: Page 85, your Honor, figure 9.5.

The witness referred to Dr. Haslam

relative to this particular chart. I would just like to clarify whether or not this is Dr. Haslam's chart.

THE WITNESS: This is not Dr. Haslam's chart, but it is a chart based on a method for display of botanical characteristics and I believe Dr. Haslam is responsible for it.

What this demonstrates is that Phenotype 1 clones have a positively skewed culm basal diameter distribution curve. What this means is that there are very few large stems and a large number of small ones. Dr Haslam has found that in dealing with phragmites the terminal shoots are under primary genetic control and that lateral shoots, which are more numerous, are under primary environmental control, and they respond much more to variations in environment. So that we could take two clones of phragmites that were the same height from two different marshes in generally the same height in that the tallest stems were the same height and we could find that they were totally different and of totally different performance, even though they were the same height, through this technique.

What we found was that on this measure of performance Phenotype 1 was the lowest performance, or the lowest vigor group. The Phenotypes intermediate between 1 and 2 and Phenotype 2 were very similar in being low performance, but a better performance than Phenotype 1, and that Phenotype 3 was the high performance plant based on Dr. Haslam's measure of plant performance and population curves. So that should refer to this, I guess, as a depauperate stand and this is an optimum stand.

So this technique enables us to take data that are difficult to compare on a one to one basis. Some of these plants are high performance and some of these are high performance (indicating) and some of these are low performance and some of these are low performance. (indicating) And when we apply this technique we are able to separate which ones are and are not and we can merge the data and directly compare them through this technique.

This is a summary description of the population type data that appears on page 86 of the report and it just gives an indication that there is a major difference in the modal diameter for Phenotype 3 at double the value of all the other Phenotypes and it indicates that the positive skew, which is a sign of lower vigor is characteristic of Phenotypes 1, 1, 2, 2, 2, 2 and 3, and that Phenotype 3 is the population which has a negative skew to the curve, giving it a high performance rating, this is page 90 of the report.

This is an outline of the physiobiological field observations that were made throughout the Meadowlands and this was done in order to gather other observations that could be readily made by observers on the ground within clone of phragmites that might give us more information about the characteristics of the growing sites and of the plants that would augment what we did in the botanical data collection work and these measures were decided upon based on our experiences in looking at phragmites and what we had learned from the literature as to whether characteristics that might relate to growing site water supply and relatively tidal inundation in phragmites marshes.

I will discuss a few of the results.

Q Excuse me, what are clones, at least I get some idea.

A That is a stem.

Soil consistency in a very qualitative way was something that we felt might be taken to be related to tidal inundation within an area known to be a tide marsh. Those areas with a softer soil substrate versus a firmer substrate might be taken to have a lower tidal position and be subjected to more frequent tidal inundation. This is something that has been observed in other marshes in New Jersey with spartina alterniflora. So that we did find from these results that Phenotype 1 clones did have a tendency to display softer soil substrates, that firmer soil substrates were characteristic of

Phrag 1 less sig rel to others in the same marsh

Phenotype 3 and that Phenotype 2 was intermediate.

We found that with associated plants, we would expect a lower vigor phragmites clone to have more plants associated with it and this is what we did find. We found a greater percentage of Phenotype 1 clones having other plants associated with them in the tide marshes and that these plants were by and large indicators of frequent tidal inundation, such as Typhe and spartina alterniflora plants that are known to occupy relatively low marsh growing sites.

We found very few Phenotype 3 clones that had abundant plant species associates, and most of those were other plants like morning glory vines that might be indicative of drier sites, and not indicators of likely low marshing growing site conditions.

We found that with surface organic litter there was in general very little leaf litter within Phenotype 1 clones and that there was a tendency for display of less litter in general in Phenotype 1 than in Phenotype 3 clones and in Phenotype 3 most of the litter was principally leaves rather than stems, so that the leaves had pretty much disintegrated in the case of Phenotype 1 and that many of the stems were in a degraded condition.

This would indicate the possibility that within the tide marsh all three of course being subjected to tide flow, that relative tidal scour action might be greatest in 1 and least in Phenotype 3.

We found from looking at the condition -- this is page 106 of the report -- from looking at the condition of overwintered stems or clones from phragmites that most of them were broken off at ground level in Phenotype 1 and that most of them were or many of them at least were frequently bent over in the middle in Phenotype 2; that in Phenotype 3 they were mostly standing erect and this can be taken to indicate two things. First of all, there may be a more intense weathering associated with Phenotype 1 that could relate to tidal inundation, relative tidal inundation and tide scour action versus Phenotype 3, and also there seems to be a lignification difference in the plant tissues which some previous work by Vandertoorn would indicate that environmental conditions and differences in environmental conditions can cause differences in lignification of plant tissues. In other words, these tissues in

Phenotype 3 are more resistant to decay and disintegration after the growing season, whereas in Phenotype 1, the plants have a tendency to disintegrate over the winter period.

I was going to show the slides on page 108, 9 and 10, I don't know if we should take the time to do that now or not.

Q These are the overwintering conditions?

A Right.

Q I don't think it is necessary. They are right in the book here and clearly shown in R-149. It will save some time.

A This is a display of the new height growth data. The other data we have been referring to are 1972 measurements made on the 1972 population of phragmites. Now, this is the current growth in June of 1973 of the same cones of phragmites throughout varying Meadowlands environs, and we see the same pattern of differences from one marsh to another in the actual size of the plants, indicating that those areas, as you go up the Hackensack River generally, are better places to grow phragmites and the plant reaches greater heights and larger sizes, but within each local environment our measurements showed from the data itself about 87, I guess, 87 percent of the measurements were in line with the relative vigor hypothesis that Phenotype 3 clones are more vigorous than Phenotype 2 clones and both of them are more vigorous than Phenotype 1 clones and that this relative vigor difference is apparently in those three signature Phenotypes throughout all the different marshes of the Meadowlands. So that even though the environmental conditions change to a major degree from one marsh to another, its salinity changes and level of pollution changes and the soil substrate changes and, you know, many of the environmental variables change from one marsh to the other, the Phenotype 1, 2 and 3 are still telling you the same thing relative to one another in each one of the marshes.

There are some illustrations in the report which show the appearance of the new stands of phragmites in June of 1973 on page 114, 115 and 116. I don't think I should bother to show those with the limitation on time. We have those here too.

Q I don't think it is necessary.

A This is page 131 of the Hackensack report. In this section we have stated basic conclusions and it is these conclusions which are used as a basis for development of delineation criteria and then subsequent application of those criteria to mapping of the Meadowlands.

The first of the conclusions was that phragmites signature Phenotypes reflect plant response to relative tidal inundation, and the support developed by the data for this conclusion are summarized beneath.

On the following page 132, the second conclusion was that signature Phenotypes relate directly to relative vigor of phragmites clones, and the support for that conclusion is also here listed.

The third conclusion was that vigor-related reflectance properties outweigh other signature influences, and the support for that have also been listed.

The fourth conclusion was that the signature differences correspond to actual ground differences, meaning that they are not part of that, that they really exist, that they are characteristics of the plants on the ground that can be predicted and reliably measured which correspond to the signature Phenotypes.

The fifth conclusion was that phragmites signature Phenotypes are transferable in that they are associated with the same kinds of botanical characteristics of the plants and the growing sites from one marsh to another throughout the Hackensack Meadowlands. On page 134 the sixth conclusion was that phragmites signature Phenotypes show stability in the time dimension, and this is supported by our colldction of data in 1972 and subsequent collection of data on phragmites growth in 1973, which was in agreement with and showed the same relationships as that developed in 1972.

The seventh conclusion was that similar phragmites Phenotypes exhibit similar characteristics, and this is supported by the botanical data and many of the field observations made throughout the project.

The eighth conclusion was that application of the explanatory hypothesis, that these signatures are related to relative tidal inundation and that the growing sites that the signature Phenotypes occupy differ from one another in terms of relative tidal inundation, provides a unified and reasonable way of understanding and interpreting all the data that was collected in integrating all forms of all the information and that includes what Earth Sat and its consultants knew, what was learned from study of prior independent research, and what was learned from the data that were actually collected in the Meadowlands.

Q How are we doing timewise?

A We are pretty close to the end here. These are the delineation criteria that were applied, this is page 139 of the Hackensack report. There are two basic delineation criteria. The first being that we would recognize then tidal phragmites marshes three signature Phenotypes, Phenotype 1 found in biozone 1 growing sites; Phenotype 2, found in biozone 2 growing sites; Phenotype 3, found in biozone 3 growing sites.

The second criteria, your Honor, was that those phragmites clones which manifested signatures which were intermediate between the major recognized tones would be classified within the three way classification system on the basis of their associated botanical characteristics.

This is page 143.

Q Excuse me just a minute.

A This is page 143 and it illustrates the application of this concept of grouping plants in accordance with their botanical characteristics. We had noticed that in some marshes that were predominantly biozone 1 environment, we observed plants stress responses in more than one signature Phenotype, and in other marshes we found that the stress responses were less prevalent in the sequence of Phenotypes from 1 to 3 and what we did in effect was include intermediate signatures, signature Phenotypes intermediate between 1 and 2 in biozone 1 class when they occurred in marshes demonstrated this increased stress response, and in other marshes where there was a manifestation through biological or botanical measurements of less of a stress response, we included intermediate Phenotypes between 1 and 2 in class 2 rather than class 1.

The rest of my presentation was to deal with a discussion of the mapping conventions that were used, some of these are just practical applications of the area, size of plants, groups that were to be recognized and that sort of thing from page 144 through 147 in the report.

THE COURT: All right, thank you, Mr. Deely, very much. I will see you gentlemen in Trenton on Monday, at around ten o'clock.

* * *

C E R T I F I C A T E

I, Edward Salbin, certify the within transcript.

Edward Salbin,
Official Court Reporter

March 31, 1976

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Respondents. :

VOLUME VII

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NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :
Plaintiff, :
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BOROUGH OF EAST RUTHERFORD, et al, :
Defendants. :

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March 29th, 1976,
Room 710,
Dept. of Environmental Protection
Labor & Industry Building
Trenton, New Jersey

B E F O R E:

HON. THEODORE W. TRAUTWEIN, J.A.S.C.

A P P E A R A N C E S:

WILLIAM F. HYLAND, ESQ.,
Attorney General of New Jersey.
BY: MORTON J. GOLDFEIN, ESQ.,
Deputy Attorney General,
For Natural Resource Council, et al.

T

APPEARANCES: (Cont'd)

WILLIAM F. HYLAND, ESQ.,
Attorney General of New Jersey.
BY: WILLIAM C. RINDONE, JR., ESQ.,
Deputy Attorney General,
For Trustees of the School Fund.

JOHN R. WEIGEL, ESQ.,
For City of Newark, City of Elizabeth,
New Jersey Land Title Assoc., Esther G.
Bertoni, et al.

ALFRED A. PORRO, JR., ESQ.,
For the Borough of East Rutherford.

Reported by:

RICHARD F. DURIK, C.S.R.

INDEX

EDWARD B. FEINBERG, having been previously duly sworn according to law by the Officer, testified further as follows:

DR. EDWARD B. FEINBERG: What we would like to do this morning is to show you what the different types of equipment are that we used and the type of thing that can be seen in this equipment and from the various data sources, the photographs, how this equipment functions.

THE COURT: Do I take it that everything you are going to show us was here and was being used at that time?

DR. EDWARD B. FEINBERG: No, sir.

The same type of equipment. We have different individual machines set up at this point.

THE COURT: Keep in mind what we are doing now is trying to show in this record what your Department did when it promulgated these maps, and if there are techniques that you are going to describe now or equipment that you have now that you didn't use at that time, I don't think that it should be in this record.

DR. EDWARD B. FEINBERG: The equipment, it's not the identical machine we used, but it' the same type of machine in this case.

THE COURT: I'm sure that is okay.

DR. EDWARD B. FEINBERG: We now have two stereo microscopes here and we only had one available to us originally.

That's a Zoom Transfer Scope and the others are getting ready to be serviced. It is not set up.

MR. WEIGEL: Would this one be a more advanced model with different capabilities?

DR. EDWARD B. FEINBERG: The capabilities are the same except that it has got a horizontal stage on top instead of a vertical stage so that the picture lays flat.

It means that we can use it more quickly. The optics and principles are all identical.

THE COURT: You are referring now to what machine?

DR. EDWARD B. FEINBERG: The Zoom Transfer Scope, ZT4.

MR. ROLAND S. YUNGHANS: The point is, I believe, Judge, that the principles of every piece of equipment that we have here are the same principles as was used at the time these maps were prepared. It's just a later model piece of equipment that makes the work easier and facilitates transfer, that's all. It's to save time.

DR. EDWARD B. FEINBERG: We have purchased a half dozen of these machines for the state wide mapping and we got them in and set one up here and one upstairs and then we keep the same model up with just people who are used to working with it.

I would like to start with the Zoom Transfer Scope.

We have one example set up on this machine with the photographs taped down so it is registered. It takes a bit of time to set it up each time. This machine has usually a base map or it could be a photograph down below. In this case, we are using the photo base map for Cromakill Creek, Number 71421-72.

MR. WEIGEL: Can I suggest that you identify the piece of gear by its manufacture model number?

DR. EDWARD B. FEINBERG: Yes.

MR. WEIGEL: And, if you would for our benefit in the record, please indicate what the manufacture model number of the piece of equipment that was actually used on the mapping that has been published.

DR. EDWARD B. FEINBERG: All right.

The machine is a Zoom Transfer Scope, Model 4, I believe. I can check that.

It's the ZT4-H. It's a horizontal configuration. The original machine used is a ZT4, which had a vertical stage that moved back and forth. The physical arrangement was slightly different but the optical system was identical and the principle of operation with the photograph on top and the map below was the same.

THE COURT: Can you describe generally the function of this transfer scope without getting into specifics?

DR. EDWARD B. FEINBERG: All right.

The purpose of this machine is to take information, say a photograph or a map, at one scale and allow you to transfer that information to another map base or photograph at a different scale. Generally the smaller scale image is placed on the top of the machine and the upper stage and the larger scale map or photograph would be on the table and you would transfer information to the larger scale; however, there are lenses available and the machine is capable of working in the other direction in terms of transferring from larger to smaller scale. The item you are transferring to is always on the table and the item you are transferring from is always on the stage.

This machine has three lamps within it. There are two lamps for the top stage. If we are working with the transparency, we can back light it with the upper stage lamp. The intensity is adjustable. If we are working with a print, as we are in this case, we can light it from below and adjust the relative intensity of the lamp. Finally, if we are working with a map and also to see the pencil when you are tracing lines and so forth, you have a light for the table. That's also adjustable.

Normally these would be set for ease of viewing to balance the intensities between the photograph and the map.

This is one of the improvements. With the old machine we had to vary the light intensities with the controls. They have since added a flicker switch now where you can switch back and forth instantaneously from one light to the other which makes it easier to make comparisons on analyses. It's faster so we can produce work faster with this.

Now, there also on this machine, which was not on the other model, is a Foot Switch which allows you to turn off one or the other, either the upper or lower stage. Those are the major differences along with the horizontal shape. They have gone to a different style lamp but the basic configuration of the lamps with the three lights and so forth is the same.

Now, the procedure in utilizing this to set it up initially, for your own viewing, each machine is adjusted to the individual operator's eyes when he goes to work with the machine. There are three adjustments that are involved. The first is the interpupillary adjustment, the spacing between the eye pieces. Here is a scale on here, once you learn what your spacing is, or else you can just do it by sitting down at the machine and looking in and setting your eyes comfortably and then you want to be able to see both circles, one from each eye piece superimposed so you see the full field of view with both eyes and not only part of it with one eye so the eye pieces are not too close, nor are they too far apart. Once that adjustment is made, then the eye pieces are turned all the way in and backed off just slightly and they are pushed all the way in so that the air pressure doesn't hold the eye pieces too far out. Then they are individually focused with the upper light off, usually this would be done with the foot switch or just turning it off, the table lamp and top light, focusing on the map below for a sharp image. These eye pieces are individually adjustable once they are set.

Now the machine has been focused, this particular machine has been focused, with a resolution target. It's only dependent on the relative distance between the stage and the table and there are index marks and scales and this particular machine is set at 2.45 or 2.5, actually. That stays the same no matter how these are adjusted just for the base photographs. So there aren't any adjustments for the upper photograph except for the range of magnification that is involved.

There are two ranges that are normally used with this machine, an auxiliary lens so you can work from up to about 5 power from .75 power on the upper photograph, then there is a second range from 2 power to 14 power which is what we are set up with right now for this particular imaging.

MR. WEIGEL: Why would you want to elevate the upper table?

DR. EDWARD B. FEINBERG: If we are working in the lower magnification range, you get a wider field of view. If you have a lot of set ups to do, if the photographs are within the range relative, there is an auxiliary lens that goes in and the mirror has to be in a different position and the focal lens is different from the optic. You can raise this. Once the machine is set up, you can just go from the index marks and don't have to focus it each time.

There is another lens that goes on the back part of this machine.

THE COURT: What is the field of vision now if I look in there? Suppose you want to examine an area way in the back of the table?

DR. EDWARD B. FEINBERG: We would then move the base map relative to the machine to place the area of interest under the lens. That's the course adjustment that is first done. Second of all, once that is set up and adjusted, the photograph is then moved on the top stage to place the same area within the field of view so that it allows it to be superimposed over the area on the base map.

The image rotation control will allow you to spin this photograph optically 360 degrees, so if you just get the area you are interested in, you can turn it.

The magnification control allows you to enlarge this photograph to the same size as the base map area you are looking at and finally there are some controls when you need them for stretch that will allow you to enlarge in one direction of the photograph more up to a factor of 2 compared to what is going on at right angles. There is rotation for that also. So you can effectively take out problems of tilt up to a certain point. So that with near vertical aerial photography, which is the source we are using on this work most of the time--the other source we would be using on occasion would be some maps, but basically for the photography it is near vertical--it's easier to remove the tilt sufficiently to line up the various features.

MR. WEIGEL: The angle of the mirrors is a factor of what?

DR. EDWARD B. FEINBERG: That is locked into place.

MR. WEIGEL: It can never be moved?

DR. EDWARD B. FEINBERG: No. It can't be moved. It's fit in. There are two positions, depending on which magnification range you are using, but the mirror itself in the back is locked in.

The other adjustment, which is the optical pickup arm, has got a lens system in it, is adjustable but it's not a critical adjustment at all. Bausch & Lomb in designing the machine did not even think it was critical enough to be worth putting a particular stop mark or index mark in. It's just not critical.

We asked them about that specifically on this and they said it was not critical to the design.

THE COURT: Within the context of our case, what does a person actually do with this machine, trace lines from what?

DR. EDWARD B. FEINBERG: The base map is used to orient the photograph and take out the tip and tilt and correct for the distortions in the photograph. Then we would take a piece of mylar and place it on this map, tape it down in the position of the area we are going to work on, and you would be able to see the image and transfer whatever features you are looking for. You can trace the outlines of the waterways or vegetative boundaries, et cetera.

THE COURT: Would the map on the top or the photograph on the top be some of those infrared photographs you were talking about?

DR. EDWARD B. FEINBERG: It could be.

THE COURT: Or you can trace old creek beds, you can take an old photo and do that?

DR. EDWARD B. FEINBERG: What I have up here is a 1940 photograph, and on the base map we have this reproduction of the 1972 photograph is what is involved in the base map.

I would like to go through the set up procedure now and then take a look at it after setting this for your eyes and going through it for you. Then I will put the hood on so it is easier to see.

First of all you have to adjust the spacing.

THE COURT: How do you do that?

DR. EDWARD B. FEINBERG: Pulling on this. You should be able to see both eye pieces, the full circle.

Don't worry if the image is sharp yet because I defocused them.

Turning these eye pieces one at a time counterclockwise, you do that until you have got a sharp focus. Each one is separate until it's sharply focused on the bottom image.

The base map we are using is Exhibit R-23 for the record.

The photograph on top is the 1940 photograph, R-192 is the exhibit number.

You have a sharp focus now?

THE COURT: Yes.

DR. EDWARD B. FEINBERG: We will get rid of the glare with the hood.

DR. WILLIAM S. MADDUX: It is important to get them focused for infinity.

DR. EDWARD B. FEINBERG: We also found an accessory with this machine which is this focusing hood which we did not have with the other, which would be adjusted once you set your eyes to the eye pieces. Then you can bring that hood back if it's too far forward.

Is that comfortable?

THE COURT: Yes.

I wasn't seeing anything except this.

DR. EDWARD B. FEINBERG: That's all you were looking at so far.

I will turn on the upper photograph and I will throw the switch.

Now you should just see the upper photograph which also should be in focus.

THE COURT: It's not the same picture, though.

DR. EDWARD B. FEINBERG: If you look in there now, you should see both. If you place your hand on this switch, up is just the photograph and down is just the map and the center position is both lights, so you could see both.

THE COURT: Oh, yes.

DR. EDWARD B. FEINBERG: It enables you to judge.

THE COURT: That's right. This wasn't there.

MR. ROLAND S. YUNGHANS: Go down one, Judge.

DR. EDWARD B. FEINBERG: If you press it down, you will also see just the base map. In the center position is both the photograph and the base map.

THE COURT: Yes.

DR. EDWARD B. FEINBERG: The upper position is the photograph.

THE COURT: Which building am I looking at, this one here?

DR. EDWARD B. FEINBERG: That is correct.

THE COURT: This was cut off.

DR. EDWARD B. FEINBERG: Yes. You can see evidence on the base map of fill and we are looking at the location of Block 71821-76. That's approximately in the center of the field of view of this machine set up.

THE COURT: The stream is right in the same place.

DR. EDWARD B. FEINBERG: When we would operate this machine, we would have a piece of mylar tape on the base map and as you can see in the center position with a pencil you could trace the boundary of the stream from the top. All you are seeing, you are seeing the pencil and since the paper is over the base map you are not seeing the stream on the base map, you are seeing the stream from the photograph.

THE COURT: I went off. I'm not a good tracer, I guess.

DR. EDWARD B. FEINBERG: It takes some practice.

As you can see, the creek you drew, it used to go right through where the building was.

THE COURT: It went through the corner of that building.

DR. EDWARD B. FEINBERG: You can see many of the features are the same, many of the small features where there hasn't been--

THE COURT: I want to see what the range is right here. I can see up to there. Here is the circle that I see.

DR. EDWARD B. FEINBERG: It covers a little bit more than a thousand foot by a thousand foot block at the working scale, which works very well with our grid system in the procedure.

THE COURT: What is this square? Is this a building?

DR. EDWARD B. FEINBERG: That is a building, that is correct.

THE COURT: What are those little tick marks there? Are those cars?

DR. EDWARD B. FEINBERG: These white lines?

MR. GOLDFEIN: I believe they are parking spaces.

THE COURT: No. Right here. These things, right here.

DR. EDWARD B. FEINBERG: Those are parking places, lines on the ground for parking places.

I don't believe there are any cars in that parking lot.

This machine then will enable us to extract the information from the old photography and place it carefully on the base map to locate it.

THE COURT: What do you use when you trace lines on mylar? What is the substance in the pen, just ink?

DR. EDWARD B. FEINBERG: We usually use a drawing pencil of this type, made to draw on drafting film.

THE COURT: Is it lead?

DR. EDWARD B. FEINBERG: It is a lead.

MR. GOLDFEIN: Why don't you identify that?

DR. EDWARD B. FEINBERG: This particular pencil is a K4 lead. It's pencil number 2830 by J.S. Stadtler Company. It's made for drawing on drafting film.

This procedure also enables us to compare two photographs just to see what changes have occurred, whether we are drafting or not. For example, this is a photo base map and we could identify carefully what changes had occurred in an area by using the Flicker Switches.

THE COURT: What scale were we transferring from?

DR. EDWARD B. FEINBERG: We were going from-- I can figure that out.

I will tell you from the settings because I don't recall offhand. It's 2.5. The scale of the photograph is about 1 to 14,000 and the scale of the base map is 1 to 2400.

THE COURT: When you mention I should adjust to infinity, did you mean use the furthest object in the circle?

DR. WILLIAM S. MADDUX: When you look through a microscope, your eye should be focused as if you were looking at a distant object, if you have the usual kind of eyes, so that you are very relaxed. What is important is to make sure you don't strain one eye into focus and not the other when you are setting them up separately because then from there on you will be looking at one distance with one eye and a different distance with another and it will give you headaches, plus you can't fuse the two images as well.

THE COURT: This is interesting.

Is Tonnele Avenue on here?

MR. ANTHONY SCOPPETUOLO: It's just off it, your Honor. It's down here.

This is Public Service right-of-way. This is the railroad.

DR. EDWARD B. FEINBERG: Now, when we got the first machine in, we practiced with it for a period of time and our procedure now, before a person actually delineates for mapping purposes or for a Court, it's approximately three months of practice with the machine. Of course, we have a very small data base for that. We have only had one additional analyst coming on board.

THE COURT: How many people did you have working on this at the time you did your 36?

DR. EDWARD B. FEINBERG: We had three people altogether, myself Joann Stitt and Stephen Whitney.

THE COURT: Using the equivalent of this

Transfer Scope?

DR. EDWARD B. FEINBERG: That is correct.

Mr. Whitney is now working in Coastal Zone Management and at this point Mrs. Stitt and myself and James Mortimer, whom we have hired, has been with us since June and also our biological field team of which there are three people, Mr. Maddux, Mr. Heenehan and Mr. Sass also have been getting training on this machine.

THE COURT: What qualifications in particular did those people have before?

DR. EDWARD B. FEINBERG: Well, for an analyst, they have to have had some experience working with aerial photography.

THE COURT: Did they?

DR. EDWARD B. FEINBERG: Yes.

Also the biologists have to have that same experience plus some biological background. It turns out that Mr. Mortimer has the biological qualifications also but he qualified under the analyst job category.

THE COURT: Is this Mr. Mortimer?

DR. EDWARD B. FEINBERG: No. This is Dr. Maddux.

THE COURT: Dr. Maddux, how do you do?

DR. WILLIAM S. MADDUX: Fine, your Honor.

THE COURT: Well, he seems to know something about this. What did Dr. Maddux do?

DR. EDWARD B. FEINBERG: He is also learning to work with this equipment.

DR. WILLIAM S. MADDUX: I have only been here since November a year ago, so I had nothing to do with the Hackensack.

DR. EDWARD B. FEINBERG: Dr. Maddux is in charge of our field teams for the state-wide map.

THE COURT: I see.

DR. EDWARD B. FEINBERG. This shows this procedure basically on this machine.

THE COURT: Did Dr. Feinberg mention that is a Bausch & Lomb Machine?

DR. EDWARD B. FEINBERG: I believe I did.

THE COURT: Do you know how much an instrument like a Transfer Scope costs?

DR. EDWARD B. FEINBERG: Yes. That machine as it is set up was approximately $5600.

In many of these boxes we have four of these machines down here and we have one set up elsewhere in the department temporarily that we can use, so that we have two that are operable.

MR. ROLAND S. YUNGHANS: I would like to point out, Judge, that as far as having other of these machines, we have them for one reason, that if we get the staff to go ahead to do this in a reasonable manner as rapidly as possible throughout the rest of the state, that's why we have extra machines on hand.

DR. EDWARD B. FEINBERG: It took us approximately seven months to get this equipment in from the time we started to order it, so we wanted to have it. Hopefully we will be staffing up in July.

The other machine that we normally use in conjunction with the Zoom Transfer Scope for analysis and have used in the earlier work was the Bausch & Lomb Zoom 95 Stereo Microscope. We have two of those set up here now, one with color infrared imagery on it on the same approximate area that was in the Zoom Transfer Scope and one with the natural color imagery that was taken at the same time. These are frames CTK-IRC-109 and 110 for the color infrared and CTK-COL-109 and 110 for the natural color.

The smaller machine with the light table, with the small adjustable light table, has a Richards 918 Light Table, is the machine that we used in doing the analysis for the Hackensack.

The machine that is standing alone with its own Bausch & Lomb Light Table is one of the new machines that we have ordered. We have two of those in now and others are on order. The microscope is the same microscope, the only difference is the microscope mount and the light tables themselves. Also these now come with a nice chair that is adjustable and makes it easier to work with.

Just to show you so that you can set the height for yourself when you sit down, there is a handle on the right, and if you will pull that handle up and you are sitting on the chair, your weight will bring the chair down; if you just pull up on the handle too low and stand up a little, the chair is operated by air and it will come right up to the height that you want it at. So it's very adjustable.

This machine is adjusted. The stereo pairs should be in position. They are. The focus of this machine is adjusted as follows: There is a control on top to set the magnification.

This control, if it's adjusted all the way up to one with 10 power eyepieces, we have up to a 10 power magnification from the microscopes as they are now set up. We have eyepieces that we can go to 20 power. This is the normal reasonable working distance. Beyond that you start to get some breakdown in the image and you are looking more at the dyes on the color imagery and the grains of the silver crystals on the black and white.

The magnification being turned all the way up, you would then focus with the large focusing knob for the right eyepiece, just the right eyepiece. Spacing the interpupillary adjustment is done in the same manner but there are no markings on this microscope as there are on the Zoom Transfer Scope. Then the magnification would be moved down to 0.25, which would be 2½ times magnification with the 10 power eyepieces and at that level the left eyepiece barrel is rotated for adjustment in a similar manner to the barrels on the Zoom Transfer Scope and that will then adjust the two eyepieces.

Now, this again can be used as can the other machine either with or without glasses, depending on the operator's preference. Just that normally we use them with correction and the eye cups are removable for use with glasses or can be left on for use without.

Would you like to sit down here and adjust that?

Is that a convenient height for you?

THE COURT: Yes.

DR. EDWARD B. FEINBERG: First turn the focusing knob to the upper magnification and then with the focusing wheel--just your right eye first.

THE COURT: Now this one?

DR. EDWARD B. FEINBERG: Now we turn the magnification down to the lowest power and now you would turn the barrel to get that in.

THE COURT: All right.

DR. EDWARD B. FEINBERG: You should have a stereo view, three dimensional view now of the images.

THE COURT: Yes.

DR. EDWARD B. FEINBERG: This control which you can turn on top, the Zoom Control now, you can turn that to any magnification and from that position you would be turning counterclockwise and that will bring the magnification up to the level you want to look at the image from.

This machine is capable of easily resolving features with the imagery that we have in it on the order of a foot or two feet apart. We field check some of these features to be able to tell that that is what we were looking at.

THE COURT: You see very little green on here.

DR. EDWARD B. FEINBERG: I believe there is a little bit.

THE COURT: There's a little bit there.

What is that, a track down there? What is this?

DR. EDWARD B. FEINBERG: This is the turnpike.

That's the eastern spur of the turnpike.

THE COURT: I see green along there but that's probably fill.

DR. EDWARD B. FEINBERG: There is fill along there, too.

THE COURT: That's really three dimensional, isn't it?

DR. EDWARD B. FEINBERG: It adds a lot in being able to do the analysis when you have

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that information.

