

REPORT

OF THE

RIPARIAN COMMISSIONERS,

OF THE

STATE OF NEW JERSEY,

*FOR THE YEAR 1873.*

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TRENTON, N. J.:

THE STATE GAZETTE—MURPHY & BECHTEL, BOOK AND JOB PRINTERS.

1873.

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## REPORT.

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*To His Excellency Joel Parker, Governor of the State of New Jersey:*

The Commissioners appointed under the act approved March 31, 1869, entitled "Supplement to an act entitled 'An act to ascertain the rights of the State and of riparian owners in the lands lying under the waters of the bay of New York, and elsewhere in this State' approved April 11th, 1864," respectfully report:

The first duty of the Commissioners is a sad one. It is to refer to the death of our late associate Hon. Peter Vredenburg. The State has lost one of her brightest ornaments, a citizen of sterling worth, unsullied character and spotless integrity. Not long after he appended his signature to the last annual report, he resorted, for the benefit of his failing health to St. Augustine, Florida, where he died March 24th, 1873. The Commissioners truly feel the death of Judge Vredenburg, and have entered on our record an appropriate tribute to his memory.

The undersigned Thomas McKeen, who was duly appointed a Commissioner under the act of March 31, 1869, to fill the vacancy caused by the death of Hon. Peter Vredenburg, and was commissioned April 3, 1873, took the oath of office in the manner and form prescribed by law, April 15, 1873, which was duly filed in the office of the Secretary of State, and he thereupon entered upon the duties of his appointment, in connection with the others of the undersigned, his associates.

During the year, the meetings have been regularly continued from time to time in the manner prescribed by the act, and all the business coming before the Commission has been carefully considered, and as rapid progress made as the nature of the duties and the circumstances connected with them permitted.

The Commissioners have during the year signed grants and leases for lands which are or were under tidal water, which, including the prices for lands granted and the principal sums which would yield an interest equal to the annual rents reserved in the leases, amount to the sum of \$26,654.34.

They have also acted, to the extent practicable, on applications, some of which will be grants and some leases, the principal sums of which at the rates fixed by the Commission, amount to \$30,008.34.

There have been other applications, the business connected with which is not sufficiently advanced to enable the Commission to fix the compensation or rentals.

The amount realized by the State for the last fiscal year from grants, rents and interest on proceeds of grants of the State's lands under tidal waters, it is understood by the Commission, is about \$80,000.

Of the applications reported last year as having been made, or renewed during that year, several, for reasons beyond the control of the Commissioners, remain in suspense. Including the principal, which would yield an interest equal to the rents reserved by the leases, annually, they amount to \$211,994.

In addition to those last referred to, there are leases which have remained in suspense for two years. The principal sum, which would yield an interest annually equal to the rents reserved in the leases now referred to is \$201,900.

The grants, leases and applications made the past year, and the applications referred to in last year's report, which remain in suspense are set forth in the tables contained in the report of the engineer.

As to the applications and leases remaining in suspense, the Commissioners have done all in their power to have them concluded. None of them have been delayed by reason of any dissatisfaction as to the price or rentals fixed, but the hindrances arise outside of and beyond the action or control of the Commissioners. In some of the cases in suspense for the last year, there have been transfers of, or some changes in, the title to some parts of or interests in the lands, which require others beside, or in addition to those who made applications, or were therein named, to become parties. These changes were discovered too late for them to be rectified the present year. It is hoped that the hindrances which have delayed the conclusion of all the cases referred to as in suspense may be removed. Possibly in some of the cases in suspense, the expected return to the State may not be realized under the present applications.

At the date of the last report, the mayor and aldermen of Jersey City had not concluded their action in the matter of the acceptance of the grant by the State to the city, of land under tide water, as provided in and by the act approved April 4, 1872, "to cede to the mayor and common council of Jersey City, certain lands of the State, now and heretofore under the tide water of Communipaw bay," &c., for the purposes of public wharves and docks. After that report, the resolution which had then been adopted by the board of aldermen, accepting the grant, was vetoed by his honor the mayor, and thereupon, when the same came up for final action, it was rejected, and the veto of the mayor was sustained. In the board of works, the subject was considered, but without result.

The impression in Jersey City, seems general that it is inexpedient

for the city to accept lands under water, the improvement of which might require assessments and taxation, and that the interests of the city would be better served if such improvements were made at the cost and under the control of private parties rather than by the public authorities at public expense. The grant not having been accepted, no map has been filed by the Commissioners.

The efficient engineer of the commission, R. C. Bacot, Esq., has, during the year, with a corps of engineers, made surveys along the south side of North Shrewsbury or Navesink river, along the easterly side of South Shrewsbury river, at and in the vicinity of Seabright on the Monmouth beach, and on the westerly side of said river in front of the Highlands, east of the Highland Lights, in the county of Monmouth. A number of the riparian owners in the localities named, have expressed a desire to make applications for lands of the State under tide waters, after the surveys are completed and maps made. Some have already made application. There are riparian owners also on the northerly shore of the North Shrewsbury or Navesink river who desire surveys to be made preliminary to applications by them.

Other applications have been made for preliminary examinations, and if need be, surveys, from riparian owners of lands on the Raritan river near New Brunswick, Middlesex county, (where one grant has already been made); on the Delaware, at Kinkora, Burlington county; at Bridgeton on the Cohansey creek, Cumberland county; on Maurice river, in the same county; also by Reuben Townsend, Esq., a riparian owner on the sound bearing his name, in the easterly margin of Cape May county, and from riparian owners on the westerly side of the same county. These preliminary applications are receiving the attention of the Commissioners and will be followed by formal applications for grants or leases from the State.

There is a growing desire on the part of riparian owners, where there is no immediate necessity for docks and wharves, and probably will never be such necessity, to secure the ownership and control of the lands of the State under the tidal waters contiguous to their shore lines along the whole frontage of land owned by them, and there is a disposition by such riparian owners to avail themselves of the opportunity afforded, by applying to the commission, to acquire the title to all such lands under water in front of their whole shore, at one time, by a single grant to each owner.

The Commissioners, in all cases, favor a liberal arrangement with shore owners, and deem that it is for the mutual interest and advantage of the riparian owners and of the State, to fix a valuation where the lands under tidal water along the whole frontage of the riparian owner are taken at one time, at such reasonable rates as will enable such owners, for a moderate sum which will not be burdensome, to acquire the ownership and control of such lands, and also secure an immediate return therefor to the State treasury.

It is found that lithographic maps of the shores surveyed are very useful by aiding to supply information which satisfies riparian owners of the advantages they gain by acquiring the ownership of lands under tide water contiguous to their frontage.

