



**US Army Corps  
of Engineers**  
Philadelphia District

Wanamaker Building  
100 Penn Square East  
Philadelphia, PA 19107-3390  
ATTN: CENAP-OP-R

# Public Notice

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Public Notice No. Date

**CENAP-OP-R-2016-0168**

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Application No. File No.

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In Reply Refer to:  
**REGULATORY BRANCH**

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This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

**APPLICANT:** New Jersey Department of Transportation  
Office of Maritime Resources  
P.O. Box 600  
Trenton, New Jersey 08625-0600  
Attn: Ms. Genevieve Clifton

**WATERWAY:** Absecon Creek Channel, Tunis Bay Channel, Lakes Bay Channel, Lakes Bay Spur, and Risleys Channel,

**LOCATION:** Dredging is proposed in 5 different waterways within Absecon Bay, Lakes Bay, and Risley Channel, Atlantic County, New Jersey. The dredged material would be disposed at the approved Gateway Confined Disposal Facility (CDF) in the City of Pleasantville, Atlantic County, New Jersey.

**ACTIVITY:** The applicant proposes to hydraulically dredge accumulated sediment from within 5 separate waterways (see Attachment 1- project plans ). These 5 projects are being advertised for one Department of the Army authorization project (CENAP-OP-R-2016-168) as a 10 Year maintenance dredging permit. The project consists of maintenance dredging within Absecon Creek Channel (#172) located within the City of Absecon and Atlantic City, Tunis Bay Channel (#173) is located within Egg Harbor Township and the City of Pleasantville, Lakes Bay Channel (#174) is located within Margate City, Egg Harbor Township, Ventnor City, Atlantic City and the City of Pleasantville, Lake Bay Spur (#175) is located within the City of Pleasantville, and Risleys Channel is located within Egg Harbor Township. This maintenance dredging event is limited to dredged material that is located below the proposed depths as indicated within the described channels.

Maintenance dredging in the Absecon Creek Channel (#172) shall consist of hydraulic dredging of approximately seventy one thousand two hundred and ninety one cubic yards (~71,291 yds<sup>3</sup>) of sediment comprised of sand, silt and clay, from approximately twenty

thousand five hundred ninety linear feet (~20,590'). The project depth in the Absecon Creek Channel is six feet below mean low water (-6' MLW), plus one foot (1') of allowable overdredge. The channel design width is 100'. Channel side slopes are 3:1. Maintenance dredging of the channel was last conducted in 2003.

Maintenance dredging in the Tunis Bay Channel (#173) shall consist of hydraulic dredging of approximately eleven thousand six hundred twenty three cubic yards (~11,623 yds<sup>3</sup>) of sediment comprised of sand, silt and clay, from approximately one thousand eight hundred fourteen linear feet (~ 1,814'). The project depth in the Tunis Bay Channel is five feet below mean low water (-5' MLW), plus one foot (1') of allowable overdredge. The channel design width is 50'. Channel side slopes are 3:1. Maintenance dredging of the channel was last conducted in 2002.

Maintenance dredging in the Lakes Bay Channel (#174) shall consist of hydraulic dredging of approximately sixty nine thousand four hundred and thirty four (~69,434 yds<sup>3</sup>) of sediment comprised primarily of sand, silt and clay from approximately twenty thousand five hundred seventy linear feet (~20,570'). The project depth in the Lakes Bay Channel is five feet below mean low water (-5' MLW), plus one foot (1') of allowable overdredge. The channel design width is 100'. Channel side slopes are 3:1. Maintenance dredging of the channel was last conducted in 2002.

Maintenance dredging in the Lakes Bay Spur Channel (#175) shall consist of hydraulic dredging of approximately two thousand three hundred and thirty eight (~2,338 yds<sup>3</sup>) of sediment comprised primarily of sand, silt and clay from approximately two hundred forty eight linear feet (~248'). The project depth in the Lakes Bay Spur Channel is five feet below mean low water (-5' MLW), plus one foot (1') of allowable overdredge. The channel design width is 50'. Channel side slopes are 3:1. It is not known when the last dredging event occurred.

Maintenance dredging in the Risleys Channel (#176) shall consist of hydraulic dredging of approximately nineteen thousand seven hundred and twenty two (~19,722 yds<sup>3</sup>) of sediment comprised primarily of sand, silt and clay from approximately nine thousand seven hundred thirty linear feet (~9,730'). The project depth in Risleys Channel is five feet below mean low water (-5' MLW), plus one foot (1') of allowable overdredge. The channel design width is 100'. Channel side slopes are 3:1. It is not known when the last dredging event occurred.

Material will be hydraulically dredged and transported via pipeline to the approved Gateway CDF. The dredge sediment transport pipeline, for each dredging event, will be submerged except where necessary to avoid submerged aquatic vegetation (SAV). The pipeline shall be marked as per USCG regulations as needed. It has been proposed that the dredging events will take a total of approximately 120 days to complete. 30 days to mobilize and demobilize and 90 days to dredge. It is anticipated that the smaller dredging events will not require the full proposed timelines.

The applicant has requested a 10-year maintenance dredging provision be authorized.

**PURPOSE:** The applicant's stated purpose is to restore the existing navigation channels to authorized project depths and to provide safe navigation for both commercial and recreational vessels currently using the channels.

A preliminary review of this application indicates that the proposed work will not effect threatened and endangered species. While Atlantic Sturgeon (Acipenser oxyrinchus), Kemp's ridley sea turtle (Lepidochelys kempii), loggerhead sea turtle (Caretta caretta), green sea turtle (Chelonia mydas), leatherback sea turtle (Dermochelys coriacea) and hawksbill sea turtle (Eretmochelys imbricate) are in the vicinity, due to the water depths and boating activity, these species are not likely present.

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and welfare of the people. A Department of the Army permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**Comments on the proposed work should be submitted, in writing, within 15 days** to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390.

Review of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion therein are located within the permit area of the work. The permit area has been so extensively modified that little likelihood exists for the proposed project to impact a historic property.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act 1996 (Public Law 104-267), requires all Federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely effect Essential Fish Habitat (EFH). A preliminary assessment of the species listed in the "Guide to Essential Fish Habitat Designations

in the Northeastern United States, Volume IV: New Jersey and Delaware", dated March 1999, indicates that the project may adversely affect EFH. In order to avoid or minimize impacts to EFH species from the dredging, specifically Winter Flounder (*Pseudopleuronectes americanus*) associated with the Absecon Creek channel, no in-water work will be authorized between January 1<sup>st</sup> and May 31<sup>st</sup> of any given year. Additionally, in order to avoid impacts to Summer Flounder (*Paralichthys dentatus*), no dredging may occur between April 15<sup>th</sup> to October 15<sup>th</sup> where submerged aquatic vegetation (SAV) beds are located immediately adjacent the channels.

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management Program. The applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management (CZM) Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact of the proposed and/or existing activity on the State's coastal zone should be sent to this office, with a copy to the State's Office of Coastal Zone Management.

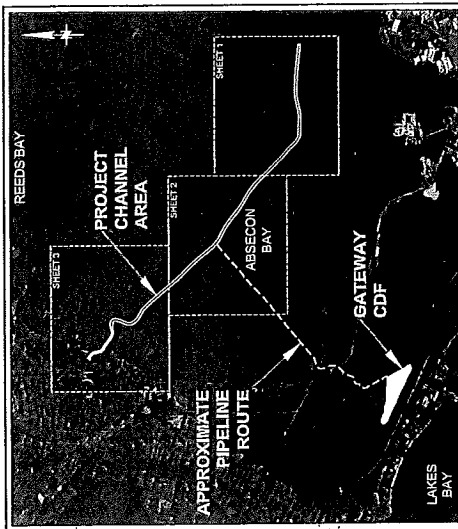
In accordance with Section 401 of the Clean Water Act, a Water Quality Certificate is necessary from the State government in which the work is located. Any comments concerning the work described above which relate to Water Quality considerations should be sent to this office with a copy to the State.

The evaluation of the impact of the work described above on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act.

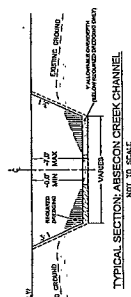
Any person may request, in writing, to the District Engineer, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state in writing, with particularity, the reasons for holding a public hearing.

Additional information concerning this permit application may be obtained by calling Mr. Peter Romano at 215-656-6729, via email at [peter.t.romano@usace.army.mil](mailto:peter.t.romano@usace.army.mil) or writing this office at the above address.

Samuel L. Reynolds  
Acting Chief, Regulatory Branch



PROJECT LOCATION MAP  
SCALE: 1" = 300'

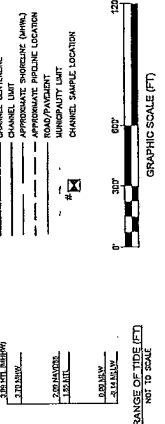


TYPICAL SECTION ABSECON CREEK CHANNEL  
NOT TO SCALE

NOTES:

1. THIS MAP IS IN ACCORDANCE WITH THE NEW JERSEY DEPARTMENT OF TRANSPORTATION'S (NJDOT) POLICY ON MAPS. THE NJDOT POLICY ON MAPS IS AVAILABLE AT: <http://www.nj.gov/transportation/maps/>. THE NJDOT POLICY ON MAPS IS A REQUIREMENT OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION'S (NJDOT) POLICY ON MAPS. THE NJDOT POLICY ON MAPS IS A REQUIREMENT OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION'S (NJDOT) POLICY ON MAPS.
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4. AERIAL IMAGERY IS FROM Bing Maps, DATED MARCH 2011.

LEGEND



STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR AND RISLEY'S CHANNELS  
CHANNEL ARRANGEMENT & GEOMETRY PLAN

PROJECT: ABSECON CREEK CHANNEL  
CITY OF ABSECON / ATLANTIC CITY / CITY OF PLEASANTVILLE / ISO HARBOR TOWNSHIP  
CITY OF VENTNOR / CITY OF MARGATE, ATLANTIC COUNTY, NEW JERSEY