You can see many small waterways that are in here.

THE COURT: Yes.

MR. ROLAND S. YUNGHANS: It may be of some value, Judge--

MR. PORRO: Objection to the conclusion.

MR. ROLAND S. YUNGHANS: It may be of some value to you to note if you see it in three dimension, to note or look at the differences in elevation between different areas of the field of view of the instrument.

THE COURT: For example, is that a difference of elevation right up there?

DR. EDWARD B. FEINBERG: I will move that weight back a little.

THE COURT: Is that higher?

DR. EDWARD B. FEINBERG: It very well may be. There are definite differences.

If I move the magnification control back a little bit, you have got a very wide field of view right now, you can very clearly see the differences in the buildings relative to the marsh.

THE COURT: Yes.

DR. EDWARD B. FEINBERG: When you bring up the magnification on to the smaller areas you can start to pick out the smaller variations in magnification.

THE COURT: Is this going to be the same thing in natural color?

DR. EDWARD B. FEINBERG: Yes, in natural color.

Let me bring this up a little bit. I didn't want to do it while you were looking in it because until you get used to it, sometimes it makes you very dizzy if somebody zooms the magnification.

THE COURT: Yes.

DR. EDWARD B. FEINBERG: You can start to see differences now in some of the smaller features.

If you focus the other microscope, it's the same way.

THE COURT: I can stand on this one.

Let me see this.

DR. EDWARD B. FEINBERG: Focus the right eye first.

Turn the valve for the left eye.

MR. GOLDFEIN: This is now the equipment that was used?

DR. EDWARD B. FEINBERG: That was used.

MR. GOLDFEIN: It was in house at the time that you were doing it?

DR. EDWARD B. FEINBERG: That's right.

You are in the same approximate area, Judge.

Is this out of stereo now?

THE COURT: No.

DR. EDWARD B. FEINBERG: This was a fairly clear day, judging from the color, the natural color imagery, but if you look back and forth you will find that the details, the small details that you can resolve, are a little sharper on the color infrared.

THE COURT: I just wanted to compare that for a minute.

DR. EDWARD B. FEINBERG: You can set them to about the same magnification, if it would be easier.

I will move the chair out of the way so you don't trip on it.

THE COURT: Yes. That is markedly clearer.

The color infrared photo to me was marked very much clearer in detail than the natural color photograph.

DR. EDWARD B. FEINBERG: As Doctor Anderson had mentioned last week, that's mainly because you have got the blue filtered out of the color infrared photographs in the visible spectrum and you get a lot of scattering of the blue light in the atmosphere with the particulates and the haze that does tend to obscure some of the detail.

MR. ROLAND S. YUNGHANS: It should be pointed out once again, Judge, that much work can be done with natural color; more work can be done with the color infrared, and the clarity and sharpness of the detail is more pronounced in the CIR than it is in the natural color for this kind of work. However, the State did at the time of acquiring the photography take both kinds of film at the same time from the same aircraft for the purposes of those who would want to look at it.

MR. PORRO: Could we have these particular photographs tied into the ultimate overlay exhibit number?

MR. GOLDFEIN: I think we have done that by indicating they are of the same place. These particular photographs have not been assigned exhibit numbers but they have been referred to.

MR. PORRO: But they ended up on a quadrangle.

MR. GOLDFEIN: R-23.

MR. PORRO: If you tie those photographs into the quadrangle--

DR. EDWARD B. FEINBERG: The map that the photograph corresponded to and the particular photograph CTK IRC-110 corresponds to the Base Map 71421-72, which is Cromakill Creek or Exhibit R-23. That is the source photography for that base photo map.

MR. PORRO: Okay.

MR. GOLDFEIN: I think we called it log book of the sources checked that led to the Cromakill quandrangle indicatea reference to these photographs.

DR. EDWARD B. FEINBERG: It should. I don't recall at this time if we noted that or not, but I know the map reports do have these photographs tied to them. In some instances we did not necessarily refer to the '72 photography except through the Botanical Overlay work when that was used. When we used it individually ourselves, we did refer to it.

These machines then were used to get a three dimensional analysis of the '72 photography and also some of the pancromatic photography, the historical photography. This could work with prints also with light from above instead of it being illuminated from below.

THE COURT: What did you call these machines again?

DR. EDWARD B. FEINBERG: These are stereo microscopes. The particular model is a Bausch & Lomb Zoom 95 Stereo Scope.

MR. PORRO: These are color infrareds that the interpretation of the color signatures comes from?

DR. EDWARD B. FEINBERG: Yes.

The Earth Satellite Corporation worked with these color infrareds and in conjunction with that the natural color to some extent.

THE COURT: Did they employ the same type of stereo equipment?

DR. EDWARD B. FEINBERG: They had similar type equipment, yes.

MR. PORRO: So that this particular quadrangle should show a very little green?

DR. EDWARD B. FEINBERG: I don't know.

Depending on the part of the frame. I haven't really looked.

There is not much green in the set up right where this is set up.

MR. WEIGEL: Did I understand your answer to Mr. Porro to mean that these particular negatives, I will call them, were what Doctor Anderson and what you read from?

DR. EDWARD B. FEINBERG: These were positive transparencies and it was these particular ones.

MR. ROLAND S. YUNGHANS: Let me point out these are positive transparencies. The base photo maps, that is the base map at 1 to 2400 scale, was in fact prepared from one of these photographs originally. The color of tones in black and white that you see on the base map over here represent the gradations in the color infrared that you see on the photograph. They were not made from natural color photography.

MR. WEIGEL: So what you are saying in effect is that Doctor Anderson had literally scores and scores of these kinds of transparencies to do his botanical reading in the Hackensack?

DR. EDWARD B. FEINBERG: That is correct.

MR. WEIGEL: Do you have an idea of about how many he was reading off? Was it a hundred?

DR. EDWARD B. FEINBERG: I haven't ever counted them up, but we do have a full index and flight log on them and we have all the transparencies here. There are 36 base maps and there is stereo coverage plus some overlaping on the flight lines, so somewhere between 80 and 110 would be a ball park estimate.

MR. ROLAND S. YUNGHANS: I just made a calculation for Mr. Weigel and it would exceed 90.

DR. EDWARD B. FEINBERG: Also I should add that the same coverage was taken at the same time with the natural color with a pair of cameras in the aircraft so he had the full set of natural color transparencies also.

When Earth Satellite did their botanical analysis work, they used a slightly different technique for information transfer and that was that they had the enlarged rectified black and white reproductions on the base maps and in cronoflex form and instead of using the Zoom Transfer Scope because they had that material available as a hard copy enlargement for the botanical overlays, they would study the image in stereo and then go to the same location, identify photographically on the enlarged base map and place their line alongside the feature. There is a correspondence in the tones.

THE COURT: The purpose of these two instruments that I just looked into, one in infrared and one in natural color, that's merely to look at something and form opinions?

DR. EDWARD B. FEINBERG: That is correct.

THE COURT: No transfer is done on maps on the basis of these? The actual transfer you use from the transfer scope. Does he make notes when looking at these things?

DR. EDWARD B. FEINBERG: Generally he would make notes. With the old photography, in some instances when we didn't have it, we would have a mylar enlargement of the base map on the light table with an overlay over it and by going back and forth, making the decision--

THE COURT: Give me an example of what you would do here.

DR. EDWARD B. FEINBERG: If I was doing the type of analysis that Earth Satellite Corporation did with this, I would, for example, say that I determine that there is a greenish patch of vegetation in this area and let's say that I had determined that that was a green signature Phragmites that I wanted to delineate as a patch--

MR. GOLDFEIN: You are indicating on the transparency that was numbered CTK IRC 109.

DR. EDWARD B. FEINBERG: This is on 110 I am pointing to.

I would look in this and study in stereo and look at the colors and the textures and so forth, and determine that that particular patch represented a certain type of plant that I wanted to delineate.

I would then go over, which I would have right alongside in that case, a copy of the base map and I would come to the same location. I have a piece of mylar over it or a separate copy of this that I could draw on, on the proper material that would take the markings, and I would mark the boundary, in this case I think it was a particular patch.

THE COURT: You would have to have that same print or photo on top of this transfer scope, wouldn't you?

DR. EDWARD B. FEINBERG: There are two ways to work. One is to put a copy of the photograph in the Zoom Transfer Scope and trace using the Zoom Transfer Scope or the base map could have been physically located on a light table and all I would do is visually identify the patch and mark the boundaries that show up here and check back and forth between the two, because this is a rendition of the same photograph.

This base photograph, base photo map, is an enlargement of the same stereo photograph. In that circumstance it is an easy transfer; however, this base map being at one time and your source map at another time, it is more difficult and you would have to use a machine such as the Zoom Transfer Scope to precise the machine.

THE COURT: As Mr. Yunghans pointed out, while it doesn't show color, it does show a change on this black and white map.

MR. ROLAND S. YUNGHANS: That's right.

THE COURT: And sometimes the boundaries are such that you can recognize it as the green patch over there.

DR. EDWARD B. FEINBERG: That is correct. By having the base map right alongside you can go back and double check.

THE COURT: Sometimes you don't need the color infrared up here, do you?

DR. EDWARD B. FEINBERG: That is correct in some instances.

MR. ROLAND S. YUNGHANS: If you are using the CIR, Judge, photograph from which the base map was made to interpret to draw lines, you do not need the CIR photograph in the top stage. If you are using something else, that is, another source, then it is more amenable to using the upper stage to make the transfer.

THE COURT: Is that decision checked by anyone?

DR. EDWARD B. FEINBERG: Yes. Our normal working procedure.

THE COURT: Is that the one you showed me? You had a set of instructions.

DR. EDWARD B. FEINBERG: That is correct.

THE COURT: That book or sheet covered it?

DR. EDWARD B. FEINBERG: That's right. Those set of instructions, the recording of the analyses were in the logs exhibit R-109 through R-120, and we also had a copy of the instructions that the analyst followed, the rules they followed in doing the analysis, which is exhibit R-160, and in the actual procedure every delineation and the analyses were at least double checked and frequently triple checked by three different people.

When an analyst did the work on a given map of the 36, they would check it and form a tentative opinion, it is all recorded in the book, then I would go through and double check and look at all the sources and either concur or raise points again to be resolved.

THE COURT: Did that ever happen?

DR. EDWARD B. FEINBERG: That we disagreed?

THE COURT: Yes.

DR. EDWARD B. FEINBERG: In many instances one thing might have been overlooked or there is a question as to how the rule applied to the given data. Usually it was a question of the old photography as to what something really was and by comparing several dates of the old photography, that usually could be easily reso It might be unclear from a single date but whe you see the same feature reappearing, it can traced on time enough to establish if it is or not.

MR. PORRO: Where disagreement, who had the ultimate decision?

DR. EDWARD B. FEINBERG: In practice, we would discuss it and in some instances I was convinced by them that they were wrong and in other instances I convinced them.

MR. PORRO: Who made the determination?

DR. EDWARD B. FEINBERG: I had the final sign off decision.

MR. WEIGEL: Did you ever have the final sign off decision with respect to any botanical mapping?

DR. EDWARD B. FEINBERG: No.

MR. WEIGEL: That was always Doctor Anderson?

DR. EDWARD B. FEINBERG: That was given to us as a product and we would use it by double checking and looking at the imagery ourselves in practice and applying it and deciding whether to use it, but we never moved any of their lines.

MR. ROLAND S. YUNGHANS: I would like to point out one thing with regard to that. As I indicated in my testimony in Court, they were to do their biological work. We made no changes to their work of any kind. We made the decision as to which portions of their work we were to use to catalogue the State's claim. We made that decision. They did not.

MR. WEIGEL: On what basis was that done? In other words, I understood that it was judgmental.

MR. ROLAND S. YUNGHANS: The basis was the green Phragmites signature A and B, the second basis was the green Phragmites signature where we could show that it was attached to a tidal waterway, that is, it had access to tidal water. Those are the two criteria that are in that criteria document, Judge.

DR. EDWARD B. FEINBERG: The way that we pursued this, there are two parts to it. Number one, to find the tidal connections to all of the patches or areas that we would take, we had to have it connected to tidal waterways and in some instances these were connected by small waterways which were not delineated by EarthSat, so we would look on the color infrared and natural color imagery to locate these, most of which were visible on the base map in that circumstance, but to actually check the interpretation just to the waterways themselves, not any of the vegetation, and then we would add these and in some instances these were added in the final delineations in order to be able to pick up some of the patches that EarthSat had identified but had not shown a connection.

THE COURT: Then that clears up the fact that Anderson was making the biological analysis, he didn't have anything to do with whether it was located or connected with a tidal waterway. You fellows did that.

MR. ROLAND S. YUNGHANS: Yes.

DR. EDWARD B. FEINBERG: Now, as I mentioned with the small streams, Earth Satellite in their normal delineation only went down to a certain sized feature and they didn't necessarily take all the very small waterways. Even within some of the red and pink areas. These were clearly visible on the base maps.

On the light table now I have the botanical overlay and the NOS Overlay for Sheets 7072160, just in the way of an example, since the exhibits that we actually have for the map in Court are up in Court for Cromakill Creek.

The procedure we used was to take the

botanical overlay which had identification of various vegetative areas, P was the phenotype 2 Phragmites, R was phenotype 3 and G is phenotype 1, A is Spartina alterniflora high vigor, and we carefully overlayed this with the NOS Overlay that was made from a photographic enlargement of a compact negative of the manuscript sheets, the sheet that went into the 1964 NOS maps. In other words, NOS gave us a set of compact negatives which Hurd had enlarged and fit to our base maps. We would go through map by map and compare, and in the heavy areas, the heavy lines which were the notation of the mean high water line by NOS, such as this stretch and then a break in the line and then you have a smaller line for just the waterways, this can be compared and was to the printed map version to be sure that the black lines on there denote mean high water and not the blue indefinite shore lines on those maps.

We did a visual check on the whole series of maps and concluded that the A generally was below, the G areas were generally below, and the boundary of the vegetative areas that were below mean high water from those above would generally be the seaward boundary of the pink. Except in those areas, for example, where the pink was mixed in with another species like Spartina alterniflora. **This** comparison was made at that time on a visual basis and the conclusion was made that we would claim the areas of green Phragmites and certainly the other vegetation in the areas of pink and red signature Phragmites would be above on the existing scene.

MR. ROLAND S. YUNGHANS: Excuse me, Ed. I would like to make one point.

We claimed the green if we had tidal waterway connections there to.

DR. EDWARD B. FEINBERG: That is correct.

MR. WEIGEL: So you had green in some situations where there was no tidal connection.

MR. ROLAND S. YUNGHANS: I can't answer that question. I really don't remember, Mr. Weigel. I really don't know.

DR. EDWARD B. FEINBERG: There may have been some patches in a pink area or so forth. We had to be able to identify and map from our source materials the tidal connection. If we couldn't see it on the photography where that tidal connection was, we didn't take the patch.

MR. GOLDFEIN: Again there are references to those that you did and didn't in the log books.

DR. EDWARD B. FEINBERG: That is correct.

MR. PORRO: You identified what green was not claimed? Is that correct? For example, this green on the top of the photo, could I tell by looking at any of the material whether that green was claimed or not?

DR. EDWARD B. FEINBERG: We could tell by looking at the claim overlay and seeing if such a patch existed there. That would be the easy, quick check. Also we had the source maps that are color coded that show where each line came from. We have a paper print and could check that very quickly.

MR. ROLAND S. YUNGHANS: There is a record, Mr. Porro, that tells us.

MR. PORRO: Okay.

DR. EDWARD B. FEINBERG: We can tell where each patch comes from, each part of the line. That's not a problem. But you would have to inspect the botanical overlay against that to see where there might be green patches that were not claimed.

MR. PORRO: You have no statistical

compilation on all the greens that were not claimed?

DR. EDWARD B. FEINBERG: No. We didn't compile any statistics on that.

MR. PORRO: Okay. Just for data purposes.

DR. EDWARD B. FEINBERG: The operating procedure was to be sure it was connected if we did claim it.

MR. WEIGEL: Where you have that black NOS line from 1962, you did use that in all instances, didn't you?

DR. EDWARD B. FEINBERG: We used that in those areas that were no longer tide flowed. Since we were doing it with existing scene in '72 if the area had not been encroached upon, we relied in '72 on biology in that area. We used the NOS line to determine which signatures generally were the reasonable ones to take in this area but in an area that had been filled, since the NOS line was done in '62 or '64, that period, and now in '72 the area has been filled and is no longer natural, we then used the NOS line for that.

THE COURT: You never went upland of the NOS line where there had been no change since the

NOS line was established, did you, despite the fact that it might be green?

DR. EDWARD B. FEINBERG: We did on the biology if it was shown, yes.

THE COURT: You didn't accept NOS accuracy. Is that correct?

DR. EDWARD B. FEINBERG: Well, no. For example, in this particular location on this overlay, the botanical line for the vegetation goes slightly inland at that point.

MR. WEIGEL: Would you put words in the record to indicate the side of the Hackensack and north of what place?

DR. EDWARD B. FEINBERG: All right.

MR. PORRO: Is this Cromakill also?

DR. EDWARD B. FEINBERG: No.

This is the Map 7072160. The area is just east of the Hackensack and east of the mouth of Berry's Creek. It's across the river and just north of the railroad bridge crossing the Hackensack at that point.

MR. PORRO: That's Secaucus?

DR. EDWARD B. FEINBERG: I believe it is.

It's about 600 feet northeast of the railroad bridge.

There are some areas where that particular vegetative line at that point cut inland, but that was the situation in '72. The NOS line had been 10 years earlier. Our rules were to start with the existing scene and move to an earlier date only if there was evidence that the existing scene had been altered generally by fill.

THE COURT: You had better indicate on the record what that NOS dark line is. I don't know if it's clear.

DR. EDWARD B. FEINBERG: The NOS dark line is the mean high water line that they drew on their '64 series of maps, that series of maps.

THE COURT: How did they determine mean high water, to your knowledge?

DR. EDWARD B. FEINBERG: They had tide gauges generally in the area. My recollection is something on the neighborhood of 7 or 8 at most covering the whole Hackensack area and they used tide controlled photography. They had persons at the tide gauge with the tide staff, reading the staff, and when the water level reached a particular elevation they flew photography of that area and then they would mark the edge of water.

MR. PORRO: We are going to demonstrate that in our case, your Honor.

DR. EDWARD B. FEINBERG: That is the procedure that they did follow.

MR. ROLAND S. YUNGHANS: It would be important here, Judge, to point out that in their final report, which I believe was mentioned in the Court the other day, that their particular accuracy in '62, they claimed nothing better than plus or minus, I believe the number was, 20 feet.

DR. EDWARD B. FEINBERG: That is correct.

MR. ROLAND S. YUNGHANS: At that point in time.

MR. PORRO: I believe a lot of people would be happy with that accuracy.

3 DR. EDWARD B. FEINBERG: As an example at that same location, NOS also has a dashed line on their overlay and when you compare that with the paper print, their published map, you find that that symbol which is seaward of the mean high water line, represents grass in the water. So they identified at that point, that particular location, that there was vegetation in the water seaward of their mean high water line also.

MR. WEIGEL: Did any of their field notes or field work try to identify types of grasses growing along the Hackensack or any of its tributaries?

DR. EDWARD B. FEINBERG: Not to my knowledge.

MR. WEIGEL: They didn't use a symbol like is used on the earlier Coast & Geodetic work which indicates generally the types of vegetation that were growing in a particular area?

DR. EDWARD B. FEINBERG: No. They had marsh symbols and a symbol for the grass in the water versus definite shoreline or definite mean high water line.

But generally we did a visual comparison to determine which of the Earth Satellite botanical delineation areas that we would use as the indicators for areas below mean high water basically.

MR. GOLDFEIN: Consistent with our efforts to have this record refer to other places in the record, I think something that we would want to point out now would be to alert readers to testimony of NOS personnel and I won't elaborate on it but the different purposes of NOS work as opposed to the ultimate purpose of the State's work in this project.

MR. PORRO: Could you point out the difference?

MR. GOLDFEIN: To my knowledge, the NOS draws its line for navigation purposes as opposed to drawing property lines.

MR. PORRO: Your contention is that the NOS mean high tide line is not the mean high tide line that they were referring to in O'Neill?

MR. GOLDFEIN: I don't mean to distinguish it from that, but I think in what we learned in our discussions with the NOS people on the record in the course of depositions this past summer was--

MR. PORRO: Suppose we have them testify to it.

MR. GOLDFEIN: That's why I didn't want to elaborate.

MR. WEIGEL: Beyond Mr. Porro's objection, it is clear that the work that was done in the Hackensack and its tributaries in 1962 to 1964 by the NOS under contract with the State of New Jersey was specifically done with the boundary problem in mind.

MR. PORRO: That's true.

DR. EDWARD B. FEINBERG: One more detail should be pointed out about the NOS mean high water line on this overlay. There are many areas where that line just stops as it starts to go into the marsh. There are many places where they could not draw the line back away from the banks of the major streams. However, again, when an area had been filled, the next earlier source from '72 was the NOS source where that line existed. We also had access to photography of about that same period, including some paper prints of the black and white infrared photography that the NOS had flown and these helped us in the analysis at that point in time.

THE COURT: Thank you very much.

(Whereupon the hearing was adjourned.)

* * *

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
(On Remand to Law Division-
Bergen County)

CITY OF NEWARK, et al, :
Appellants, :
vs. :
NATURAL RESOURCE COUNCIL, et al, :
Respondents. :

CERTIFICATE

- - - - - - - - - - - - - - - - :

NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :
Plaintiff, :
vs. :
BOROUGH OF EAST RUTHERFORD, et al, :
Defendants. :

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-BERGEN COUNTY
DOCKET NO. L-16799-72

I, RICHARD F. DURIK, a Certified Shorthand Reporter and Notary Public of the State of New Jersey, certify that the foregoing is a true and accurate transcript as taken by me stenographically.

I FURTHER CERTIFY that I am not related to any of the parties to the action and that I am not a relative or employee of any Attorney or Counsel employed in this case, nor am I financially interested in the action.

Richard F. Durik
A Notary Public of the State
of New Jersey

My Commission Expires
October 12, 1978

A-3311-72
no Brf.

A101 SEP 1979

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A-3311-72
(On Remand to Law Division,
Bergen County.)

FILED
APPELLATE DIVISION
NOV 2 1978
Elizabeth McLaughlin
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Clerk

CITY OF NEWARK, et al.,

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vs.

NATURAL RESOURCES COUNCIL, et al.,

Respondents.

VOLUME VIII

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
Docket No. L-16799-72

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NEW JERSEY SPORTS &
EXPOSITION AUTHORITY,

Plaintiff,

vs.

BOROUGH OF EAST RUTHERFORD, et al.,

Defendants.

March 31, 1976,
Courthouse,
Hackensack, N. J.

FILED
SEP 21 1979
CLERK

B E F O R E :

HONORABLE THEODORE W. TRAUTWEIN, J.A.S.C.

Reported by:

EDWARD SALBIN,
Official Court Reporter.

APPEARANCES:

For Natural Resources Council, et al.,

WILLIAM F. HYLAND, Esq.,
Attorney General of New Jersey,
By: MORTON J. GOLDFEIN, Esq.,
Deputy Attorney General.

For Trustees of the School Fund,

WILLIAM C. RINDONE, JR., Esq.,
Deputy Attorney General.

For City of Newark, City of Elizabeth,
N. J. Land Title, Esther G. Bertoni, et al.,

JOHN R. WEIGEL, Esq.

For Borough of East Rutherford,

ALFRED A. PORRO, JR., Esq.

I N D E X

WITNESS		DIRECT
WILLIAM R. SEESTROM	By Mr. Goldfein	3
	By Mr. Weigel	57
EDWARD B. FEINBERG	By Mr. Goldfein	63

EXHIBIT FOR IDENTIFICATION		
R-263	Booklet	18

WILLIAM R. SEESTROM, sworn.

DIRECT EXAMINATION BY MR. GOLDFEIN:

Q Mr. Seestrom, by whom are you employed?

A Mark Hurd Aerial Surveys, Incorporated, Minneapolis, Minnesota.

Q How long have you been so employed?

A Since 1957, approximately 19 years.

Q What is your present position?

A I'm vice president in charge of project planning department, which includes estimating, liaison work.

Q How long have you held that position?

A For approximately 12, 15 of those years, I can't remember exactly.

Q What are your responsibilities in that position? A. I'm in charge of basic planning of projects, estimating costs, preparation of proposals, and general liaison with respect to the projects.

Q Have you engaged in those activities with regard to the work for the State of New Jersey?

A Yes.

Q Have you engaged in those activities for, with regard to work for other publications?

A For other?

Q Other governments and publications.

A. Yes.

Q I will ask you to talk about some of those in a moment, but prior to doing that, would you describe to the Court your educational background and other professional training?

A. My education, or background, includes the B.S. degree from the University of Wisconsin, civil engineering; following graduation I took some special courses.

BY THE COURT:

Q When was that, sir?

A. It was in 1940.

Q Nineteen-forty? A. Right.

I took special courses in photogrammetry at George Washington University in connection with the Defense Training Program, the beginning of World War II. I also took some special courses at the Department of Agriculture Graduate School, Washington School in geodesy.

Q What is that? A. That is a high level type of surveying that deals in big areas in contrast with plain surveying like lots.

As far as experience is concerned, I started in 1940 with the Engineer Reproduction Plant in Washington, D.C., the Corps of Engineers Insulation, which later became the Army Map Service. Presently, I'm not sure

Society of Photogrammetry. I've been in the American Society of Surveyors, Mapping, Military Engineers. I have been a member of The American Society of Photogrammetry since 1943. I recently formed the Minnesota Chapter of that organization.

I have a few technical papers, one of which has been published: "Highway Routes in Undeveloped Areas." That was published in The Photogrammetric Engineering, the offical publication of the American Society of Photogrammetry.

Q [By the Court] Can you give us sort of a simple definition of photogrammetry, please?

A. I think the most common definition is very short. It is an art or science of making reliable measurements through the use of photography, not necessarily aerial, but photography in general.

THE COURT: Thank you.

MR. WEIGEL: Your Honor, I am prepared to stipulate that for the parties that I represent that all of the experts that I have talked to have the highest regard for Mark Hurd Aerial Surveys and for Mr. Seestrom, personally. I believe the State is to be commended for their selection of Mark Hurd Aerial Surveys for the work that Mark Hurd is able to do, and I am certainly prepared to stipulate for my clients that not only is Mr. Seestrom qualified in his field but that the Mark Hurd Aerial Surveys Company is one of the leading companies in the country, if not the world, in the work in which it operates.

MR. PORRO: I have a simpler stipulation, your Honor, and that is that the photography that was taken we stipulate to be accurate and what it purports to be, and that any further testimony from this witness is irrelevant.

THE COURT: Those are the nicest things I have heard in a long time.

See how nice we are?

THE WITNESS: Thank you, Judge.

THE COURT: It looks as though this case has now entered a period if not of detente at least rapprochement.

MR. WEIGEL: Well, till next week.

THE COURT: Dr. Kissinger to the contrary, notwithstanding. [Laughter.]

MR. GOLDFEIN: Your Honor, the State appreciates the commendation of Mr. Weigel and his clients and appreciates Mr. Porro's stipulation and zeal to move on with the case.

However, I think it important that Mr. Seestrom provide somewhat more background than what Mark Hurd Company has done, for those who are going to read the record later, and also that he continue to testify as to what was done in this instance.

THE COURT: Stated another way, what you have told your worthy adversaries is that flattery will get you nowhere.

MR. PORRO: Your Honor, the only relevancy to his testimony is the photography, the pictures, the photographs. We are willing to stipulate that. I don't see what more we need.

THE COURT: Your point may be well taken, Mr. Porro, if we were in the adversary phase, but once again I have to be mindful of the fact that we are trying to build a record of what was done at the administrative level, and I believe one of the challenges to these maps is that quite possibly the State could have done it another way, or they didn't do the best they could. So I think Mr. Goldfein feels obligated to prove they not only did the best they could, but that was the best.

MR. WEIGEL: I think there is a very

important part of the testimony that I would certainly like to hear and I assume it is going to be something that Mr. Goldfein is going to cover, and that is the preparation of the various intermediate and final overlays and that certainly goes well beyond the photography aspect of it. I am particularly interested to hear that, so, I, to that extent, disassociate myself from Mr. Porro's remarks.

THE COURT: All right, there is a crack in that otherwise solid Soviet bloc over there and that is enough levity, I guess.

All right, Mr. Goldfein.

BY MR. GOLDFEIN:

Q Mr. Seestrom, can you describe briefly the kinds of work Mark Hurd does?

A Mark Hurd is one of the oldest privately owned companies, I believe, in the country. We have been in business since 1922. Our main office is in Minneapolis with branch offices in San Juan, Puerto Rico, and Santa Barbara, California. In the earlier years, Mark Hurd pioneered in aerial cameras and aerial photography. They were among the first to use high altitude aircraft for photography, by that I mean P-38s, and B-17s, where pressurization was necessary. Of course, we are now using the Lear Jet, which goes up to as high as 50,000 feet.

The topographic mapping, or photogrammetric part, as we call it, of the business has been in being since 1954. Both our aerial photography and our topographic mapping surveys have included foreign projects as well as domestic. Flying and mapping projects have been done in most of the Central American countries, Puerto Rico, and the Caribbean, Bolivia, Chile, Venezuela, Ethiopia, Tanzania, Nigeria, Alaska, and Hawaii, if you consider these foreign, Alaska wasn't foreign when we did the work up there, and also most of the 48 states.

Some major jobs we have done are Two Hundrred Mile Highway Route in Bolivia, this is one I prepared the map on which went from sea level up to 12,000 feet; about 300 miles of highway route in Awash Valley, Ethiopia; about a 200-mile job in Tanzania on what is called the Great North Road; about a hundred miles, a portion of the Anchorage to Fairbanks HIghway, and currently we are doing about 130 mile section of railroad route for the Burlington Northern Railroad.

Much of our recent work has been with the Lear Jet. We are operating in one, two, three, but we have one of our own and we lease one or two when we need to. We have special camera doors, we have special camera doors that fit on any Lear Jet of a certain model, so we don't have to own the Jets necessarily, but we do own one.

We have flown most of the states, most or all of the states of Minnesota, Florida, New Jersey, Wyoming, Colorado, plus we have done work in most of the other states for government agencies such as the U.S.G.S., Department of Defense, Soil Conservation, Forest Service, the B.I.A.

Some of the special surveys we have done are, we recently did 12 airport obstruction surveys for the N.O.S. Of course, we have done wetlands surveys for New Jersey and also New York, most of the coastal area for both states. We have done much flood plain mapping, that is, inland flood plain mapping for Minnesota, Wisconsin, North Dakota, Nebraska, Puerto Rico, California.

We have done considerable property line work for cities, including Minneapolis and most Minnesota cities. Other services besides normal topography include such things as preparing other photographs, volume measurements for inventory, cross-section profile work for highway work and digital mapping, which is one of the most recent advances in our business, digitizing.