An extended, particular and careful examination has been made of the frontage, depth of water and best locality for exterior lines of wharves and piers, along the Delaware river, in front of the riparian owners of lands in the cities of Camden and Gloucester and vicinity. In adjusting such exterior lines, regard has been had to the improvements already existing and those contemplated, to the desires and wishes of riparian owner, and of those interested in existing and contemplated improvements, and to the necessity of keeping free, open and uninterrupted the navigation of the river as a common highway between the States of Pennsylvania and New Jersey. The exterior lines adopted correspond with the exterior lines fixed by the Port Wardens of Philadelphia in front of that city by being located parallel therewith, they also avoid, along the whole length thereof, any narrowing of the river, and at the same time afford such depth of water as will make the frontage very valuable to the owners.

The map accompanying the report of the engineer is reduced from a large map, which has been prepared with great care, and represents the present shore line along the Delaware river, at the cities of Camden and Gloucester and their vicinity, and the exterior line for wharves and piers adopted by the Commissioners. It is apparent, from an inspection of the map, that the plans adopted by the Commission will be of great advantage to the commercial interests of those cities and to the riparian owners there and in the vicinity, by preserving a uniform frontage with such deflections only as the changes in the course of the river require, leaving a greater or less width of the shoals, or as yet unimproved space, between the shore line and the exterior line according to the variations in the course of the shore line. The unimproved spaces are well adapted to be used for any improvements, even the most extensive required by the wants of commerce, while the exterior line, as has been suggested, is located along the easterly limit of deep water, as ascertained by the latest official soundings. The uniform exterior line will prevent those entitled to make improvements from extending them so far out into the river as to interfere with the proper enjoyment by other riparian owners in the vicinity of such improvement of lands under tide water, for which they may have acquired or may desire to acquire title from the State for the purposes of improvement.

It is respectfully suggested that the policy of deriving an income to the State, and the policy of establishing the exterior lines for wharves, piers, docks and improvements along the margins and shores of the tidal waters of the State upon a uniform and syste-

matic plan, having both been adopted, whether it is not for the interest of the State and quite important that there should be no more grants of lands of the State under tidal waters, by legislation, without compensation, and without any regard to uniformity of exterior lines, or to the extent outward from the shore of the respective grants.

The Commissioners stated, in a former report that applicants desiring to acquire title to lands under water which were oyster grounds, had not been encouraged, for the reason that the magnitude of the oyster interest was such that some plan would probably be adopted by the Legislature, by which, on application by the board of chosen freeholders or others interested in the respective counties within the limits of which are grounds under tidal waters, where oysters might be advantageously planted, suitable oyster grounds might be set apart and dedicated for the purpose of planting and growing oysters, for such length of time as would seem best, and after such dedication, be leased by committees of the board of chosen freeholders, or other local county authorities and the rents paid to the State. Such a plan was in operation in the western part of Raritan bay several years ago, but under Commissioners. A similar plan is now in operation in Shark river, in the county of Monmouth, by a local statute. A plan to control the business is, by virtue of a local statute, also in operation in Maurice river cove, in the county of Cumberland, and the vicinity thereof.

It is understood that those engaged in the oystering business in our State desire the adoption of some plan for their protection. It would seem advisable to ascertain whether a uniform system could not advantageously be adopted, which would meet the wishes and foster and protect the interests of the large number of our citizens engaged in that business, by enabling them to acquire such grounds as they desire for their business, and to hold and enjoy the same without molestation or disturbance. The local management of the portions of the lands under water which might be set apart for the business, such as dividing the same into lots, and making maps and descriptions thereof, making and renewing leases, adjusting, receiving and accounting for rentals, could be in the hands of existing local authorities in the counties. The rents should be satisfactory to those in the business, either by offering the grounds, at public vendue, or by fixing such moderate rates that they would be regarded as a fair and just compensation for the security and protection afforded. It is the settled policy of the State not to interfere with the natural oyster beds, but to leave them without appropriation by individuals. What is herein suggested has reference to the dedication and leasing of lands under tidal waters, upon which there are no natural oyster beds.

There are localities where the riparian owners on tide waters, might, very properly, and without disadvantage to any plan the Leg-

islature may adopt, have grants or leases made to them from the State, although the lands thus acquired by them are or may be made available for the planting and growing of oysters. In view of past legislation, lands under water upon which there are natural oyster beds would not be included in any grant or lease, except where such lands are to be used for permanent improvements.

It is considered appropriate at this time to refer to the case of *Whitman v. Thompson*, pending in and argued at the present sitting of the Supreme Court of the United States at Washington. It is one of three actions of trespass, founded upon the seizure September 26, 1862, of the sloop *Ann L. Whitman*, of which John Whitman, the plaintiff, was master and the alleged owner, and of arrests then made by the defendant, Joseph I. Thompson, as sheriff of the county of Monmouth, in the waters of Raritan bay, she, at the time as the defendant alleges, being employed by those in charge of her, for the purpose of, and they being engaged in taking clams, within the limits of this State, in violation of the act of April 14, 1846, for the preservation of clams and oysters, by the provisions of which act any person who is not, and for six months previous has not been an inhabitant and resident of this State, who shall rake or gather clams, oysters or shell-fish in any of the rivers, bays or waters of this State, shall be fined \$20, and the vessel employed shall be forfeited.

The sloop seized was, by proceedings had before two justices in the county of Monmouth, pursuant to the statute declared forfeited, condemned and sold. The actions against Sheriff Thompson were originally brought in the Superior Court in the city of New York, and were removed to the United States Court. The Legislature of this State by resolution of March 18, 1863, directed the employment of counsel to defend them on behalf of the State, and the case was argued in the Supreme Court by the Attorney General. In February, 1864, the case of *Whitman v. Thompson* was tried in the city of New York in the United States Circuit Court before Justice Shipman and a jury, the trial occupying eleven days. The legal questions involved were reserved for subsequent consideration, and the jury being directed to find specially certain propositions submitted, rendered a verdict, in effect: that the seizure of the vessel was within the limits of New Jersey, but not within the limits of the county of Monmouth, and that the plaintiff was not within the limits of the county; and the plaintiff's damages, were assessed at \$3,500. The court ruled that the boundary line between the States of New York and New Jersey, by the treaty approved by the act of February 26, 1834, is the middle of Raritan bay to the main sea, which it was held meant to the main ocean lying outside of the shores of the two States. The defendant alleges that the limits of Monmouth county as defined by the act then describing its boundaries, as well as the limits of the State, included the locality at the eastern part of Raritan bay, where the witnesses testified the plaintiff raked for and took clams, and

where the seizure of the vessel and the arrests were made. The questions, among others involved, are: the boundaries of this State and of the county of Monmouth in that part of Raritan bay; the right of this State by her tribunals to adjudicate relative to a breach of her laws within her limits, and the effect of an adjudication in this State, unreversed, by which the plaintiff was convicted and his vessel condemned and forfeited; also the constitutionality of the act of New Jersey, which prohibits non-residents from taking oysters and clams in the waters of this State and prescribes as a penalty the forfeiture of the vessel employed. The ruling at the trial as to the State boundary was satisfactory. The limits of the county of Monmouth were then defined by the act of 1822, and since by the act of 1866. The case has not been decided.