DRAWN BY: SEF  
CHECKED BY: MRS  
SCALE: AS SHOWN  
DATE: FEB. 2018

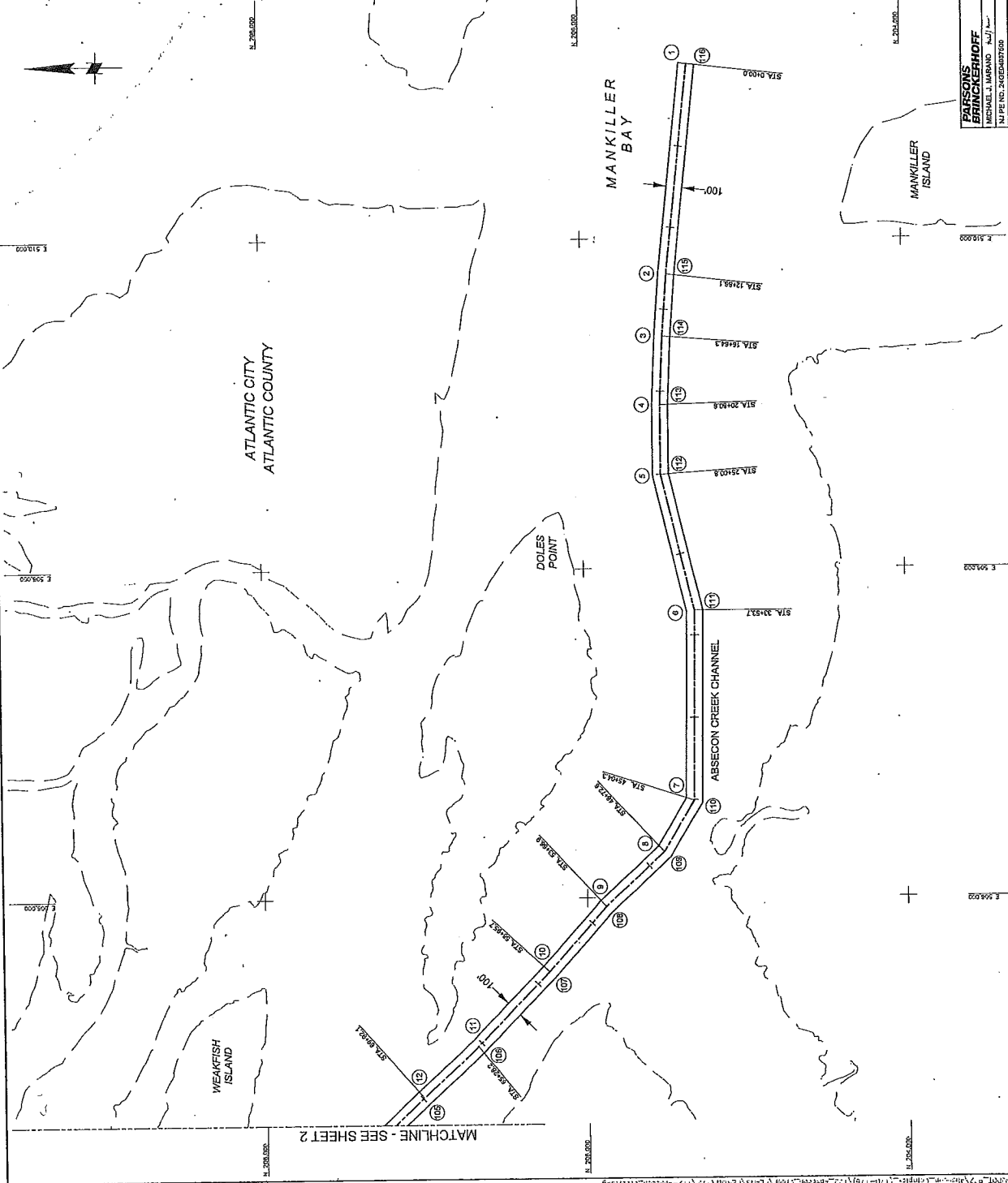
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SCALE: AS SHOWN  
DATE: FEB. 2018

PROF. ENGINEER  
NO. 2406477000

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DATE: FEB. 2018

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SCALE: AS SHOWN  
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PROF. ENGINEER  
NO. 2406477000



PARSONS  
BRINCKERHOFF  
MICHAEL J. MARANO  
NJ PE NO. 2406477000

DESIGNED BY: MRS  
SCALE: AS SHOWN  
DATE: FEB. 2018

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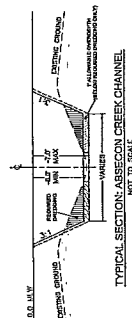
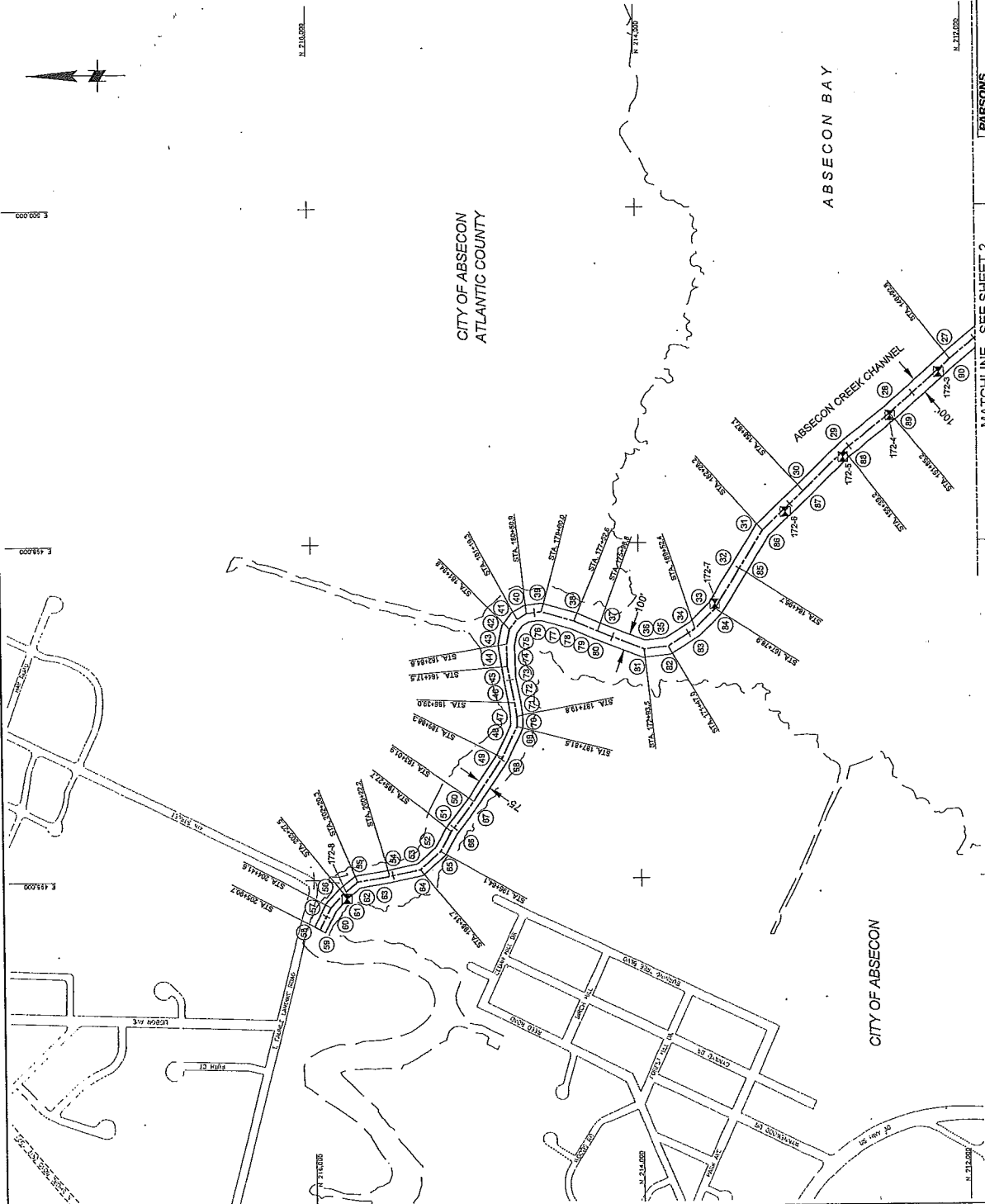
DESIGNED BY: MRS  
SCALE: AS SHOWN  
DATE: FEB. 2018

PROF. ENGINEER  
NO. 2406477000



**PARSONS  
BRINCKERHOFF**  
MICHAEL J. MARANO  
ALLIANCE NO. 243630487500

				DRAWN BY: SEF	CHECKED BY: MRS 24G02B18700	GAGHAN & BRYANT ASSOCIATES, INC. CERTIFICATION OF AUTHORIZATION NO.	SHEET 2 OF 36	PAGE NO.	RWG, CO PERMIT-62
				DATE: FEB. 2016	SCALE: AS SHOWN	STAR LULWICZ NEW JERSEY PROFESSIONAL ENGINEER NO. 24G054770800			
				REV.	DATE:				



- NOTES:**
1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 2.09 FEET BELOW THE NORTH AMERICAN DATUM (NAD 83). VERTICAL DATUM IS BASED ON MEAN LOW WATER (MLW) FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) TIDE GAUGE DATA.
  2. COORDINATES ARE EXPRESSED IN FEET AND INCHES TO THE NEAR JERSEY STATE PLANE GRID COORDINATE SYSTEM WITH ANCESTRAL DATUM OF 1883 (NAD83).
  3. DUSTING SHORELINE (DMS) & DOCK LOCATIONS BASED ON AERIAL IMAGERY AND SHOULD BE CONSIDERED APPROXIMATE.
  4. AERIAL IMAGERY IS FROM Bing Maps, DATED MARCH 2011.

**LEGEND**

- CHANNEL CENTERLINE
- CHANNEL LIMIT
- APPROXIMATE SHORELINE (DMS)
- APPROXIMATE PIPELINE LOCATION
- SHORELINE LIMIT
- CHANNEL SAMPLE LOCATION

**RANGE OF TIDE (FT)**  
NOT TO SCALE

**GRAPHIC SCALE (FT)**  
0 100 200 300 400 500

STATE OF NEW JERSEY NJDOT OFFICE OF MARITIME RESOURCES	
<b>TITLE:</b> MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RISLEY'S CHANNELS CHANNEL ARRANGEMENT & GEOMETRY PLAN	
<b>PROJECT:</b> ABSECON CREEK CHANNEL, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RISLEY'S CHANNELS CITY OF ABSECON, CITY OF MARGATE, ATLANTIC COUNTY, NEW JERSEY	
<b>DESIGNED BY:</b> BRINCKERHOFF	<b>PROJECT NO.:</b> 172-172
<b>CHECKED BY:</b> MICHAEL J. MARANO	<b>CERTIFICATION OF AUTHORIZATION:</b> [Signature]
<b>DATE:</b> FEB 2016	<b>NO. SHEETS:</b> 7
<b>NEW JERSEY PROFESSIONAL ENGINEER</b>	

MATCHLINE - SEE SHEET 2

ABSECON CREEK CHANNEL COORDINATES			
POINT	NORTHING	EASTING	
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ABSECON CREEK CHANNEL COORDINATES (CONT)			
POINT	NORTHING	EASTING	
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ABSECON CREEK CHANNEL CENTERLINE COORDINATES			
STATION	NORTHING	EASTING	
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49	253717	513619	
50	253717	513619	

ABSECON CREEK CHANNEL SAMPLE LOCATION COORDINATES			
SAMPLE	NORTHING	EASTING	
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2	253717	513619	
3	253717	513619	
4	253717	513619	
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46	253717	513619	
47	253717	513619	
48	253717	513619	
49	253717	513619	
50	253717	513619	

NOTES:  
COORDINATES ARE EXPRESSED IN FEET AND INCHES TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).

STATE OF NEW JERSEY

NJDOT OFFICE OF MARITIME RESOURCES

TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RISLEY'S CHANNELS

CHANNEL GEOMETRY & SAMPLING COORDINATE TABLES

PROJECT: ABSECON CREEK CHANNEL IMPROVEMENTS

CITY OF VENTNOR, CITY OF MARSHALL, ATLANTIC COUNTY, NEW JERSEY

DESIGNED BY: SEE

CHECKED BY: JES

SCALE: AS SHOWN

DATE: FEB. 2016

DRAWN BY: SEE

CERTIFICATION OF AUTHORIZATION NO. 1

SCALE: AS SHOWN

DATE: FEB. 2016

PROJECT NO. 1

SHEET 4 OF 38

DWG. NO. PDR074

PARSONS BRINCKERHOFF

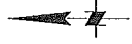
MICHAEL J. HAYANO

NEW JERSEY PROFESSIONAL ENGINEER

NO. 246087700

\\H001\B72\project\Comp\170 176\172\Absecon\_Creek\VEN\172\172-Absecon\_Creek.dwg