Q Now, inasmuch as our effort here has been to demonstrate for those who might read this record the steps that the State and its contractors have gone through in doing tidelands delineation work, and if you could in chronological a manner and with reference to documents, contracts and other things, relate for us your involvement in this project from the inception of your involvement.

THE COURT: When you say "this project," what are we talking about?

Q Talking about that work done by Mark Hurd which resulted in the delineation work. I think that goes beyond the tidelands work as we have heard from other witnesses.

THE COURT: All right.

A. I prepared some rules with the idea to understand the entire project we are talking about now. Hackensack and Newark-Elizabeth areas.

THE COURT: That is the critical one in this case, yes.

A. And confined my notes to these two areas.

Initial contract for these two areas Contract 2P-331, dated June 27, 1972. I understand tha is Exhibit R-133.

THE COURT: I would like you wherever you to refer to our Exhibits.

Q [By Mr. Goldfein] Were you involved i

negotiation of that contract, Mr. Seestrom?

A. Yes, I was involved in the negotiation of that contract. This included both areas, originally included only three of 36 sheets in Hackensack. The plan was to do a certain amount of work on Newark-Elizabeth first before a decision was made as to whether the flying should cover one area or both areas. This preliminary work was done from existing photography which we had done under another contract, high altitude photography. We delivered the basic materials for Newark-Elizabeth in August, 1972. Then there was an addendum to this contract in October, 1972, I believe that is Exhibit R-135, where the additional 33 sheets of Hackensack were added, included overlays, intermediate overlays and final overlays, now total 36 sheets of Hackensack, plus the work on Newark-Elizabeth. I have arranged my notes here to take the procedure for Hackensack first because that involves a complete change of operations.

To begin with, I will describe our procedure for preparing the base maps of Hackensack. The first operation I have considered to be ground control. The first step was to research existing geodetic control done by N.G.S., formerly U.S.C. & G. S. -- U.S.G.S., New Jersey Geodetic Survey. The object was to get descriptions of all the control monuments that existed. The State Plane Coordinates were these monuments, and to select from these points a number of points which we felt were necessary to control the mapping, taking those preferred points first and citing alternates in case we could not find the preferred point.

For the points used, we prepared a control list and I believe that is Exhibit R-165.

The next step was field operation of placing ground targets. The first thing we had to do was to look at the monuments using the descriptions which we had been furnished and consult with local authorities, as necessary. Many of them fell in built-up areas on public highways.

BY THE COURT:

Q For the record, would you just tell us a little bit about targets? Do you place targets that you can do your over-flight accurately and know precisely what your photograph is?

A No, the targets are not--they do not guide you in flying, they are placed over a monument or near a monument either as a painted cross on a hard surface, or as a strip of cloth, two strips of cloth on a grassy area, and they mark on the photograph a specific point of known position. They serve as our horizontal control for the mapping that will take place from the photography. It has no bearing on the flight pattern at all. You would have difficulty seeing the targets from the altitude they are flying unless they know where they are.

Q [By the Court] At least you are picking it up and then you can orient the area that you actually photograph, right?

A Right, exactly. Prior to flying these have to be all put in place and they have to be maintained until the aerial photography is taken, of course. Al of the control work, both the selection of the points, the planning of them, and the laying of the targets, plus the aerial triangulation, which I will describe later, were under the supervision of our chief engineer, Mr. Conway, who is a registered civil engineer. He is primarily responsible for the accuracy of our maps in that area primarily.

The next step was to take the photography and we had what we call our low altitude photography and high altitude photography--I will describe the low altitude first, and the high altitude later.

The flight plan for the low altitude was laid out on the U.S.G.S. 1 to 24,000 scale quad maps, and each exposure was spotted so as to fit the wetlands map sheet layout, which was 6,000 feet east-west and 7,000 north-south.

We flew in a north-south direction. The alternate exposures covered the center of each sheet and each exposure covered a full sheet. The remaining exposures or intermediate exposures fell at the edge of each sheet and provided the stereoscopic coverage, or three-dimensional picture which we require.

The overlap of photograpsh in line of flight, or forward lap,was about 60 per cent and the side lap, between adjoining flights was about 30 per cent, figure the altitude above mean ground was 6,000 feet, producing a photograph scale of 1 to 12,000 or one inch equals 1,000 feet. The flying, of course, had to be carefully coordinated with the FAA control centers, which is a real problem in metropolitan areas, and required that we visit the control center and explain our project and ask for their cooperation.

The aircraft we used was a twin engine Beechcraft AT-11, fitted with dual stabilized mounts, one in the nose and one in the fuselage, plus a platform for a sighting device, the sighting device that is used by the photographer, who, through the use of this equipment acted as a navigator and instructed the pilot regarding the course of the airplane. The cameras consisted of two precision six-inch focal length cameras, that is the focal length of the lens. Each of these weighs about 100 pounds. The format of the negatives is nine inches by nine inches. The lens is essentially distortion-free. The vacuum pack on the camera is extremely flat and it is held in position by a vacuum when the picture is taken. The exposures were made simultaneously through electronically timed equipment or connections.

The film--one camera was natural color film, the other was infra-red color or what we call false color film. Each of these comes in about 125 foot rolls. The film, particularly the infra-red color, is very sensitive and was stored in a frozen condition until it was shipped from our office. It was shipped in dry ice and then refrigerated when it got to the field until it was used. It was shipped promptly after exposure to Precision Laboratories in Dayton, Ohio, for processing. The processing of color film is a very critical process.

After it was processed, it was inspected for quality of image and color both by Mark Hurd personnel and by N.J.D.E.P. people.

MR. WEIGEL: Who is that?

A New Jersey Department of Environmental Protection.

THE COURT: Excuse me, Mr. Seestrom.

Mr. Weigel, let me have that book.

MR. GOLDFEIN: I believe the witness has one, your Honor.

THE COURT: Good, he can keep that.

A. [Continuing] I had no intention of inserting this -- mentioning this particularly. I can mention it here if you would like me to.

BY THE COURT:

Q I think this might be good for the record. I show you a booklet that I am marking R-263 for Identification. Mr. Seestrom, does this booklet, R-263, represent an accurate summary of techniques and instrumentation used in preparing the scale photo base maps that Mark Hurd participated in covering the Hackensack Meadows? A. Yes. I have a copy of it here. Let's take a look at it. It is very brief but it does explain accurately what was done, but it is a very brief explanation of the work and the equipment which was used.

Q Okay, you may continue.

A. To continue with the inspection process, after the film had been inspected to make sure that it would do the job from the interpretation standpoint that the color was correct, in other words, we then examined it further for coverage, scale overlap, conditions, cloud coverage that might exist, and so forth, to make sure it would provide the necessary means of making the base maps themselves. Once that was done, we titled the film adding the exposure number on each frame, the date and the type of film. As I mentioned before, we also flew what we referred to as high altitude photography. The purpose of this photography was for aerial triangulation, specifically, to reach key control points that fell out beyond the project photography, and also to span open water areas which would be impossible with a lower altitude exposure.

The flight plan was laid out. Instead of a north-south direction it was laid out on a diagonal at various angles in order to fit the control scheme and to provide the coverage of the areas that we wanted to cover with this photograph. The altitude above mean ground was at 15,000 feet, providing a photo scale of 1 to 30,000, or one inch equals 2,500. The forward lap was again approximarely 60 per cent and the side lap between any adjoining flights was variable, depending upon the conditions. The camera and aircraft were the same as used for the low altitude. The film processing was done in this case in our own lab. This was black and white panchromatic film and inspection titling was similar to the low altitude photography. The inspection process only was to see that it was suitable for the intended purpose.

The laboratory work from this film to begin with on the natural color low altitude film, which was in a positive form in its original state, was duplicated to black and white negatives. We used these negatives to make contact prints for not only delivery to the State but also to make what we call mini-prints or one-half size prints for preparing a photo index. Then the original film for this was cut up from the roll into individual frames and put in plastic and furnished to the State for the biological studies. The infra-red color film was also duplicated to black and white negatives on extra thin film. These were used in the photogrammetric process and as such were used to make prints for our internal use, and these negatives were used directly in our photogrammetric process and our equipment.

Again, once this was done, the original film was cut up and put in plastic envelopes and delivered to the client for study.

The high altitude panchromatic film was a negative in black and white in its original form and these were -- this film was used in our internal processes only. We made the necessary contact prints which I think were also delivered and we duplicated -- we made diapositive negatives for our photogrammetric work. We also made many prints for indexing. The original film was still in its original roll form. The indexing consisted of laying the mini-prints down in overlapping position the way they fall geographically. These were the prints from the natural color which served as an index both for the natural color triangulation and infra-red color, since there were simultaneous exposures, and we also indexed the high altitude panchromatic film in the same way, labels and names, data, including main features, topographic features, strip numbers, titles, and so forth added. The assembly was reduced to negative and contact prints were prepared for delivery and general use.

The next step was aerial triangulation. This was done in two stages. First of all,we did an aerial triangulation using the high altitude. The purpose of this was to establish the supplemental points which we needed, as I said before, at the edges of the project where there wasn't any control falling within the mapping project and also to span the large bodies of open water. We then used these supplemental points in aerial triangulation solution using the low altitude photography where we again used both the supplemental points and targeted points in conjunction with each other.

For this triangulation we used the high altitude diapositives which I mentioned before, and we used the low altitude duplicate or inter-negatives directly.

The first step was to identify all the ground targets on both sets of prints and on the film. Then we selected additional points on this photography which we call pass points, which are points which are common to the photographs in line of flight and also to photographs in adjoining flight. These are necessary in order to relate all the photographs together in our triangulation solution. These points, these pass points were actually marked on the film, or on the diapositives, as the case may be, with tiny holes using special stereo viewing equipment to assure that the same location appeared on both overlapping photographs.

We also selected at that time additional points for rectification purposes. These were selected in the wetlands area which for our purpose was defined as that area below 10 feet of elevation. We needed these points in order to eventually rectify and enlarge these same negatives to a precise scale and shape.

We then set the overlapping photographs or diapositives in our stereo plotters and read what we call model coordinates. This is just a relative set of coordinates for these pass points and also the control point panels that appear. These were punched automatically on IBM cards indicating their relative position within the photogrammetric model.

At this point we then assigned state plane coordinates to those known points and used a Control Data Corporation 6600 Computer and a Zeiss Squares adjustment program to compute state plane coordinates values for all of the points in the system.

This concludes the area triangulation portion and we now have state plane coordinates for all of the points that we have marked on these photographs and can now be used to orient the individual photographs, or a model, as you choose, to a definite position on the earth's surface.

The next step was to prepare a base map which in this case was a stable base Mylar at the map scale of 1 to 2,400 or one inch equals 200 feet. On this we showed the state grid lines at 1,000 foot intervals, all the control points, the pass points, and the points for rectification. In addition we computed the relative position of the universal transverse mercator from a cater [phonetic] grid system and the latitude and longitude system and added this to this base map overlay.

The next step was to prepare rectified enlargements from the black and white inter-negatives which had been prepared from the infra-red color 1 to 12,000 photography. These enlargements were prepared on Zeiss SEG V enlarger and rectifier.

BY THE COURT:

Q What does rectification mean in development of prints?

A. In this sense rectification is nothing more than placing the photograph in the projection camera and tipping and tilting to recover the position that the original taking camera had. If it was perfectly vertical, pointing straight down, the camera would now be pointing straight down, if it was tipped over the side we would now be tipping the projection camera to match the taking of the picture. At the same time we, of course, scaled it to a very precise point, in fact the rectification scale was done using the base map which I just described. As I said, we put the film negative in the projection holder and projected it down to fit the base map and we did the necessary tipping and tilting, one, in line of flight, and one across the flight, and raising or lowering the projector so that we fit all of these pre-positioned rectification points,and again I stress that the only points that we are concerned with at this stage were the points below ten feet of elevation. The area above ten feet of elevation would be close, but with this system it is not possible to get those higher elevations to fit within a specified tolerance and they would have to fall where they may, which would still be very close in most of this area since there is not much relief displacement.

We then printed a clear base screened film positive. By screened I mean we built in a half-tone dot pattern. When this was developed we checked it against the base map to make sure that the processing was corrected and that the screen positive now fit over the base map, and all of these points fit the points we were matching to.

At this point we also added the corner ticks from the base map. By corner ticks I mean the corner ticks of the 6,000 by 7,000 scale sheet, so that could be used in all future registration rather than have to use all these little fine dots.

At this point we also, as I recall, made an ortho positive of this rectifying sheet for field delineation work.

The next step was to combine or to make a photo map, the photo map itself. The first step was to prepare a standard format which included the neat line or the 6,000 by 7,000 foot grid lines that represented the sheet limits to add standard border data that would not change from sheet to sheet, and we pre-printed these on Mylar or stable base positive material, one for each of the 36 sheets in Hackensack. Then the data peculiar to each sheet was added to this format, such as the grid numbers for the state grid, the UTM or Universal Transverse Mercator, ticks were picked up from the base map and inked on the border sheet, the latitude and longitude ticks and numbers were also picked up. The names of topographic features were added to this overlay. The sheet number and name and other similar data.

We now have two pieces of material. One is our rectified enlargement in half-tone screen form. The other is our border or format sheet. These were sandwiched together, by that I mean one laid on top of the other, carefully registered using the corner ticks. From that combination we printed a positive, a composite positive which portrayed the photo image as half-tone screen and the border work in solid lines. From this we also printed a contact negative which in turn was used to make the Cronapaque or opaque photograph that we delivered as part of the project.

BY MR. GOLDFEIN:

Q Excuse me, Mr. Seestrom, are you familiar with the exhibit number that you got in reference to the map you just referred to?

A Of the final product?

Q Yes.

A No, I'm sorry I don't.

THE COURT: Can you suggest one?

MR. GOLDFEIN: R-23 is the way I have it on my list. I believe an example of that has been referred to as the Cromakill base map is R-23-714-2172.

THE COURT: All right.

MR. WEIGEL: Your Honor, at some logical breaking point before Mr. Seestrom gets into the next phase, can I ask one question for clarification?

THE COURT: Yes.

THE WITNESS: I might sum up the Hackensack base maps preparation by commenting on the accuracy. The accuracy specified for these maps was that the area below ten feet of elevation meet national map accuracy standards, and these briefly state that all positions shall be correct within 1/30th of an inch at the map scale, which in this case was 6-2/3 feet.

We, as I say, our chief engineer, Mr. Conway, watched this very carefully to see that the control points we selected were sufficient, the aerial triangulation process was correct and we had a couple of points at which we were able to monitor this to double-check our results. One was at the aerial triangulation stage where the magnitude of the so-called residuals indicated was a good indication of our accuracy.

BY MR. GOLDFEIN:

Q This measure of accuracy, you said it was a requirement of the job, I think. Was that provided in the agreement? A That is in the agreement, that they meet national map accuracy standards.

In another spot where we were able to check the accuracy was when we made the individual sheets and put them together, each sheet being done independently so to speak, and when we put them together if they matched within that 1/30th of an inch we were pretty well assured that the accuracy was reliable.

Q Now, for the record, could you give us an explanation of what you mean by national map accuracy standards? A Yes, national map accuracy standards is a fairly lengthy document, but basically it specifies the horizontal and vertical accuracy of a topographic map. In this case we were only dealing with horizontal, we were not dealing with contours or the vertical aspect, so we are only talking about the accuracy of the positions shown on this map with respect to the basic geodetic control in the area.

Q Whose document is that?

A It was originally put out by the Bureau of the Budget, I believe, many years ago, to define the accuracy of government mapping, and it varies for different scales, but at this scale it calls for an accuracy of 1/30th of an inch.

Q And is it published and republished in some fashion?

A Yes, it is published in a number of areas and publications and there is also a little pamphlet itself that does describe it.

Q Do you know who publishes it now?

A I have got a copy at home, it might still be the Bureau of the Budget, I'm not positive, either that or U.S. Geological Survey.

Q Is it customary in your work to refer to that document as a standard for measurement?

A That is one standard of accuracy referred to, the one we refer to most frequently. There are others, but this is the one that is referred to most frequently and it is generally accepted.

BY THE COURT:

Q When you speak about accuracy and you say you are allowed a tolerance of 1/30th of an inch, I don't quite understand the meaning of the word "accuracy." A camera takes a picture, it is a true picture. The only thing that can throw it off, you say you correct that through rectification, but do you mean by accuracy if one of your photographs photographed a gasoline storage tank on the ground, that if you looked at that tank on the photograph and plotted its position relative to another object and then if you went on the ground and plotted the location of that tank to the same object, how accurate would you be? The 1/30th of an inch doesn't mean anything to me except, I suppose, if I know the scale I can figure it out.

A Right. This scale, which is one inch equals 200 feet, 1/30th of an inch, works out to be 6-2/3 feet, which means we are saying this tank over here in this case you have to be sure,you have to refer to the base tank,because the top of the tank may be up 20 feet in the air and on the photograph it is displaced, the base of this tank is shown on the map and it is read by the coordinate system. You can read the state plane coordinates at points at the bottom of that tank or more specifically the intersection of two sidewalks, which is a more well-defined point, and read a similar point on the other side of the sheet and read those two coordinates and either measure them on this plastic material or compute them to their coordinates and you will get a distance of, say, 1,920 feet.

That should be accurate to within, let us say, twice the 6-2/3 feet. This point might be out a 30th that way and this way, and the maximum error in that distance should not exceed anything double 6-2/3 feet, or about 12, 13 feet, 12, 14 feet.

BY THE COURT:

Q As you know, your infra-red photography was also picking up vegetation , was it not?

A Yes.

Q That would apply also to the visible boundary line of what was green and what was pink, it could be off, conceivably, 12 feet. Is that correct?

A On this final enlargement, yes. This map that was made.

Q How true is that? When you tested some of these photographs were some of them more accurate? How did you pick up that six-foot inaccuracy? Did a lot of objects come up truly in their location?

A Well, I meant to say that this isn't very likely to happen that they both be off in the opposite direction.

The more likely situation is that both of them are maybe shifted in the same direction so that the distance between them is generally, within a single sheet, is generally much more accurate than twice the tolerance. It is the position with respect to the basic control in the area that the accuracy is applied to, and the distances measured off of any area, any one sheet, are much more accurate than 14 feet. In this case there is no doubt about that. It is just that the whole area might be shifted a little bit with respect to the basic geodetic points in the area, but scale-wise between two points relatively close to one another, the accuracy is far better than 14 feet. It is more like 200ths of an inch or about four feet generally speaking.

Q [By the Court] In checking these maps you made 36 base maps. Did the error vary from base map to base map very much?

A No. As I say, these maps have not been checked as such. There have been some checks made, but I can't specifically point to the specific checks.

Q All right. A Except our triangulation solution is sort of a self-checking system. If these number points that we are trying to fit to, if any one of them is off in this case, if any one of those points should be misidentified, or the surveyor made a mistake of say two to four feet, our aerial triangulation system would not go together, our computer would reject that point and say 'something is wrong here, it doesn't fit.'

So we have to go find out and we very often do reject isolated points because it will not fit the solution and we usually select more points for control than we really need just for this purpose.

Q You had all the points, I understand?

A. Right, we can throw out a fairly high number of these points from our solution and don't worry about why. It could be a surveyor's error, or it could be an identification error, and that is about all, or just a typographic error in putting on the coordinates. So it is sort of a self-checking system. Once a point is thrown out we go back and re-run that solution without that point and it will improve the relative position of these other points.

Now we get into the procedure for preparing the Hackensack area overlays.

MR. WEIGEL: Before Mr. Seestrom gets into that, your Honor, please, may I ask a question?

THE COURT: Yes.

BY MR. WEIGEL:

Q What was the purpose for which the

false color infra-red photography was taken?

A As I understand it, the false color infra-red photography is the main medium for making the biological interpretation. This is somebody else's bailiwick, but this, I understand, is the main purpose, but we also found it convenient before doing the aerial triangulation and of course we made the enlargement from it, so that the image tones would be very similar to the final base map.

Q I think we all realize what it was ultimately used for, but I was really asking the question, did Mark Hurd need that infra-red photography for the purpose of making the base map, or anything related to it?

A No, we could have used another film. We would at that time probably have used a panchromatic film since it is easier to work with and to prepare an enlargement from.

BY THE COURT:

Q Is panchromatic natural color?

A That is black and white, just plain black and white color.

BY MR. WEIGEL:

Q When Mark Hurd took that photography did you know it was going to be used for interpretation of vegetational lines down a road?

A Yes.

THE COURT: Now we are getting into the procedures for preparing the Hackensack overlays.

THE WITNESS: Right, with the exception of a few sheets in a few cases we made four overlays for each of 36 base maps of Hackensack. One was referred to as 1877-1887 Topographic Manuscript Map Overlay. The other was the 1930-32 Airplane Photography Atlas Sheet Overlay. The other one was the NOS 1964 Overlay, and then the final one was Areas Now or Formerly Below Mean High Water Overlay.

I will describe the procedure for preparing the 1877 to 1887 Topographic Manuscript Overlay in some detail and the procedure would be somewhat similar for the next two overlays. We received a film negative from the State at a scale of approximately 1 to 21,000, or one inch equals 1700 feet, which was a copy of the old 1877 to 1887 maps. We enlarged these maps in a precise copy camera to the base map scale of 1 to 2400, or one inch equals 200 feet. The scale was determined by using the theoretical dimensions of the one minute latitude and longitude lines on those maps. We calculated that there was about a one per cent scale differential in the cardinal directions of these maps due to the unstable material which they were furnished to us on. We averaged this out in our enlarging process. So we are a little bit short in one direction and a little but long in the other. We printed these in the form of film positives and these film positives were then overlayed on the one to 2400 base maps and we identified features which were still common to both the old map and the new base map, such as railroads, roads, streets, and other common features. This was for orientation purposes. We then traced these features from the new photograph onto an overlay.

BY THE COURT:

Q What was that last thing you said?

A We traced these common features from the new base map onto an overlay keyed to that base map.

MR. GOLDFEIN: I believe he is talking about R-189.

A Yes, I do have the number. The overlay so prepared was placed over the film positive of the enlarged 1877 to '87 map and the shorelines, streams, and marsh limits were traced onto the overlay. When doing this tracing we made incremental shifts between orientation features, which was necessary to compensate for the material distortion which I mentioned in the original manuscript, possibly original drafting on that old map, and also for possible survey errors. After all, these maps were made by ground surveys.

The common features and the wetlands lines that we traced out were then neatly drafted with standard symbols identified in a legend and a film positive of that overlay was prepared and furnished as delivery material.

The procedure for preparing the overlay for the 1930 to 1932 airplane photographic atlas maps was essentially the same.

BY MR. GOLDFEIN:

Q Excuse me, the 1932 overlay has been marked as R-186.

THE COURT: Yes.

A The only difference here was that we were furnished a photographic mosaic on a cloth, in other words, it didn't have any latitude and longitude lines, so we used the ratio of common distances identifiable on both the original mosaic and on the 1 to 2400 base map to determine the average scale of the mosaic, that is, you measure the number of distances on the base map, compare them with the mosaic, and took the average of those and enlarged the mosaic then by an average enlargement factor to get a scale as close to 1 to 2400 as possible. The technique then for tracing up detail was similar.

The third overlay, or the NOS 1964 map overlay, was again essentially the same.

Q Excuse me, this one I believe, your Honor, is marked as R-180.

THE COURT: All right.

A In this case we were furnished copies of the basic plastic materials directly from NOS and these were enlarged by a simple ratio. Since the material was of recent vintage and on good stable material, it was much easier and more direct.

Now, the procedure for preparing the fourth overlay, which was referred to us Areas Now or Formerly Below Mean High Water--I don't have the exhibit number--

Q R-59.

A In this case paper prints made from the individual 1 to 24000 overlays which I have described just briefly for the 1877 to '87, 1930 to 1932, and the NOS maps, was furnished to us by the State.

BY THE COURT:

Q This source, what was this again now, Areas Now or Formerly Below Mean High Water. What document was given to you or what material?

A To Mark Hurd?

Q Yes. A We received a paper print made from the previous overlays prepared, along with that we were furnished detailed instructions as to what to take from each of these previously prepared overlays, and we were also furnished additional materials, including an item referred to as the phragmites overlay which I understand was prepared by someone else, showing the vegetation aspect.

In addition we got a number of old maps which were furnished with the detailed instructions on what to take from these maps.

MR. WEIGEL: Are all these things in your exhibits?

MR. GOLDFEIN: I believe they are, we are just going to pull them out and have him identify them.

MR. PORRO: The instructions?

MR. GOLDFEIN: Yes.

THE COURT: You fellows stipulated Mr. Seestrom's expertise and Mark Hurd's before you said this and you said "The finest photography in the world, in the universe." Are you stipulating the techniques used in preparing the overlays?

MR. WEIGEL: Absolutely not.

MR. PORRO: Just the photography. So the

record is clear, I'm sure Mr. Weigel and myself agree, our remarks were to the photography.

THE COURT: Maybe you better clear it up if that is what you mean.

MR. PORRO: I make no stipulation relative to any of the overlays.

THE COURT: What about base maps?

MR. WEIGEL: Base maps I have no problem; they are as high quality a product of this type as you can have made. But my problem is with the overlays, the fitting process which was very descriptively provided out in Minnesota on depositions by Mr. Seestrom, but which we haven't heard yet fully. I suppose it will come out on cross, I don't think it will come out in this part of the case.

THE COURT: All right.

A. [Continuing] Using the instructions and the prints that were returned we then put together a composite overlay which showed the line of mean high water, or as stated "Now or Formerly Below Mean High Water."

These were drafted from the various overlays as per instructions and in some cases we had to make a few additional maps. We had to orient those maps to the material previously furnished and to complete the wetlands or the mean high water line. This was primarily a drafting operation.

This sort of covers very briefly what we did on the Hackensack. If you don't have any questions, I will go on to the Newark-Elizabeth products which were somewhat different.

BY MR. GOLDFEIN:

Q Mr. Seestrom, I wanted to ask you a couple of questions here. With regard to the various documents and maps forwarded to you from the State, who were you in touch with at the State? Who did you deal with during the interchange of these materials?

A We dealt with a number of people, including Mr. Yunghans, Dr. Feinberg, Jo Ann Stitt, and Mr. Whitney. I can't think of any other names offhand.

Q Did you personally have contacts with those individuals in the form of written correspondence or telephone conversations? A Yes.

Q And the instructions that you refer to were those forwarded to you by the personnel of the department? A By whom?

Q You referred to instructions that had been received, but you didn't say from whom.

A They were sent to us by, I can't recall for sure if they all came from one source, but I know the discussions I had concerned all of these people at different times.

Q Now, we had testimony of an earlier witness marked, what I have in my hand, as R-161. I want to hand this to you and ask you if these are those instructions. A These appear to be typical, typify the instructions that we received for each and every sheet. I can't recall the specific one, of course, but this is the type of instruction which we received which refers to a block using grid numbers as a means of telling you exactly where in the sheet this should be used.

Q Would they typically have been received at Mark Hurd by you? A They generally came to my attention, but if I wasn't available they went directly to Mr. McGurty, who wasin charge of preparing the overlays, but I was generally aware of the status of these sheets at all times.

Q Thank you. I have one other question that may be appropriate for me to ask you.

You have been describing the kinds of materials and products and you used the phrase, "a stable material." Could you define that for us in a few words and also distinguish it from other kinds of materials that you dealt with?

A. When I first started out in this mapping business the type of material and more specifically the instability of it was a very big problem. One day you would lay out a grid system on a map or a piece of paper, heavy drawing paper, that was supposed to represent say five inches or a thousand feet at this scale on that paper.

The next morning you come in and maybe it is only 950 feet becaue it shrunk. To make it worse, it may have expanded in the other direction, so that drawing maps on it was a real problem, especially when you wanted to draw parts of the same map on different pieces of material, and then put them together so they would register properly when you printed them as a composite, which is done in most map work. The color separation process consists of putting the black or cultural features on one drawing, the blue r drainage features features on another and the brown or contours on a third, and so forth. It was very difficult to make them match, so in the early days they went to such a thing as metal laminated paper, heavy boards with the paper glued on, and eventually we got to the point where the DuPont people and the Eastman people and other products people developed a stable base plastic material which when you draw a line here and one here five inches apart, that is what it is the next day and the day after and so forth, regardless of rather severe humidity, temperature changes. That is what we mean by stable base material.

BY THE COURT:

Q The 36 maps that were prepared for the State, what kind of material are they on?

A The final delivered materials are on actually two types of material. The base material is the same. There are plastic Mylar materials, it is kind of a general term for various trade names.

Q Is that photo map that Mr. Goldfein holds in his hand--what is the exhibit number?

MR. GOLDFEIN: R-123.

Q Is that Mylar too?

A That is generally referred to as a Mylar product. Specifically, it is DuPont's Cronapaque material.

Q I was always thinking of Mylar in terms of transparencies or overlays.

A We also delivered the transparency,which I'm not sure you have, but it has the -- you can see through it except for the images and it is used to make Ozalid prints such as you have on the table or Diazo prints, more specifically.

Q [By Mr. Goldfein] Distinguishing stable from, I guess you call non-stable or unstable, R-23 is a Mylar that is a stable base. This is R-162.

A That is a very unstable material.

Q Which is on paper and that is deemed to be unstable? A Right.

BY THE COURT:

Q Are those two the same shot? Looks like the same areas.

MR. GOLDFEIN: Yes, they are both of the same areas.

A And that print that is on top was made from the other Mylar material, or what we call Cronapaques. It is the transparent version of that which can be run through a Diazo printing machine to make these prints very clearly. It is translucent or transparent, depending upon which one of the actual products you use.

BY MR. GOLDFEIN:

Q This is R-162. Did such a map accompany the instructions as they came to you?

A Yes. I'm not positive whether the print of that map accompanied the instructions or just the prints of the overlays, I can't recall the details any more.

THE COURT: I think Mr. Goldfein asked if that is representative of the type that was sent, not that particular map.

THE WITNESS: Oh, yes, the print, the paper, but it was a print made from the overlays that we prepared to fit that map, and I think there was a print along with that also, as I recall now, that had some comments on it. So we got a whole bundle of materials, including a print of the base map and I think prints of the overlays that were prepared to fit that base map, plus supplemental sources which all were explained in the instructions.

THE COURT: All right, I think we will recess now to one-thirty.

[Recess, 12:30 to 1:30 p.m.]

THE COURT: We have Mr. Weigel's and Mr.Porro's permission to proceed without them for a few minutes, so we will go right ahead.

MR. GOLDFEIN: Your Honor, we would like to resume with Mr. Seestrom's testimony.

THE COURT: Yes.

BY MR. GOLDFEIN:

Q Proceed.

A This next portion which I had prepared is on the Newark-Elizabeth survey and I can make this real brief if so desired, because the documents already in evidence are quite as detailed as I can make them, and I can just refer to them very briefly, if this is what you want.