The map showing the new exterior line for piers established between Castle Point at Hoboken and North Fifth now Thirteenth street, Jersey City, referred to in the report of last year, made by the Commissioners under the authority conferred by the act of the Legislature of the State of New Jersey, approved April 4, 1872, the same being a supplement to the riparian act approved April 11, 1864, which map was made by the engineer and approved, adopted and certified by the Commissioners and dated November 25, 1872, was filed in the office of the clerk of the county of Hudson, at Jersey City, December 12, 1872, and a duplicate was also filed in the office of the Secretary of State, at Trenton, December 13, 1872.

Permanent monuments marked "R. C. N. J." <sup>1872</sup> have, during the year, been procured and located at the points along the Hudson river deemed important to be thus designated at present, and the locations thereof and of existing structures selected also as permanent monuments have been marked on the maps of the commission.

The engineer under the direction of the Commissioners also prepared a map of the tide water basin in Communipaw bay, south of Jersey City, representing the bounds thereof, as they are described in the act approved April 4, 1872, establishing such basin, which map was approved and certified by the Commissioners and is dated December 7th, 1872. It was filed in the office of the clerk of the county of Hudson, at Jersey City, December 12, 1872, and a duplicate thereof also certified, was filed in the Secretary of State's office, at Trenton, December 13th, 1872.

Reference is made to the fact, that since the operation of the riparian laws has been extended to the lands of the State under all its tidal waters, a large amount of work not originally contemplated has become necessary. Of this work, the surveys, the examinations of particulars at the localities where riparian owners are beginning to apply for information relative to their interests, and the making of maps are preliminary to and distinct from any special applications by the riparian owners for grants or leases. Such work, however, is necessary in some localities, in order to furnish to ripar-

ian owners the information necessary to enable them generally to adopt the policy of acquiring the title of the State to the lands under tide water opposite their shore-fronts.

Special attention is called to the nature and value of the aid and service rendered to the State by R. C. Bacot, Esq., as engineer. He has been engaged in connection with the work pertaining to the lands of the State under tidal waters since the organization of the preliminary commission, appointed in the year 1864, devoting his time and attention thereto almost continually. His skill and services professionally, are superior; his excellent judgment in all matters connected with, and his personal knowledge of all the details of the work, both as to the part accomplished, and the very important part now being carried on and extending rapidly, impel the Commissioners to recognize the importance of his services as engineer of the commission. In view of the additional work referred to, it is suggested that necessary expenses incurred beyond the amount now provided for by law, be paid out of moneys realized by the State from proceeds of sales of lands under or which were under tidal waters.

The engineer's report, together with the maps accompanying the same, representing the location of the exterior line for piers and wharves at the cities of Camden and Gloucester, and the vicinity thereof, on the Delaware river, the exterior lines for improvements along the Cohansey creek at Bridgeton, and similar lines in North Shrewsbury or Navesink and South Shrewsbury rivers, are submitted herewith.

Attention is respectfully directed to the map showing the changes which have taken place in the bay of New York, and to the statements in his report relative to the care exercised on the part of the State of New Jersey to avoid any reclamations of land on the New Jersey margin of New York bay and the Hudson river, which would tend to impair navigation; also to the several other suggestions made by him.

Respectfully submitted, this eighteenth day of December, 1873.

(Signed), FRANCIS S. LATHROP,  
CHARLES S. OLDEN,  
BENNINGTON F. RANDOLPH,  
THOMAS MCKEEN.

## ENGINEER'S REPORT.

*To the Board of Riparian Commissioners of the State of New Jersey :*

GENTLEMEN:—The applications for grants and leases of lands of the State under tide water, made since December 4th, 1872, have been as follows, viz :

### FOR GRANTS.

	Principal sum.
By L. F. & A. Beckwith, Staten Island sound, - - -	\$1,000 00
" Morris & Cummings, Jersey City, 8 lots, - - -	40 00
" Juan C. Ribon, Jersey City, 2 lots, - - -	10 00
" Freeman & Titcomb, Jersey City, 10 lots, - - -	50 00

### FOR LEASES.

By George S. Coe, Hudson river, - - - - -	\$1,076 67
" Gorham & Dickerman, Hudson river, - - - - -	7,210 00
" Crammond Kennedy, Hudson river, - - - - -	1,654 50
" S. E. Meredith, and others, Arthur Kill sound, - - - - -	7,076 67
" Joseph A. Throckmorton, Navesink river, - - - - -	128 00
" I. S. Applegate, Navesink river, - - - - -	73 00
" Mary H. Sneed, Navesink river, - - - - -	48 00
" Matthew White, Navesink river, - - - - -	100 00
" American Dredging Company, Delaware river, - - - - -	7,500 00
" The estate of Cooper, Delaware river, - - - - -	1,557 50
" A. Cooper, and others, Delaware river, - - - - -	1,815 00
" S. B. Garretson, Delaware river, - - - - -	1,600 00
" W. I. Thompson, Delaware river, - - - - -	
" W. B. Mulford, Delaware river, - - - - -	
" Thomas Higbie, Delaware bay, - - - - -	
" C. W. Slatterley, Delaware bay, - - - - -	
" — Pine, and others, Kinkora river, - - - - -	
" J. B. & — Nixon, Cohansey river, - - - - -	169 00
" A. Q. Keasbey, and others, Shrewsbury river, - - - - -	
" James Bishop, Raritan river, - - - - -	
" Pardee, and others, Hackensack river, - - - - -	

2 REPORT OF THE RIPARIAN COMMISSIONERS.

Of the above the following grants have been executed and are now ready for delivery to the parties named, viz:

- To L. F. & A. Beckwith.
- To Morris & Cumings.
- To Juan C. Ribon.
- To Freeman & Titcomb.