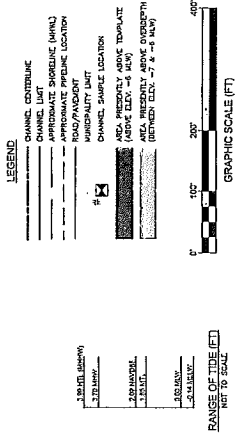


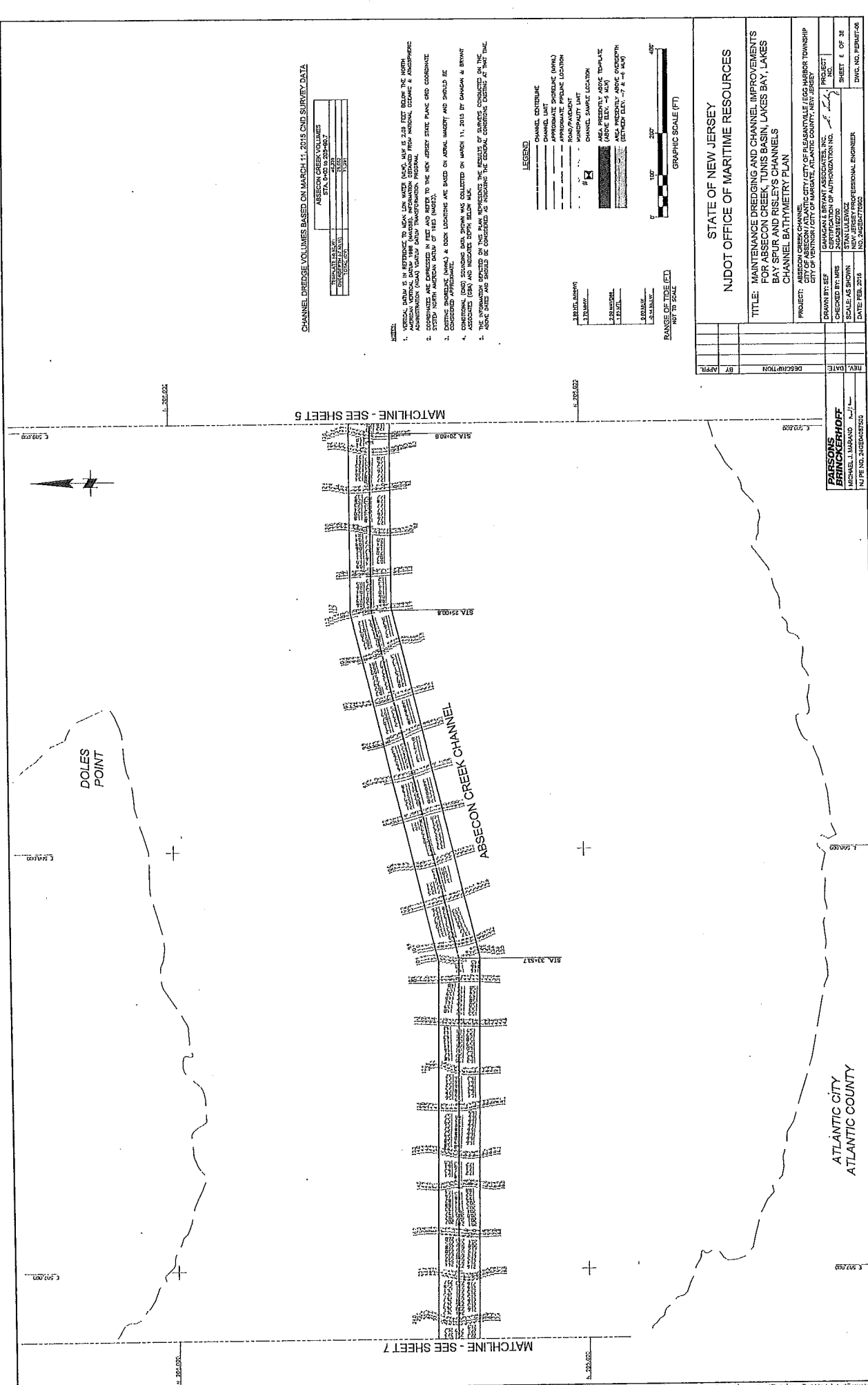


ATLANTIC CITY  
ATLANTIC COUNTY

TEMPLATE (A,B,M,V)	41,329
CHANGES (P,H,M,V)	25,642
TOTAL (C)	7,291


- NOTES:**
1. VERTICAL DATA IS IN REFERENCE TO MEAN LOW WATER (MLW) AND IS 0.69 FEET BELOW THE NORTH AMERICAN DATUM (NAD83). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) COASTAL DATA MANAGEMENT PROGRAM.
  2. DISTANCE FROM THE SHORELINE TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM (NJMAPS) OF YEAR 1983 (MDS).
  3. DRAINAGE SUBURBAN (DRAWS) & RURAL LOCATIONS ARE BASED ON Aerial Imagery AND SHOULD BE CONSIDERED APPROXIMATE.
  4. CONDITIONS (CODE) SCORING DATA SHOWN AS COLLECTED ON MARCH 11, 2013 BY CAHAWAT & BIRNBAUM.
  5. THE WINDSPEED DATA SHOWN AS APPROXIMATE.
  6. THE NUMBER OF SURVEYS CONDUCTED AT EACH LOCATION AS INDICATED BY THE GENERAL CONDITIONS EXISTING AT THAT TIME. ADVICE DATES AND SHOULD BE CONSIDERED AS INDICATED BY THE GENERAL CONDITIONS EXISTING AT THAT TIME.

[illegible]



REV.	DATE	PROJECT NO.	SHEET	OF	DATE	NO.
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44	04/11/2018	24060102700	1	1	04/11/2018	1

PARSONS  
BRINCKERHOFF  
MICHAEL J. MARANO  
NJ PE NO. 24GE043720



1

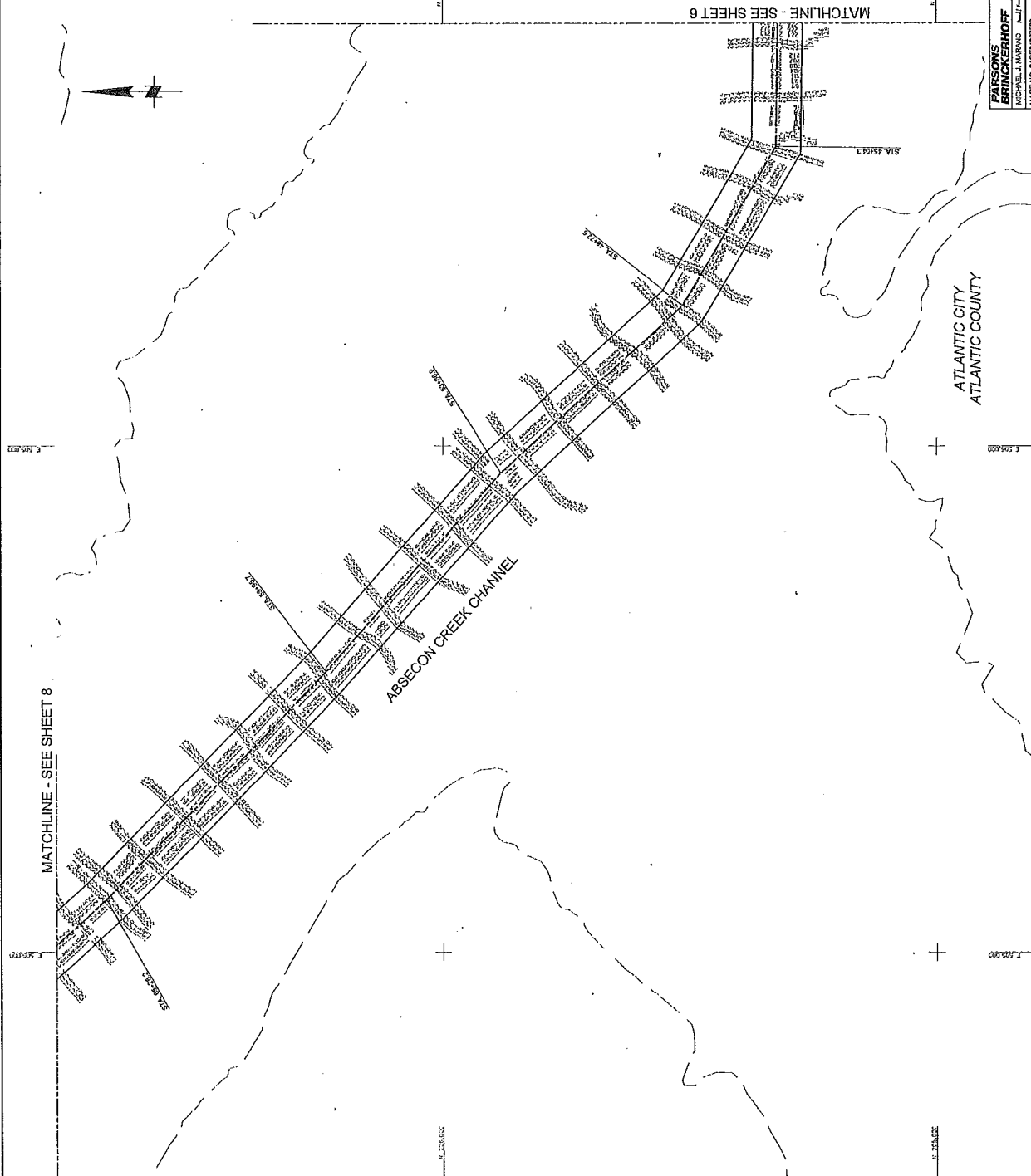


681092 1

TY

ATLANTIC CITY  
ATLANTIC COUNTY

$$-105 \pm 25 q^2 - 27 \epsilon^2 \left( 10 q^2 - 1 - 4 \epsilon^2 \right) \left( 1 - 3 q^2 \right) \left( 1 - 10 \epsilon^2 \right) \left( 1 - 4 \epsilon^2 \right) \left( 1 - 4 \epsilon^2 \right) \left( 1 - 4 \epsilon^2 \right)$$



ASBECON CREEK VOLUMES	
STA. 0+00 to 205+60.7	
TRANS. DATE 12/24/91	44,230
OVERSIGHT 12/11/91	21,502
TOTAL (Ct)	71,261

**CHANNEL DREDGE VOLUMES BASED ON MARCH 11, 2015 CND SURVEY DATA**

1. VERTICAL DATA IS IN RESPONSE TO HIGH LOW WATER (H/L), M/LK IS 2.50 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD83). INFORMATION OBTAINED FROM NATIONAL COAST AND GEOSPHERIC ADMINISTRATION (NOAA) VECTOR DATA SOURCE FOR THE NEW JERSEY STATE PLANE COORDINATE AND DATUM 1983 (NAD83).
2. DOTTED SHORELINE (H/LK) & ROCK LOCATIONS ARE BASED ON AERIAL PHOTOGRAPHY AND SHIPLOG RECORDED APPROXIMATE.
3. CONTINENTAL SHELF SOUNDING DATA SHOWN WAS COLLECTED ON MARCH 11, 2015 BY OCEANOGRAPHIC RESEARCH ASSOCIATES (ORA) AND INDICATES DEPTH BELOW NAD.
4. USACE AND USFWS SPECIALLY DESIGNED AND CONDUCTED A SURVEY OF THE COASTLINE OF THE STATE OF NEW JERSEY TO DETERMINE THE LOCATION OF THE COASTLINE OF THE STATE OF NEW JERSEY.