THE COURT: I think so. What I would suggest you do, the documents certainly are going to speak for themselves, they are in evidence, and if there is anything you think is necessary to highlight for the Court to understand and for another Court to understand, why, go ahead and do that to highlight or give some further explanation of what is contained in the documents. So I will give you carte blanche. Brevity would be appreciated and that is no reflection on you, Mr. Seestrom at all, because you have a lot of ground to cover.

A. On the Newark-Elizabeth area we have prepared a base map at 1 to 9600 or one inch equals 800 feet. We prepared three -- five overlays, five overlays on the key to that base map, and I will just review them briefly.

BY THE COURT:

Q How many overlays were they?

A. Five overlays. I will review these briefly and give the existing exhibit number and comment briefly. I have the exhibits in my hand here which I prepared myself. As far as the base map is concerned, I refer to an exhibit, R-167, which is September 5, 1972, letter, which describes the procedure and comments on the accuracy of the base map. This is related to also another exhibit. This base map was prepared from photography which was obtained under a separate contract, namely, Contract 2P-293, which is a Court's Exhibit R-137. That photography was infra-red color positives, transparencies taken on 25 March 1972, in approximate scale of 1 to 80000 and as indicated in the exhibit, R-167, this is the photography that was used to make the base map. Another thing that is different than the Hackensack procedure is that the control that was used instead of being developed through ground targets and aerial triangulation we used, and I quote, from the report, "Stable base film postive transparencies of the Elizabeth and Jersey City 7.5 minute 1:24000 scale quadrangles were purchased from the U.S. Geological Survey," and these enlargements, --these quadrangles were enlarged to the two scales, 1:12000 and 1:9600, with the 1:12000 scale being used initially to enlarge and rectify the 1:80000 scale photography, which was more or less the limits of our rectifier, and the remaining enlargement was done in our precise copy camera. Otherwise, the method of making the photo map, adding the border information and the grids was pretty much the same except again that we relied on the Geological Survey quadrangle map for the information more or less directly.

So now, having the base map in hand at one inch equals 800 rather than one inch equals 200, we prepared an overlay based on the 1877 to 1887 topo maps in the same general manner as we did for Hackensack, and that is referred to as Court Exhibit R-166. That is the report that covers that. It is the letter of September 5, 1972.

BY THE COURT:

Q What was that exhibit number again?

A That is R-166. That is the report that covers the preparation of that base map--I'm sorry, I think I got the exhibits--the report that covers the preparation of the base map is R-167. The report that covers the preparation of the overlay based on the old 1877 to '87 topo maps is R-166. They are both dated September 5, 1972.

Q I have R-167 before on the base map. Okay, that is the right one.

A Right.

Q 166 is on the 1877 to 1887 series?

A Right, 166. I might backtrack and comment on the accuracy of that base map. Quoting from the report [R-167]: "The basic accuracy of the Newark-Elizabeth 1:9600 scale base map was established by the 1:24000 scale U.S. Geological Survey maps used in product preparation. These quadrangles comply with National Map Accuracy Standards"--which say that "90 per cent of all well-defined positions are correct within 1/50 inch at map scale."

You might notice a difference between that and 1/30th of an inch that I mentioned earlier. When the map scale changes from larger than 1:20000 to smaller than 1:20000 the tolerance also changes.

Q Why, is it stricter? That is just an academic question. A I think because you might say it is miniaturized.

Q [By the Court] That's right, it does make sense. A Yes, the detail is much closer together and it is crowded together more.

Q So it better be more accurate?

A Right, if it is going to be useful. Surveys are usually made on larger scale and reduced, which reduces the error on paper, but not necessarily on the ground. It is still 40 feet at that scale whereas we are talking about 6 feet at the other scales.

Q Where are we going,into the second overlay now? A Yes, the second overlay, that is the preparation of the 1930-32 airplane photographic atlas sheet overlay and that is pretty well covered in the September 5, 1972, report, which is Exhibit No. R-168.

Q Prepared the same way? A Right,

that is prepared pretty much the same. It is described here in the report and except for scale it is not much different than the description of the Hackensack procedure I gave.

Then the last overlay, "Lands Now or Formerly Below Mean High Water." Again, I refer to the report of September 18, 1972.

Q There was no NOS 1964?

A No, there was no NOS 1964 on this area and that is a Court Exhibit, R-169. Then we prepared another overlay which we called the combined overlay for 1930-32 airplane photographic atlas sheet, the 1917 City of Newark tax maps, and riparian exhibit D-L-2 overlay.

Q What is that last one?

A That was similar to Exhibit R-168, which only took into consideration the airplane photographed atlas sheets except this one had included in it two other sources which were used in conjunction and to add information from these two other sources. That is covered in my March 30, 1973, report, which is R-170. The technique of preparing the overlay is again similar to the other overlays that we prepared from these source maps.

Q Okay, you stop there. Look at Exhibit 170, Mr. Goldfein. I will tell you what it says, if you follow. We are calling this--this is the Combined Overlay for 1930-1932 Airplane Photographic Atlas Sheets, 1917 City of Newark Tax Maps, and Riparian Exhibit DL-2, filed under so-and-so. What is that, do we have it?

MR. GOLDFEIN: I don't have a recollection from looking at it. I think I would have to pull it out and look at it.

THE COURT: You mean it is all part of Exhibit R-170?

MR. GOLDFEIN: Dr. Feinberg might be able to tell you precisely what it was.

MR. FEINBERG: Your Honor, that was one of the source maps that was provided in the riparian file and was used and referred in Exhibit R-170 report. It is simply one of the source maps that went into making up this particular overlay, which is not a final overlay, but was a base for compilation of some of the intermediate sources, the tax maps.

MR. GOLDFEIN: It was one of the maps that came from Jim Johnson's office.

MR. FEINBERG: That's right.

THE COURT: Very well, thank you.

THE WITNESS: Then we prepared still

another overlay which is referred to as "Areas Now or Formerly Below Mean High Water." This is generally referred to as the final claims overlay and that is described in my report of June 29, 1973, which is Court Exhibit R-171.

Q [By the Court] Mr. Seestrom, go back to Number Three. I thought you said, "Lands Now or Formerly Below Mean High Water," R-169.

A. Right.

Q Oh, that was the procedures used to estimate the accuracy, that wasn't actually on the overlay, was it?

A. That was an overlay.

Q What is the difference between that and Number Five?

A. Number Five includes additional information . Maybe I should read that. The State has now reviewed much of this material and it is a much more detailed report. To begin with, the State furnished a paper print made from the 1:9600 combined overlay which I just discussed. That was the fourth one, I believe, for 1930-32 airplane photographic atlas sheets, 1917 City of Newark tax maps, and riparian Exhibit DL-2. On this print the State designated which lines were to be used from this overlay. Also, the State indicated which lines were to be used from the 1877 to 1887 topo manuscript overlay and New Jersey

State topographic atlas sheet number 7,(1889); the Tidal Situation Map No. A-6996 prepared by Grassman, Kreh & Mixer, Inc., and 1940 Aerial Photography Frames 23-10, 23-11, and 23-12 (taken by Aero Services Corporation, April 6, 1940), and the main difference here, I think, is embodied in that paragraph that there were many more sources not covered since the first overlay was made, and in fact the name was changed slightly from "Land Now or Formerly Below Mean High Water" to "Areas Now or Formerly Below Mean High Water." There is some significance in that wording, I believe.
A These reports
Q Okay.
are much more in detail and unless somebody wants me to review them I won't.

Q No, I don't think that is necessary.

A I did want to comment that each of these reports that we made, that I made here, of Newark-Elizabeth have an accuracy of evaluation in the report which was carefully considered after we got all through working with material we re-assessed, assembled it, and noted the magnitude of the shifts we had to make between known common points, orientation points, and we came up with what we considered a rather conservative estimate of how far away from the base map detail these lines could be.

To say it another way, how much in error they could be with respect to the new base map detail underneath. I say conservative, I would guess that most of it is much closer than that. We are basically a conservative organization and when we estimate an accuracy we usually want to be sure that it is safe, and that is stated in each of the reports as a final part, Part Two, I believe, in each report's accuracy assessment.

Unless somebody has some questions, I think that pretty well covers what I had planned to say.

THE COURT: Do you have any more direct, Mr. Goldfein?

MR. GOLDFEIN: No, I don't, your Honor.

THE COURT: Is there anything by way of cross that you think might be helpful in developing this record at this time?

For your edification, Mr. Weigel, and Mr. Porro, Mr. Seestrom has testified as to the preparation of the Newark-Elizabeth base map and the five overlays much in the same fashion that he did in the Hackensack, and I think, I don't know if you heard this, but the third overlay was "Land Now or Formerly Below Mean High Water," developed much in the same way as the Hackensack, but then he came up with a fifth one that looks to be about the same, calls it "Areas," and the difference between the third and the fifth is that many more source materials were used in the fifth than in the third. I suppose you will want to examine him on that at another time.

MR. WEIGEL: I have some cross-examination. Was the Court suggesting that this might be an appropriate opportunity to avoid a return trip to New Jersey for Mr. Seestrom?

I would be very willing to cooperate if that is the thought.

THE COURT: Well, if you think you can do it within the short time left, but I wouldn't want to spend that time and then not finish and have to bring him back again. Certainly, if you can do it and save him a trip out here, all right.

MR. PORRO: Your Honor, I would prefer, since we have followed this, no cross-examination, that we follow the same plan, unless there is any, you know, major objection.

THE COURT: Mr. Rindone, when you get into East Rutherford, are you going to need to have Mr. Seestrom out here?

MR. RINDONE: I doubt it, but I would not want to make a definitive representation at this time.

THE COURT: Does your contract include defending your participation in this project? I thought I saw that someplace, in other words, part of the contract was you would be available for court testimony?

THE WITNESS: Yes, that is true; not written, it is understood, I think we have discussed it.

MR. GOLDFEIN: I don't have any hesitancy about the availability of Mr. Seestrom at another time.

THE COURT: I beg your pardon?

MR. GOLDFEIN: Subject to a date being convenient to his schedule which involves, as I learned at lunch, a lot of traveling. We will certainly have him here on another day, and we will have him back.

THE COURT: Mr. Goldfein, I also understand Mark HUrd has a Lear Jet? Do you have that available at times?

[Discussion off the record.]

THE COURT: Back on the record, now.

BY MR. WEIGEL: Q I didn't want to interrupt before, I know it tends to cause a problem, Mr. Goldfein, but I did want to ask ultimately the question. You indicated that the Federal Bureau of the Budget established apparently the National Map Accuracy Standards. They were obviously established for some purpose related to work that the Federal Government was in. Do you know why the Bureau of the Budget was the agency that established these standards and why the Federal Government was interested in trying to reduce this thing to some kind of a standard form?

A. I think the Bureau of the Budget, I am assuming some of these things, they were the ones that budgeted the money at that time, and they were the watchdogs of the Government expenditures. There were many surveys being made and as you probably all know, some of the public land surveys were real wild, there were no accuracy requirements. So when the government agencies, particularly the Coast Survey and the U.S. Geological Survey, began preparing maps, they had to have some type of a standard. Now, I don't know exactly why the Bureau of the Budget prepared this, but they were prepared for the purpose of standardizing the mapping activities under the Act's requirements. Of course, they were prepared way back there when the mapping was done by ground survey methods, which is now quite obsolete, and I would like to emphasize a couple of things. They say that 90 per cent of well-defined features shall be within either that 1/50th of an inch for the smaller scale maps and 1/30th of an inch for the larger scale maps, so there is 10 per cent that can be up beyond this, and I think prior to recess for lunch I was talking about the maximum tolerance here that you could have.

Let me go back again. The standards speak in terms of what we refer to as absolute position, absolute position of point-by-point to the basic control in the area. That means that the relative position of two points can be much better--I think this is borne out here in Court Exhibit R-172, which concerns the accuracy of a Newark-Elizabeth map where I estimated that our accuracy was within National Map Accuracy Standards. Subsequent to that, the State had somebody from Coast Survey, the Coast Survey offered, I believe Mr. Cravatt offered to have some field checking done on Newark-Elizabeth and that exhibit includes the coordinates for three points and the comparison between the coordinates scaled off of our map and those surveyed on the ground ranged from a minus -- a plus 7 to a minus 42. That is based on the absolute coordinate positions.

However, in this case you remember we sandwiched the rectified enlargement to the format with the grids on it, and if this were shifted slightly the whole map shifted slightly. That difference between the points scaled off of the map versus those scales or determined by ground surveys ranges from a minus 10 to a plus 17. It reduces.

BY THE COURT:

Q Minus 10 and plus 17 what, I don't know what?

A Feet. These were all in feet, and, of course, the tolerance on this particular map was 90 per cent within 40 feet. So even with a slight shift of the map on the grid system it still basically met the National Mapping Standards. It also indicated that the internal accuracy was better than that standard would tend to show. I don't know if that will confuse you or enlighten you.

BY MR. WEIGEL:

Q Does it tell you anything at all about the other 10 per cent?

A No. The standard way to check a map becomes quite elaborate. You've really got to run high order surveys, run a traverse and a line of levels and you need quite a number of points. This was only based on six--three points which really isn't enough to establish whether the map meets or not. It is very few points. Usually, you should have a line through the middle of the map and many points as you go to determine how many of those points fit the pattern.

MR. PORRO: Actually, ground points taken on the ground, the surveyor?

THE WITNESS: Right, ground survey, at least a third order survey or better.

MR. PORRO: Or better.

THE WITNESS: Or better. Then you find the scale of the map.

Q [By Mr. Weigel] Why didn't you do that?

A Why what?

Q Why didn't you do that?

A It is costly. You mean to test the maps?

Q Yes. Well, we feel as far as we are concerned we know our system, the limits of our system, and we don't feel that they need to be checked, plus the fact that it is cost, it is a costly process to field check a map. It is not included in our estimate of costs. Whenever we do have a field check it usually comes out okay, and we do it as part of our, you might say, research in the company. We are constantly checking whenever it is convenient for us to get out and do some checking and to see, to test our methods to keep us abreast of our capabilities.

THE COURT: Okay, thank you, sir. How long will Dr. Feinberg take?

MR. GOLDFEIN: Less than an hour.

THE COURT: I have a sharp appointment at three-thirty. Well, we have been through this before, he gave his explanation in the partial summary judgment cases. Why can't we incorporate that record into this case? We have affidavits and we have Dr. Feinberg's testimony, unless he has something to add and then he would be subjected to cross-examination at a later time. I think we can dig that up. Somebody must have it in the appendix on the appeal.

MR. PORRO: I think I have a copy.

THE COURT: Mr. Goldfein, do you want to put in testimony by Dr. Feinberg as to how the hatching was done originally?

MR. GOLDFEIN: That is what I contemplated. But now he explained it is more expansively.

THE COURT: You have that testimony, you cross-examined him one time.

MR. PORRO: Yes, I have that testimony.

THE COURT: But we didn't get into it fully.

MR. GOLDFEIN: No, I think he was called by Mr. Porro as a witness on the case. It was in here.

MR. PORRO: It was. We cross-examined him, we had him as our witness on that point.

THE COURT: Let's take a couple of minutes and we will see if we can get him in.

[Recess.]

EDWARD B. FEINBERG, previously sworn.

THE COURT: Go ahead, Mr. Goldfein.

DIRECT EXAMINATION BY MR. GOLDFEIN:

Q Dr. Feinberg, this is an opportunity to incorporate into our record the techniques employed by the State in arriving at the designation of cross-hatching on certain of the maps, and I would ask you in relating it to refer to exhibits that have already -- techniques that have already been discussed.

A. In doing the analysis for the various data sources for the maps, we established a list of written instructions for the analysts. This list is in as Exhibit R-160. In particular, I would like to refer to Paragraphs 6 and 7 on page 3. We were dealing with the question of impacts of artificial encroachments. Section 6 said that for marsh areas which showed evidence of artificial encroachment and which have no adjacent natural tidal unrestricted marsh areas only defined waterways from earlier sources will be delineated as areas formerly below mean high water.

Seven states that for marsh areas which show evidence of artificial encroachment and which have adjacent natural tidal unrestricted marsh areas, if both areas appear similar on photography taken before the encroachments occurred then this photography is used to delineate major waterways and the remainder of the encroached area is hatched.

The areas below mean high water from the botanical overlay are used to establish the percentage of the encroached area which is below mean high water.

Now, these two rules for mapping came about for the following reason: In looking at the photography and evaluating the data it became apparent that certain areas of marsh had been filled, they were marsh at one time and they had been filled. Except for the actual water courses,with our knowledge at that point in time, we could not draw a line any further landward than the limit of the actual visible creek bed itself. However, we had knowledge from the adjacent marsh areas that significant portions of the marsh beyond the actual visible water course, in other words part of the vegetated area, would be below mean high water. We had experienced this in the Hackensack. It is shown on many areas of the NOS maps, the 1964 maps. We had experienced this in other marshes in New Jersey that in many areas mean high water is somewhere in the vegetation; in some places it is very close to the creek edge visible waterway unvegetated areas and other areas it may be very far inland and frequently it is someplace in between.

With this knowledge we took a look at the appearance of the marsh areas and the appearance of adjacent areas which had not been filled.

MR. WEIGEL: I am going to object. I think it is very important. We are talking now about appearance and my concern is that we have identified in the record what was done on the ground as opposed to what was done down at Trenton in somebody's office looking at a map, or something, or a photograph.

THE COURT: I don't understand your objection.

MR. WEIGEL: I am concerned about tying in the testimony of Dr. Feinberg to, for instance, if somebody can say that they were on the ground and they saw phragmites growing in there in 1931-32 in this location, that is fine, but I think we ought to have that as opposed to somebody looking on a photograph in 1972.

THE COURT: That goes to weight, that goes to testing title, doesn't it?

Now all we are doing is establishing what they did.

MR. WEIGEL: But he said appearance, Judge, I don't know what is meant by that. Appearance can be somebody looking at a photograph and drawing a conclusion in Trenton. It can also mean somebody on the ground seeing it with their own eyes.

THE COURT: Can we go back to where he said that?

[The Reporter reads as follows:

"However, we had knowledge from the adjacent marsh areas that significant portions of the marsh beyond the actual visible water course, in other words part of the vegetated area, would be below mean high water. We had experienced this in Hackensack. It is shown on many areas of the NOS maps, 1964 maps. We had experienced this in other marshes in New Jersey that in many areas mean high water is somewhere in the vegetation; in some places it is very close to the creek edge visible waterway unvegetated areas and other areas it may be very far inland and frequently it is someplace in between.

"With this knowledge, we took a look at the appearance of the marsh areas and the appearance of adjacent areas which had not been filled."]

THE COURT: Do you mean what appeared to you is what appeared to you or anyone else looking at a photograph?

THE WITNESS: That's correct, your Honor.

THE COURT: You are not talking about being at the site and physically looking at the area at that time?

THE WITNESS: No, sir.

THE COURT: Okay.

A. We are comparing filled areas,which had been filled at some point in the past,with the appearance of adjacent areas which are presently unfilled.

BY THE COURT:

Q As they appeared in photographs?

A. As they appeared in the same photograph, and we would look at a series of the aerial photographs. In some instances you would only have one photograph of that area in the 1930s, and then the area had been filled before the subsequent photographs. In other areas the filling might have not occurred until after the 1961 series of photographs. It varied from place to place.

MR. WEIGEL: Can I ask this one question, I hope it is helpful in an explanation of this.

Q Is there anything in this case, any of the documents, any of the exhibits, which will tie, for instance, the target like--tie the photography like the 1972 false color photography with somebody being in that same area back in 1930, 1931, and 1932, and being able to say on a report,whatever, that there was actually in that location phragmites communis or spartina alterniflora, any of the meadowlands grasses so that you can in effect take a report where a guy says--

THE COURT: You mean for verification purposes?

Q To tie the two together as opposed to just reading off of the photography.

BY THE COURT:

Q Let's find out. I go with your question.

Did they indeed when they were going into this hatching procedure, did you use any other source materials than photographs? A No, sir.

Q The answer is no. All right.

A We compared the photographs for the various dates, including looking at the existing 1917 color infra-red photography and then looking back at the same features over time to see how they appeared on that photography and in this way being able to interpret the signatures on the older photography in the same area that was unfilled today in terms of how that marsh area appeared and then transfer that information to the adjacent filled area. We found that we had many small water courses that were visible, the actual waterways. These were referred to in the books, the log books, such as Exhibit R-118, for Cronakill Creek. There was a description of what is known as a finely veined appearance of the marsh area in the old photography. This terminology represented the visible, very fine network of water courses.

The conclusion would be that this marsh surface, if it was on the same water system, the same stream system, as the adjacent unfilled area and looked the same on the photograph in the general appearance, would have had similar portions of that marsh surface below mean high water as the adjacent marsh system. You could have a system on another creek that would be related to what the water behavior was, and the hydrology of the given creek, but certainly on various creeks would be different from simply on Cronakill Creek in terms of the amount of area that would be below mean high water or could possibly be different.

Now, with that information, we had the criterion that we had to have, an adjacent undisturbed area, or unfilled area, today, in which to judge how much of that marsh would have been below. If we didn't have that comparison we had no yardstick with which to measure a given piece of film marsh. This led, in effect, to the hatched areas. It had to be visible on the old photography as marsh. It had to have an adjacent piece of unfilled marsh that today could be studied and you could arrive at an estimate or measurement of how much of that marsh was below mean high water in the unfilled condition and then project this back statistically to the filled area.

The evidence to the analyst showed, and from our experience with the marshes, showed to us that something more than just the visible water course where you could see the water from above would be below mean high water, and we knew from our experience in marshes and in the marshes in the Hackensack with the data, that the entire marsh was not below mean high water in most areas, that this led us to conclude that the equitable way was to hatch the area and look at the property on a parcel-by-parcel basis, and we had envisioned as analysts this being a basis for negotiation on an individual parcel, and we had discussed this with our attorneys who were advising us at the time, Mr. Clayton and Mr. Greenberg, and they reviewed this and then we submitted it to the Council as the best procedure we could come up with to handle these areas. We were not able to find any means, in our research, of judging the impacts specifically on any piece of property of any specific artificial change, such as ditching or filling, as to whether in a given instance it would have increased or decreased the area below mean high water except to note that if an area had fill placed upon it the tide was obviously excluded completely at that point, but as to what the previous condition was, or what the impact of that film would have been on adjacent properties, we were unable to pin down any further anyway to quantify that and to correct for it. But basically that was the procedure that was followed for the hatching and with the standard applied and the reasons for it.

MR. PORRO: Can we have him identify out of the 36 quadrangles how many quadrangles had hatching on it?

THE COURT: Hatching on it?

I don't know if he can tell you off the top of his head. It was mostly in Walden Swamp.

THE WITNESS: Most of it was in the vicinity of the Berry's Creek water system. That was the only creek with the areas that met the full set of criteria.

THE COURT: Thank you, Dr. Feinberg.

MR. WEIGEL: Can I just ask one question for a while?

THE COURT: Yes.

BY MR. WEIGEL:

Q Were your instructions to the analysts in this technique that you have described for hatching, were they explained by you and/or Mr. Yunghans to the membership of the Natural Resource Council?

A The basic process was explained. I don't recall at this point in time if the specifications, the specific instructions, were gone into. The process and the reasoning behind it for the hatching were explained to the Council.

Q By you or Mr. Yunghans?

A In the presentation we made before the Council at the hearing, yes, I believe, but I would have to check the transcript to see if it was also in the record of the public hearing.

Q In effect, what you are leaving with us is that the Council knew this and understood what you were doing? A In terms of the hatching?

Q Yes. A They understood they were hatching and why.

THE COURT: I don't know if he can testify whether he understood it, but he explained it.

THE WITNESS: They approved it.

THE COURT: They approved it. I don't mean any reflection on you, I wouldn't ask the witness if somebody else understood what he said. I guess there is a presumption that they understood.

Thank you, Dr. Feinberg.

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I CERTIFY the foregoing to be a true and accurate transcript.

EDWARD SALBIN,
Official Court Reporter.

April 6, 1976.

what the name of it is. I had about 15 years with them. I started out as a geodetic computor, I went into cartography, production of military maps, and eventually got into the photogrammetric division when they began to prepare maps from aerial photography.

I had certain on-the-job training there in connection with the plotting instruments and my jobs included planning,supervision work, administration of commercial contracts. At one time I was specially assigned, on special assignment as advisor to the Task Force commander in Operation Castle--that was in 1954, that was the first H-Bomb test, and before I left there I was in charge of contract administration and inspection.

I spent a short time in the military teaching at Fort Belvoior Engineering Training Center in Geodetic Computing. I left the Government to go with the Aero Service Corporation as a manager of their Duluth office which was set up to serve primarily the mining industry, which included aerial photography development control compilation drafting. I joined Mark Hurd, where I have been since 1957, nearly 20 years, and my jobs there have been in various capacities, but primarily in the planning and estimating and client relationships.

My technical societies include the American

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SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
(On Remand to Law Division-
Bergen County)

FILED
APPELLATE DIVISION
NOV 2 1978
Elizabeth McLaughlin
Clerk

CITY OF NEWARK, et al, :
Appellants, :

VOLUME IX

vs. :

NATURAL RESOURCE
COUNCIL, et al, :
Respondents. :

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NEW JERSEY SPORTS & : SUPERIOR COURT OF NEW JERSEY
EXPOSITION AUTHORITY, : LAW DIVISION-BERGEN COUNTY
Plaintiff, : DOCKET NO. L-16799-72

vs. :

BOROUGH OF EAST RUTHER-
FORD, et al, :
Defendants. :

FILED
SEP 21 1979
Stephen W. Townsend
CLERK

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Tuesday, April 6, 1976
South Branch Metedeconk
River, Brick Town, N.J.;
Manasquan River at Route
70 Bridge, Brick Town, N.J.;
Great Bay Boulevard Site,
Tuckerton, N.J.

B E F O R E:

HON. THEODORE W. TRAUTWEIN, J.A.S.C.

A P P E A R A N C E S:

WILLIAM F. HYLAND, ESQ.,
Attorney General of New Jersey.
BY: MORTON J. GOLDFEIN, ESQ.,
Deputy Attorney General,
For Natural Resource Council, et al.

APPEARANCES: (Cont'd)

JOHN R. WEIGEL, ESQ.,
For City of Newark, City of Elizabeth, New Jersey Land Title Assoc., Esther G. Bertoni, et al.

ALFRED A. PORRO, JR., ESQ.,
For the Borough of East Rutherford.

Reported by:

RICHARD F. DURIK, C.S.R.

(South Branch of Metedeconk site.)

MR. JACK E. GUTH: This is no preplanned script, so if there is any question or if I am disjointed, why, just sound off and I will try to explain it.

The program calls for about 200 long term tide gauges around the entire tidal area of the state of New Jersey. This is a cooperative program between the National Ocean Survey and the State of New Jersey. The National Ocean Survey is supplying the tide gauges.

This is a Leopold Stevens tide recorder. There are several gauges that the National Ocean Survey does accept, and this is one of them. The National Ocean Survey owns these gauges. They are supplying them to the State of New Jersey who in turn are supplying them to us as a contractor to use. The data that is collected off these gauges is in turn turned over to the National Ocean Survey who does the analysis of the recorded data. If it is acceptable, they inform the State, the State informs us that this is good data that they will accept, and we go o with the next one.

These gauges will operate for a minimu

12 consecutive months. The reason for this is to get an entire 12 month cycle, a full year cycle of tide.

THE COURT: These then are primary tide gauges?

MR. JACK E. GUTH: Yes, sir. These are primary gauges. There will probably be an additional--I think we are talking somewhere in the neighborhood of 30 or 40 of the secondary gauges which would be three month gauges, and these secondary gauges will run simultaneously with the primary so that there can be a direct comparison.

The National Ocean Survey's terminology as a primary station is a 19 year station, the secondary station is a 12 month station and the tertiary station is a 3 month. This is just terminology.

This gauge that we are going to look at, as I may have mentioned, is a Leopold Stevens Gauge. It's a mechanical gauge that is operated off of a battery. The simplest way is when we get there I will show you how it works. It will take about 5 minutes. If you have any questions then, I can answer them, but it won't take long.

The location of this was selected by the National Ocean Survey. This is a very nice place to have it, at a marina. Some of our gauges are out in the middle of a river or hanging from a bridge or wherever the NOS selects as a logical site for them. The hope is, and I think very obviously from these selected sites throughout the state, a local surveyor or engineer can come off of one of these sites and extrapolate or interpolate a tide at any place in the state to relatively a very accurate height and location for determining boundary lines and so forth.

At each of these sites there are five permanent monuments which it's a steel rod with copper coating welded to it and they are driven down to 50, 60 feet until they hit 90 pounds of resistance and there is a brass cap put on top for permanency and all five of these benchmarks are leveled into the tide gauge and the tide staff. Once the tide staff and gauge are removed, then these five marks become the permanent location, permanent elevation for that locale.

The question was were these tidal benchmarks tied in to the National Net and the answer is yes, if they are within a one mile radius of the station, they are tied in to the National Net with second order class 1 levels.

I will sign off now and direct our driver into the location.

(Demonstration Manasquan River at Route 70 Bridge site.)

(Demonstration Tuckerton area site.)

DR. EDWARD B. FEINBERG: We had planned a third stop in the Margate area which we are not going to make because of the time, so we will be heading back up. The site was in the Margate area where we had done a delineation where we used the information we gathered here at Tuckerton. It's a salt marsh with a similar type grass, Spartina alterniflora, which is almost exclusively what is involved there, high and low vigor, and we have prepared an overlay mostly based on 1972 photography and also partly on 1940 photography in an area that had been excavated and partially filled for a marina.

We have copies of the map section for that area and an overlay of the claim that would fit over that.

Again, the tick marks go to the upland

on the overlay. The one or two features I would like to point out on this particularly, one is the complexity of where the water goes, the biological high water line in this case, and also the fact of the presence of many island-type features that are little upland areas totally cut off by water.

We went out and walked almost this entire line on the ground after we had done the interpretations and then went back into the office and I redone the interpretations based on all the field observations and it was checked by the other people that were out there.

This is the type of delineation that would be done in practice in the salt marshes with the exception that we might in some of the areas, once we get the tidal datums in from the tide gauge network that Mr. Guth is working on, we might have local datums which we can compare the keys with in a given area such as was done out here by the NOS. We did not have that available to us in the Margate area at the time except that the type of marsh was such that we felt we could validly extrapolate the area from Tuckerton. This area was just west of Atlantic City, just about 20 miles down the coast.

If we had gone down there, we would have provided you an opportunity to walk any part of that line you wanted to in order to see what the conditions would be.

This happened to have been prepared for a particular case in South Jersey under Court Order that we had to prepare it within a certain specified time, so we went ahead with what we had.

THE COURT: Who was the Judge handling that case?

DR. EDWARD B. FEINBERG: Justice Hahneman. It was a dispute by two private parties over ownership and we were brought in as a third party, the State, and asked to delineate, and the case is now in a settlement phase. There have been several settlement conferences since we provided the delineation.