Of the applications noticed in the last report (December 4, 1872), the necessary papers have been executed for the following parties, viz:

Grant to A. V. Schenck, Raritan river, . . . . .	\$1,386 00
Lease to Otto Kohler, Hudson river, . . . . .	5,280 00
" H. J. Anderson, Hudson river, . . . . .	2,113 34
" Wetmore & Phelps, Hudson river, . . . . .	1,550 00
" William Walter Phelps, Hudson river, . . . . .	1,800 00
" John S. Lyle, M. A. & E. Newcomb, Hudson river, . . . . .	13,425 00

Of the remaining applications of the same report the following remain under consideration, by reason principally of changes of ownership of shore fronts, since the applications were presented, viz:

Wetmore, Dana & Phelps, . . . . .	3,000 00
William Walter Phelps, . . . . .	1,735 00
Phelps & Baylis, . . . . .	1,460 00
Phelps & Coe, . . . . .	2,060 00
William Walter Phelps, . . . . .	1,825 00
Englewood Dock & Transportation Company, . . . . .	330 00
E. B. Wakeman, and others, . . . . .	16,250 00
J. L. Brownell, . . . . .	1,900 00
J. L. Brownell, . . . . .	2,650 00
J. L. Brownell, . . . . .	3,275 00
J. L. Brownell, . . . . .	2,090 00
J. L. Brownell, . . . . .	3,040 00
J. L. Brownell, . . . . .	2,080 00
J. L. Brownell, . . . . .	1,950 00
J. L. Brownell, . . . . .	5,550 00
J. L. Brownell, . . . . .	984 00
J. L. Brownell, . . . . .	1,020 00
J. L. Brownell, . . . . .	14,760 00
J. L. Brownell, . . . . .	3,125 00
Robert Annett, . . . . .	7,860 00
Robert Annett, . . . . .	8,850 00
Robert Annett, . . . . .	2,000 00
Robert Annett, . . . . .	124,200 00
Heirs of James G. King, . . . . .	

The following are applications suspended for the last two years, viz:

Morris and Essex Railroad Company, . . . . .	\$76,900 00
James Brown, . . . . .	125,000 00

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Maps showing the alteration adopted by the board November 25, 1872, of the exterior line for piers between Castle Point, Hoboken, and Thirteenth (formerly North Fifth) street, Jersey City, and of the tide water basin in Communipaw bay, established by the act of the Legislature approved April 4, 1872, were filed in the office of the clerk of the county of Hudson, December 12, 1872, and duplicates thereof in the office of the Secretary of State, at Trenton, December 13, 1872.

The stone monuments marked <sup>R. C. N. J.</sup><sub>1872</sub> intended as points of reference for readily determining the positions of the exterior lines, on the west side of the Hudson river, have been set in a permanent manner, and the exact location of each monument has been indicated on the official maps of the commission.

Surveys have been made during the year of the Shrewsbury river along the easterly side thereof, from the government lands at Sandy Hook on the north, to the southerly limits of the property of the Monmouth Beach Association, and also along the westerly side in front of the Highlands, and along the southerly side of the Navesink or North Shrewsbury river from the South Shrewsbury river on the east to the railroad bridge at Red Bank on the west.

An exterior line for solid filling has been established for the shores of these rivers within the limits above mentioned as shown on the accompanying map.

A map of the Delaware river showing the water fronts of the cities of Camden and Gloucester, together with the latest official data of its channels and soundings, has been prepared by Mr. I. H. Yocum, Jr., surveyor, a copy of which is hereto annexed. Upon this is marked the exterior line for solid filling established for a portion of the shore front of the city of Camden by the commission of 1865, with the extension of this line adopted by the present board for the additional territory embraced by the map. Copies of this map will be filed in the clerk's office of the county of Camden, and in the office of the Secretary of State, at Trenton.

Examinations have been made of the Cohansey river within the limits of the city of Bridgeton, Cumberland county, and the establishment of proper exterior lines for solid filling for the shores of this river is now under consideration. The dredging of portions of the channels of this stream, now being made by the Federal Government, has probably, to a great extent, been rendered necessary in consequence of the many injudicious projections into the river by riparian owners, which have diverted the flow of the waters from their natural course to the injury of navigation.

Similar instances of injurious encroachments, observed upon other navigable rivers of the State, make it advisable that legislative action should so control this important subject as to require the previous sanction or advice of this commission in all cases of improvements upon tide water.

The rapidly increasing settlement of the shores of the rivers and bays in the eastern portion of the State, for commercial purposes, renders it important for the protection of navigation in these waters, that exterior lines limiting the construction of wharves and other improvements thereon, and not embraced in the surveys and maps of 1865, should be defined and adopted as soon as practicable; some progress in the collection of data for this object, has been made during the year.

The improvements projected and now in course of completion by corporations and citizens of this State, on the water-fronts of Jersey City and Hoboken, and in the coves or shallow waters adjacent thereto, are all, not only within the limits prescribed by the commission of 1865, of this State, but conform also to the suggestions as to improvements on the New Jersey side of the harbor of New York, made in 1856, to the commissioners for the State of New York.

It may be observed of the exterior lines established by this State in 1865, for structures into the waters of the river and bay, that the decision of this important subject, as well as the mode of improvement proper for the coves referred to, to which places the reclamations of land have been principally confined, were made and adopted after a careful review of all questions relating to the preservation of the harbor in its full capacity for commercial purposes.

The positions of these lines, and the mode of improvement of the coves, agree substantially with those suggested and recommended by eminent officers of the United States Coast Survey, Messrs. Totten, Bache & Davis, when in their report, made as advisory counsel to the harbor commission of the State of New York in the year 1856, they indicated exterior lines and modes of improvement which would be suitable and proper for the western shores of the harbor.

Their conclusions as to the lines proper for our shores, were summed up as follows:

"1st. That the limits of construction on the New Jersey side, must be carried out very far, if they are to be practically useful;" and

"2nd. That this can be done without endangering the free navigation of river or substantially diminishing its bed." [Page 168, Report of New York Harbor Commission of 1856].

And as to the reclamation of the shallow waters of the coves, they remark, "that the obvious method of turning to account this now useless and unprofitable ground, is by appropriating it to basins and their accompanying buildings." [Page 172 of same volume].

From the earliest authenticated survey of the bay and harbor of New York, made by Lieutenant Ratzer, in the year 1767, the position of the original eastern margin of the Hudson river, at Fourteenth street, in the city of New York, shows a width of forty-eight hundred feet, between that shore and the opposite shore of New Jersey, at Castle Point, Hoboken. The width of the river between these shores is now reduced to three thousand feet, by the extension

of the street above named and encroachments upon the deep waters of the river, made wholly on the eastern or New York side.