### LEGEND

- [illegible]

3 99 477 114 66 3

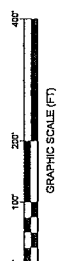
3.70 MW

207 NAVAJO

1.05 MPa

RANGE OF TIDE (FT)

**NOT TO SCALE**



STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

**TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR AND RISLEYS CHANNELS  
CHANNEL BATHYMETRY PLAN**

**PROJECT:** ASSECON CREEK CHANNEL

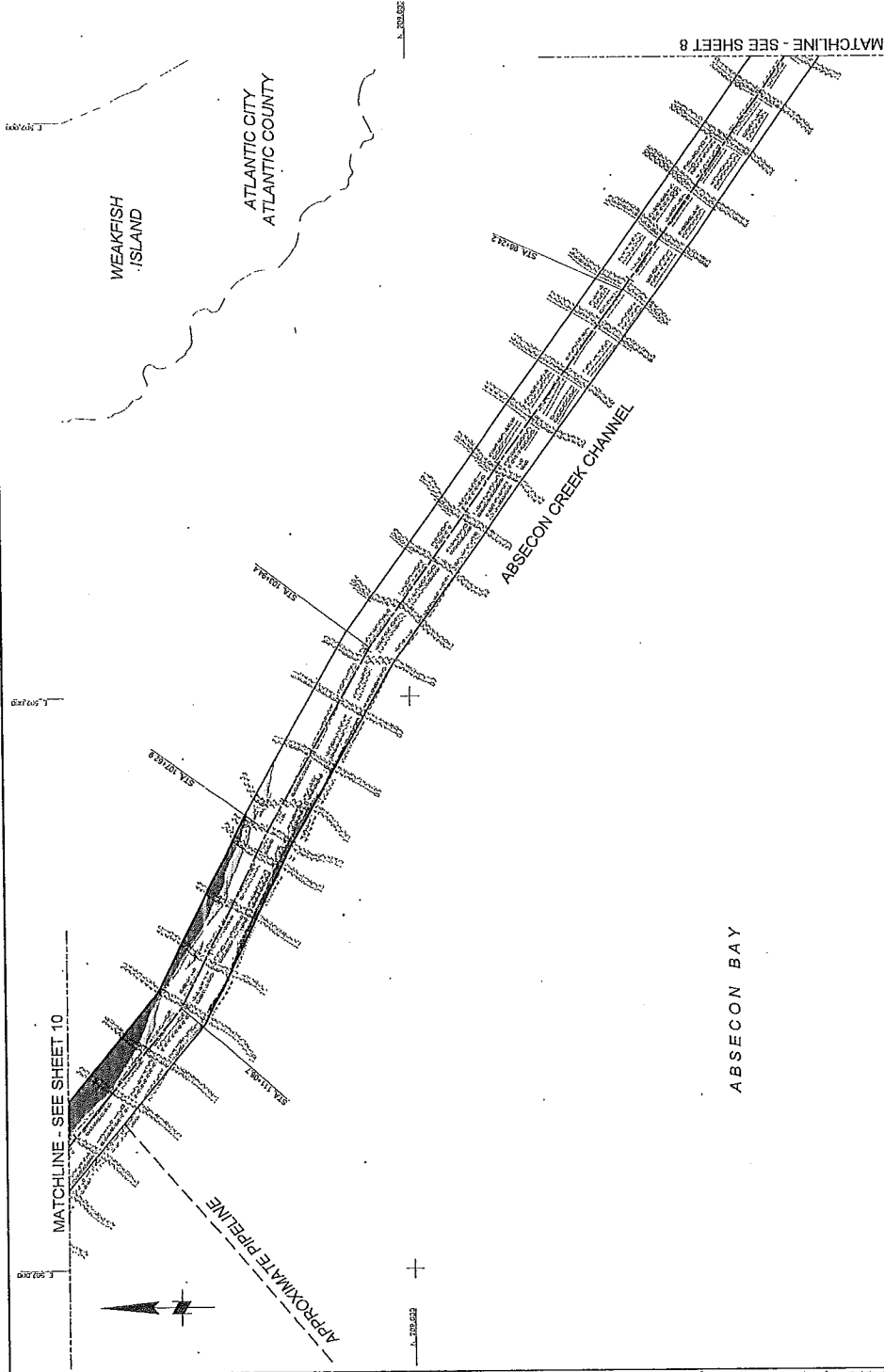
CITY OF VENTNOR / CITY OF HARRISBURG, ATLANTIC COUNTY, NEW JERSEY	DRAWN BY: JEF GAHAGAN & BRYANT ASSOCIATES, INC. CERTIFICATION OF AUTHORIZATION NO.	PROJECT NO. P. 244
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CHECKED BY: MRG	DATE: AS SHOWN	STAN LULEWICZ NEW JERSEY PROFESSIONAL ENGINEER	SHEET 7 OF 38
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PRIME F&B 2010	NO. 24CE04770900
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CHANNEL DREDGE VOLUMES BASED ON MARCH 11, 2015 CHD SURVEY DATA

ABSECON CREEK VOLUMES	STA 0+00 TO STA 10+00
THICKNESS (FEET)	4.25
PERCENTAGE SAND	75.00
PERCENTAGE SILT	25.00

- NOTE:
1. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA.
  2. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA.
  3. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA.
  4. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA.
  5. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA. CHANNEL DREDGE VOLUMES ARE BASED ON MARCH 11, 2015 CHD SURVEY DATA.

**LEGEND**

- CHANNEL CENTERLINE
- APPROXIMATE SHORELINE (MHW)
- APPROXIMATE PIPELINE LOCATION
- CHANNEL BATHYMETRY PLAN
- CHANNEL SAMPLE LOCATION
- AREA PREVIOUSLY ADOPTED TO PLATE
- AREA PREVIOUSLY ADOPTED TO PLATE
- AREA PREVIOUSLY ADOPTED TO PLATE

**GRAPHIC SCALE (FT)**

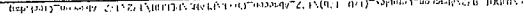
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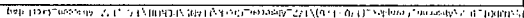
**RANGE OF TIDE (FT)**

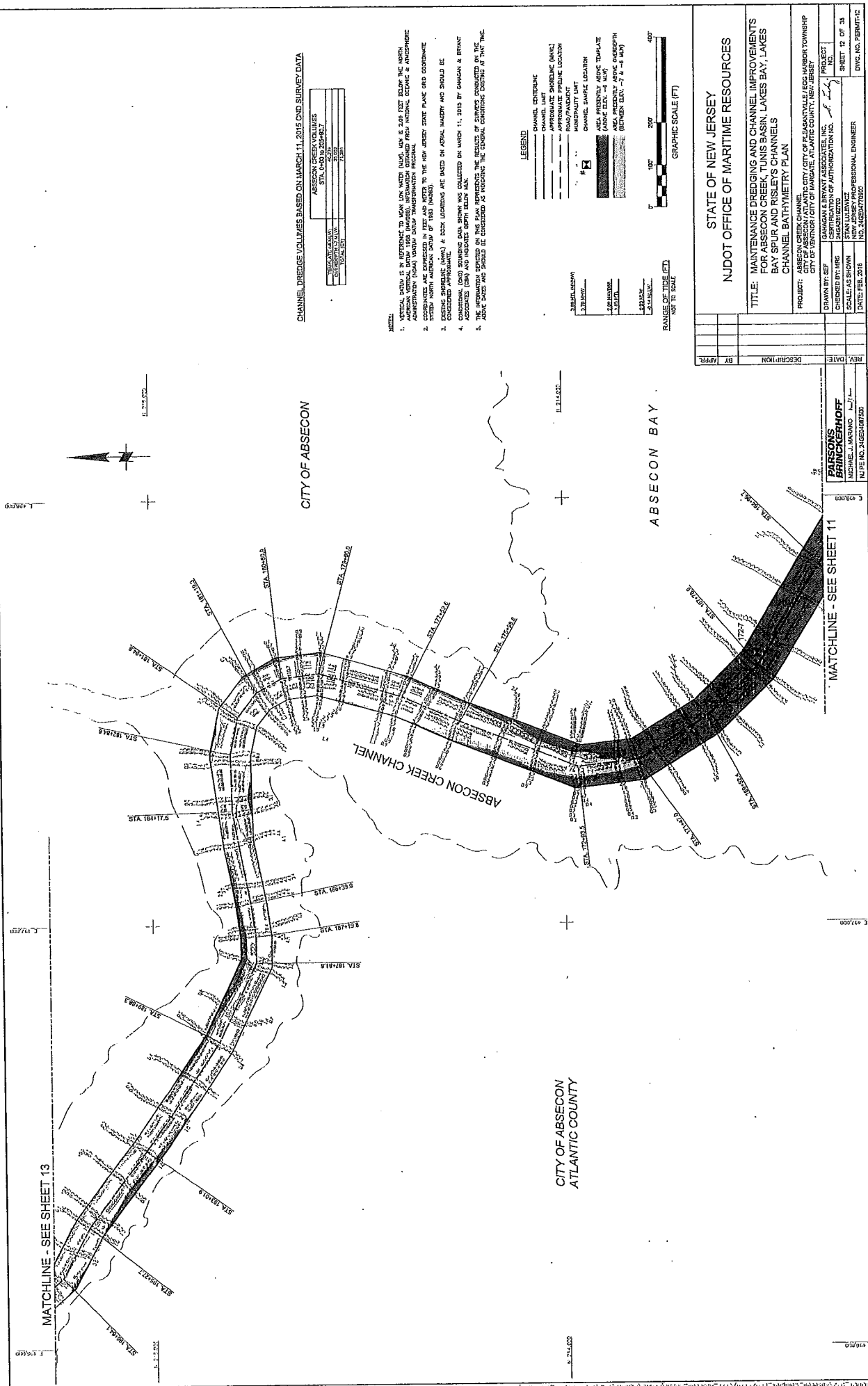
NOT TO SCALE

STATE OF NEW JERSEY NJDOT OFFICE OF MARITIME RESOURCES	
TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RISLEY'S CHANNELS CHANNEL BATHYMETRY PLAN	
PROJECT: ABSECON CREEK CHANNEL CITY OF ABSECON/ATLANTIC CITY/CITY OF HESKANTVILLE/EGG HARBOR TOWNSHIP CITY OF VERNON/CITY OF MARSHALL/ATLANTIC COUNTY/NEW JERSEY	
DRAWN BY: SEP	PROJECT NO. 12
CHECKED BY: JRS	DATE: FEB 2018
SCALE: AS SHOWN	NEW JERSEY PROFESSIONAL ENGINEER
DATE: FEB 2018	NO. 24000477000
REV. DATE	BY
DESCRIPTION	BY

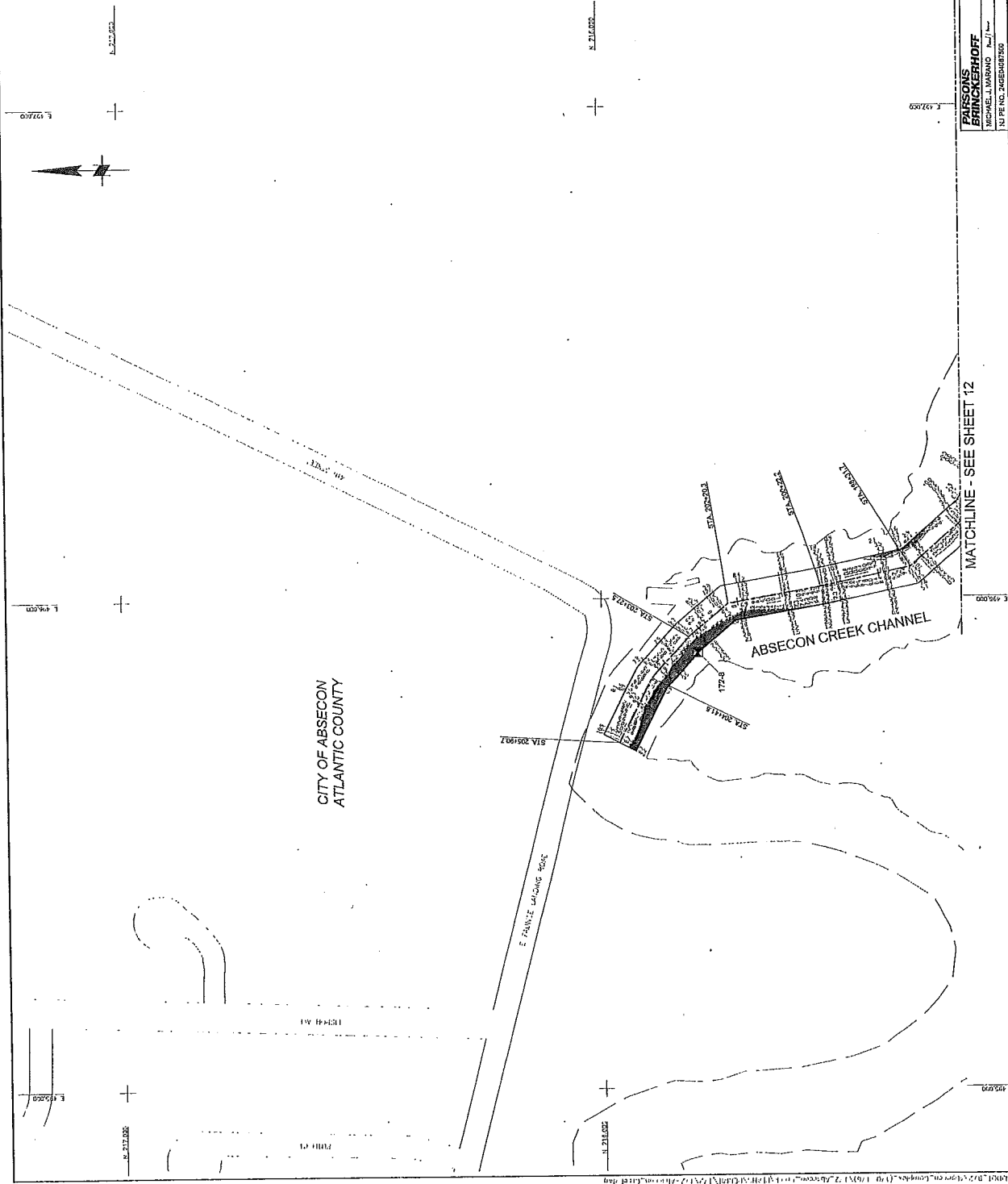
**PARSONS  
BRINCKERHOFF**  
MICHAEL J. MARANO  
NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24000477000