THE COURT: IS Justice Hahneman still sitting on it?

MR. ANTHONY SCOPPETUOLO: No. He has retired.

THE COURT: They had called him back for a while.

Is the case still pending?

DR. EDWARD B. FEINBERG: Yes. As a matter of fact, there is a settlement conference on it today.

MR. ANTHONY SCOPPETUOLO: Judge Francis is, I believe.

THE COURT: What is the name of it?

MR. ANTHONY SCOPPETUOLO: D.D. Junior.

DR. EDWARD B. FEINBERG: The full identification didn't come out on the copy, but we can get that information.

Bill, maybe you should go into a little bit about what happened on the boat for the record?

DR. WILLIAM S. MADDUX: Basically what we did was to visit part of the Metedeconk River Bank where there is a sizable stand of Phragmites communis growing in a fresh water tidal area and we were able to show that the Phragmites grows down to beneath the edge of the tidal water and at some place is subject to tidal action. We could show that there were differences in vigor that could be seen to be associated with differences in the height of the ground relative to the water.

I attempted to point out the irregularity of the surface of the marsh and would like to say that I hope people saw the difficulty in conventional surveying in such an area, that there are problems of visibility, problems of simply traversing the area, moving through it, and so on.

THE COURT: I think we pointed out a dead cedar tree or two and asked questions about that and your response was that sea level was constantly rising and that was the explanation--

DR. WILLIAM S. MADDUX: Excuse me, your Honor. If I said that I wouldn't mean to say it, because what I should say is that there was a change in the relative level of the water to the land. Whether that is due to a change in the height of the land or height of the water, I don't know, although there is, of course, in the tides records kept by NOS an indication of the rise in sea level that is taking place in this area, the entire coast line.

DR. EDWARD B. FEINBERG: Anybody have anything to add?

Jack, maybe you would like to summarize what you talked about at the tide gauge.

MR. JACK E. GUTH: We showed the group a Leopold Stevens Automatic Digitized Tide Gauge at a location on the Manasquan River where Highway 70 Bridge crosses the river. This is a gauge that is in operation now by the State. It is set on a 4-inch galvanized steel pipe well which this particular one is driven to the bottom and a few small holes are drilled through the pipe, down below the lowest point of what we would expect the normal low tides to be, to let the water into the pipe, but just small amounts, so that we don't get a lot of wave action inside the pipe. In other words, it dampens any sea action. Inside the pipe well is a stainless steel or bronze float that goes up and down with the tide. Connected to the float is a wire which comes up around a drum, mechanical drum, which goes through a series of gears and a coding drum punches out on to a punch tape the elevation of the tide as it compares to a tide staff in the immediate vicinity. This punch-out reading on the tape measures in feet, tenths and hundredths, so that every six minutes the elevation of the water is automatically punched to within a hundredth of a foot as compared to the tide staff.

It is automatic in that there is a solid state electronic timer run by dry cell battery which accentuates the timing and punching mechanism automatically every six minutes.

The tide gauge itself is monitored daily on a minimum of five times a week by a local observer who actually visits the gauge to make certain it is running, compares the time, compares the water level, et cetera. If the gauge should stop in operation, there is a telephone number which can be called 24 hours a day, an answering service, and our office immediately responds and puts the gauge back in operation. The idea of this is that there should never be a break in the tide record by more than three days in any one month, and we will take a minimum of 12 consecutive months of tide recordings in order to establish a valid mean high, mean low water elevation at the site.

DR. EDWARD B. FEINBERG: At Tuckerton we went out to the northern most site that was involved in a joint experiment with the National Ocean Survey and the Department of Environmental Protection which took place in April of 1973, from the 9th to the 16th of April. In that experiment in the work done at this site, a tide staff was placed in reference to three local temporary benchmarks so that it could be judged if the staff moved during the period of time that the measurements were made. This area in general had 15 tide gauges run with 3 to 5 month datums established by tide gauging and the tide staff at the local site was used to extrapolate the elevation of mean high water into that local area. Then the NOS, joint NOS-New Jersey Field Crew, surveyed that elevation in at approximately 15 locations in the vicinity of that tide staff at this northern most site and placed stakes in the ground at each of those 15 points at the horizontal position of mean high water in that area and we walked and found a number of those stakes that were still left in the ground and looked at the location of those stakes relative to such features as soil consistency, changes in the surface elevation of the marsh, and the different vegetation, and in particular, seaward of those stakes was the high vigor Spartina alterniflora and landward of it generally in the immediate vicinity of the stakes was a break and we had the lower vigor growth forms of Spartina alterniflora.

There were four other test sites in this area that I did mention rather than the marsh where similar work was done in this Tuckerton area by the NOS and New Jersey.

MR. WEIGEL: Did you ascertain the time of mean high tide down here before we came on the Tuckerton marsh?

DR. EDWARD B. FEINBERG: Today? Yes. We looked at the prediction in the tide tables and it was predicted for some time around 12:07, I think.

MISS LORRAINE S. TELEKY: High tide or mean high tide?

DR. EDWARD B. FEINBERG: High tide. That high tide today was lower than the mean high for the area.

MR. WEIGEL: The only observation that I think I would want to make is that I noticed a great number of ponded areas where there was water but where there was no tidal connection, and in the route that we followed from Great Bay Boulevard out to the site, that although we generally had gear on that would allow us to walk in marshy areas, that we were not walking through water.

MR. JACK E. GUTH: About 1300 would have been high water.

MR. WEIGEL: About 1 o'clock.

MR. JACK E. GUTH: Predicted.

MR. WEIGEL: It's about 2:35 now and we were probably out there on the marsh for a good hour and a half, so we probably were there very nearly at the time of mean high water.

MR. JACK E. GUTH: But it's a neap tide, slightly below what would normally be average.

MR. WEIGEL: A little below the normal high tide?

MR. JACK E. GUTH: Predicted.

DR. WILLIAM S. MADDUX: Again you are talking about a predicted tide.

MR. JACK E. GUTH: Right.

MR. WEIGEL: I think the only point that would be a point everybody would certainly agree on was that we weren't walking through water from Great Bay Boulevard out into the Tuckerton Northern Site.

DR. WILLIAM S. MADDUX: I would like to comment that the wind is from a southwesterly direction and vigorous enough that it's difficult to hold a map.

MR. PORRO: I will make one other observation. It was apparent that the staked line or the alleged staked line was never any more than five to ten feet from the apparent waterway.

DR. EDWARD B. FEINBERG: I would take exception to the word "never" because one of the specific places that we showed there was a definite inlet that went in 25 feet.

There are two small points, one being that many of those tidal ponds which Mr. Weigel mentioned which were not tidally connected, which many of those ponds are only filled on the highest tides, we would not delineate, and we pointed out the definite differences in the vegetation surrounding those as compared to the vegetation along the tidal waterways.

Also one point I had forgotten to mention was that we did point out to Judge Trautwein the presence of Ribbed muscle in the high vigor Spartina alterniflora in several locations.

DR. WILLIAM S. MADDUX: Ribbed muscle is a filter feeding mollusk which cannot survive unless it is frequently flooded with water, and certainly as a biologist as a practical matter you would say that it can't survive above the mean high water line, at least not be able to thrive.

THE COURT: These Ribbed muscles were pointed out to me as sticking out of the mud and ending just where the stake was as sort of a verification.

DR. EDWARD B. FEINBERG: Anything else that anybody wants on the record?

MR. PORRO: Other than to place my objection to the whole observation, because I don't see where it is at all relevant to the Hackensack Meadows either by way of the dominant vegetation or any of the other characteristics.

MR. WEIGEL: Thank you for the trip.

* * *

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
DOCKET NO. A-3311-72
(On Remand to Law Division-
Bergen County)

CITY OF NEWARK, et al, :

Appellants, :

vs. :

NATURAL RESOURCE COUNCIL, et al, :

Respondents. :

CERTIFICATE

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NEW JERSEY SPORTS & EXPOSITION AUTHORITY, :

Plaintiff, :

vs. :

BOROUGH OF EAST RUTHERFORD, et al, :

Defendants. :

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-BERGEN COUNTY
DOCKET NO. L-16799-72

I, RICHARD F. DURIK, a Certified Shorthand Reporter and Notary Public of the State of New Jersey, certify that the foregoing is a true and accurate transcript as taken by me stenographically.

I FURTHER CERTIFY that I am not related to any of the parties to the action and that I am not a relative or employee of any Attorney or Counsel employed in this case, nor am I financially interested in the action.

Richard F. Durik
A Notary Public of the State
of New Jersey

My Commission Expires
October 12, 1978

A-3311-72

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VOLUME X

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SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
DOCKET NO. L-16799-72

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et al., :

Defendants. :

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April 26, 1976
Courthouse
Hackensack, N. J.

B E F O R E:

HONORABLE THEODORE W. TRAUTWEIN, A.J.S.C.

I Som

Reported by:
RICHARD M. JENNINGS, C.S.R.
Official Court Reporter

A P P E A R A N C E S:

For Natural Resources Council, et al.:

WILLIAM F. HYLAND, ESQ.
Attorney General of New Jersey
By: MORTON J. GOLDFEIN, ESQ.,
Deputy Attorney General.

For Trustees of the School Fund:

WILLIAM C. RINDONE, JR., ESQ.
Deputy Attorney General.

For City of Newark, City of Elizabeth,
N. J. Land Title, Esther G. Bertoni, et al.

JOHN R. WEIGEL, ESQ.

For Borough of East Rutherford:

ALFRED A. PORRO, JR., ESQ.
(Not Present)

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EXHIBITS

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THE COURT: All right, Exhibits A-1 through A-241 were marked for identification. A copy of those Exhibits with a brief description of what each Exhibit represents has been handed to the Court Reporter. This is now part of the record and then at the appropriate time you may offer them to be marked in evidence, Mr. Weigel.

Mr. Porro is not here this morning, he is tied up in a case in Morristown, but I take it there is no objection to our proceeding without him.

All right, Mr. Weigel.

MR. WEIGEL: Your Honor, there are a couple of matters that I would like to bring up at this point so that I could have some guidance on how to proceed.

I had spoken to Jonathan Harris last week with respect to the depositions of Mr. Kraft and those depositions have been marked for identification beginning with A-166, which is the deposition of June 29, 1970; A-167, the deposition of July 13, 1970; A-168, the deposition of May 25, 1971; A-169, the deposition of June 22, 1973; A-170, the deposition of July 6, 1973; A-171, the deposition of August 17, 1973 and A-172 is a deposition when the Court was present, that deposition was taken on November 11, 1974.

Mr. Kraft died in March of 1975 and the purpose of my taking the extensive depositions that I did of Mr. Kraft was that he was a gentleman who was born in the year 1896 and he was well up in age when I first met him and it was with the thought that the eventuality which did occur might occur, and in talking to Mr. Harris last week, I made the suggestions after going through and rereading all of those Kraft depositions, that they be admitted and that rather than have portions of those depositions read into the record, since I thought that in most cases the deposition needed to be put in in toto, that the entire deposition be put in and that at the time, at the end of the case when you ask Mr. Goldfein and Mr. Rindone and Mr. Porro and I to, in effect, summarize the pertinent facts as we see them, I would draw out the more critical portions of the transcripts and would make, in effect, factual statements.

These depositions are very important to us because I had presented these depositions to Dr. Barghoorn who will be a witness for us in this matter and to Dr. Reimold who will be a witness for us in this matter and they have both read the depositions in their entirety and I am going to ask them an opinion question which is going to be based in large measure on information contained in the Kraft depositions so that I think it would be helpful since their opinions are going to be based on a complete reading of the case, or the transcripts I should say, that those transcripts in their entirety be permitted to go into evidence.

THE COURT: Are you going to ask them the question in the form of a hypothetical?

MR. WEIGEL: I plan to and I plan to draw out of it not only the fact that they have read the depositions in their entirety, which they have....

THE COURT: I do not mean that, that is not what I am directing my question to, just so Counsel understands this, if Mr. Kraft were alive, undoubtedly you would have him testify.

MR. WEIGEL: Yes.

THE COURT: And under our rules of evidence you may ask an expert to assume certain facts, provided those facts have been testified to in Court and then he can give an opinion based upon those assumed facts.

Is that the way you intended to do it with your witnesses?

MR. WEIGEL: Yes, and the assumed fact, your Honor, is the information that Mr. Kraft testified to in those depositions which are listed as Exhibits A-166 through A-172.

THE COURT: Are you offering these depositions in evidence at this time?

MR. WEIGEL: Yes, I am, your Honor.

THE COURT: Mr. Goldfein, any objection?

MR. GOLDFEIN: We object, your Honor, with the exception, I think, of A-172 which was the deposition of Mr. Kraft taken on November 11, 1974, when, I believe, the Court was present at his home in Ocean County. With the exception of that, all of the others were apart from this case and not concerned with the issues involved in this case and don't involve the issue before this Court which is the making of recommendations to the Appellate Division on an evaluation of the propriety of the State's actions in responding to a particular statute as to which even in the deposition of November 11, 1974, A-172, Mr. Kraft was not asked a single question on those and there hasn't been a proffer of why the deposition of the decedent is critical. There is not an opportunity to cross-examine him, of course, now, so all of the safeguards of the hearsay rule are intended to narrow the purposes of evidence and wasn't deposed for purposes of this case. In the numerous other situations, there has not been a --

THE COURT: Was the State present during the entire deposition taken?

MR. WEIGEL: I presume there was a representative present.

MR. GOLDFEIN: I presume there was a representative of the Attorney General's Office at each of those depositions. It was not with regard to this case. The focus of those depositions was other than the issues involved in this case. This is an evaluation of the actions of the State officials which have been presented in the initial phase of this case and it goes too far afield.

What I am suggesting would be a proffer of those portions of the particular depositions as to which we could make particular objections. I think the record would be in far better shape, the burden with eight or nine volumes in which you get off to what are clearly irrelevancies as to the issues in this case.

THE COURT: I think a long, long time ago, I don't whether it was ever formalized in an order, but there was a discussion about Jacob Kraft and the fact that he had some intimate personal knowledge of the Meadowlands scene through his association with the Mosquito Commission for many, many years and I was also informed that he was aged and I believe I concurred with Mr. Weigel in the suggestion that his knowledge ought to be memorialized in some form or another, anticipating a suit someday in which this knowledge of his might have some bearing on the case and indeed that is why I went down to see him on one of those dates, November 11, 1974, so I could have more than the cold typewritten word in order to evaluate his credibility and his general ability to testify and I made notes on what I observed that date, which is my recollection.

Now, Rule 63:3, Rules of Evidence, that does provide for just what

Mr. Weigel contemplates doing and I am not going to read it, I am going to rely on my memory, I know if there is testimony taken in the form of a deposition of a person it can be taken deliberately to be taken de bene ese, looking forward to a trial or indeed even if a deposition was taken at one time as part of discovery, not with the idea of offering the deposition or written interrogatories into evidence and that person either becomes unavailable or dies, as is the case with Jacob Kraft, it can be offered into evidence subject to the general rules of evidence.

Now, that brings us to this point, Mr. Weigel, Mr. Goldfein says, "All right, here are seven volumes of depositions, what relevancy do they have to the issues in this case, this case being primarily a challenge to an action of an administrative agency in promulgating maps?"

Can you give us a general overall proffer?

MR. WEIGEL: Yes, I can, your Honor. I guess I should have done that initially.

Our experts, Dr. Barghoorn and Dr. Reimold will testify based upon matters on the total reading of the Kraft deposition, on the work of the Army Corps of Engineers in the removal of large amounts of sediment of the upper Newark Bay and the lower reaches of the Hackensack and Passaic Rivers, from the construction of the Berry's Creek canal, from the imposition of more than 126 miles of mosquito ditches; that over a period of approximately sixty years the physical scene of the Hackensack Meadows over north of Sawmill Creek, has been dramatically changed by the hand of man and they will rely also upon the only detailed botanical study that we know of this area and that is in his era that would know of this study of Harshberger and Burns in the year 1919 and that is one of the Exhibits listed here and their conclusion which they expressed to me, and it is in large measure based upon the great detail that Mr. Kraft gave with specific maps, and I want to point out in the record that we have included in our list of Exhibits, maps that were marked in those depositions. I believe I can pick those out. Those maps were used beginning with A-92, the 1916 drainage map of the Bergen County Mosquito Commission, that was referred to in the Kraft depositions of June 29, 1970 and July 6, 1973. A-93, the map of the Bergen County Mosquito Extermination Committee, referred to in the deposition of Kraft of August 17, 1973. A-94, the 1934 Key Map of Tidal Marshes in Bergen County, Bergen County Mosquito Extermination Commission Map, contained in the Kraft deposition of August 17, 1973. A-95 which is a 1935 map of tidal marshes in Bergen County prepared by the Bergen County Mosquito Commission, Section Two. That was in the Kraft deposition of August 17, 1973. A-96, the 1935 Map of Tidal Marshes in Bergen County, that is Bergen County

Mosquito Extermination Commission, Section Three Map, that was referred to in the Kraft deposition of August 17, 1973. A-97, a 1941 WPA Map of the East Rutherford Meadows. That is in the Kraft deposition of August 17, 1973. A-98 is Part One of the so-called Gray and White Map that was used in the Kraft deposition of June 29, 1970. All of these maps, by the way, your Honor, at least most of them, have markings that were made by Mr. Kraft and, in effect, his testimony becomes intelligible by reference to the maps and the markings that he made on those maps. He described in very vivid detail where he and his father fifty-five years ago were out with an eight hundred pound cutting machine with burrows that weighed nine hundred pounds apiece and they had two of them drawing across the Meadows, cutting salt hay and the botanical testimony will be in those areas that Mr. Kraft marked and where he and his father were cutting salt hay, that those areas were not then subject to daily tidal flow so that by tying in Kraft's reconstruction of that normal area which runs essentially from the Paterson Plank Road south down as far as Sawmill we hope and expect to be able to convince the Court that the scene of 1910, 1915 and 1920 is dramatically different from what that scene is today and the result of that difference no accounted for by any phenomena of nature, including relative sea rise, and we have testimony that will exclude that as a possibility,but rather is the result of all of the interventions of man that I mentioned and others which we are not able to quantify.

THE COURT: Keep this in mind, Mr. Weigel, this case is not the test of whether these maps are accurate or inaccurate at this time. I want to go back to the pretrial order. We have to continually do that. We are not trying that kind of a case and I am not suggesting that you are suggesting that we are, but if you go and look at the issues, I want you to tell me what Kraft's depositions have to do with the issues in this case.

MR. WEIGEL: I draw it out of the statute, your Honor.

THE COURT: I am not talking so much about what property ownership the State of New Jersey posesses at this time. I am primarily interested in those issues under B, were the maps published in accordance with the statute and more specifically did the State of New Jersey do the following things.

Now, if you are going to use the Kraft depositions and your experts to demonstrate that the State either deliberately or accidentally overlooked other sources of information before they promulgated the map, I would say the depositions are relevant to that extent, and if that is what you are going to do, fine, and I would think Mr. Goldfein might agree with me on that.

MR. GOLDFEIN: I would agree that portion of the deposition may be relevant.

THE COURT: I would not say all of them.

What is the harm of letting all of them in and at the end of the case cull out -- many times irrelevant testimony creeps into a case. We don't have a jury trying this case.

MR. GOLDFEIN: I think in order for me to adequately cross-examine the experts we are going to be asked an opinion based on these depositions, that the Court is entitled to know the relevant portions of those depositions that those witnesses are being asked to testify from. I think if we are going to be put to going through all seven depositions and saying did you consider this and that, we are going to be dealing with a normal amount of irrelevancy and a waste of the Court's time.

MR. WEIGEL: The statutues clearly provide that one of the State's obligations is to consider the historical scene, that is a statutory mandate and this part of my case is directed right there.

My position is I long ago identified Mr. Kraft during his lifetime when he was able to elucidate fully to any questions that the State might have had. I alerted the State to the fact that here was man who possessed unique knowledge. I knew of no one, no one has identified to me over the years one other human being who possessed as much knowledge drawn from being on the scene in the critical areas we are talking about in this tidelands matter, and I believe I am the only person who years back tried to preserve his testimony for use against just exactly where we are today and I represent to the Court that the Court's recollection is accurate, that years ago we discussed the problem of Mr. Kraft and the Court indicated and I believe there is an existing order that his testimony could be preserved for use not only in the monster case but for any other case any place in the State where relevant knowledge that was possessed by Kraft or others on the physical condition of that Meadow in the historical past could be used and I asked the Court because I think it is an absolutely essential part of this case, that this record in its entirety go in. The State was well-aware, and when I read the depositions over --

THE COURT: That is not the problem, Mr. Weigel. I am inclined to let them come in now, but I think in deference to the Court and to yourself and to your adversaries, you ought to key them in to some extent as to what portions of those depositions you are really going to rely on. You are not going to rely on every single page, I am sure.

MR. WEIGEL: The great difficulty with me agreeing to that, your Honor, when I picked them up recently to read through them, I had the intention of trying to cut passages out and say that this passage is what I relied on and the difficulty is, and I am sure the Court can see it by reading no more fifteen or twenty pages of any volume, the question because it was done in a chronological fashion, I tried to take this man back to his earliest recollections as a child. I tried to move him chronologically from the earliest recollections right up through manhood. I had him identify as to specific areas those areas, what he and his father did, cutting bean poles, banana hay, whatever, and then how he hunted muskrat. He had a very detailed recollection of the bird life, kinds of birds that were there and where they built their nests and all of this testimony --

THE COURT: How many pages are we talking about?

MR. WEIGEL: We are talking about -- we did not bring the volumes in, but I would estimate that in those six volumes, your Honor, maybe four hundred pages or fewer of testimony.

THE COURT: Well, number one, I want to avoid having to have them read into the record. I think that is a waste of time.

What can you do to accommodate Mr. Goldfein?

MR. WEIGEL: What can I do, your Honor?

THE COURT: As far as giving him some preparation.

MR. WEIGEL: What can I do, your Honor? What I can do is to tell him and I will be glad to do it in written form that, number one, it is very important to our experts to know what vegetation was growing in what area. The Kraft deposition is full of indications of what kind of vegetation was growing in what area.

What we did, your Honor, was we took samples of about ten grasses. When Mr. Vail was the Deputy Attorney General in charge of this matter, he took a sample of the grass and I took a sample of the grass. For instance, Kraft would use not the scientific name for it, he would call it banana grass or three square or blueband. We got samples of the grass, I sent it up to Harvard University and it was analyzed by people and Dr. Barghoorn will give the scientific name to the grass. I can tie Kraft's popular name to the scientific name. The State had the same opportunity.

I was with Mr. Vail. That day we did it together, dug it up in the Meadows. I put some of it in a baggie and Mr. Vail put some of it in a baggie. I understand the State's samples, some of it went to Rutgers. Confirmation of the same scientific names that Dr. Barghoorn derived with the scientific names that the State university derived so that we will have no problem of taking Kraft's salt hay or three square or whatever, and tying it into what kind of grass it really is and there is no problem either in identifying where he cut the grass that he identifies or where he saw the grass because the deposition and the maps that I have referred to will clearly indicate where that was done.

Beyond the question of the

vegetation, your Honor, there is also the muskrat trapping. This man trapped musk-rat throughtout this greater Meadow area over much of his lifetime from the time he was an early boy and he describes in vivid detail where he was, what grew, how the muskrats used the vegetation that was growing to build their nests and things of that kind. Things of that kind the botanical people can interpret. Also the birds, places where the birds had their nests. That also will be part of the testimony.

The physical things that we can document such as the construction of the Berry's Creek canal, that I have as one of the Exhibits, the Act of Congress in 1911 which authorized the construction. We were never able to precisely pin down and commence with a completion date with construction, but we can show through some of the State's own records that that canal was constructed to avoid the low level railroad bridge and it was a bar type thing that was needed because there were apparently chemical factories up Berry's Creek and they needed to get shipping up there to get chemicals out.

We hope to tie that in in that deposition.

We have records of the Bergen County Mosquito Commission that show by 1922 there were over 166 miles of mosquito ditching in that. That had the effect of dewatering the Meadow and causing what they call autocompaction, reducing the level of the Meadow from what that Meadow would otherwise be.

We have the records of the State of New Jersey Harbor Commission which say -- this is all of the material that is going to be used.

THE COURT: We are talking about Kraft's deposition.

MR. WEIGEL: Kraft tries to identify when the canal was constructed because he was alive at that time. He identifies when the dike was put up in the Kingsland Creek area. He identifies because he was the man who supervised it when the Mosquito Commission ditches were dug and what the effects of digging those ditches was in terms of effect of lowering the depth of the Meadows.

His testimony relates to fires which occurred across the Meadowlands and what the effect of those were on vegetation. Apparently persistent fires getting right down in the peat, burning for months and months where they could not get the fires out and we tried to identify areas where those kinds of problems were.

He also testified as to the farmers up on the sides of the hill.

THE COURT: I am going to interrupt you. I will have to have to read those. I am going to provisionally permit them into evidence. I am going to go over them. I think you have to do something likewise, Mr. Goldfein, but by the end of the case I will either hear you on it or on my own motion say what I am going to exclude from what is in the case.

MR. GOLDFEIN: I think you have allowed Mr. Weigel by his filibuster to talk you out of his having to give you a proffer, which portions of those depositions, which keys he is going to ask the witnesses about and you deferred to the end of the case any opportunity for us to know which witnesses, which portions of those depositions, they are going to rely on.

THE COURT: I have to hear a special motion now.

(There is a short recess.)

THE COURT: All right.

You see, Mr. Weigel, I am concerned about fairness to the State in this respect, were it not for the fact that Jacob Kraft were deceased, he would undoubtedly be testifying, Mr. Goldfein would be listening and making notes. To hand him six or eight volumes like this without cluing him in on what he should focus his attention to is a little unfair. I know you are trying to accommodate him too. Have you thought about how you can work this out?

MR. WEIGEL: I will be glad to send a letter to him which will expand on what he called my filibuster. We are going to be here a long time together. When someone asks for a proffer and you try you darndest to give it him and it is called a filibuster -- I will write the letter to him and I will try to identify pages in the transcripts and the maps are up here in the files so those are one of a kind. I have no idea how I am to help him, but I have no objection if he wants to borrow those and take them out of the Court House.

THE COURT: When in the context of your case could you expect your experts to testify on the Kraft depositions?

MR. WEIGEL: I want to get into that also.

I have been told by one of Mr. Goldfein's assistants that Dr. Anderson was not available when I had requested him on May 3rd, but that Dr. Anderson is available on May 10th which is a Monday.

Do you know whether or not that is correct information?

MR. GOLDFEIN: I understand he has examinations of the week of the 3rd of May. He can be here any time after that.

MR. WEIGEL: Then my plan would be to have Dr. Anderson testify on May the 10th and then to put our two witnesses, Dr. Barghoor and Dr. Reimold as soon as we finish the cross-examination of Dr. Anderson, and I have asked Dr. Reimold and Dr. Barghoorn to commit to being here in New Jersey for Monday, the 10th, Tuesday, the 11th, and Wednesday, the 13th, expecting that there will be lengthy cross-examination of Dr. Anderson where both Dr. Barghoorn and Dr. Reimold will want to be present and I will ask the State so that we don't get into any problem if they want to have Dr. Anderson in Court when Dr. Reimold and Barghoorn are testifying, that they also clear his schedules so he can be available on the 10th.

THE COURT: You people work together on that.

I have a letter from Mr. Porro which I received this morning about scheduling matters and I do want to finish this before the summer recess.

You fellows have to understand there will be interruptions such as I had this morning. I cannot avoid that. I want you to diligently apply yourselves on this case, and I think you have to try to get this over with at then end of June. If I have to go to four days a week, I will, or five days a week, I will. That may confront you sooner or later, going to five days a week, and I will just have to delegate some of my responsibilities to other judges. I do not want to do that if I can possibly avoid it.

MR. WEIGEL: Just in terms of scheduling, it has been very difficult, as I am sure the Court can appreciate, to take the witnesses and the order in which I may want to present them, sometimes conflicts with the State having its own people who want to be present while certain people are testifying, available. I was going to suggest to the Court this -- and I mentioned this to Mr. Harris last week -- that on Wednesday of this week, I would be prepared to have Mr. Walter Sprouls who is the president of New Jersey Realty Title Insurance Company and Mr. John McDermott who is the State legal counsel for Commonwealth Land Title as witnesses. Next week, that would be the week of the 3rd, I would like to conduct the cross-examination of Dr. Feinberg which will be extensive and Mr. Yunghans which would not be as lengthy and I was allowing the week of the 3rd to cover cross-examination of Dr. Feinberg and Mr. Yunghans.

Then on the week of the 10th, starting out with Dr. Anderson, and we had originally indicated to the Court that we might not have Dr. Anderson up first to testify, but when we brought Dr. Reimold and Dr. Barghoorn together, they strongly urged me that in order for them to properly present their testimony, they need further explanation of certain items, and here while we are on the record, I would make a request just to allow the State as much time as possible, I understand that the work of Dr. Anderson was checked both in Tuckerton and up in the Greater Hackensack Area. I am led to believe that the checking in the Hackensack area was by Dr. Jack McCormick, and I would formally ask that this report be made available. I understand that it is about one hundred some odd pages. Apparently it was a report done for the Hackensack Meadowlands Commission, since the date appears from the Exhibit list, there is a pretty good relationship in terms of supplying Commission data, I would ask that that request be made through the Commission, if that is where it is coming from.

Secondly, I would ask that we be given copies of the work that was done not by the NOS but by others to confirm the work that was done down at the Tuckerton Project hearing.

THE COURT: I want cooperation, but if you want to be sure you have those here, it might be, under the Rules, better to make a demand. They do not have any control over the HMDC, but don't count on that completely.

MR. WEIGEL: I was trying to give maximum alertness. I will certainly formalize it.

There are some references in Mr. Yunghans' testimony which I will point out to him which he indicates certain documents which are not part of the record and I will point out to Mr. Yunghans where that testimony is so he can provide the documents.

MR. GOLDFEIN: May I be heard, your Honor?

THE COURT: Are there special plans for Monday, May 3rd?

MR. WEIGEL: That would be the beginning of the week in which I would cross-examine.

THE COURT: If he went to the 4th, 5th and 6th, there is a possibility I may not be able to hear you on the 3rd.

It is only a possibility.

MR. WEIGEL: I added a few other matters.

MR. GOLDFEIN: May I be heard on this so far?

THE COURT: Yes.

MR. GOLDFEIN: First, not necessarily in the form of an apology, it is better off the record, Senator Allan was referred to as the distinguished junion senator from Alabama. He was quoted as saying, "What's wrong with filibusters, there are only one hundred of us who know how to do it."

The sequence of the case by Mr. Weigel's schedule, getting back to that which he opposed the first day we came in here, there has not been as yet anything offered to sustain the burden on the Appellants as to the impropriety in the administrative action of the State which is the issue before the Appellate Division and we were concerned with the cart being before the horse and to now conduct cross-examination prior to the introduction of any kind of a case, that there was any impropriety at all, it seems to me that is the cart before the horse problem that we were concerned about and I ask the Court to evaluate the scheduling request in that light.