On the Hudson river between Fourteenth street, and the Battery, and along the shores of the East river to Corlear's Hook, it will be noticed by reference to the same survey, that the widths of these highways of commerce, have been narrowed by reclamations of land on the New York side, to an average extent of one thousand feet; so likewise as to the passage-way between Governors Island and the shores of Long Island, with a width of twenty-four hundred feet, in the year 1767, now reduced to fourteen hundred feet.

The map submitted herewith shows the former and present width referred to and other changes affecting the bay of New York.

These changes are referred to, because it is important that they and all alterations which may occur along the margin of our common harbor, should be kept in view, as well as to make it evident and have it understood, that the improvements on the New Jersey shores are not injurious to navigation.

The superior commercial advantages conceded to our shores, leading to the selection of the water fronts of Jersey City and Hoboken, as ports of entry and departure for the numerous lines of European steam vessels now established thereon, and affording convenient connection with the great continental lines of railways, require that the improvements made should correspond with the magnitude of the commercial business which these facilities for the close connection of transportation by land and sea will bring to our depots, wharves and docks.

The benefits of every development of commercial enterprise made upon the shores of this State must eventually be shared by the city of New York, and as we have a common interest in the preservation of navigation no encroachments should be permitted by either State which would tend to impair navigation or be detrimental to the commercial interests of either.

Copies of the maps referred to in this report are annexed, viz:

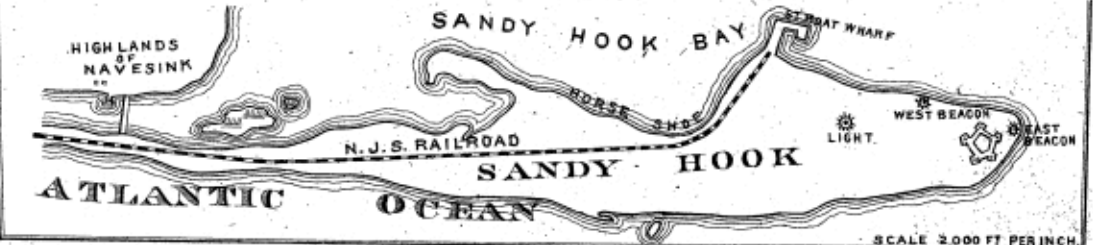
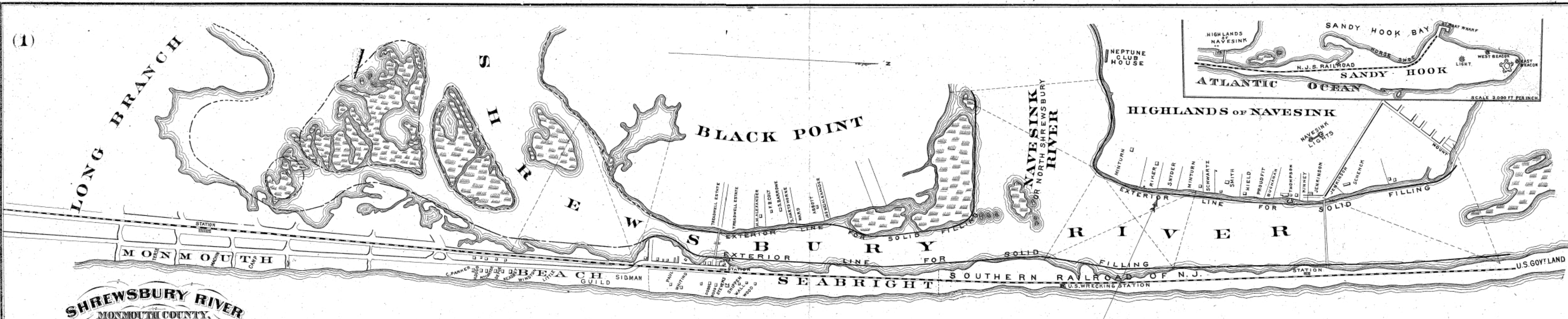
1. Map of the Shrewsbury river, from the Highlands of Navesink to Long Branch.
2. Map of the southerly shores of the Navesink, or North Shrewsbury river, showing water-fronts of Oceanic, Red Bank, &c.
3. Map of the Delaware river water-fronts of the cities of Camden and Gloucester, &c.
4. Map of the Cohansey river, at Bridgeton, N. J.
5. Map of the Bay of New York, 1767 and 1873.

ROBERT C. BACOT,

Jersey City, December 18, 1873.

Engineer.

(1)



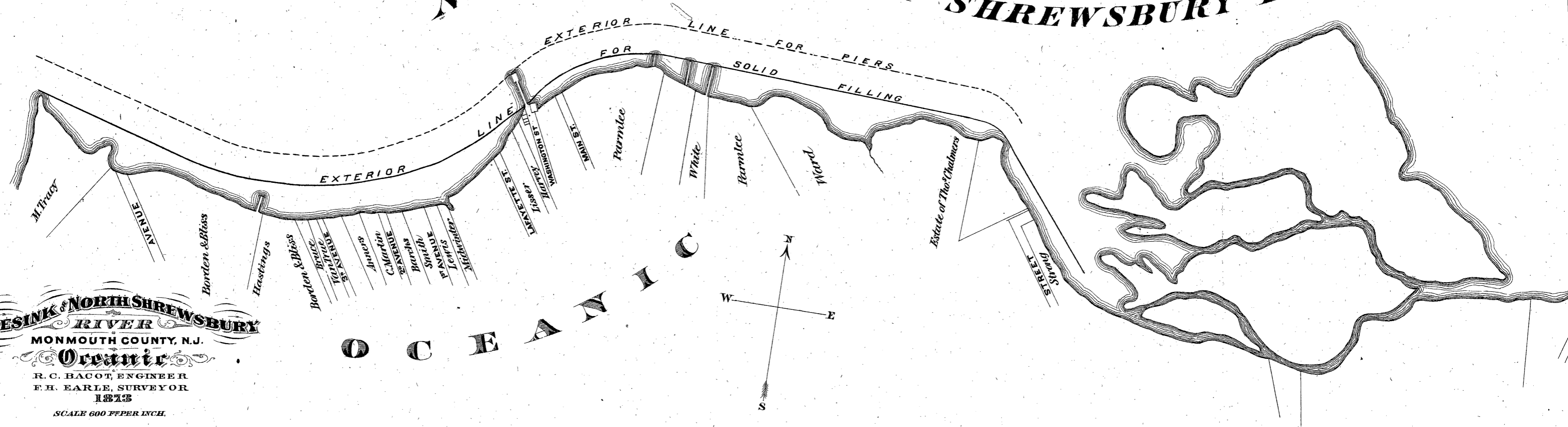
**SHREWSBURY RIVER**  
 MONMOUTH COUNTY,  
 NEW JERSEY.  
 FROM THE  
 HIGHLANDS TO LONG BRANCH.