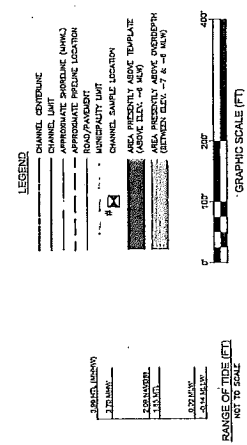




ABSCEON CREEK VOLUMES STA. 0+00 to 205+60.7	
TEMPERATURE (40 MIN)	40.234
OVERDEPTH (2) MIN	22.001
TOTAL (C/T)	71.235


**CHANNEL DREDGE VOLUMES BASED ON MARCH 11, 2015 CND SURVEY DATA**

- [illegible]



DATE	BY	DESCRIPTION
APRIL 11, 2018	BY	DESCRIPT

PROJECT: ASSESS CREEK CHANNEL CITY OF ASBECON / ATLANTIC CITY / CITY OF HEBARTVILLE / CEC HARBOR TOWNSHIP CITY OF VERNON / CITY OF WESTPORT / NEW CASTLE COUNTY, DE / DELAWARE		PROJECT NO. 
DRAWN BY: GEP CHECKED BY: MRS SCALE: AS SHOWN DATE FEB. 2018	CERTIFICATION OF AUTHORIZATION AND 24262877070 24262877070 24262877070 24262877070	SHEET 13 OF 34 SPAN JERSEY PROFESSIONAL ENGINEER NO. 24262877070

TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR ASBECON CREEK, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RISLEY'S CHANNELS CHANNEL BATHYMETRY PLAN	
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STATE OF NEW JERSEY NJDOT OFFICE OF MARITIME RESOURCES	
---	--

SOUTH

NORTH

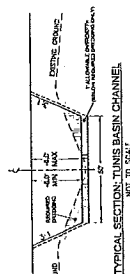
CREEK CHANNEL

10.00

10.00

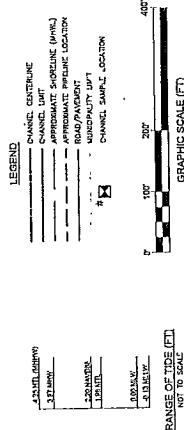
<b>PARSONS BRINCKERHOFF</b>	Drawn / Issue
MICHAEL J. VARRANO	
NJ PE INC. 246847100	

F 492.053



**Keywords:**


1. VERTICAL VELOCITY IS IN REFERENCE TO SEAN LOW WATER PAVING, MAX IS 2.20 FEET BELOW THE NORTH COASTLINE OF LONG ISLAND SOUND. INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION DATA YEAR 1986.
2. COORDINATES ARE DISCUSSED IN FEET AND NOTED TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM (NAD 83) WITH A DATUM TRANSFORMATION PROGRAM.
3. CONCENTRATIONS ARE PRESENTED IN FT/LB AND NODATA FOR THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM (NAD 83) WITH A DATUM TRANSFORMATION PROGRAM.
4. DOWNING SUPERFLEX (P-10C) AT DICK'S LOCATIONS BASED ON AERIAL IMAGERY SHOULD BE CONSIDERED APPROXIMATE.
5. AERIAL IMAGERY IS FROM USMC MAP NUMBER 1071.

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

**TITLE:** MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ~~ASPEN GREEN~~ TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR AND RISLEY'S CHANNELS  
CHANNEL ARRANGEMENT & GEOMETRY PLAN

PROJECT: TUNIS BASIN CHANNEL  
 CITY / CITY OF BIR EL ANASSIR / EL EGQ HARBOR TOWNSHIP

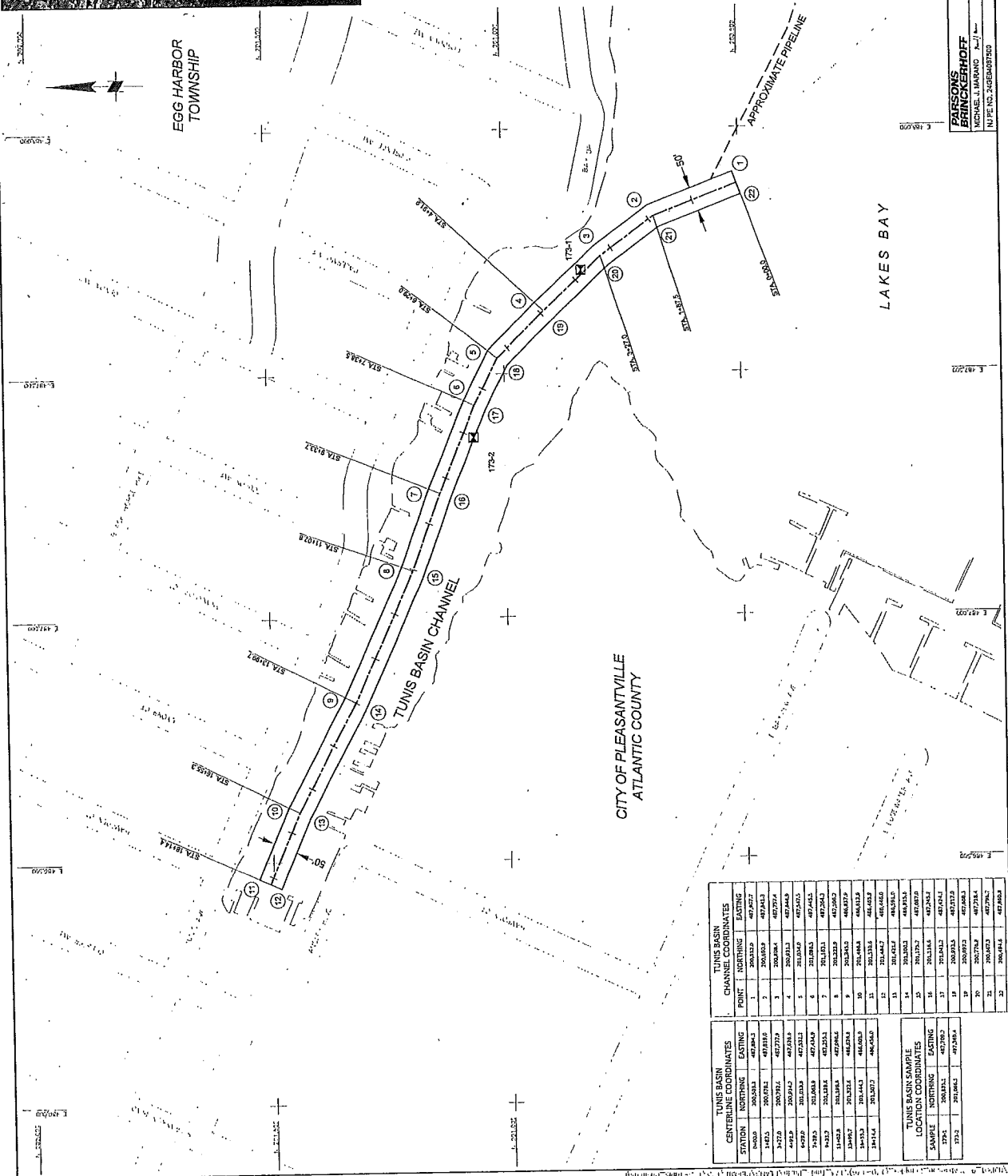
OWNER	CITY OF VENTNOR / CITY OF MARGATE, ATLANTIC COUNTY, NEW JERSEY
ARCHITECT	GAHAGAN & BRYANT ASSOCIATES, INC.
ENGINEER	GAHAGAN & BRYANT ASSOCIATES, INC.
PROJECT	PROJECT