We still have that continuing concern. We have had witnesses come forward and say, "You did something wrong."

Now, today is beyond the period as to which there was an order to show cause for this Court and as to which an agreement was worked out -- Mr. Porro is not here -- that we would have a report from a number of people, including Dr. Reimold and we never have been furnished with anything from him. I have to take that up with Mr. Porro, but Mr. Weigel stated it is his witness as well. Perhaps I can, to a limited degree, say now we are going to have this situation where Dr. Reimold who, aside from a list of publications appearing on the list of Exhibits marked for identification today, which we can check, we don't have a word from him as to what he thinks is wrong. I think he is a relatively new witness. He is someone who came on and who Mr. Weigel started dealing with very recently so perhaps he hasn't received his reports until recently. We have not received a word. We are going to have to have Dr. Reimold sitting here, listening, reading transcripts of two years of depositions, I might add, that have gone on in the case and hearing further cross-examination of the State's witnesses, and then he is going to testify without the benefit of our having any pre-indication of what he is going to say. I submit that that is the cart before the horse, putting us in an entirely unfair position. Perhaps it could be remedied by his not testifying until we have had his report for some reasonable period and it can be remedied by getting a report at the earliest possible moment, but it is a pattern of not only does the State have to go forward in the first instance and establish on an administrative record, but now that the administrative record is going to be cross-examined and questioned before there is any case entered.

THE COURT: Keep this in mind, that if the State in promulgating its maps when they have the public hearings, if that had been conducted the way it should have been, there would have been an opportunity to cross-examine who got up and made statements. That is the way an administrative record is made. I don't know of any rule of law that says that an interested party, one who is interested in an administrative ruling, cannot ask questions of the people that are promulgating the rule or the decision and that is all we are doing here and I am sure the Appellate Division is going to be very interested in looking at a record that has more than just the testimony on direct of the State's witnesses. They want that tested in some way, I am sure.

MR. GOLDFEIN: I am not arguing that the State's witnesses cannot be cross-examined, but the burden has shifted to the Appellants and yet it is the State's witnesses who are being asked to now, on some cross-examination, to present the Appellants' case.

THE COURT: Look, Mr. Goldfein, if the Appellants' whole case were to ride on cross-examination of the State's witnesses, I think you would think that would be a pretty weak case, and if you are right, so be it, let it be a weak case. I know there is something more than that that concerns me.

MR. GOLDFEIN: It certainly does.

THE COURT: And that is having some prior knowledge of what the Appellants' witnesses are going to say.

Now, how can we accommodate Mr. Goldfein on that, Mr. Weigel?

MR. GOLDFEIN: I am particularly concerned with Dr. Reimold. We examined Dr. Barghoorn previously and I am prepared to deal with that.

MR. WEIGEL: I tried to cover this one some weeks back and I think it is probably at least two months since I sent a letter to Mr. Goldfein advising him that I had taken a trip to Georgia and had met Dr. Reimold, just so you understand where we were. We had Dr. Feinberg taking an oath and I believe saying things that went considerably beyond the things that he said at depositions two year ago, so that, in effect, I faced a problem. I had to address myself to new State testimony so I went to Georgia, met this man and hired him on the spot, gave his name to Mr. Goldfein. I even suggested to Mr. Goldfein that we arrange to take his deposition because I said he would be a principal witness for us. Scheduling, or whatever, in the Attorney General's office and, I guess, budget was a problem and he did not have his deposition taken.

I had no formal report from him. I will call him this afternoon, however, and ask him, as maybe Miss Teleky knows -- through you, your Honor, can I ask Miss

Teleky, has Dr. Reimold indicated that he has a written report with not only conclusions, but with other material?

MISS TELEKY: Not to my knowledge.

MR. WEIGEL: I will call him this afternoon, your Honor, and ask him quickly. I know he cannot do it promptly. He was up here in my office last week. I had him up here for two days. I know what the man's conclusions are, I know how he arrives at them, but I will ask him to reduce that to written form.

MR. GOLDFEIN: I will be satisfied with that. What I am looking for-- I am really not looking for a document to wave under his nose and say, "Didn't you say that." I would like to have a document as to what he is going to say.

MR. WEIGEL: I would hope to have that ready for you by the end of the week.

THE COURT: Okay.

MR. WEIGEL: On the Kraft items, your Honor, I would ask formally if we could have them admitted, not only the Kraft depositions, but all of the items that are tied with it and those items would commence with A-92 and run through A-100.

The depositions are unintelligible in many instances without reference to the maps where Mr. Kraft in his hand marked areas in which he testified as to physical conditions.

THE COURT: All right. Over the lunch hour, let Mr. Goldfein study A-92 through 100 so that he could frame his suggestion or give his consent after some reasonable opportunity to study and you remind of it after we get back fmm lunch.

MR. WEIGEL: I have a similar problem with another witness, your Honor, that witness is Peter J. Gannon, who was the Chief of the Bureau of Navigation as it was then known which is the predecessor of the working arm of National Resource Council from 1949 to 1969 when he retired. Mr. Gannon tied approximately a year ago and the purpose for offering Mr. Gannon's testimony as it relates to the issues that I have raised in my request that went into the pretrial order in the form of issues related to the manner in which the State of New Jersey over the time period from the last century through to the middle 1960's administer its riparian policy.

Mr. Freeman who is in Court today starting working in 1922, he will give the Court the benefit of how that operation of the State was conducted from 1922 up until he retired in 1960, but Mr. Gannon was the Chief of the Bureau, a superior to Mr. Freeman, and Mr. Gannon as the top person in the Bureau from 1949 to 1969 testified in great detail about the State's administration of its riparian laws and policy during this time, and I represent to the Court that the impact of that in terms of its conclusion is that the State did not during this period of time ever assert claim to ownership under the Sovereign Ownership Doctrin to the interior meadowlands of this State.

THE COURT: You say you are offering that as a demonstration that the State did act arbitrarily and capriciously by not taking that into consideration when the promulgated these?

MR. WEIGEL: That's correct.

THE COURT: You were talking about A-173, 74 and 75. Is that correct?

MR.WEIGEL: There were three volumes, yes. Again, these were again and it is so noted in the beginning of the deposition, it was taken with the thought of preserving Mr. Gannon's testimony for use in the event anything occurred which would require that, and as I indicated, he died roughly a year ago so we are talking about using his deposition of April 22, 1972, which is A-173, his deposition of May 2, 1972, which is A-174 and his deposition of May 11, 1972, which is A-175.

THE COURT: Mr. Goldfein.

MR. GOLDFEIN: I had the good fortune of reading these depositions last night and their relevance is negligible in this case, they were taken subject to -- it was your order, your Honor, I believe it was in the so-called "monster case," you entered an order. In my reading of what Mr. Weigel and others said of the purpose of that order -- not in this case, but in a different case with different issues -- was that the intention was to preserve the testimony of people who knew something about a particular parcel and what the nature of the tidal history was. Mr. Gannon does not get into more than a discussion of one or two separate parcels on in the first day of three days of depositions, some lands in, I think, mostly in Hudson County, in the Jersey City area, and he does refer to some part of other parcels from time to time, and as Mr. Weigel indicates, it is a discussion of history of the office in which Mr. Gannon was employed over a period of time that he was employed there and his understanding of the way things went on before. None of it relates to the administrative action which is the subject of this case.

THE COURT: You may be right, I guess it is the only way I can test your argument, the only way to test your argument would be to read it myself.

MR. WEIGEL: Can I give you the background of this, your Honor?

THE COURT: Excuse me, one second, Mr. Weigel, regardless of what that order says that you said I made, that, of course, does not stop Mr. Weigel from introducing those in evidence, he would have to prove it.

MR. GOLDFEIN: I appreciate that, but this case is now being subjected to the discovery rules of a different case. This case is an Appellate Division case wherein we are asked to make very specific findings and recommendations to that Court and to burden that Court with things that are beyond relevance is -- I am trying to establish now, I guess, on the record, a request to you that in looking at this stuff, you read it with that kind of a jaundiced eye, it has nothing to do with mapping.

THE COURT: I will do that and my inclination -- I will hear you on it, Mr. Weigel -- but my inclination is to do what I did before, I provisionally admit them into evidence -- that is subject to a lot of things later on. In this instance, I intend to admit them provisionally into evidence and read them with that jaundiced eye, Mr. Goldfein.

MR. WEIGEL: I think the record ought to show the background of this.

On January 20, 1972, up before the New Jersey Supreme Court, I was arguing a portion of your order of September 8, 1971. Among other things, suppressed was the Grand White Map and I had cited in my brief the Manzell case out of California.

Very briefly, that case involved 19,000 homes built on land which the State through its subtidelands agency came in and asserted were subject of sovereign ownership claim. The California Supreme Court in the Manzell case said no, it would amount to a virtual fraud to have stood by and watch these people improve that land when you, the State of California, knew better than that, they were charged with the knowledge of where the true boundary line was between private and public lands, and the Chief Justice stopped me when I was arguing that. He said, "Mr. Weigel, do you have a fact situation in New Jersey where the State did not go out and assert claims in areas where people relied on that and did something?"

I said, "Your Honor, I am sure we can bring it up," and he said to me, "Go, do it."

That is in the transcript, and I will provide it to the Court. I have a copy of that full transcript. We made special arrangements to get it. It is the transcript that he has that famous comment about pick up your tent and go home, but in response to what the Chief Justice, in effect, suggested that the Court would like to hear, I went and got hold of Mr. Gannon whom I knew was the

Chief of the Bureau during this period of time and very shortly after this argument, I preserved his testimony with the thought that the order you entered was broad enough to preserve the testimony of anybody who had any kind of relevant information on this whole issue of State ownership claims, and he had very relevant knowledge because this man was the boss of the Bureau of Navigation prior to Sisselman, a man who knew better than anyone else how the Bureau of Navigation was administered, and I suggest when you read these transcripts, and they are not very lengthy, that you read them with that in mind.

THE COURT: Thank you.

MR. WEIGEL: I have one other matter before my witness which, I guess, will have to be after lunch.

THE COURT: See if we can dispose of something else.

MR. WEIGEL: The one matter I did hope to cover preliminarily is this question of Mr. Cravat's report.

Mr. Cravat was Chief of Photogrametry Section of the U.S. Coast and Geodetic Survey. He was a person who did some amount of work for the State and with the Attorney General who was then assigned to this matter, we entered into a form of agreement which is dated October 5, 1973, in which if there is any need to could be put into the record.

What I understood that that agreement involved, a copy of that agreement went to Mr. Yunghans and to Mr. Cravat, was that within the realm of that undertaking, we could get from Mr. Cravat a report, and we did. That report is marked in the list of Exhibits, it is A-208, and it is a report that was prepared in April, 1974, and was submitted to the State of New Jersey in April or May of 1974. For two years we did not hear any suggestion that there was anything improper about any portion of that report and I received a letter from Mr. Goldfein bearing a date of April 12, 1976, wherein he indicates that the State will seek to bar the introduction of substantial portions of that report, virtually all of it, I would take it, from his letter.

Mr. Cravat suffered a serious heart attack within a week of when I got the report from him. I spoke to him on the telephone about two weeks ago and he told me under his doctor's instructions he is no longer taking on any kind of outside work at all; that only once, and it had been fairly close to my phone call, had he ever ventured as far as Washington, D.C. and never been back to Rockville since the heart attack. In effect, he has not traveled at all and he said he would not be able to come up to New Jersey.

At that point, I suggested that we either take the deposition down in Maryland -- and I am willing to go to Maryland on a Thursday, Friday, Saturday and Sunday and have it taken, or that interrogatories be prepared and submitted.

I received, I believe, with Mr. Goldfein's letter or very shortly after I got his letter, I believe, four questions in which it was asked, I submit, of Mr. Cravat. I think we have two questions, one, and it will be offered after the interrogatories are answered, so I guess it really ought to be the second of the two questions.

The first question however, I think, is whether or not the interrogatories that I have received are full interrogatories in light of the fact that the Court may rule that the Cravat report in its entirety is allowed to go in. If the Court should feel, and I suggested this in my letter of April 16, 1976, sent Mr. Goldfein a copy of which I sent a copy to the Court also, if the Court feels for any reason that that agreement of October 5, 1973, limits my ability to use the entire report, I would ask that the Court consider Mr.Cravat to be the Court's witness and if the Court has any interrogatories that it would want to have Mr. Cravat answer, that the Court propound those and have them answered.

THE COURT: Do I have a copy of that agreement?

MR. GOLDFEIN: It was attached to my letter.

What I did was attach the copies of the pages from the deposition where the letter was apparently read into it. The letter is October 5 and I attached the pages of the October 16, 1973, depositions to it and, of course, I wasn't in the State's employ at the time, I was not party to the preparation of the agreement, but it speaks for itself and it speaks very clearly. It says that this fellow, Cravat, could be a witness with respect to the mechanics of photogrametry and including the following specific areas of inquiry, and it listed the mechanical kinds of things.

Mr. Weigel in his letter of the 16th does not dispute that, he simply says this is an important case and the State has a solemn duty to its citizens to have both the strengths and weaknesses of its map exposed. He knew in October of 1973 that Mr. Cravat was a person that he could use for a very, very limited purpose and it was only because the State was more than fair that it allowed its consultants authority to be used for that reason, but he has had two years to find somebody else and he has not and now he seeks to revoke his own agreement.

THE COURT: What generated that agreement?

MR. GOLDFEIN: I couldn't tell you that, perhaps Dr. Feingold could tell you.

THE COURT: It would seem you have a right to call him any time you want.

MR. WEIGEL: I will tell the Court what I thought this agreement meant.

What this agreement meant to me, your Honor, was that the State already had a person that they had used for a purpose. I had a fullright, if I wanted to -- say I never hired Mr. Cravat, I would have a full right to call Mr. Cravat and today I submit I have a full right if he is the State's witness to ask him what he thinks of what the State did. Beyond that, what I did here was made an arrangement to have Mr. Cravat available at my expense to go out to Minnesota, and he did, to listen to the testimony and take the tour around the Earth Satellite plant and then to comment to me and to report to me on what was done and how it was done.

In addition to that, I hired him at my expense to take him down to Earth Satellite Corporation in Washington, D.C., when we took the Earth Satellite depositions in 1973, and he was there during all of the Earth Satellite depositions, and, in effect, he heard how the Earth Satellite people concocted the so-called "botanical intermediate overlay," and one of the items that is referred to in here is number three, the preparation and the drafting of intermediate overlays.

Here is a man who worked with color infrared photography and his report indicates that he was a person who worked directly with the manufacturer, Eastman Kodak. He is very familiar with film, very familiar with what the film showed, and I submit all of his report is pertinent and if you want to review it in effect as a report on the aspects of the State case that they hired him for and consider it limited in terms of my case to the aspects that may be drawn out of this with Mr. Goldfein's reading of it, that is fine, but in any event, his full comments should be heard.

THE COURT: I will consider this after lunch. I may have some more questions to ask you after lunch.

(There is a luncheon recess.)

AFTERNOON SESSION

THE COURT: All right.

MR. WEIGEL: You indicated you had a few questions, your Honor, if not, I have a witness who is available.

THE COURT: I have not had a chance to read that.

MR. GOLDFEIN: All I want to say on this is Dr. Feinberg and

Mr. Yunghans are in Court and they can testify to an understanding of what the agreement meant and if the Court wants to hear from them, they are available. If you are going to reserve, it is not crucial that it be decided today.

THE COURT: You have a witness here? Do you think you can finish him today?

MR. WEIGEL: I hope so.

THE COURT: Let's do that.

MR. WEIGEL: Fred C. Freeman.

FRED C. FREEMAN, 7 Frederick Street, Toms River, New Jersey, sworn.

DIRECT EXAMINATION BY MR. WEIGEL:

Q Mr. Freeman, I am going to talk up. If you cannot hear me at all, you let me know. If you cannot hear a question, I will be glad to repeat it for you.

When were you born, Mr. Freeman?

A 1899.

Q Did you ever work for the State of New Jersey?

A I did.

Q When did you first start to

work for New Jersey?

A I believe that was 1924 to 1960.

Q Did you retire in 1960?

A 1960, yes.

Q During this period of time what did you do for the State of New Jersey?

A Well, the first few years I worked in general with the last, probably twenty-five, thirty years, I handled the riparian rights.

Q Do you recall what your official title was, if you had one? Did you have an official title?

A Yes, I was Office Engineer.

Q Were you Tony Scapatulo's immediate predecessor?

A That's right, yes.

Q In other words, when you left in 1960, Mr. Scapatulo took your job?

A That's right, he did, yes.

Q During the period of time that you worked for the State of New Jersey, did you handle riparian matters, generally?

A I did, yes.

Q Will you tell us where your office was and what kind of work you did generally?

A Well, we had an office in Newark, then it was moved to Trenton. At that time I had -- it was full charge of riparian rights.

Q When you say "riparian rights," are you talking about the State's ownership interest?

A That's true, yes, that's right.

Q Are you familiar with the Atlas Sheets that the State has?

A I am, yes.

MR. WEIGEL: Your Honor, if it is agreeable, these are large maps and I think it might be easy to put them on the table here to have Mr. Freeman get a view of them.

THE COURT: All right.

Q Can you walk down here, Mr. Freeman?

A Yes.

Q Mr. Freeman, I am going to show you a group of exhibits which have been marked for identification, A-33 through A-53, and will you take your time, and I will help you, I will go through these one at a time.

THE COURT: Who is Victor Dillon?

THE WITNESS: He was the

Director and Chief Engineer. He passed away about 1950 -- do you know when he passed away, was it 1950? -- yes, something like that.

THE COURT: Was he your boss?

THE WITNESS: Yes, he was at that time, yes.

THE COURT: All right.

Q Mr. Freeman, you looked at each and every one of the exhibits which have been marked for identification A-33 through A-53?

A That's right.

Q Would you tell us what those are?

A Those are the official Atlas Sheets used by the Riparian Commission, water, commerce and navigation are the successors, and those are the Atlas Sheets. They showed the riparian grants.

Q Was this the principal working record of the Department when you were there?

A That's right, it was.

Q You had not other record that you would describe as the principal working record of the Bureau other than this?

A On the main streams, like, say, the Hackensack River or other rivers or bays where we made our Atlas Sheets, those were the official sheets, but I don't recall if there were any other locations where we plotted our grants except on the Atlas Sheets because we had hundreds of Atlas Sheets that covered the whole State of New Jersey.

Q These sheets which we have identified as A-33 through A-53, those are only part of the Atlas Sheets?

A That's right.

Q I notice some of these sheets, for example, A-33, just by way of example, in Jersey City, some of them have a legend converted to a grant, 1895. In other words, how far back do these Atlas Sheets go, memorialized grants?

A Oh, the grants, they went back in the 1800's. Some people who took out a grant in 1800, the State may have converted that or at least may have taken a lease and we converted it into a grant at a later date.

Q Well, to your knowledge, does the State have these Atlas Sheets that purportedly memorialize every grant that was ever made?

A Yes, sir.

THE COURT: Maybe that is what you want.

Q Let's just take as an example A-33, Mr. Freeman, this indicates that this particular sheet was drawn in June of 1916.

A 1916, yes.

Q It also indicates in a block by the word "revised," various dates which started August of 1916, continuing 1917, August, 1919, January, 1924, February, 1924 and May 1924, what do those various dates indicate?

A I don't know what each date covers, but here's something here, you will notice, I think, there was an island, I believe it was an island out here and that have been one of the revisions. This is dated '29. It don't show that. What the revisions were, they were pierheads and bulkheads.

Q Let's say this was the original pierhead and bulkhead line, then they revised these lines, the government brought these lines into here (indicating), that may have been one of the revisions.

Let the record show that Mr. Freeman took his index finger and ran it from a point in the upper center portion of A-33 in a general southwesterly direction along an interrupted line that appears alongside of the words, "adopted by Riparian

Commission, April 25, 1912," running along that line down to a point which is opposite the words "Jersey City," and then in a general southeasterly direction down across the legend on the map and then he moved his finger interior of that line toward the land fall and generally following the same configuration where the words "pierhead line adopted by the Board of Commerce and Navigation, August 3, 1915," appear and then, "Bulkhead line adopted by the Board of Commerce and Navigation, August 3, 1915," appear.

Again, continuing the reference to A-33, there is on both sides of the Hackensack River, both in the Kearny-Hudson County side and in the Jersey City-Hudson County side, there is a solid line that appears and it starts up at the railroad tract where the words, "Price per foot, $25.00, $2,500.00," appear in the upper right-hand side of A-33, down along various names, George F. Ganz, Joseph T. Ryerson and Son, around past Hugo Berman, City of Jersey City, and then they come in with the body that is described as Muddy Creek, they come out along in a solid fashion uninterrupted out past the words "Jersey City," and then come back across and by the words Jersey City and continue down to the lower right-hand corner of the map and over on the Hudson County side.

MR. GOLDFEIN: Is this a question or is this Counsel's description of the map, for the record?

The map speaks for itself and I do not think it is necessary to read all of the entries from the map into the record. I object to the form of the question.

MR. WEIGEL: I understood from the Court's request in order for the record to indicate that those who read it, what we are talking about, that it would be a matter of convenience to be descriptive of the many, many lines that are on there.

THE COURT: What request was that?

MR. WEIGEL: My request is only to get into the record the line I am going to ask him a question about.

THE COURT: What I said before, the witness took his finger and was pointing to things on the map and saying something about it. I said the record will not indicate anything unless you show where his finger pointed.

MR. WEIGEL: I wanted to have the record indicate where my finger was running to.

THE COURT: My question is is this the beginning of a question?

MR. WEIGEL: It is the beginning of a question, the question being what was that line, what does it represent, and I described now the line that I am asking you about on the Jersey City side.

What is that line, if you know, this line here, Mr. Freeman?

A That is a high water line.

Q And on the Kearny-Hudson County side, picking up at a point below the Central Railroad of New Jersey, a solid line that runs down past the words "Austin McGregor," and then runs back into the tract that is described as Austin McGregor, comes back down here and runs to a point where the areas are American Splint Corporation and Austin McGregor and then continuing to the upper left-hand corner of that map.

What does that map indicate?

A That is also the mean high water line of the northerly side of the Hackensack River.

Q If I were to take and lay over each one of these sheets as I am willing to do, when we come to the solid line that runs across each one of these sheets, if I were to do them individually, what does that line on each and every one of these sheets represent?

A All those lines are mean high water lines.

Q When you say the mean high water line, what do you mean with respect to the State's ownership of the land?

A The mean high water line is where the mean tide, high tide every day would stop. That is the point where the hight tide would end.

Q Going back now to A-33, does A-33 depict various grants that were made by the State of New Jersey? This here is referred to as Exhibit A-33.

A These are the grants that we have. We sold the land, these are the grants that are plotted on the Atlas Sheet after we sold the land.

Q If I had one of those grants, would that grant be made to me with respect to th high water line?

A Certainly would.

Q With respect to each and every one of those grants that is plotted, are you talking about the high water line being that line that you have already identified?

A This line here is essentially the mean high water line. That had moved either one way or the other. You can see maybe -- here they have when this grant was made, they showed the --

THE COURT: Granted to Harold E. V. Shaw.

THE WITNESS: When this grant was made, the high water line was shown across here. You can see they have a line, this dotted line was the line of the grant, so that it might move them a little bit one way or the other.

MR. WEIGEL: Let the record show Mr. Freeman has been agreeing in his last response to the line that I previously described by words in the record on A-33.

THE COURT: Do you know how they established that line on the maps, these are Exhibits starting at line 33. Who drew that line?

THE WITNESS: This was known as the mean high water. This was taken as another notch.

THE COURT: Do you know which map that was?

THE WITNESS: No, we had old maps that were not to scale, then when we made up these maps, these are pretty close to the scale. You can see here where the grants were plotted.

MR. WEIGEL: That has not previously been marked. Would you come down here and mark it?

(The witness complies.)

THE COURT: Mr. Freeman, were the maps that we are about to mark inside this big red folder, were they used in preparation of A-33 through A-53?

THE WITNESS: These are the original of what we call the original Atlas Sheets. We used these maps to plot the grant on before we had those.

(The maps above-referred to were received and marked as Exhibit A-242 for identification.)

Q Mr. Freeman, I ask you to take a look at the various items that are inside this large reddish brown folder, come over on this side of the table if you would.

Would you take a look at each one of these items as I turn and first of all there appears to be a tracing which has got a number one.

Who prepared that tracing?

A I don't know anything about that tracing.

Q Do you recognize it?

A I don't recall that too well. That was probably --

Q If you don't recall, that is your best answer, that is all we need.

A I don't recall why we made that map at all.

Q Do you recognize it though?

A I know we had one like this. It was in the files, yes.

Q Setting aside that tracing and starting, I guess, there in reverse order with number eleven, take a look at each one of them, if you would.

(The witness complies.)

MR. WEIGEL: Let the record show

that Mr. Freeman has looked at a series of maps which bear numbers starting with the number two and running sequentially through the number ten.

What are these maps that you have just looked at?

A I don't know about two, but maps three to ten were the original Atlas Sheets before these maps were made.

MR. WEIGEL: Let the record show when he says before these maps, he's referring to A-33 through A-53. So as I understand your testimony, Mr. Freeman, you are telling us that maps three through ten in this folder which is A-242, these were maps that existed prior to these Atlas Sheets, samples of which are in A-33 through A-53?

THE COURT: I think it would be helpful if you could, through the witness, indicate the earliest and the latest dates of the original maps and then the earliest and latest of A-33 through A-53 so I get some chronological setting in my mind.

Q Were these so-called original

maps, were they used when you first went to work in the Bureau?

THE COURT: I thought you could do it just by looking at the dates.

MR. WEIGEL: These don't have dates, your Honor.

THE COURT: Some places they do.

THE WITNESS: These maps were used prior to the time I went with the State of New Jersey.

MR. WEIGEL: When he says these, he's referring to A-242. I don't see dates on it, your Honor.

THE COURT: Before you go any further, I would have to ask you a question that would be important for me and to any Court reviewing this.

These maps, these Exhibits speak for themselves, I understand that.

What do you say these maps demonstrate with respect to the issues in this case?

MR. WEIGEL: I would offer through Mr. Freeman's testimony to show that during the nearly forty years of his working career, during roughly the period from the 1920's to the 1960's that the riparian sheets and these maps which predate the riparian sheets were principal working drawings of the Bureau of Navigation, the so-called "Tideland Agent" of the State and with respect to these original Atlas Sheets, that they, in effect, depict the Passaic River, the Hackensack River and other water courses of the State and that these original Atlas Sheets form the basis upon which the State of New Jersey checked all of the applications for riparian grants or leases during the time these documents were used.

THE COURT: I understand that, but so what, what do they prove with respect to the issues in this case?

MR. WEIGEL: I did not develop it yet, but the blue line is the mean high water.

THE COURT: What about it, just give me an offer of proof as to what you would want me to conclude from this.

MR. WEIGEL: What I want you to

conclude is that the blue line is the mean high water line and when we get the State's Exhibits out here, their claims fall someplace else.

THE COURT: Would you also say these Exhibits, A-33 through 53 and A-242, if they demonstrated one important thing, what would it be?

MR. WEIGEL: They demonstrate that during the time that this man is able to testify to, the State asserted its sovereign ownership claims in a different fashion than the State asserts them today.

THE COURT: What is the big difference, I am taking this as an offer of proof now?

MR. WEIGEL: The big difference is never during this man's working career with the State of New Jersey and he is in a position to know what the State is doing in its sovereign ownership claims, never asserted a claim for the interior Meadowlands and beyond that, your Honor, that the entire record of the administration of the State's riparian policy from the inception of the Riparian Commission of 1869 until after the Sisselman case with respect to these working documents was that every conveyance which was made, and I will develop this through Mr. Freeman's testimony, every conveyance, every lease, was developed through the mean high water line as he testified to.

THE COURT: I will hear you through a proffer on the questions through the witness. I do not recollect this, maybe you two can refresh my recollection, were Exhibits A-33 through 53 and Exhibit 242, were they among the documents that were considered by the State in promulgating the maps?

MR. WEIGEL: They were not, despite the fact that A-33 through A-53 were and are marked already in the Gannon deposition and Mr. Freeman's deposition which was taken on May 11, 1972, and which specifically on page 92 -- and the Exhibit marking is DA-33A for identification, involved this folder and all of these same Exhibits and this description on this transcript is that it was a large folder containing one tracing and ten original riparian maps, so that the State from May 11, 1972, was well-aware of the fact that we considered these to be important documents.

THE COURT: I just wanted your proffer so we know where we are going. I don't take this as proof.

MR. GOLDFEIN: I would call the Court's attention to the record as to the specific testimony of the State's witnesses, as to what was and was not considered. I think Mr. Weigel's characterization of it is, it is not my recollection, but I don't have the transcripts here, I am not going to argue the point, I observed that.

MR. WEIGEL: I will point out to the State where Mr. Yunghans and Feinberg were asked the questions and I have their answers. They exclude use of these kinds of information to produce anything that the State did anything with, in terms of its --

THE COURT: Are you talking about the depositions or the record in this trial?

MR. WEIGEL: I am talking about the deposition, that is not before you. We have not had a chance to cross-examine them. I will point the portion of their testimony out. If they want to change their testimony, we will have a chance to find that out.

MR. GOLDFEIN: I will enter an objection to the relevance of Mr. Freeman's testimony with regard to the issues in this case in that his testimony about what was done in the handling of riparian grants through many years of the State's service is not in issue before this Court in making a record to the Appellate Division to decide whether there was appropriate State action, mapping the State's Tidelands interest in the 1970's. What it come to, it seems to me, Counsel's argument, is that the line was drawn in the wrong place and he is saying areas were claimed that should not have been claimed, but not whether the line was drawn reasonably which after all is -- what he is arguing is the secondary issue is no, this land is mine, not yours. That is the issue that is reserved.

THE COURT: I don't know if I understand you, Mr. Goldfein. One of the issues in this case is did the State act arbitrarily, capriciously and unreasonably in preparing the maps in now setting what the State claims. That is an issue. I take it that Mr. Weigel is offering the testimony of Mr. Freeman and using him on these Exhibits to demonstrate the arbitrariness.

By having followed a fixed policy, he says, for a number of years, not to claim interior Meadowlands, and I think we ought to straighten that out for the record, what we mean by the phrase "interior Meadowland," because obviously at least the way I understand the term, the State now does claim interior Meadowlands and the Appellants are saying this is a dramatic reversal of form after what they have been doing for years.

The State can come back and say we decided this is the right way despite whatever we did in the past. We were told to catalogue our claims and we went out and did it.

MR. WEIGEL: This testimony forms the basis for two principal legal arguments that we are advancing in this record that, number one, there should be an estoppel applied against the State for an assertion of the claims and the second position which we assert, and this is again something which will have to be briefed, this reversal of the State's position in law constitutes a taking of property by judicial decree without compensation in violation of the constitution.