R. C. BACOT, ENGINEER.  
 F. H. EARLE, SURVEYOR.  
 1873.  
 SCALE: 1,200 FT PER INCH.

A T L A N T I C O C E A N

(2) SECTION NO. 1

# NAVESINK OR NORTH SHREWSBURY RIVER



**NAVESINK OF NORTH SHREWSBURY RIVER**

MONMOUTH COUNTY, N.J.

**Oceanic**

R. C. BACOT, ENGINEER

F. H. EARLE, SURVEYOR

1873

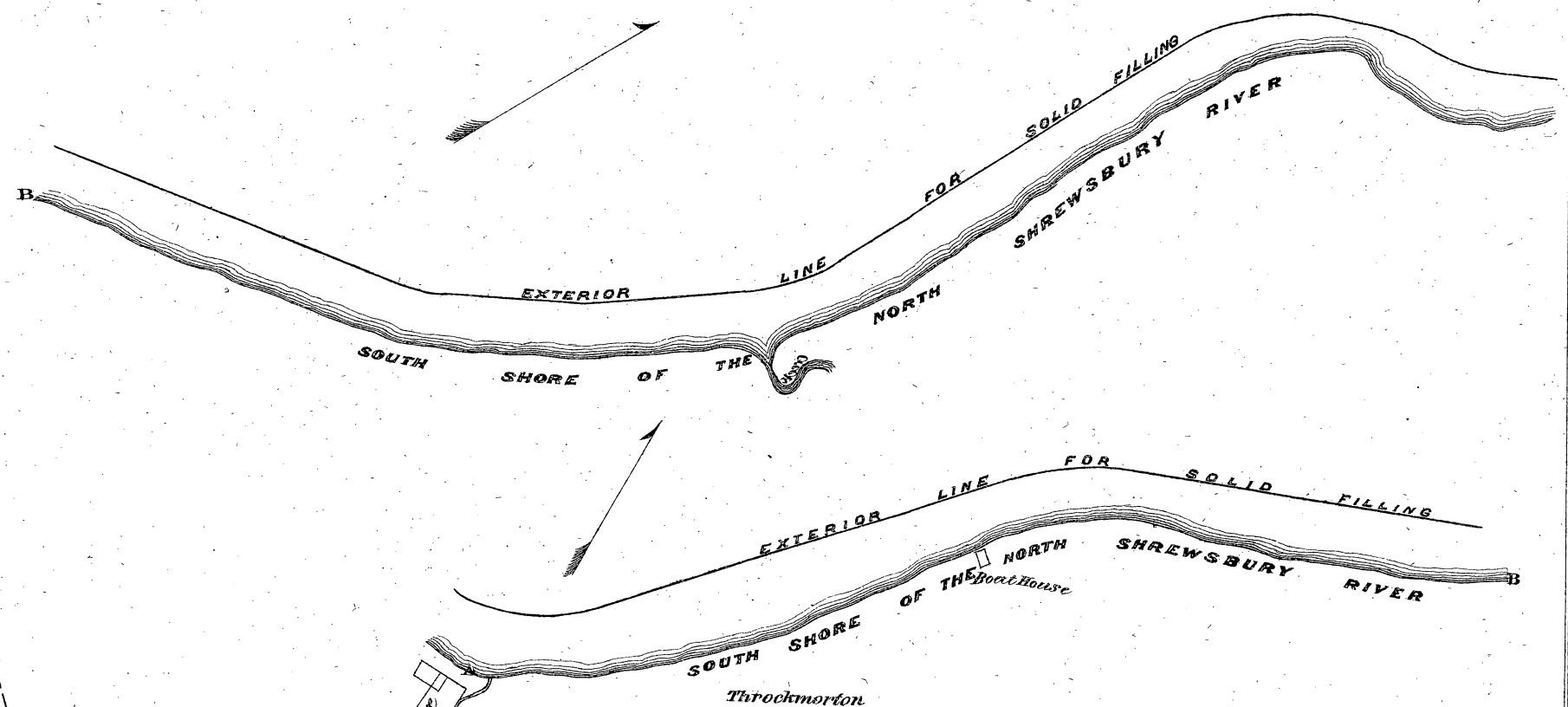
SCALE 600 FEET PER INCH.

Murphy & Bechtel, Trenton, N.J.

(2) SECTION NO. 2

RAILROAD BRIDGE  
NEW JERSEY SOUTHERN R.R.

Bird



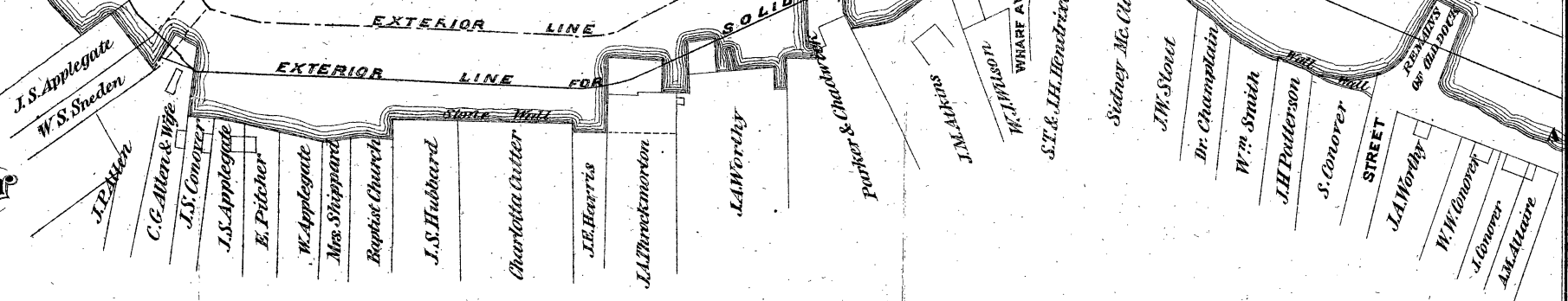
# NAVESINK OR NORTH SHREWSBURY R.