DRAWN BY: SEF	24GAG28102700		DATE	NO.
			SHEET 14 OF 31	

SCALE: AS SHOWN  
STAN LULEWICZ  
NEW JERSEY PROFESSIONAL ENGINEER  
DWC NO. PERMIT-12

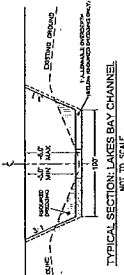
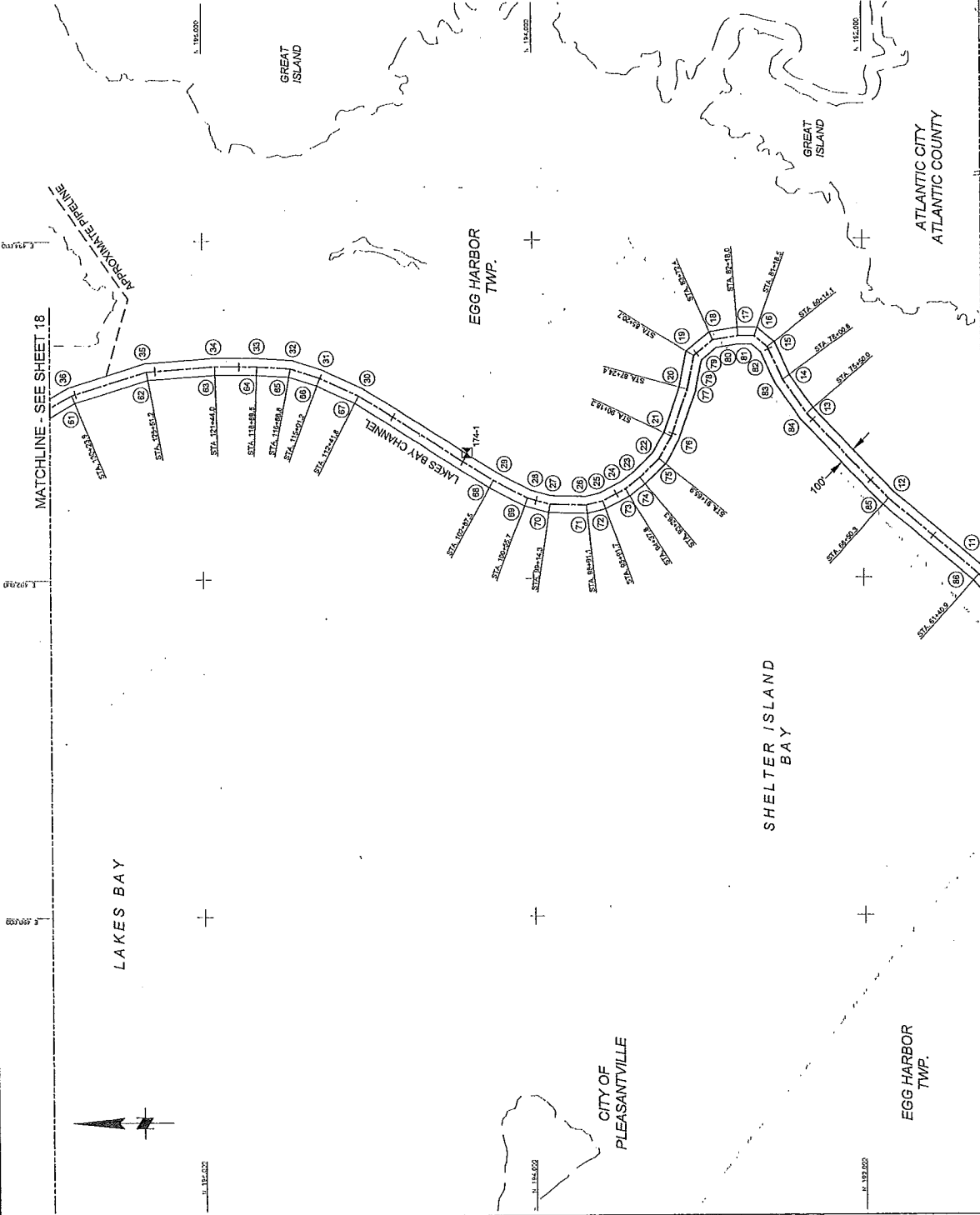
DATE, FEB 20 1960	NO. 240026770900
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- NOTES:**
1. THIS MAP IS A REVISION TO THE MAP OF LAKES BAY AND SHELTER ISLAND, NEW JERSEY, DATED FEBRUARY 2011, AND IS A PART OF THE LAKES BAY AND SHELTER ISLAND MAPS. THE LAKES BAY AND SHELTER ISLAND MAPS ARE PART OF THE LAKES BAY AND SHELTER ISLAND MAPS, NEW JERSEY, DATED FEBRUARY 2011, AND ARE PART OF THE LAKES BAY AND SHELTER ISLAND MAPS, NEW JERSEY, DATED FEBRUARY 2011.
  2. COORDINATES ARE EXPRESSED IN FEET AND INCHES TO THE NEAREST TENTH OF AN INCH. THE LAKES BAY AND SHELTER ISLAND MAPS ARE PART OF THE LAKES BAY AND SHELTER ISLAND MAPS, NEW JERSEY, DATED FEBRUARY 2011, AND ARE PART OF THE LAKES BAY AND SHELTER ISLAND MAPS, NEW JERSEY, DATED FEBRUARY 2011.
  3. EXISTING SURVEY (NAD83) & DOCK LOCATIONS BASED ON AERIAL IMAGERY AND SHOULD BE CONSIDERED APPROXIMATE.
  4. AERIAL IMAGERY IS FROM Bing Maps, DATED MARCH 2011.

**LEGEND**

- CHANNEL CENTERLINE
- CHANNEL LIMIT
- APPROXIMATE CHANNEL (NAD83)
- APPROXIMATE PIPELINE LOCATION
- BANK/PAVEMENT
- UNDEVELOPED LIMIT
- CHANNEL SAMPLE LOCATION

**GRAPHIC SCALE (FT)**

0 300 600 1200

**RANGE OF TIDE (FT)**

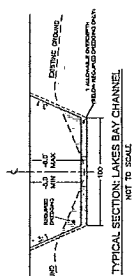
NOT TO SCALE

STATE OF NEW JERSEY NJDOT OFFICE OF MARITIME RESOURCES	
TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR LISBESON CREEK, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RUSLEY'S CHANNELS CHANNEL ARRANGEMENT & GEOMETRY PLAN	
PROJECT: LAKES BAY AND SHELTER ISLAND CITY OF VENTNOR, CITY OF MARATON, ATLANTIC COUNTY, NEW JERSEY	
DRAWN BY: SEE	PROJECT: LAKES BAY AND SHELTER ISLAND
CHECKED BY: JMS	SCALE: AS SHOWN
DATE: FEB. 2018	DATE: FEB. 2018
<p><b>PARSONS BRINCKERHOFF</b> MICHAEL L. NARAND NJ PE NO. 24050407000</p>	
REV.	DATE
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97	02/20/2018
98	02/20/2018
99	02/20/2018
100	02/20/2018

CITY OF PLEASANTVILLE  
ATLANTIC COUNTY

EGG HARBOR  
TWP.

LAKES BAY



NOTES:

1. VERTICAL CURVE IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 2.21 FEET BELOW THE NORTH DATUM.
2. HORIZONTAL CURVE IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 2.21 FEET BELOW THE NORTH DATUM.
3. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM.
4. AERIAL IMAGERY IS FROM Bing Maps, DATED MARCH 2011.

LEGEND
CHANNEL CENTERLINE
CHANNEL LIMIT
APPROXIMATE SHIPWRECK LOCATION
APPROXIMATE SPILLWAY LOCATION
APPROXIMATE SPILLWAY LIMIT
CHANNEL SAMPLE LOCATION

RANGE OF TIDE (FT)  
NOT TO SCALE

GRAPHIC SCALE (FT)  
0 100 200 300 400 500 600 700 800 900 1000

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR AND RISLEY'S CHANNELS  
CHANNEL ARRANGEMENT & GEOMETRY PLAN

PROJECT: LAKES BAY CHANNEL  
CITY OF PLEASANTVILLE, ATLANTIC COUNTY, NEW JERSEY

DRAWN BY: SEP  
CHECKED BY: MRS  
SCALE: AS SHOWN  
DATE: FEB. 2016

PROJECT NO.  
SHEET 18 OF 38  
DIVISION NO. FERMAT-18

BRICKERHOFF  
MICHAEL J. MARANO  
NJ REG. NO. 24000007555

MATCHLINE - SEE SHEET 17

REV.	DATE	DESCRIPTION



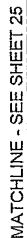










EGG HARBOR TWP.  
ATLANTIC COUNTYCITY OF PLEASANTVILLE  
ATLANTIC COUNTY

LAKES BAY

TRIM PLATE 1/8" MIN.	42.14
CYCLE DEPTH 1/8" MIN.	27.23
TOTAL	69.37

CHANNEL DREDGE VOLUMES BASED ON OCTOBER 14, 2015 CND SURVEY DATA

**Notes:**

1. VERTICAL DOWNS IN REFERENCE TO NEW YORK WATER QUALITY ACT IS 2.51. FETZ BEARS THE NOTION OF VERTICAL DOWNS IN REFERENCE TO NEW YORK, INFORMATION COMING FROM NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) YOUTH DATA TRANSFORMATION PROGRAM.
2. COORDINATES ARE EXPRESSED IN FETZ AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM WITH ANCHOR DATA OF 1983 (NAD83).
3. DATING SCHEMATIC (NUMERIC) AND ROCK LOCATIONS ARE BASED ON AERIAL IMAGERY AND SHOULD BE CONSIDERED APPROXIMATE.
4. CONTAMINANT DATA SHOWN WAS COLLECTED ON OCTOBER 14, 2015 BY CANADIAN & BRITISH ASSOCIATES (C&B) AND INDICATES TOTAL FETZ RAIN RUN.
5. THE RESULTS OF ANALYSES CONDUCTED ON THE RESULTS OF SAMPLES SUBMITTED ON THE WORK SHEET SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THE TIME OF ANALYSIS AND SHOULD NOT BE USED TO DETERMINE THE PRESENT OR FUTURE STATUS OF THE

### LEGEND

- | # | CHANNEL CENTERLINE<br>CHANNEL LIMIT<br>APPROXIMATE SHORELINE (MHW)<br>APPROXIMATE FIDELINE LOCATION<br>ROAD/PARALLEL<br>WINGED/FANITY UNIT<br>CHANNEL SAMPLE LOCATION<br>AREA PRESENTLY ABOVE TDPLA<br>(ABOVE ELEV. -3 M.W.)<br>AREA PRESENTLY ABOVE OVERDREDGE<br>(BETWEEN ELEV. -0.6 & -5 M.W.) |
|---|---|
|   |   |

4.25 MTS (M2000) \_\_\_\_\_  
3.87 MTS \_\_\_\_\_  
2.21 MTS \_\_\_\_\_  
1.98 MTS \_\_\_\_\_  
0.03 MTS \_\_\_\_\_  
0.14 MTS \_\_\_\_\_

RANGE OF TIDE (FT)  
NOT TO SCALE

14-00000

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

DESCRIPTION	ST	AP-116

**TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR AND RISLEY'S CHANNELS  
CHANNEL BATHYMETRY PLAN**

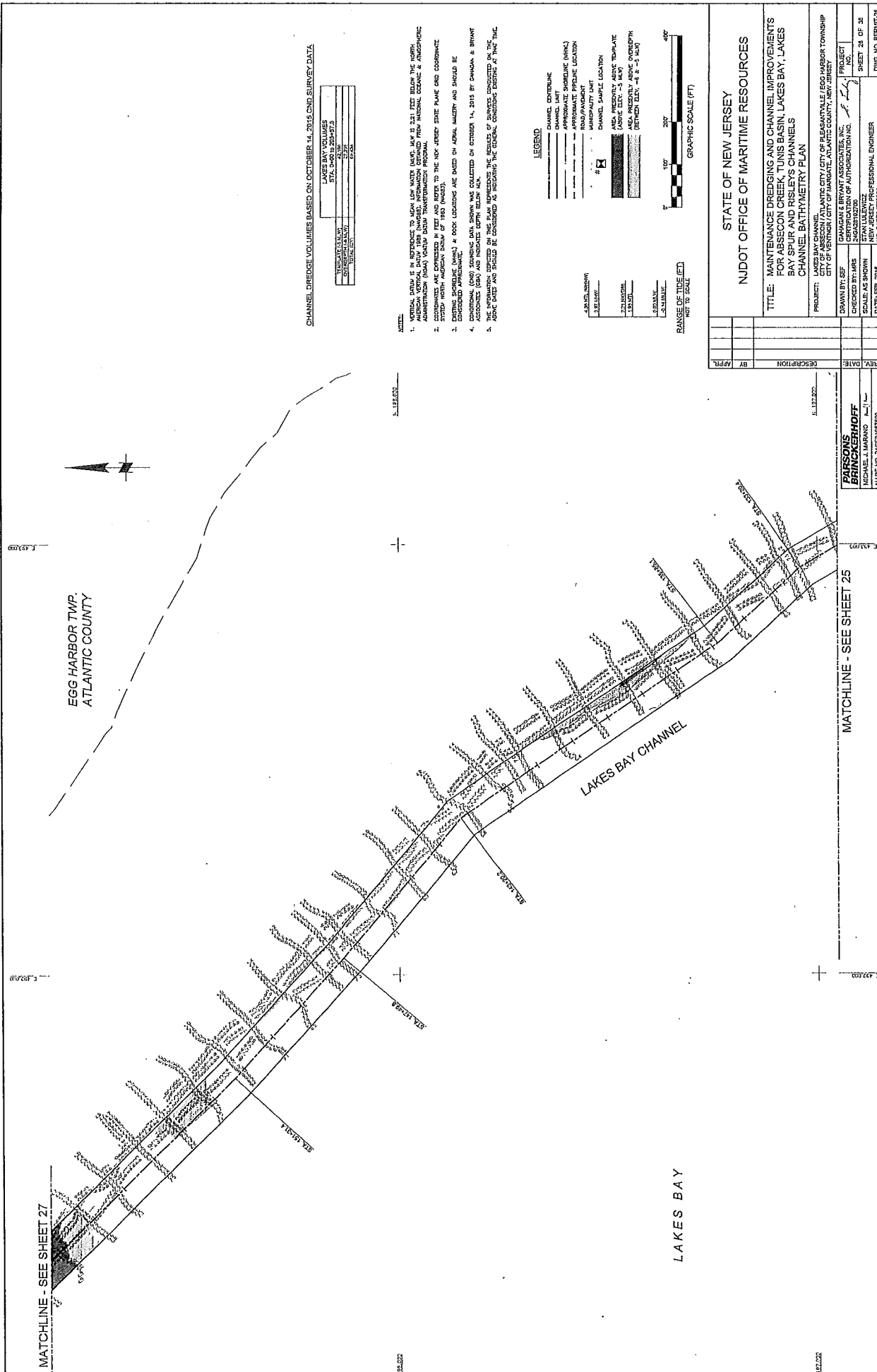
[illegible]