THE COURT: Not by judicial decree.

MR. WEIGEL: By O'Neill, if that is to be conceived.

It is my understanding of the law of this country, based upon the

Washington case that I cited a number of times in the brief, the State neither through its Legislature or through its Courts can take and reverse, in effect, a whole history of its handling of matters and, in effect, assert claims to what it had acknowledged over historical time as the ownership of private lands and cannot do that either by Court decision, O'Neill, or can it do it by passing a statute, be it the Hackensack Meadowlands statute or whatever.

THE COURT: I have to rule on Mr. Goldfein's motion as far as barring this testimony or these exhibits on grounds of relevancy. I overrule the objection for reasons heretofore stated.

The other portion of the objection, I think will have to await the trial -- that is, whether or not the State did consider these Exhibits when promulgating the new maps. I am not going to rule on that. It is premature. all right.

DIRECT EXAMINATION BY MR. WEIGEL CONTINUED:

Q When you were working for the State of New Jersey, did you ever have reference to these so-called "original Atlas Sheets"?

A In what way?

Q In any way.

A Not any more than these Atlas Sheets. These were plotted, the grants on there, that is as far as we went.

Q Say I applied to the State of New Jersey for a conveyance of some State lands and my application involved a settlement along what is shown as the Passaic River, on what is marked in red crayon in the lower-right hand corner as number 3 of A-242, what would you do if I filed that kind of application?

A If you file an application along the frontage in here, we will show your grant the same as we show the grants on here.

Q Now, you have referred to a couple of grants. One is a grant to Julius Drager, July 24, 1895, and the other a grant to Williams and Andress Company, July 30, 1896, and a grant to Cooper Lumber Company, February 18, 1924, Liber E-1 page 357.

Now, with respect to those grants there

is something that is in red. What is the red that is alongside of the word "grant." What does that depict?

A The grant which we convey, these dates, you see here.

Q What does the blue line show?

A That represents the high water line of the Passaic River.

Q When you referred to number three, and if you referred to any of these others, number four, number five, number six, number seven, number eight, nine or ten, what does the blue line stand for?

A The mean high water line of the Passaic River or whatever rivers you have, the mean high water line of the Passaic River.

Q And you used that line with respect to the grants that were given and described in that red marked area?

A This line here, when these grants here were made before 1916, they were made --

Q What happened in 1916?

A Took these grants off here and put them off here.

Q Let the record show he is

talking about taking grants off A-242 and put them over on the Riparian Sheets, copies of which, but not a full set of which is represented by A-33 through A-53.

Why don't you resume your seat up there.

(The witness complies.)

MR. WEIGEL: Your Honor, I am willing to have excluded what is marked number two and also the tracing that has the number one on it.

THE COURT: All right. Very well. A-242 will consist of how many sheets?

MR. WEIGEL: Nine, starting with red number two and running through red number ten. I would offer A-242, your Honor.

THE COURT: Where were these sheets obtained from?

MR. WEIGEL: The custody in the Court this morning was from Mr. Scapatulo, he was here and I am willing to him on the stand if need be to show their custom.

MR. GOLDFEIN: That is not

necessary, but the purpose for them being offered in evidence, they are being offered as to this witness' recollection that he used such sheets to do this work, I have no problem with that.

THE COURT: I think they are being offered to show what the State considered its claims to be limited to and that is to a mean high water line that excludes interior lands. I think that is the primary purpose.

MR. GOLDFEIN: This witness has testified he did not put the lines there. He does not know how the line got there and he does not know where the line came from. I think for that purpose, it can only be, perhaps, his understanding of what he sees there, and I think what I am calling to the Court's attention is that certainly there has not been any offering by the Appellants through this witness that the blue line indicated there is the line he knows to be the line.

THE COURT: I think he said that.

What I have before me, so far, is this: This man says he was in charge of Riparian grants from about 1924 to 1960 or worked intimately with it part of the time and he has looked at these sheets and says that he used these sheets, these Exhibits when theywere making these grants. He says further that the sheets have lines on them. One of the lines is a blue line from the old sheets that is Exhibit number A-242. The other lines are described on Exhibits A-33 through 53 as sort of a solid line and you can see where the grants run to. He said those are the lines at mean high water and he says -- I do not know if he has gotten -- you better pick up right there, he has not said that yet.

MR. WEIGEL: I will go through the entire direct case with Mr. Freeman and then make my offer at the end of his testimony on all of the Exhibits.

THE COURT: Will you please.

DIRECT EXAMINATION BY MR. WEIGEL CONTINUED:

Q What I want to do with your

testimony now, Mr. Freeman, I want to ask you to assume that we are talking about the processing of an application for a riparian grant or lease during the time that you worked down in the Navigation Bureau. You got applications from all over the State, didn't you?

A That's right, all over.

Q So that you had Statewide responsibility, didn't you?

A That's right.

Q If you got an application in, was it on a form that you supplied?

A Oh, yes.

Q With that form, was there something attached to it?

A Was what attached to it?

Q Attached, a survey.

A Oh, that's right, that's true, yes.

Q Who prepared the survey that was attached?

A Their engineer.

Q In other words, if I were the applicant, my engineer would present a survey?

A That's right.

Q Would he show a mean high water,

my surveyor?

A He did.

Q What would you do when you got that survey showing a mean high water line?

A We checked the mean high water line with their Atlas Sheet and they were substantially correct and if we thought it was all right, we would use that. If there was any question, we would go out in the field and check it.

Q How did you check it if you went in the field?

A Took their survey, went out on the ground and looked at it.

Q Did you ever, yourself, go out in the field and look?

A I did.

Q Did you do it all over the State of New Jersey?

A All over the State, yes.

Q Was that a normal part of your functioning as one of the people in that Bureau?

A That was, yes.

Q When you got out in the field and you still had some kind of questions, did you ever put in tide gauges?

A We did at times, yes.

Q When would you put tide gauges in?

A When there was some doubt as to the high water line.

Q So that the State of New Jersey would put gauges in and collect data?

A That's right.

Q What did you do with the data you collected?

A I don't know what they did with it, but they checked it over and in order to determine the point of high water.

Q So that finally after it had been checked, a grant or lease was issued?

A That's right, if it was checked with the survey that was supplied with the application.

Q During the whole time that you were with the Bureau, do you ever recall even one instance where this kind of procedure was not followed, where you would in effect, go out and check it or at least look at your Atlas Sheets to make sure the mean high water shown by the applicant's surveyor corresponded to what you showed on your Atlas Sheets?

A If the high water line, if there was any doubt, we went out in the field and there are times when the shoreline was possibly -- there was not much difference than the Atlas Sheet. We went out to determine whether we had the true mean high water line.

Q So that you would reconcile it somehow or not process the application I assume?

A That's true, yes.

Q So you would reconcile my surveyor's mean high water line against your Atlas Sheet?

A That's right.

Q Would you ever issue a grant or a lease unless you were satisfied that my surveyor had placed that mean high water line in the right place?

A We would not, no.

Q So that I can take it and look on any riparian grant or any riparian lease issued by the State of New Jersey and that mean high water line showing on there will be the mean high water line as the State understood it on the date on which that application was processed and the grant was issued?

A That is right, yes.

Q What does mean high water mean to you?

A Mean high water line is the average mean high water line as it rises each day and we are not talking about flood tides, we are talking about normal tide as it reaches its height every day.

Q And what is your background with respect to engineering, are you practically trained in engineering?

A Well, I took engineering at Pratt Institute, but most of my time was spent with the State of New Jersey and when you work with riparian rights, that comes from experience.

Q Did you ever when you were out in the field checking find people on State land that did not belong there?

A Every what?

Q Did you ever find people on State land that did not belong there?

A Absolutely.

Q What did you do when something like that happened, you saw somebody on State land?

A We'd write to them and send an application in order to take their riparian rights.

Q Was that done, did you send the applications out and get people to apply for grants or leases?

A That's right.

Q Say they didn't apply for a grant or lease, what happened to them?

A Well, in most cases we would try to go out and talk to them and if they were stubborn and it was an important case, very important, why we would turn it over to the Attorney General's office.

Q For a time when you were working for the State, didn't you go out every Friday and do this kind of work?

A After a while I found since I was handling the riparian rights, I found there were an enormous amount of people who had trespassed on State lands and I would take for, say, a period of maybe two months at a time and I would go out and check on these people, get the name and address, try to get them to take out the riparian rights. They were illegally occupying State lands.

Q Were you ever up in the Hackensack area?

A I was, yes.

Q You went out and inspected

the Hackensack?

A Yes.

Q Did you ever inspect in the Newark-Elizabeth area?

A Yes.

Q You inspected generally along the coastline of the State?

A That's right, yes.

Q Was this effort of the Navigation Bureau to check on unauthorized occupation of State lands, was that something that everybody in the office tried to cooperate with?

A No, this was a thing that would come up every once in a while. We did not have the help to check the illegal occupation. When you come down to it, there were thousands of people who occupied State lands and then we would cover what we possibly could, but we could not cover them all.

Q But when the other fellows that were in the office with you, when they were out there and they saw an unauthorized occupation of State land, would they do the same thing you did?

MR. GOLDFEIN: Objection.

A Sometimes.

THE COURT: What is the

relevancy of this?

MR. WEIGEL: I am going to get your Honor to the point where we show this unauthorized occupation referred to not interior Meadowlands but to the land interior to the blue Meadow lines and it is a solid line through A-33 to 53 and all the other Atlas Sheets of the State.

THE COURT: What was the last question you objected to?

MR. GOLDFEIN: The objection was to hearsay, your Honor, a series of leading questions.

THE COURT: If he is serious about the objection, I think it is well-taken unless you lay a proper foundation.

Q Was there a procedure within the Navigation Bureau for notifying people who were observed in an unauthorized occupation of State lands?

A We would obtain the names and addresses and then we'd mail them a letters and applications and so forth in order that they would make application for the riparian rights.

Q That was done by the Bureau as

opposed by you solely?

A I would not say -- I would write the letters.

Q Did anybody ever report to you that they had seen people in an unauthorized occupation of State land, would they have been out observing a piece of land?

A Well, sometimes if a neighbor didn't like the solid fill that we were making or something like that, they'd tell us about it.

Q So you had a little intelligence system, the neighbor might be the person to make the complaint?

A That's right.

Q You also had complaints made by other people in the Navigation Bureau besides you?

A That's right.

Q And you processed those as you told me?

A That's right.

Q With respect now to the blue line on the old Atlas Sheets and with respect to that solid line on those other sheets, where was this land of the State's that these people that were in unauthorized occupation of with respect to those lines?

A They were outside of the blue line or the solid black line shown as the mean high water line of the rivers.

Q In other words, they would be on the water side?

A On the water side of the line, of the high water line.

Q How would those kinds of unauthorized occupations come up? How would you know it was unauthorized?

A We could tell very easily because they may have a pier out there one hundred feet or we could see the original shoreline and we could see where they filled in beyond the original shoreline. There was a point there where the land would extend out into the water a number of feet, far enough to determine that that was beyond the original shoreline.

Q Were you a witness in the <u>Sisselman</u> case?

A I was, yes.

Q So that you know when that <u>Sisselman</u> case was heard?

A That's right.

Q Do you remember it being heard

up in this Courtroom?

A It was in Hackensack, but I don't remember where it was.

Q Do you remember the name of the Judge?

THE COURT: Look up behind you, does that look like him?

THE WITNESS: No.

Q Judge Leyden?

A Yes.

Q So you know when I say Sisselman case, you know about the time I am speaking?

A That's right.

Q Prior to that Sisselman case, during the whole period of time when you were with the Bureau of Navigation, did anybody ever tell you what you were doing was wrong in terms of the Governor, the Commissioner of the Department, any of the members of the Council, did they ever tell you what you were doing in that Department was wrong?

MR. GOLDFEIN: I object to this, I think it is highly irrelevant.

THE COURT: I will sustain the objection.

THE WITNESS: What we were doing was wrong?

THE COURT: You don't have to answer it. You do not have to answer it.

Q Did you meet with the people that were the Commissioners?

A Oh, yes.

Q How frequently did you meet with them?

A Once a month.

Q Did you help prepare the agenda?

A Yes, I did, yes.

Q You attended the meetings?

A Yes.

Q And you knew the Commissioners?

A Yes.

Q How did that Commission work in that time you were involved, did those men go out in the field?

A Once in a great while, yes.

Q How did they handle riparian applications?

A We would prepare the agenda and the maps and the deeds for the riparian rights and submit it to them at each meeting and they would approve the grants and sign the grants.

Q You functioned essentially as the staff functions, is that right, for the Commissioners?

A That's right.

Q And you prepared the legal description?

A Yes.

Q Did the Attorney General's office prepare legal descriptions as a matter of normal routine?

A Not normally, no.

Q Would they ever prepare descriptions?

A I believe once in a great while they would prepare a description.

Q But part of your staff function was even to prepare a legal description that went into the State --

A We, ourselves, prepared the legal descriptions.

Q When you went to these Council meetings every month, did you report on things like what you saw when you went out and saw these unauthorized occupations?

A No, we did not, no.

Q How did you handle that?

A Those were handled by the staff and by the office, and as I said before, we wrote letters and sent applications for them.

Q Say someone in an unauthorized occupation of State lands filled out a grant application, that would go to the Council, would it not?

A We would make up the grant the same as the others and submit it to the Council, yes.

MR. WEIGEL: Your Honor, there is, I represent, and it has been previously identified, what is called a price book. Mr. Scapatulo told me that a search conducted since I requested it last week has not turned it up, but apparently still is attempting to locate the price book and I would like to have that ultimately admitted, but I wanted to ask Mr. Freeman some questions relating to the price book.

MR. GOLDFEIN: No objection.

Q Are you familiar with what is called the price book?

A I am.

Q What is it?

A That is a book that shows the waterways of the State of New Jersey, and as we fix prices, we would establish those prices on this book, in this book.

Q How did you fix the prices, on what basis?

A Well, we normally followed the price that we had been -- that had been fixed prior and until someone checked it or suggested that we raise the price, the property was becoming more valuable then, that way we raised the price of the riparian grants.

Q How was that price measured, on what kind of a measuring device, was it so much an acre?

A Generally it was so much a foot.

Q What did the foot that you were using as its measure, what did that relate to?

A If a man should have a one hundred foot plot and the pierhead and bulkhead line out in front of his property was one hundred feet, we would charge him for that one hundred feet.

Q So you are telling me that the footage charge was measured along its pierhead and the bulkhead line?

A That's right.

Q Let's assume this situation, in some of these situations exist, the pierhead and bulkhead line are not in different places, they are not together.

A The case there -- let's assume the bulkhead line -- if it was two lines, generally measured on the bulkhead line for a price. Now, if the bulkhead line was two feet out shore of the high water line, that would be, let's say, fifty dollars a foot. If it was one hundred fifty feet out, it would be the same price, so we went by the front foot basis.

THE COURT: I am going to take a short recess. I want something in the record as to what you understand are interior lands.

(There is a short recess.)

DIRECT EXAMINATION BY MR. WEIGEL CONTINUED:

Q Mr. Freeman, we were talking about that price book.

A Yes.

Q Was that an official record of the Bureau of Navigation?

A That was a book that we retained in order show prices throughout the State of New Jersey.

Q When those prices changed, does the book reflect how they were changed?

A That's right, we showed every price on these books.

Q Would it show today both the old price and the new price?

A That's right, it would.

THE COURT: You said so many dollars per foot, running foot?

THE WITNESS: That's right, yes. Well, if it was acreage, we'd say five dollars an acre or ten dollars an acre.

THE COURT: I was going to say having a strip of land fifty feet wide along the water and running maybe five hundred feet, that is one thing, but suppose --

THE WITNESS: I did show so much a foot on the frontage. Didn't show the depth or anything, just that was the price, five dollars a foot in that location or ten dollars a foot in that location.

THE COURT: But what if the land running back from the water ran a thousand feet, let's say it was real low and the tide came in for a thousand feet.

THE WITNESS: That would show on the Atlas Sheets.

THE COURT: What would you charge then?

THE WITNESS: That shows price.

THE COURT: You did not charge on a running foot then?

THE WITNESS: Oh, yes.

THE COURT: You would charge twenty-five dollars a running foot?

THE WITNESS: So much a running foot along the bulkhead line, yes.

THE COURT: No matter how deep the land was?

THE WITNESS: That was not shown on the price book, that was shown on the Atlas Sheet, as a general rule.

THE COURT: You are shaking your head, Mr. Weigel, do you know?

MR. WEIGEL: Yes, the answer was as he indicated along the bulkhead line so much a foot and it did not relate to the depth.

THE WITNESS: That was not related to the depth.

Q That was your understanding, that it did not relate to the depth?

A No.

THE COURT: So some people could be getting fifty acres for the same price as ten acres, one other person?

Q You remember the Sisselman case?

A Yes.

Q Before the Sisselman case up here, did the State ever claim to own the Meadowland that was back off the bank of the water course?

A Never.

Q Never did? During the whole time that you were with the State of New Jersey from the 1920's to 1960, did the State ever claim the Meadowland that was back in the bank of the --

A They never did, no.

Q You were up in the Hackensack during this period?

A Absolutely, I was.

Q All over the State?

A All over, yes.

Q You know of no instance when the State claimed the land that was back off the bank?

A No, if we did, we would show it on the Atlas Sheet.

Q When you say back off the bank, where would the bank be along the old Atlas Sheet, what line on there would show the bank?

A The bank would be as the Meadowlands came across, then you would have your river, indentation of your river. The bank would be right at the top of the bank. That was considered the mean high water line.

THE COURT: What would happen if you saw a break in the bank and the tide went into the Meadows?

THE WITNESS: We never went beyond the bank of the -- what was considered the mean high water. The high water line generally went to the top of the bank.

Q And you were talking about the whole time that you were down there?

A That's right.

Q Were you down there after the _Sisselman_ case was decided?

A Yes.

Q Did anything happen when the _Sisselman_ case was decided, something change?

A After that was decided, why the Council held up -- some of the grants, and I believe, they agreed if anyone would come in for some Meadowlands, they agreed to give them a quit claim deed.

Q During the time which you were with the Bureau of Navigation, was there a Deputy Attorney General assigned to your --

A Oh, yes, always.

Q Did he generally meet with the Commissioners?

A No, he did not.

Q You met with him but the Attorney General didn't?

A That's right.

Q Did you ever call on the services of the Attorney General?

A We did.

Q In what situations?

A When there was a question of legal rights, legal rights or the question of riparian rights, we would call on him to give us a decision.

Q Opinions were then rendered to you by the Attorney General's office?

A That's right.

Q During the whole time you were with the Bureau of Navigation, did any opinion of the Attorney General's office advise you that the interior Meadowlands was owned by the State?

A Never, no.

MR. GOLDFEIN: I am going to object to that, your Honor, there has not been the slightest bit of a foundation that such a question was ever asked let alone that there was a need for an appropriate answer, and in any case, the legal advice to the staff of the determining agency -- I am going to withdraw the objection, I would like to hear the answer to the question. I question the relevance.

MR. WEIGEL: I would like to put the basis for the question on the record because I think the record should reflect what I have in mind.

The basis for the question,

you Honor, is, number one, I do not think privilege can be asserted here because --

MR. GOLDFEIN: It has not been asserted.

THE COURT: He is not asserting it.

MR. WEIGEL: I am anticipating.

In terms of the basis, I think that the obligation of the Attorney General's office in these matters goes beyond rendering opinions when questions are asked and one of the positions we are going to argue is that the Attorney General's office, if it had a different view than the operating view, it had the obligation to express that view and the record is barren of anything to indicate they ever expressed that view.

MR. GOLDFEIN: We did not call it the Attorney General in 1926 or '36. You are imposing a set of values on the Attorney General's office in the form of a question to this man who is not just a lawyer, but isn't even a person he had to question and your conception of the duty of what the Attorney General's office is goes beyond the scope of the issues in this case. Just by the assertion that you assume there is an objection based on privilege is a suggestion of the irrelevance of this line of questioning.

THE COURT: I am going to sustain the question for now. I want to ask a question of this man.

Is it correct, Mr. Freeman, that when you were in the office of the Bureau of Navigation, is this correct, that you and the rest of the people in that office, to the best of your knowlege, concluded that the State of New Jersey owned lands that were washed regularly by mean high tide?

THE WITNESS: What was that?

THE COURT: Was it your conception that when you were in the office of the Bureau of Navigation that the State of New Jersey owned those lands that were covered regularly by mean high tide. Is that correct?

THE WITNESS: Only covered by

mean high tide.

THE COURT: But with a limitation, correct, you limited your application of that theory to the banks of the river as you phrased it?

THE WITNESS: Top of the bank.

THE COURT: The top of the bank of the river. Is that correct?

THE WITNESS: That's right.

THE COURT: You did not look beyond the top of the bank of the river to see whether other lands were --

THE WITNESS: If you go beyond the bank of the river, generally, unless there was a flood tide, lands as we knew them were drylands.

THE COURT: Allright.

You do have streams in the Meadowlands, do you not, that do not really have banks?

THE WITNESS: I am talking about the normal bank of the river, yes.

THE COURT: Did anybody ever tell you that was the proper theory or who formalized that theory, if you know?

THE WITNESS: That was always used by the State of New Jersey when they made grants.

THE COURT: Well, how did you become acquainted with that limitation, did someone tell you that in the office?

THE WITNESS: No, we used that limitation for the reason that, as we knew it, the lands beyond the bank were private lands. We would check these lands at times and find that the people had deeds to them, were paying taxes.

THE COURT: That is the name of the ballgame, a lot of people had deeds and paid taxes. Mrs. O'Neill did too.

Then you are telling me that during the period of time that you were in the Bureau's office, you limited the claims of the State of New Jersey to the top of a bank of a river. Is that correct?

THE WITNESS: I recall several rivers where we limited it to the top of the bank.

Now, there may have been, I don't recall right off hand, but there may have been other banks where the water drifted in such as down at Sewaren and places like that.

THE COURT: Did you ever have occasion to discuss this question with an Attorney General or Deputy Attorney General?

THE WITNESS: Never, no.

THE COURT: You know it to be a fact, do you not, that today the State of New Jersey is claiming lands beyond what you call the top of a bank of a river?

THE WITNESS: I know about that, yes.

THE COURT: And that concept had never been discussed when you were in the Bureau. Is that correct?

THE WITNESS: No.

THE COURT: When you talk about the bank of a river, you have a lot of little tributaries in the Hackensack Meadowlands, haven't you?

THE WITNESS: That's right.

THE COURT: Were you applying that rule to the little streams too, did you?

THE WITNESS: Not -- in general, I might say, in general, all over the State in the Delaware River, the top of the bank was generally considered where the mean high water line rose. Sometimes it didn't go to the top of the bank. Sometimes it was below the top of the bank. If it would go over the top of the bank, it was on flood tides.

Q But what about somebody who had a deed to some land along Berry's Creek, did you apply the same rule?

A If it had what?

Q Berry's Creek.

A On Berry's Creek, that area there we considered the high water line to the top of that bank.

Q Berry's Creek is a good sized body of water?

A That's right, yeah.

Q Did you have any set of standards where you just said, "We're not going to consider this riparian land," when the tributary was a small little stream?

A We never found -- you see, you take some of the creeks, no grants were ever made. That was out of our -- out of the question, but where the grant was made we would check that and find that the tide went to the top of the bank. That could be any stream all over the State of New Jersey.

Q Let me ask you this then: Did you ever have an application for a grant where you told the applicant you don't need a grant?

A I don't recall that ever, no.

THE COURT: You see this top of the bank bothers me, Mr. Weigel, I don't know what to put in my notes.

MR. WEIGEL: I think he has tied it to the only thing I can help you with, your Honor, that is Exhibit A-33 through A-53 and A-242.

THE COURT: You see on the one hand it is a very pertinent piece of information that we have, that they restricted at least when he was there their claims. Apparently their claims to lands on behalf of the State of New Jersey to, as he phrases it, to the top of the bank, but when I ask him about little streams, he said, "Well, we never got into that," apparently because nobody ever applied.

What I can gradually begin to assume here is that maybe people when he was there never applied for grants in areas that we call interior Meadowlands, it wasn't that the State was not claiming those lands, it's that nobody was coming in asking for a grant. I don't know, that is possible, though, isn't it, and that sort of blunts the significance of what he has been saying.

MR. WEIGEL: I submit and I am ready to argue it but this obviously is not the time or the place, what Mr. Freeman has testified to is absolutely consistent with the legal arguments that I have advanced in numerous briefs and that is that the law in this State simply changed, your Honor, with Sisselman and O'Neill and everything that went before it has to be distinguished from everything that went after it.

THE COURT: If that is so, and I know that this would be a great time to explore what went through their minds with respect to claiming lands, was it along fixed navigable water courses, I am not going to get into that now, we know what the law of this State is right now.

MR. WEIGEL: I think this witness has done the best he can to relate his experience to the Exhibits.

THE COURT: I am sure he has.

MR. WEIGEL: I am satisified with his answers. I would like to go further but apparently he cannot help me any further.

I would still like to know about interior Meadowlands. I hope to pursue that on cross-examination.

THE COURT: All right. Good.

MR. WEIGEL: I would offer A-33 through A-53 and A-242.

THE COURT: Any objection?

MR. GOLDFEIN: For what purpose?

MR. WEIGEL: To demonstrate during the period of time that this man was in the Bureau of Navigation the claims of the State to riparian lands was restricted to the top of the bank,at the very most, of the river.

MR. GOLDFEIN: I do not think that was all his testimony. Perhaps it would be necessary to get into cross-examination, and being because no one asked and/or because they never went any further.

THE COURT: But this map is being offered for what it contains. He has interpreted those lines and says this is what those lines stand for. I don't think anybody can dispute that. Whether this is correct or not....

MR. GOLDFEIN: His testimony of what it means is --

THE COURT: I am going to admit them in evidence, A-33 through A-53 and A-242.

(Exhibits A-33 through 53 and Exhibit A-242 previously marked for identification were received and marked in evidence.)

MR. WEIGEL: Your witness.

CROSS-EXAMINATION BY MR.GOLDFEIN:

Q Mr. Freeman, could you come down here and look at one of these again?

(The witness complies.)

THE COURT: All right.

Q Mr. Freeman, I want to call your attention to what has a red number five as being one of the sheets that we have marked as A-242 which, I think, you called the original Atlas Sheets.

A They were the original Atlas Sheets.

Q Do these accurately depict the high water line, what we have here as Number Five of the Hackensack River?

A I did not make these maps but those maps were supposedly -- this blue line was the mean high water line of that creek.

Q I have got my finger on what is indicated to be a grant to William H. Rose, October 28, 1905, that must be some kind of a mistake, but those words are over a "Y" shaped tributary of the Hackensack River. Is that right?

A You are talking about this grant in here?

Q I was actually just looking at those words to be able to indicate this "Y" shaped creek.

A They show it here, they show here (indicating).

Q I did not want to call your attention to the grant itself, just to this point on the drawing. I am interested in the "Y" shaped creek which seems to be a tributary of the Hackensack River at this point.

A Evidently it is a tributary, yes.

Q In line with the questions that Judge Trautwein was asking you earlier in computing the line of mean high water to a value of whether or not to recommend a grant, had there been a grant application upstream of this point, would you have said that was not below mean --

A If we went upstream of this point we would have a large map showing high water line and we would -- on these maps, we would show the grant in a dot or something like that, say a grant to John Jones would be up here but that would have nothing to do with the high water line because we couldn't show it.

Q So this map does not depict what you understood to be the mean high water line in the tributaries?

A Assuming that this tributary was more or less active through here. There were streams all through here.

Q Are there tributaries that in fact do not appear on this Atlas Sheet?

A Not that I know of, no. What is shown here is actual creeks.

Q This is a demonstration of all the tributaries of the Hackensack River as you knew it at that time?

A As far as I know they were all the tributaries on the Hackensack River. How these maps were made, I don't know.

THE COURT: Well, on this sheet number five as part of Exhibit 242, to the south there is a tributary of the Hackensack River, that is called Sawmill Creek. As far as this map is concerned, does the blue covering Sawmill Creek indicate that you are claiming riparian lands to the bank of Sawmill Creek?

THE WITNESS: No grants made up the creek.

THE COURT: That is not what I am asking you. If someone applied for a

A Assuming that this tributary was more or less active through here. There were streams all through here.

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THE COURT: Well, on this sheet number five as part of Exhibit 242, to the south there is a tributary of the Hackensack River, that is called Sawmill Creek. As far as this map is concerned, does the blue covering Sawmill Creek indicate that you are claiming riparian lands to the bank of Sawmill Creek?

THE WITNESS: No grants made up the creek.

THE COURT: That is not what I am asking you. If someone applied for a grant, what would you have done?

THE WITNESS: We would spot it on here, that is the best we could do.

THE COURT: Would you say to the Council, "Look, here, we are entitled to consideration for giving a grant here"?

THE WITNESS: Oh, yes, we would get consideration, absolutely, but it is so small, you take the other sheet, the creeks are much wider. These are very small scale maps. If there is a grant up here it would just show as a very small one and say, "Granted to so and so."

BY MR. GOLDFEIN:

Q Do you know who put the blue mean high water line on this map and other maps?

A This line here, as far as I know, these lines you see here are, in my opinion, approximately correct and they are as I have been -- correct in accordance with the larger scale maps.

Q Do you know who put the blue line in?

A No.

Q You were never involved in the preparation of any of these maps?

A No.

Q Do you know when these maps were made or were they always in existence?

A I don't know anything about them.

Q Did you ever undertake to draw a map of all of the lands that the State owned?

A All the what?

Q All the lands that the State owned.

A Here's a map here, you're talking about a map like this?

Q Yes, perhaps. Is this a map that shows all the lands that the State owned?

A Our Atlas Sheets do not cover all the lands the State owned. Itcovers the main rivers, base, creeks and so forth.

Q Was that a map made from grants and grant applications as they came in?

A That map -- I think these maps here possibly came from the tax map of the City of Jersey City and the town on the opposite side -- I would not know where they actually came from. This was probably taken from the tax map of the City of Jersey City.

Q Now, you have been referring to

A-33 which is one of the maps entitled "Map Showing Riparian Lands and Conveyances."

The nature of your work was in processing applications for grants. Is that right?

A That's right.

Q And in the course of doing that, did you make a decision on whether a grant would be approved or not?

A Make a decision -- well, if there was any -- if there was a normal application, I approved it.

Q Your signature was then when it would be recorded or did it go from you to some citizen body that made the decision itself? Who would make that decision, wasn't there a commission or council who would make the decision?

A We had men on a council, yes.

Q Did you appoint them?

A No, the Governor appointed them.

Q And it was their decision that mattered?

A They very seldom made the decision, they did not decide it. He made up the grants and they approved of them.

Q They approved of your work?

A My work and Mr. Scapotulo and whoever made the grants.