AMALGAM BROOK

FOR PIERS  
FOR SOLID FILLING

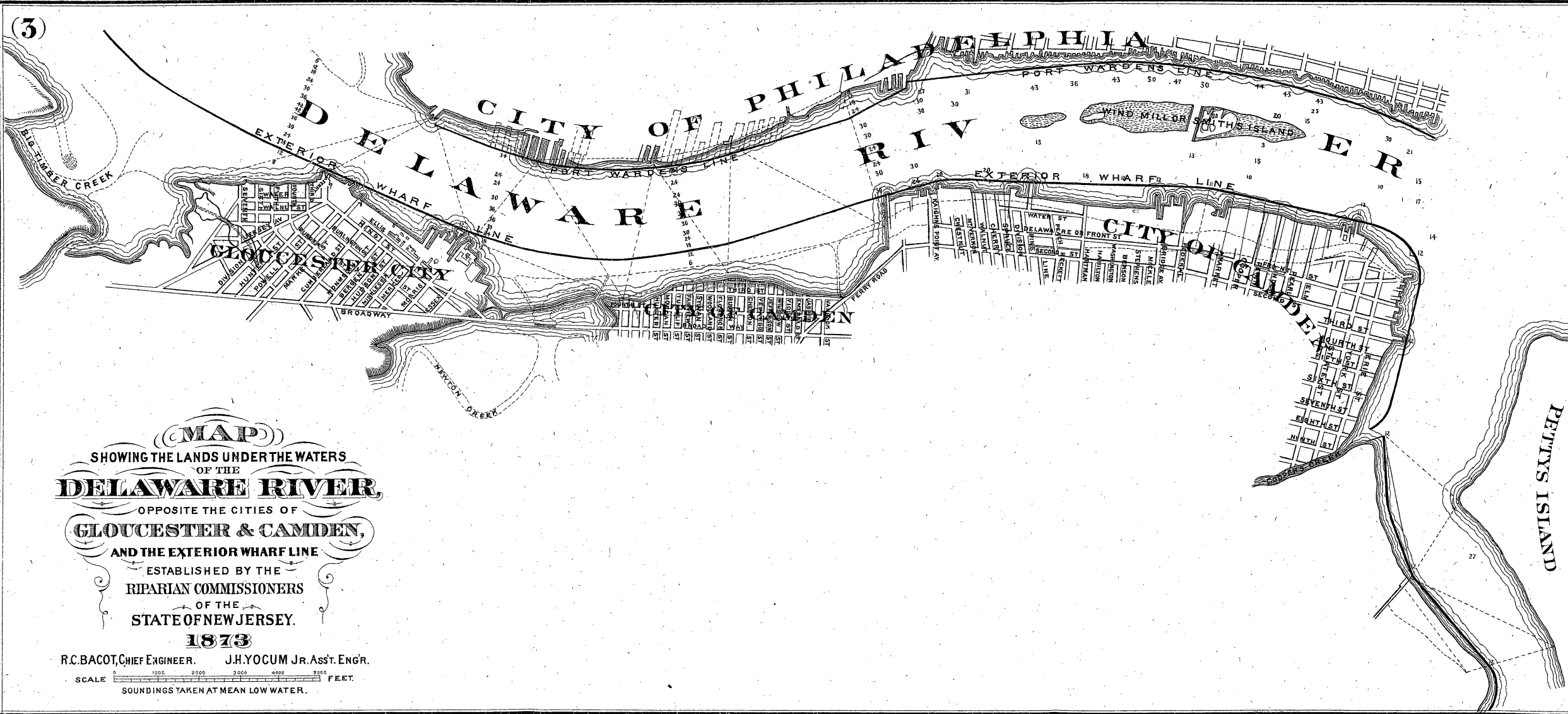
**NAVESINK**  
OR  
**North Shrewsbury River**  
MONMOUTH COUNTY,  
N.J.  
**RED BANK**

R. C. BACOT, ENGINEER  
F. H. EARLE, SURVEYOR  
1873  
SCALE 300 FT PER INCH



# RED BANK

(3)

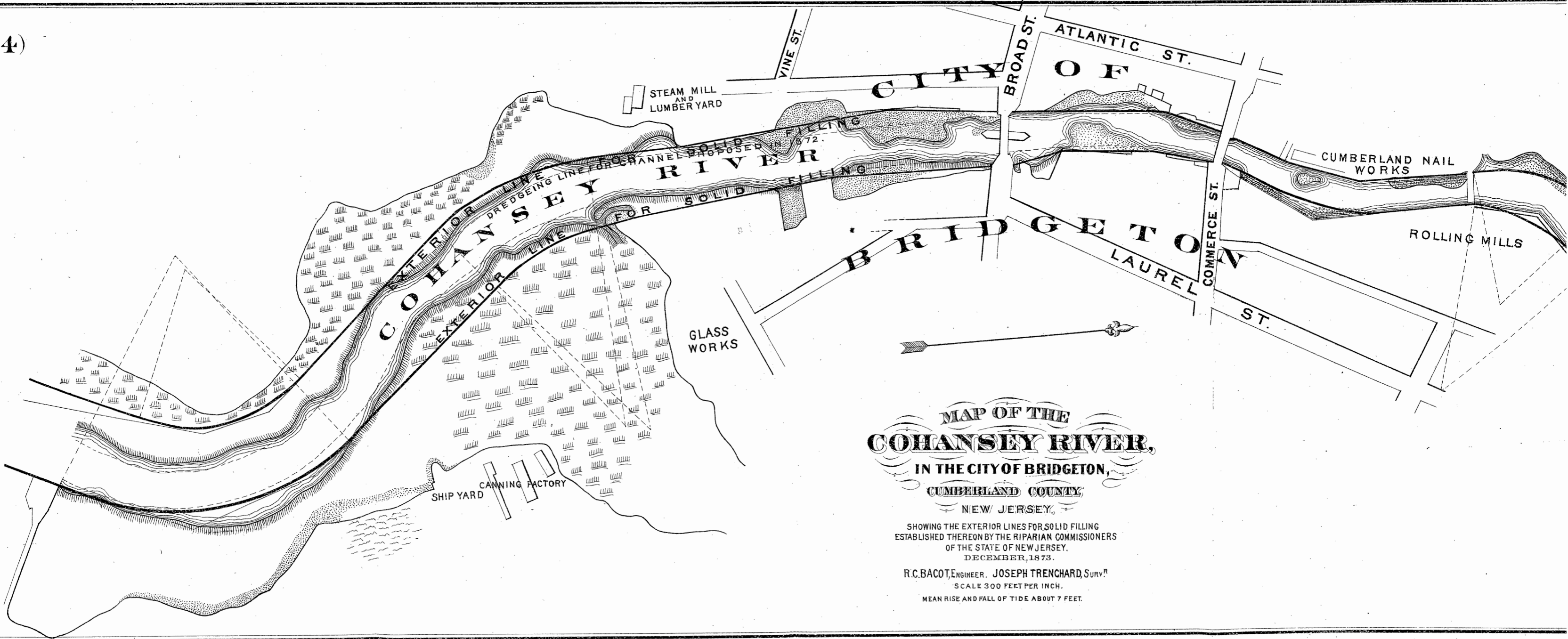


(MAP)  
 SHOWING THE LANDS UNDER THE WATERS  
 OF THE  
**DELAWARE RIVER,**  
 OPPOSITE THE CITIES OF  
**GLOUCESTER & CAMDEN,**  
 AND THE EXTERIOR WHARF LINE  
 ESTABLISHED BY THE  
 RIPARIAN COMMISSIONERS  
 OF THE  
 STATE OF NEW JERSEY.  
 1873

R.C. BACOT, CHIEF ENGINEER. J.H. YOCUM JR. ASST. ENGR.

SCALE 0 1000 2000 3000 4000 5000 FEET.  
 SOUNDINGS TAKEN AT MEAN LOW WATER.

(4)



MAP OF THE  
**COHANSEY RIVER,**  
 IN THE CITY OF BRIDGETON,  
 CUMBERLAND COUNTY,  
 NEW JERSEY.

SHOWING THE EXTERIOR LINES FOR SOLID FILLING  
 ESTABLISHED THEREON BY THE RIPARIAN COMMISSIONERS  
 OF THE STATE OF NEW JERSEY.  
 DECEMBER, 1873.

R.C. BACOT, ENGINEER. JOSEPH TRENCHARD, SURV.<sup>R</sup>  
 SCALE 300 FEET PER INCH.  
 MEAN RISE AND FALL OF TIDE ABOUT 7 FEET.

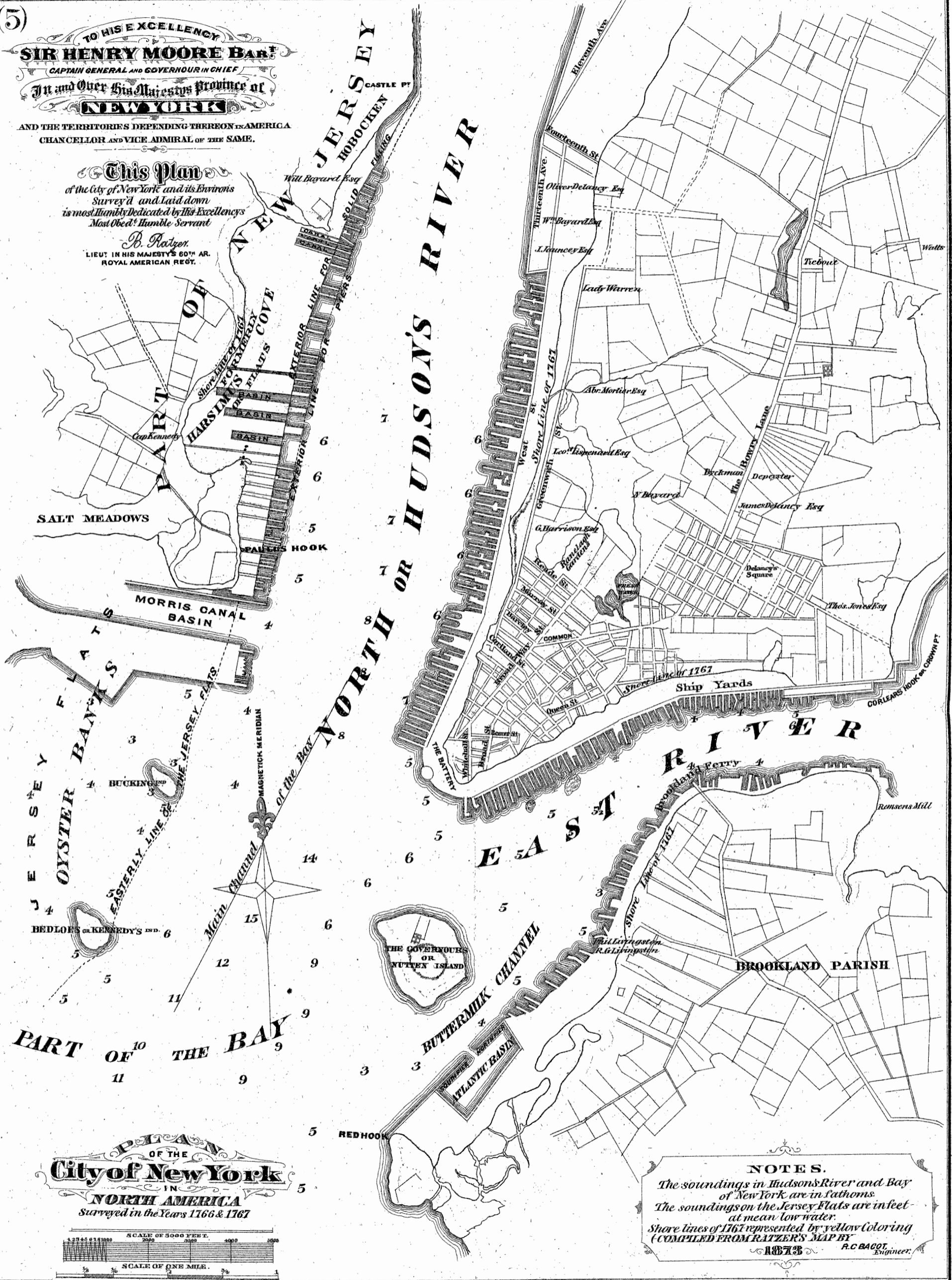
(5)

TO HIS EXCELLENCY  
**SIR HENRY MOORE BAR<sup>T</sup>**  
CAPTAIN GENERAL AND GOVERNOUR IN CHIEF  
OF  
His Majesty's Province of  
**NEW YORK**

AND THE TERRITORIES DEPENDING THEREON IN AMERICA  
CHANCELLOR AND VICE ADMIRAL OF THE SAME.

**This Plan**  
of the City of New York and its Environs  
Survey'd and laid down  
is most Humbly Dedicated by His Excellency's  
Most Obed<sup>t</sup> Humble Servant

*B. Ratzer*  
LIEUT. IN HIS MAJESTY'S 60<sup>TH</sup> AR.  
ROYAL AMERICAN REGT.



**NOTES.**  
The soundings in Hudson's River and Bay  
of New York are in fathoms.  
The soundings on the Jersey Flats are in feet  
at mean low water.  
Shore lines of 1767 represented by yellow coloring  
(COMPILED FROM RATZER'S MAP BY  
1873 R.C. BACOT, Engineer.)