Q Did they ever disapprove of your work?

A I checked then.

Q Did they ever disapprove of your work?

A Not that I know of, ,never.

Q Why don't you take your place up there again.

THE COURT: Why don't you leave him there a second.

Mr. Weigel, this is what bothers me. This may offer a partial solution, the maps being challeged in this case are maps that represent claims of the State of New Jersey to ownership. The Exhibits before us are maps that memorialize grants so in a sense they are not claim maps, are they?

MR. WEIGEL: I do not agree with the Court's characterization.

THE COURT: Let me finish now.

You have brought out through this witness the fact that at time when they were out in the field checking the applications that if they saw someone that was illegally occupying lands they would report back. To that extent this witness with these Exhibits may represent sort of a claim situation.

Now, the question I would like to ask is this: Mr. Freeman, when you were personally out in the field, did you ever report back that someone was illegally occupying land, that occupied the land beyond the bank of the river?

THE WITNESS: No, sir, I did not.

THE COURT: All right. This isn't going to make much sense unless we develop it.

MR. WEIGEL: I had asked the question and gotten the answer previously.

THE COURT: Not about whether they were beyond the bank of the river. I am not going to argue with you. Then it didn't come through to me.

MR. WEIGEL: Can I put what I see in these records on the record because the Court has characterized them and I would like to ask that you reflect on my characterization and after the testimony is in give consideration to it?

THE COURT: Is there any doubt that these maps show grants?

MR. WEIGEL: Some grants.

THE COURT: What else do they show besides the blue line?

MR. WEIGEL: To me they are claim maps, your Honor.

THE COURT: Tell me why you think they are claim maps?

MR. WEIGEL: Because the lines shown on that map and the area that our line represents are the areas that the State of New Jersey concedes during this man's career he would be in a position to know where its claims were and where the boundary between public and private lands were.

THE COURT: How did the line get on there, it follows right down where the grants were made, doesn't it?

MR.WEIGEL: That's right.

THE COURT: Is it a claim map

then? The line was constructed on the basis of grants that were made.

MR. WEIGEL: I do not conceive it that way at all because if the Court's view of it is correct then you would have no segment here where you did not have a grant showing -- there are many areas shown here where there is no segment showing a grant.

THE COURT: I believe A-33 was the one Exhibit you referred to when you named the various grants that were given by the State of New Jersey and you said what does this line represent, did you not, which is a line to the easterly -- all of the grants that you mentioned, among which are a chemical works, Ryerson, Mutual Chemical Company and so forth, all on A-33.

What I am suggesting, Mr. Weigel, is you can no more say to me that the State fixed this line and said this is our claim then I can say to you that line resulted from the fact that there were grants made to the easterly and that is how the line was constructed.

MR. WEIGEL: I do not accept that.

THE COURT: Why don't you, I can accept yours as much as my version and I am the guy who has to try this and make a finding of fact and you have to prevail and persuade me that this line was actually drawn.

MR. WEIGEL: May I suggest this to the Court, I think the Court did not appreciate what I had intended from the testimony of this witness because I believe what this witness has testified to is that these maps were constructed beginning around the year 1916; that when they had an application for a grant they went onto these.

Now, on the map that you are referring to obviously some of these predate but here is one that follows it. Here is a grant in the year 1925. This document existed for nearly ten years by that time and they have the line there and the grants were imposed on it after they had the map started and I believe that we can develop that not only through Mr. Freeman's testimony but through Mr. Scapotulo's testimony and, in effect, the State, but not in all instances, would go on and place a grant on once it was made and, of course, you resurrected that whether you take Newark Bay and virtually any other area, the only grants that would predate 1916 are the grants as they are indicated, and some of these are grants.

Can you help us at all on that point?

THE WITNESS: Yes, let me show you, you see this angle here, you see the angle of the grant, when we put this grant on, these grants are plotted accurately and when we put this point on, we took the survey or whatever it was that we measured from here to here, that is where we established -- here they show the high water line as this grant was made. These angles, the distance from here to the high water line, that is a fixed point.

THE COURT: You testified, Mr. Freeman, in most instances private property owner came in and said, "I want a grant," and he prepared a survey, didn't he?

THE WITNESS: That's right.

THE COURT: And you took his survey and what did you compare it to?

THE WITNESS: Well, for example, this survey here, this survey checks -- every survey here checks with our high water line. There they showed the high water line here and our water line was here so it is practically the same thing.

THE COURT: You don't know who put that high water line there though?

THE WITNESS: No, I don't know but when this survey was made they showed the high water line along this dotted line but those points are fixed by the surveyor.

THE COURT: Where did the applicant get that information to make that survey?

THE WITNESS: A civil engineer went out and made the surveys.

THE COURT: Did he look at

those maps?

THE WITNESS: No, he did not.

THE COURT: That is a curious coincidence.

THE WITNESS: When the survey came in, evidently the measurement from here to the high water line checked with his high water line on the print. The dotted line is his line and this line is our line.

MR. WEIGEL: I hope the Court has gotten what I think is the clear testimony, that is that in many, many instances the Atlas Sheets were prepared prior to any grant and the grant application was then checked against an existing line on the riparian map for the accuracy of the mean high water line shown on the survey that accompanied the application. That is an extremely important point and if it has been missed by the Court, I think we ought to clarify it now.

THE COURT: I understand what you and the witness are saying. I understand that part of it.

Mr. Freeman, looking at Exhibit A-33 and the line that we have been referring to that runs generally north and south or northeast and southwest, does this solid line we see as the easterly boundary line of the various grants along the Hackensack River, is that the top of the bank?

THE WITNESS: No, that is a mean high water line. The engineer's survey here shows it. That point and this point is scaled from back here to the surveys and they all checked with the high water line.

THE COURT: That is not the top of the bank then?

THE WITNESS: No bank there, just the mean high water line. The map may be sloped. Maybe no bank in.

THE COURT: That is what I asked about before. There are areas then where the tide sort of ebbs and flows without you seeing any perceptible bank. Is that correct?

THE WITNESS: That's correct,

this is sloped land. That land is all sloped. Where the high water line hits the slope land, that is the high water line.

THE COURT: Mr. Weigel, as far as your questions are concerned when you used the phrase "interior Meadowlands," or I did, are these interior Meadowlands?

MR. WEIGEL: No.

THE COURT: What is an interior Meadowland on A-33?

MR. WEIGEL: You want my position or his?

THE COURT: Yours.

THE WITNESS: This might be all Meadowland in here.

MR. WEIGEL: Anything that is interior of this line which he has described as the high water line.

THE COURT: That is not telling me anything.

BY MR. GOLDFEIN:

Q What would interior Meadowlands be on this map?

A This might be all Meadowland area.

Q On either side of the line? You are indicating on either side of the heavy line?

A I am saying this here could all be Meadowlands, I don't know. The grant shows the high water line. The Meadowland back there, the -- we went from the high water line, it is shown these are correct points. That survey and his survey show that point hit that point there which is our high water line and his high water line (indicating).

Q How many grants along the Hackensack River do you think you processed in the years you were with the Bureau?

A I couldn't even hazard a guess.

Q Hundreds?

A Several hundreds, yeah.

Q Thousands?

A I don't know. If you say hundreds, I will say yes, I will go along with you, but outside that I don't know.

Q They were all along banks of existing rivers?

A The only way I can tell you how many of these, you have to go by the dates of the grants.

Q Are there any areas, Mr. Freeman and Mr. Weigel, on any of the Exhibits, A-33 through

53, that have lines that are within the mean high water line as the witness has described it that do not show grants?

MR. WEIGEL: Yes.

THE COURT: Can you pick out one for me?

MR. WEIGEL: I am referring to A-36 alongside the word "Kearny," there are apparently two lots shown. There is no indication of any grant and yet both of those properties have a continuation of the solid line which runs from the grant to C.W.H. Carter, July 30th, 1914, page 173, which is to the right of the upper side of the map and that line runs continuously across two pieces of property to another piece of property that shows a grant to Newark Quartz Land Company, August 20, 1917.

THE COURT: So A-36, you say, is an example of a condition that demonstrates that these maps are claim maps?

MR. WEIGEL: That's correct because it shows a continuous line and that continuous line has been described by this witness as the mean high water line.

THE COURT: What is that Exhibit number again?

MR. WEIGEL: That is number 36. There are others, your Honor, but that is just an example of what the Court asked for.

THE COURT: We have to recess.

All right, we will pick up again tomorrow at ten-thirty.

MR. WEIGEL: Your Honor, I had indicated to Mr. Freeman that we had hoped to get through today.

THE COURT: Is it a big problem for you to get up here tomorrow?

THE WITNESS: Not too big a problem.

* * *

CERTIFICATION

I hereby certify the foregoing transcript to be a true and accurate record of my stenographic notes.

RICHARD M. JENNINGS, C.S.R.
Official Court Reporter

A-3311-72

A101 SEP 1979

SUPERIOR COURT OF NEW JERSEY
APPELLATE DIVISION
Docket No. A-3311-72
(On Remand to Law Division,
Bergen County.)

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APPELLATE DIVISION
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CM
Elizabeth McLaughlin
CLERK

CITY OF NEWARK, et al., :

Appellants, :

vs. : VOLUME XI

NATURAL RESOURCES COUNCIL, et al., :

Respondents. :

- -

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: BERGEN COUNTY
Docket No. L-16799-72

NEW JERSEY SPORTS &
EXPOSITION AUTHORITY, :

Plaintiffs, :

vs. :

BOROUGH OF EAST RUTHERFORD, et al., :

Defendants. :

- :

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APPELLATE DIV
ELIZABETH McLAUGHLIN
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April 28, 1976,
Courthouse,
Hackensack, N. J.

B E F O R E :

HONORABLE THEODORE W. TRAUTWEIN, J.A.S.C.

Reported by:

EDWARD SALBIN,
Official Court Reporter.

APPEARANCES:

For Natural Resources Council, et al.:

WILLIAM F. HYLAND, Esq.,
Attorney General of New Jersey,
By: MORTON J. GOLDFEIN, Esq.,
Deputy Attorney General.

For Trustees of the School Fund:

WILLIAM C. RINDONE, JR., Esq.,
Deputy Attorney General.

For City of Newark, City of Elizabeth,
N.J. Land Title, Esther G. Bertoni, et al.:

JOHN R. WEIGEL, Esq.

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THE COURT: I assume Mr. Porro is not here yet. Why don't we dispose of this matter that involves you, Mr. Weigel, and you, Mr. Goldfein, on Mr. Cravat's report.

Is there anything you wish to add to what I heard the other day?

MR. WEIGEL: I don't believe I have anything further.

MR. GOLDFEIN: No, your Honor.

THE COURT: Now, I take it the letter agreement was probably generated by the fact that you were aware that Mr. Cravat had been employed by the State of New Jersey, and rather than speak with what you would assume would be a potential witness, you carried on a dialogue with the State to a certain extent about what you could and could not do with him, and this is the letter agreement result.

MR. WEIGEL: That's correct.

THE COURT: In analyzing this question, it seems to me that the mere fact that Mr. Cravat was employed by the State of New Jersey would never have prejudiced you from calling him as a witness, and indeed you probably could have noticed him for taking of a deposition or propounding of interrogatories. I suppose out of your own zeal for observing ethical standards you took the route you did and I have no criticism of you for doing that. It seems to me that today you could call Mr. Cravat as a witness, and so, Mr. Goldfein, following that route, I see no reason why, and I don't think there is any contradiction of the fact that Mr. Cravat is incapacitated and probably cannot appear personally, why you cannot subpoena his complete report which is what you want to do.

MR. WEIGEL: Yes, your Honor.

THE COURT: Do you have it?

MR. WEIGEL: Yes, it has been identified as one of the exhibits, and, unfortunately, I don't have my exhibit list.

THE COURT: I don't need it now.

MR. WEIGEL: But I can give you the reference.

THE COURT: Is that the extent of Cravat's participation in this case, that report?

MR. WEIGEL: That is the result of his participation. That is all that I plan to utilize in our case, your Honor.

THE COURT: You are not going to depose him and take any deposition?

MR. WEIGEL: I was not going to depose him. I would certainly cooperate with the State if the State wants to depose him.

THE COURT: Mr. Goldfein, I haven't ruled yet.

MR. GOLDFEIN: I have already submitted to Mr. Weigel, I guess it is four interrogatories. I think they were mailed out.

MR. WEIGEL: I received them.

MR. GOLDFEIN: They go to that portion of the report as to which we had no objection and which was the first three-plus pages. I would like to reserve the right to submit further interrogatories, and my concern is--and our concern was directed at trying to exclude the rest of the report substantively, that there were areas we believe Mr. Cravat is not qualified to be expressing opinions. I would like to pursue those areas before the Court gives consideration to the substance of the report.

THE COURT: I will reserve your right to do that. Now, let's understand one thing: Mr. Cravat is your witness?

MR. WEIGEL: That's correct.

THE COURT: All right, Mr. Goldfein, we

understand that. So even though the State did employ him at one time it was not your intention to call him, I take it, so you may do anything to impeach any testimony adduced one the basis of what Cravat has produced in the way of a work product, including what I have just said, I am reserving your right to impeach his qualifications in whatever areas you choose to go into, and I will hear you on that. I don't know quite how you are going to do that, but I will leave that up to you. You might want to -- you are propounding interrogatories on a limited area now? Are you going to propound other interrogatories with respect to his expertise?

MR. GOLDFEIN: I think I shall.

THE COURT: That is the only way I can conceive of you presenting something to the Court I can rule on.

MR. GOLDFEIN: I think the report--I don't want to characterize it--but I think the report is really of limited substance in terms of the overall case, and I think relatively it is not a wise commitment of our resources to be going down to Maryland to take his deposition, which is why I am going to pursue the interrogatory route. If

I am dissatisfied with his responses and answers, I am going to pursue depositions then.

THE COURT: Let me make a note then. All right, my ruling is going to be--

MR. GOLDFEIN: We would like, your Honor, because this is an effort to make a complete record, and because it has been a couple of years since Mr. Cravat has been ill and we would like a current certificate of his inability to appear.

THE COURT: I think that is a fair request, Mr. Weigel.

MR. WEIGEL: I think that is fair.

THE COURT: Mr. Weigel, can you get us something to put into the record?

MR. WEIGEL: Yes, sir.

THE COURT: What is the exhibit number of that report?

MR. WEIGEL: It is A-208, your Honor.

THE COURT: My ruling is this. I will permit Mr. Weigel, despite the letter agreement, to offer into evidence the entire report of Mr. Cravat, Exhibit A-208. However, it will not be marked in evidence at this time because I am reserving unto the State, to Mr. Goldfein, the right to conduct whatever further discovery he wishes and that Mr. Cravat will be considered the Appellants' witness and hence the State can pursue any course it wishes with respect to the probative value of the report, and also may question and attempt to develop, if it wishes, a limitation on the expert qualifications of Mr. Cravat to whatever extent it deems necessary. We all understand each other on that?

MR. WEIGEL: Yes, your Honor.

Your Honor, since I take it Mr. Goldfein is likely to propound additional interrogatories, I would ask that I have all those interrogatories in hand before I send a set of interrogatories to Mr. Cravat. I think it would be helpful to him and to me to have them sent at one time, other than sending in the four questions that have been asked and then waiting for some additional questions.

THE COURT: All right. And you will get some kind of certificate?

MR. WEIGEL: Yes, your Honor.

THE COURT: To demonstrate unavailability at this time.

Did anybody hear anything from Mr. Porro? Was he still going to Morristown?

[Discussion off the record.]

THE COURT: Well, the Court hasn't heard anything, either, and I want to proceed with this case, so we will go ahead.

MR. WEIGEL: Your Honor, because of the fact that Mr. Freeman is well up in age and lives in the Toms River area, I know it took him the other day better than three hours to get up, I suggested to Mr. Harris that we use Mr. McDermitt as a first witness and when Mr. Freeman gets to the courtroom Mr. Goldfein can continue with his cross-examination. If that is acceptable to the Court, I would like to have John H. McDermitt called as a witness now.

THE COURT: Yes.

JOHN H. MC DERMITT, 140 Market Street, Paterson, New Jersey, sworn.

DIRECT EXAMINATION BY MR. WEIGEL:

Q. Mr. McDermitt, are you a lifelong resident of New Jersey? A. Except for four and a half years during service, yes, Mr. Weigel.

Q. Could we have your age, Mr. McDermitt?

A. I'm fifty-six.

Q. Are you an attorney at law of New Jersey?

A. Yes, sir, I was admitted in 1948 to practice.

Q. Are you employed in the Title Insurance industry? A. Yes, I'm now vice president in the New Jersey Council for Commonwealth Land Title Insurance Company.

Q Is Commonwealth Land Title Insurance Company the largest title insurer? A. It is now, and has been for about the past three and a half years, yes, sir.

BY THE COURT:

Q What does that mean, by largest?

MR. WEIGEL: We relate largest to liability assumed, your Honor. That really is the basis.

THE COURT: Liability assumed as to real estate in New Jersey?

MR. WEIGEL: Yes. We have some statistical information if that is of any significance, but our measure of size, your Honor, is total liability assumed, and what we would do where there is simultaneous insurance, we exclude the lowest insurance.

THE COURT: Do you have any idea what your liability exposure is in meadowlands?

THE WITNESS: I have an idea of the claims we have pending, sir; but I don't think it is possible to quantify the potential claims.

THE COURT: What is your rough idea of the claims pending?

THE WITNESS: In the sense that the demand has been made on my employer as an insurer there are about ten.

THE COURT: Ten claims. Have you any idea of the dollar amount?

THE WITNESS: Yes, sir. I have reserved, as required by the Pennsylvania statute, about $575,000 against those claims.

BY MR. WEIGEL:

Q Just so the record is clear, why are you relating to Pennsylvania? A. Commonwealth is a Pennsylvania company and under the Pennsylvania title insurance code, they are required to set aside actual cash in an amount a responsible official of the company estimates should be the potential for loss.

BY THE COURT:

Q I take it,you can ask Counsel for advice if you want to before you answer this question, do these claims relate to policies where there were no exceptions in the policies respecting tidelands claims?

A. Yes, they do, your Honor.

THE COURT: All right, thank you.

BY MR. WEIGEL:

Q Pursuing that line of inquiry, Mr. McDermitt, are you the chairman of the Riparian Lands Committee of the New Jersey Land Title Insurance Association?

A. Yes, I am. I have been for at least the last five years.

Q. What is the New Jersey Land Title Insurance Association? A. It's an organization of the title insurance underwriters in New Jersey, essentially about, I think at last count, 19 companies are writing title insurance in the State, and 18 are members of the association, if I recall the numbers correctly.

Q. What is the Riparian Committee of that association? A. It is a committee constituted by the Board of Governors of the association to investigate and support our insureds in an effort to clarify the riparian land law in this state.

Q. Has that committee, which you chair, has that been the body that has given instruction, advice, and direction to counsel during the last decade in the various litigations that the association has been involved in? A. Yes, indeed. The Board of Governors simply cannot, it is too large a group, handle the questions of both policy and planning, so that responsibility has been delegated to my committee.

Q. Has the association discussed the subject of the impact of the tidelands claims of the State as they have been asserted at various times, and I am referring now, among other things, to the Grey and White map and its impact and to these recent 37 base photo maps and claims overlay upon property owners and title insurance industry? A. Yes, indeed. We have over a long period of time and for many hours considered various aspects of those claims.

Q What is the view of the group that you are chairman of with respect to how those claims of the State of New Jersey impact upon the record claimants, lending institutions, title insurance industry?

A. By putting the title to substantial acreage in issue, or making it doubtful, the riparian lands in the State have been very heavily restricted in growth and in use and in many parts of the State these riparian attitudes of the State have completely eliminated the insurability of titles,and therefore, the use of that land for improvement.

Q And has it had an impact upon the willingness of lending institutions to advance money for the purchase of properties?

MR. GOLDFEIN: I will object to that question.

THE COURT: On the ground of irrelevance?

MR. GOLDFEIN: Relevance and it is hearsay. He has not been presented as a witness for the lending industry.

THE COURT: I suppose he could lay a foundation on that, but what is the relevance, Mr. Weigel?

MR. WEIGEL: I thought from the Court's early questioning that the Court was concerned with the impact in terms of claims of, the todelands claims, the riparian claims of the State.

THE COURT: No, I merely, as a little bit of background for the record, also I think if I did it probably Mr. Goldfein would, it does demonstrate interest on the part of the witness without reflecting on his credibility.

MR. WEIGEL: I didn't realize that was the purpose of the Court's question.

THE COURT: As a matter of fact, just to complete the cycle, do you have any idea, as Chairman of the Riparian Lands Committee of the New Jersey Land Title Insurance Association, do you have any idea of what the title claims are against all title companies who belong to this association with respect to State claims against the meadowlands? Do you have any idea what that might total?

THE WITNESS: I'm afraid not, Judge. The

competitive situation is such that there isn't really any centralized reporting on that type of problem.

THE COURT: I want the Appellate Division to see the magnitude of this case and of course, consistent with that, I probably should let you develop the other thing, but I don't want to get too far afield, okay?

MR. WEIGEL: All right. I withdraw the question.

BY MR. WEIGEL:

Q. In what year again, Mr. McDermitt, were you admitted to practice law in New Jersey?

A. The same year I took my law degree, sir, in 1948, September 3rd or 4th.

Q. Were you in private law practice before you started working for title insurance companies?

A. Yes, for about nine years I practiced in partnership down in the Brick Church section of East Orange with Harvey Stevenson and John Willett, two other attorneys.

Q. Was any substantial portion of your private law practice during those years related to real property matters?

A. During my clerkship, I had done title abstracting work for my preceptor, Milton Unger, and it was a natural consequence that as our firm developed the real estate title search work fell to my lot, and in 1949 we were retained by Home Title Guaranty Company to represent them in New Jersey. So that for about five or six years half of my time at least was spent in searching titles in the various county record rooms in the State, reporting those titles, and in closing titles. I searched over those years in 17 of the 21 counties in the State. Most of the work, of course, was concentrated in the northeast counties of Essex, Union, Middlesex, Bergen, and to a lesser degree Passaic.

I did all sorts of title abstracting work and recording work in that period, as I say, for about half of my time during a six-year period.

Q. Will you tell us what title abstracting and title searching is?

A. The terms are very nearly synonymous and they describe the investigation of land records in the county clerk's or register's office of the particular county. One begins with a given present owner of land and establishes a chain of title by finding the deeds into that owner and into his predecessors in title and we were then obligated and it was a common standard to run that chain of title back for at least a 60-year period and to a sound source deed. After doing this chaining as it is called, and establishing a chain of deeds which reflect title to the property, then the abstractor proceeds to do what is described as the adverse work, and verifies the legality and sufficiency of the title conveyed by the various deeds and determines the existence or non-existence of **liens** on the property which is being searched and turns out a product which is essentially a chronological setting forth of the deeds in abstract form, and his notes as to the adverse work he did. And this would complete a county level search. The abstractor or the examiner of title, if you will, must also verify the tax status of the property in the municipality and search for or have searches made for **liens** in the Superior Court of the State to the Superior Court Clerk's Office, and in the Office of the Federal District Court Clerk at Trenton.

When all those things are done an examination of that abstract can be made and conveyance of title granted.

BY MR. WEIGEL:

Q. I take it from your testimony, Mr. McDermitt, that you personally have gone into various county land records and brought the indices out and searched title and set up in effect chains of title?

A. Oh, I most assuredly have. I have slung books, as the saying goes, in 17 of the counties as far south as Salem.

Q. Have you done plotting from descriptions and instruments? A. Yes, indeed, frequently, especially in rural areas plottings are necessary in order to determine the location of the property in relation to bounding owners and also its location on the ground.

Q. Will you tell us briefly what the system is in the State of New Jersey for the recordation of land records? A. Yes. The statute calls for instruments to be executed and acknowledged for specified authority and recorded in the county recording office of the county in which the land is located. The system dictates that unless and until that is done third parties can deal with the land with impunity as against a claimed owner of the land, or a lienor of the land, so essentially as with most states ours is a system which requires the recording and the goal to force the recording is the fact that the absence of the instrument from the record eliminates a question of public notice and its recording in the public record imputes notice to the whole world.

Q. Is what we call a deed,is that the principal method for transfer or conveyance of lands from one party to another party? A. Very nearly the only method of transferring. There are some minor other ways in which it can be accomplished, but the normal method between living parties is a deed.

Q. Is a description of the premises to be conveyed a constituent part of every deed?

A. Yes, it is an essential part just as there must be parties and date, so there must be a venue and a description of the property being conveyed which would permit its identification as a particular parcel and not other lands.

Q. From your experience since 1948 with respect to the description of property being conveyed, what is your understanding of the requirements of New Jersey's system of land conveyancing and land recordation with respect to the need for identification with precision of land that is being conveyed or transferred?

MR. GOLDFEIN: I will object to the question-- I will withdraw the objection. I think I just don't understand it.

THE COURT: Up to now, you have been qualifying him as an expert, an expert in what, land conveyance, doing title work?

MR. WEIGEL: I will develop at this point, your Honor, because I really had not gone totally through it, Mr. McDermitt's credentials. I can do that at this point and that will form a basis for asking the question.

THE COURT: I know you demonstrated his credentials as an expert in the real estate field.

MR. WEIGEL: I would like to put a few other things on the record.

THE COURT: What are you going to offer him for after that?

MR. WEIGEL: As a person who is an expert in terms of what is a requirement of New Jersey's system of land recordation and land conveyancing in terms of the precisions of description in instruments and the need to identify specific properties and exclude all other properties in the question.

THE COURT: What issue does that relate to in this case?

MR. WEIGEL: The issue that it will ultimately relate to, your Honor, is the claims overlay placed upon the base photo maps and the inability of the lawyers -- the surveyors to identify with the precision that the land conveyance and land recordation system requires the identification of specific property to the exclusion of all other property.

THE COURT: I suppose you are covered by two issues. Sub-issue under Issue B, Number Two in the pretrial order, "Are the base photo maps with claims overlays" maps "within the meaning of the statute and O'Neill," and Number Four: "Has the Natural Resource Council clearly indicated those lands designated as State owned pursuant to the statute?"

I think I will overrule your objection at the present time for its relevance.

MR. GOLDFEIN: Let me restate the objection.

THE COURT: Go ahead.

MR. GOLDFEIN: This witness is a member of the bar and is qualified to testify to certain instruments. What the requirements of the New Jersey statute are regarding having a deed in form to be recorded by appropriate officers in each county, he has not done that and now he is being asked a question which is in the form--it is stated as if there is some legal requirement of particular kinds of technical language beyond the statutory requirements which he has already testified to in the county in which it is located, a description, name of the grantor and grantee, and a few others like he didn't mention.

THE COURT: Excuse me, just a minute. Perhaps we should have the question read back, but I think the question seeks to impose into the recording statutes, which I believe is Title 46, requirements which just are not there, and I don't want the question answered by this witness as if those in fact were the requirements of the recording statute. I want to see what the statute says.

MR. WEIGEL: While we are waiting for the book to come up, just to expand a little bit on the position which I have maintained throughout, that position is simply stated in this fashion, that our system historically of land conveyance and land recordation requires as an essential element of both the conveyancing and the recordation, the identification of specific property being conveyed, and by an identification it has to be inclusive of that property and exclusive of all other property.

THE COURT: Are you fitting the 36 maps into recordation, or conveyancing?

MR. WEIGEL: Well, we will develop, your Honor, what the State has done, and we have been told, and if there is a different representation I would like to hear it, we have been told and I have had that experience in specific instances, where we have been told to have our engineer prepare a description of their claim. They give you no metes and bounds description, they give you no monumentation, they give you nothing, and it will be developed not only through Mr. McDermitt's testimony but through our land surveyor's testimony, they give you nothing that will enable ten licensed New Jersey surveyors to take the same base photo map and claims overlay and come up with a description which will enable a person intending to convey that land to lend money on that land, to identify that land to the exclusion of all other lands.

THE COURT: Well, before they will lend money or convey, there would have to be a description. Is that correct?

MR. WEIGEL: That's correct, your Honor.

THE COURT: What we are talking about now under the statute and O'Neill, as I recollect, is that the State is told to state their claims.

MR. WEIGEL: Certify and determine, I believe, is the phrase, your Honor.

THE COURT: 13:1B--13.2, entitled, "Title Studies and Surveys; Certification of State Owned Lands.

"The Council is hereby directed to undertake title studies and surveys of meadowlands throughout the State and to determine and certify those lands which it finds are State owned lands."

Then it goes on to give priorities in those studies, and then the next section relates to a consideration of mean high water line, and then the next section says, "Upon completion of each separate study and survey the Council shall publish a map portraying the result of its study and clearly indicating those lands designated by the Council as State owned lands."

I think we ought to do this.

Is it uncontradicted that the maps which the State has published that indicate lands claimed by the State do not have courses and distances within the boundary lines?

MR. GOLDFEIN: Metes and bounds.

THE COURT: Metes and bounds?

MR. WEIGEL: I think that is uncontradicted.

THE COURT: Okay, that is stipulated.

MR. WEIGEL: Nor traditional monumentation.

MR. GOLDFEIN: I will object to that.

THE COURT: What is traditional monumentation?

MR. WEIGEL: Something that will enable me, your Honor, to know pertinent points on the boundary lines.

THE COURT: Mr. Weigel, I built a new home recently, just two years ago, and the wooden stakes that have been in were knocked down and disappeared, there is no traditional monumentation on my property and nine of the homes in Irving Farms.

MR. WEIGEL: You are considering it from a different position. I am considering it from the kind of monumentation land surveyors have even in meadowlands. There are monuments in the Newark-Elizabeth Meadows. Those monuments may be on roads or railroad trackage. They provide a known point from which they--

THE COURT: You should be satisfied if they are there.

MR. WEIGEL: How do you relate the problems, how do you relate that?

THE COURT: I can't accept your statement that there is not traditional monumentation there just that way.

MR. WEIGEL: You have not let us develop our case on that.

THE COURT: I'm not going to spend the whole week, Mr. Weigel. So far, we have discussed Mr. McDermitt's experience and I know I have interrupted a few times and I want to get moving faster than that. I am sure Mr. McDermitt is going to say that a conveyancer could not draw a deed based on what the maps showed unless he sent a surveyor out there. Let's agree to that and then argue the legal effect of it. We don't have to spend hours doing that. Is that what he is going to say?

MR. WEIGEL: What I think he is going to say and what other witnesses will say, your Honor, if they sent three surveyors out, you would get probably three different answers. And I submit to the Court--

THE COURT: How have the grants been ddveloped in the past?

MR. WEIGEL: In the recent past what the State has done to us, your Honor, is they have said we are not going to give you the location of our claim beyond these base photo maps and claims overlays; if you want us to render a conveyance to you, you hire an engineer, you have your engineer go out and do it.

THE COURT: That is precisely what Mr.Freeman testified to as being the traditional method; the applicant has his surveyor prepare a map and submit it with the application. Do you want to change that?

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