REV. DATE:	
REV. NO. 240CE4087500	PARSONS BRINCKERHOFF MICHAEL J. MARANO <i>Paul J. Marano</i>

MATCHLINE - SEE SHEET 23

—





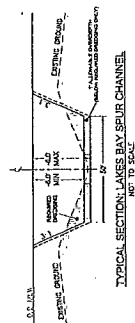
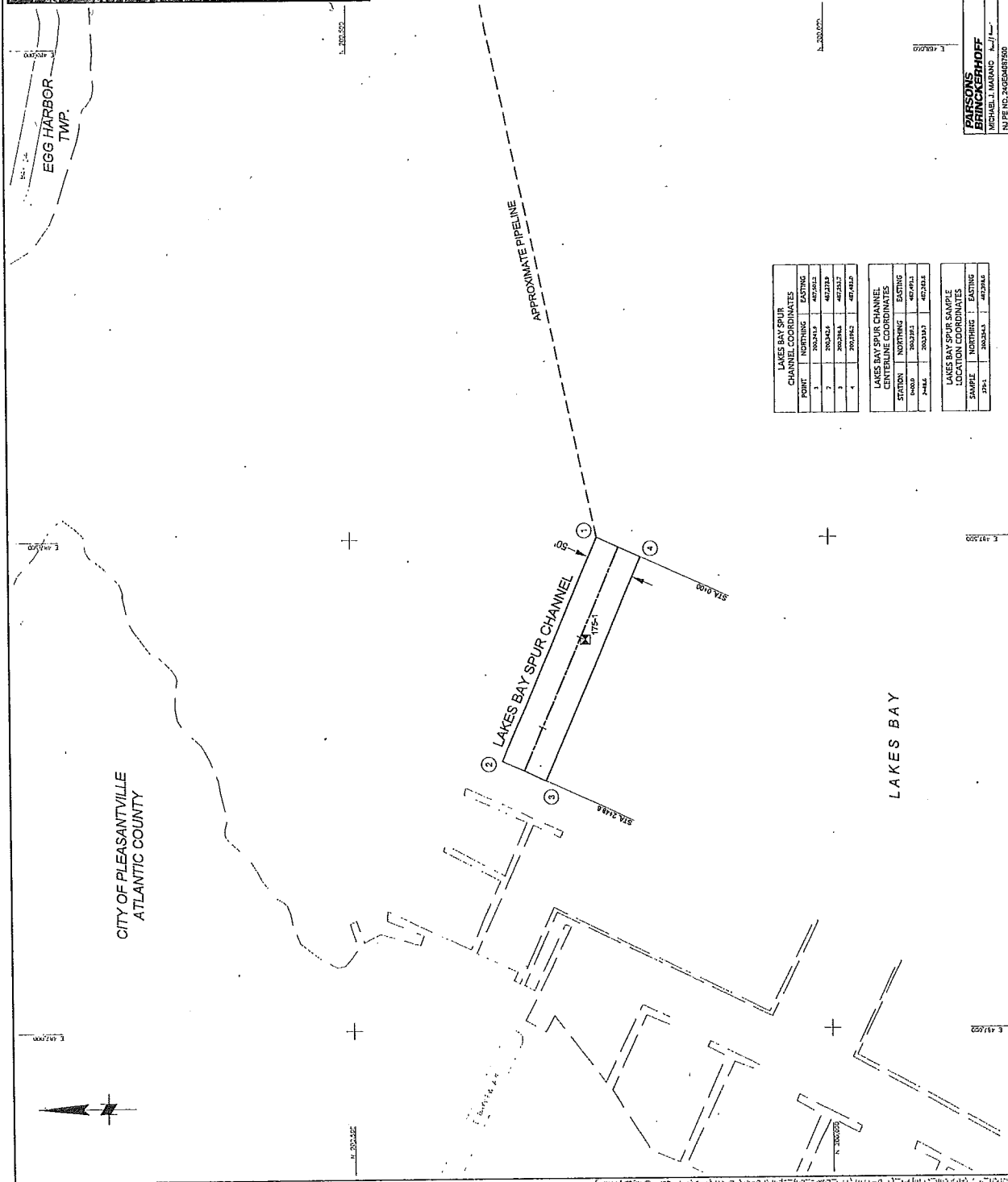
CHANNEL DREDGE VOLUMES BASED ON OCTOBER 14, 2015 CHD SURVEY DATA

LAKES BAY VOLUMES	
STATION	STATION
1774	1775
1776	1777
1778	1779
1780	1781
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**NOTES:**

1. VERTICAL DATA IS IN REFERENCE TO MEAN LOW WATER (MLW), MAX IS 230 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM (NAVDA) 1983 (MAGL). INFORMATION OBTAINED FROM NATIONAL SCIENCE & ATMOSPHERE ADMINISTRATION (NOAA) VECTOR DATA TRANSMISSION PROGRAM.
2. COORDINATES ARE EXPRESSED IN FEET AND RASTER TO THE NEW DATUM SINCE PLANE AND COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. DOTTING SHORELINE (DOWL) & ROCK LOCATIONS BASED ON AERIAL IMAGERY AND SHOULD BE CONSIDERED APPROXIMATE.
4. AERIAL IMAGERY IS FROM BIRD EYE MAPS, DATED MARCH 2011.

**LEGEND**

4.25 MPa (max)

3.57 MPa

2.20 MPa

1.06 MPa

0.00 MPa

-1.12 MPa

**RANGE OF TIDE (FT)**  
**NOT TO SCALE**

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

**TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR, AND RISLEYS CHANNELS  
CHANNEL ARRANGEMENT & GEOMETRY PLAN**

PROJECT:	LAKES BAY SEAR CHANNEL CITY OF AMERSON / ATLANTIC CITY CITY OF TRENTON / CITY OF MARGATE ATLANTIC COUNTY, NEW JERSEY
DRAWN BY: SEF	DATE: FEB. 2016
CHECKED BY: MWS	DATE: FEB. 2016
SCALE: AS SHOWN	DATE: FEB. 2016
GAGAHAN & BRYANT ASSOCIATES, INC. CERTIFICATION OF AUTHORIZATION NO. 2740208162700 2740208162700 STAN LUEWITZ NEW JERSEY PROFESSIONAL ENGINEER NO. 24030470000	
PROJECT NO.	DIV. NO. PERMIT-35
SHEET 25 OF 38	

LAKES BAY SPUR CHANNEL COORDINATES			
POINT	NORTHING	EASTING	
1	200,241.9	487,501.2	
2	200,342.4	487,273.9	
3	200,296.4	487,253.7	
4	200,196.2	487,483.0	

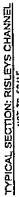
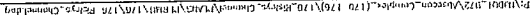
LAKES BAY SPUR CHANNEL CENTERLINE COORDINATES		
STATION	NORTHING	EASTING
0+00.0	203,239.5	457,491.1
2+41.6	203,219.7	457,543.6

LAKES BAY SPUR SAMPLE LOCATION COORDINATES		
SAMPLE	NORTHING	EASTING
379-1	200,254.3	487,394.6

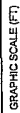
**PARSONS  
BRINCKERHOFF**  
MICHAEL J. MARANO *Principal*  
NJ PE NO. 24QE04087500



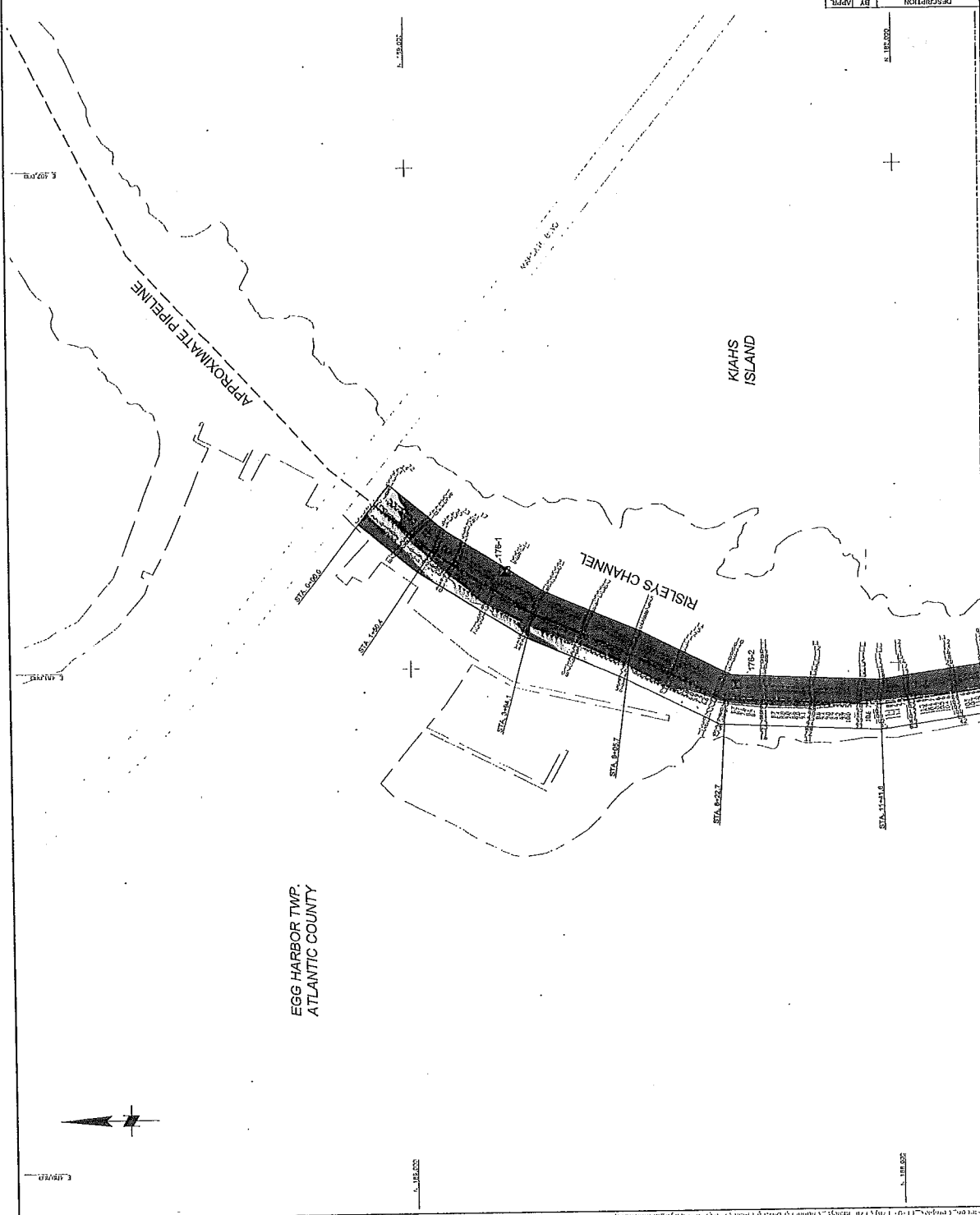




- | LEGEND  |                               |
|---------|-------------------------------|
| _____   | CHANNEL CONTINUED             |
| _____   | CHANNEL CLOSURE               |
| _____   | APPROXIMATE BOUNDARY (HAWK)   |
| _____   | APPROXIMATE PIPELINE LOCATION |
| _____   | ROAD/PAVEMENT                 |
| _____   | MUNICIPALITY LIMIT            |
| # _____ | CHANNEL SAMPLE LOCATION       |



**PARSONS  
BRINCKERHOFF**  
MICHAEL J. MARANO ٢٠١١  
N 111111 NO. 240100007500



EGG HARBOR TWP.  
ATLANTIC COUNTY

KIAHS  
ISLAND

RISLEY'S CHANNEL

APPROXIMATE PIPELINE

CHANNEL DREDGE VOLUMES BASED ON APRIL 11, 2015 CNO SURVEY DATA

RISLEY'S CHANNEL VOLUMES	
STATION	STA. 0+00 TO STA. 10+00
DEPTH	1.15
VOLUME	11.5
TOTAL	11.5

- NOTES:
- VERTICAL DATA IS IN REFERENCE TO MEAN LOW WATER (MLW). DATA IS 2.15 FEET BELOW THE MEAN.
  - COORDINATES ARE EXPRESSED IN FEET AND METERS TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
  - STATIONING IS BASED ON THE CENTERLINE OF THE CHANNEL.
  - CHANNEL DREDGE VOLUMES ARE BASED ON AERIAL IMAGERY AND SHOULD BE USED AS A GENERAL GUIDE ONLY.
  - CONTOUR DATA SHOWN WAS COLLECTED ON APRIL 11, 2015 BY DANAGAN & BRYANT ASSOCIATES (DBA) AND INDICATES DEPTH BELOW MLLW.
  - THE INFORMATION SHOWN ON THIS MAP IS THE PROPERTY OF DANAGAN & BRYANT ASSOCIATES (DBA) AND SHOULD BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED.
  - NO PART OF THIS MAP SHOULD BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DANAGAN & BRYANT ASSOCIATES (DBA).

LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMIT (DREDGE MOUND)
- APPROXIMATE PIPELINE LOCATION
- ROAD/PAVEMENT
- WATERWAY LIMIT
- CHANNEL SAMPLE LOCATION
- AREA PREVIOUSLY ABOVE OVERDEPTH (AREA ELEV. -3.5 MLLW)
- AREA PREVIOUSLY ABOVE OVERDEPTH (AREA ELEV. -4.5 MLLW)

RANGE OF TIDE (FT)  
MLLW TO MHHW

GRAPHIC SCALE (FT)  
0 100 200 400

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RISLEY'S CHANNELS  
CHANNEL BATHYMETRY PLAN

PROJECT: RISLEY'S CHANNEL  
CITY OF VENTNOR/CITY OF MARGATE ATLANTIC COUNTY, NEW JERSEY

DRAWN BY: SEF  
CHECKED BY: LRS  
SCALE: AS SHOWN  
DATE: FEB. 2016

PROJECT NO.: 1400000000  
SHEET NO.: 34 OF 38  
DWG. NO. PERMIT-30

MATCHLINE - SEE SHEET 34



MATCHLINE - SEE SHEET 34

EGG HARBOR TWP.  
ATLANTIC COUNTY

WILLIAMS  
ISLAND

RISLEY'S CHANNEL



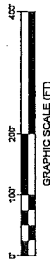
CHANNEL DREDGE VOLUMES BASED ON APRIL 11, 2015 CND SURVEY DATA

RISLEY'S CHANNEL VOLUMES	
STA. 0+00 TO 0+257.7	
STATION	VOLUME (CY)
0+00	0.00
0+257.7	0.00

- NOTES:
- VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW), WHICH IS 2.15 FEET BELOW THE NORTH DATUM.
  - COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83) LOCAL DATUM TRANSFORMATION PROGRAM.
  - STATION NUMBERS ARE GIVEN IN FEET (HUNDREDS).
  - CHANNEL DREDGE VOLUMES ARE BASED ON ACTUAL SURVEY AND SHOULD BE CONSIDERED APPROXIMATE.
  - COORDINATE (CND) SOUNDING DATA SHOWN WAS COLLECTED ON APRIL 11, 2015 BY DANAMON & BRYANT ASSOCIATES, INC. (D&B).
  - THE CHANNEL DREDGE VOLUMES ARE BASED ON THE CND SOUNDING DATA AND SHOULD BE CONSIDERED AS INDICATIVE OF THE CHANNEL'S CONDITION AT THAT TIME.

LEGEND

- CHANNEL CENTERLINE
- CHANNEL BATHYMETRY (HUNKS)
- APPROXIMATE PICTURE LOCATION
- ROAD/PANORAMA
- WINDPUMPY CUT
- CHANNEL SAMPLE LOCATION
- AREA PREVIOUSLY ABOVE OVERSLOTH (BETWEEN ELEV. -4 & -3 MSL)

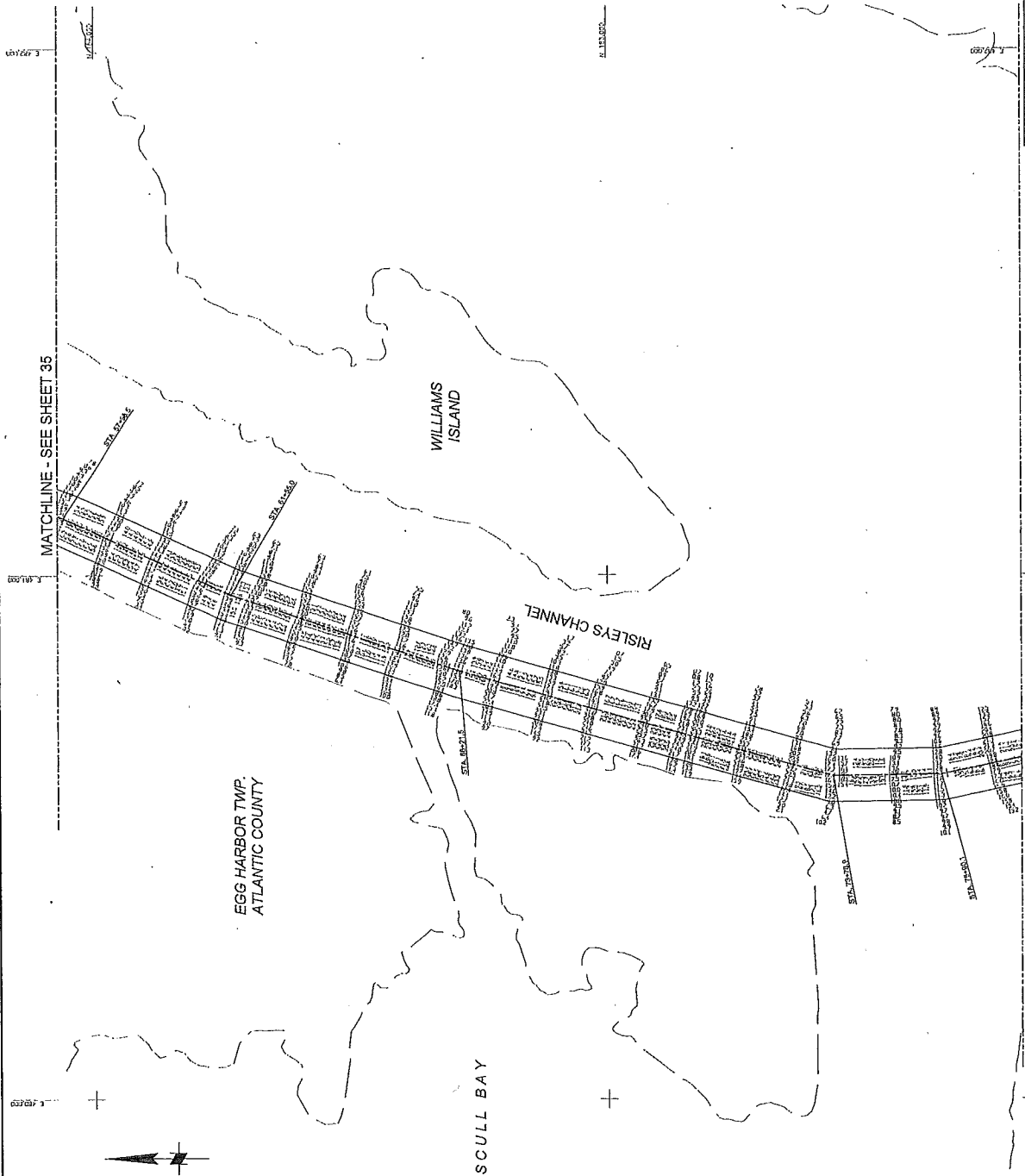


RANGE OF TIDE (FT)  
NOT TO SCALE

STATE OF NEW JERSEY NJDOT OFFICE OF MARITIME RESOURCES	
TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES BAY SPUR AND RISLEY'S CHANNELS CHANNEL BATHYMETRY PLAN	
PROJECT: RISLEY'S CHANNEL CITY OF ABSECON / ATLANTIC CITY / CITY OF PLASANTVILLE / EGG HARBOR TOWNSHIP CITY OF VERNON / CITY OF MARGATE, ATLANTIC COUNTY, NEW JERSEY	
DRAWN BY: SEF	PROJECT NO. 14-00000000
CHECKED BY: MRE	SCALE: AS SHOWN
DATE: FEB. 2015	DATE: FEB. 2015
DESIGNED BY: MRE	DESIGNED BY: MRE
DATE: FEB. 2015	DATE: FEB. 2015
DESIGNED BY: MRE	DESIGNED BY: MRE
DATE: FEB. 2015	DATE: FEB. 2015
DESIGNED BY: MRE	DESIGNED BY: MRE
DATE: FEB. 2015	DATE: FEB. 2015

MATCHLINE - SEE SHEET 36

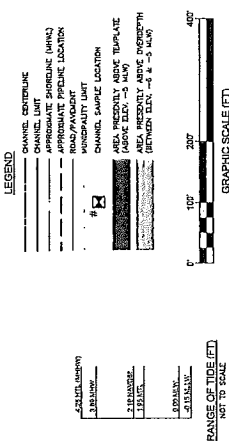
PARSONS  
BRINCKERHOFF  
MICHAEL J. MARANO  
NJ PE NO. 24684087200



RUSLEYS CHANNEL VOLUMES STA. 0+00 TO 67+30.7	11.64 5.79 18.72
TEMPLATE 6.5 MW, OVERDEPTH 1.4 MW,	TOTAL (cu)

CHANNEL DREDGE VOLUMES BASED ON APRIL 11, 2015 CND SURVEY DATA

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW), WHICH IS 2.15 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM (1985) (NAVD83). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) TIDE GAUGES WAS USED TO DETERMINE THE MLW.
2. COORDINATE SYSTEM (PLANES) USED FOR THIS PROJECT WAS BASED ON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD83) WITH AN ELEVATION DATUM OF 1985 (MGS).
3. DITCHING OPERATIONS (WELLS & DRAIN LOCATIONS) ARE BASED ON AERIAL PHOTOGRAPHY AND SHOULD BE CONSIDERED APPROXIMATE.
4. COORDINATE (GAGE) SCOURING DATA SHOWN WAS COLLECTED ON APRIL 11, 2015 BY CANADIAN & IRVING ASSOCIATES (C&I) AND INDICATES DEPTH BELOW NAV.
5. THE RESULTS OF THE SCOURING DATA WERE USED TO DETERMINE THE RESULTS OF SCOURING OBSERVED AT THE MAJOR DITCHES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL SCOURING DURING AT THAT TIME.

[illegible]

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

**TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR AND RISLEYS CHANNELS  
CHANNEL BATHYMETRY PLAN**

PROJECT:	WILFRED CHAMBER CITY OF ABERDEEN / ATLANTIC CITY / CITY OF PLEASANTVILLE / ESG HARBOR TOWNSHIP CITY OF VENTNOR / CITY OF MARGATE, ATLANTIC COUNTY, NEW JERSEY	PROJECT NO.	24-000137700	SHEET 36 OF 38	DWG. NO. PERMIT-31
DRAWN BY:	SEF	GAGANAK & BRYANT ASSOCIATES, INC.	CERTIFICATION OF AUTHORIZATION NO.	24-000137700	
CHECKED BY:	MMB	STAFF ENGINEER	STAMP NO.	24-000137700	
SCALE:	AS SHOWN	STATUS:	PROFESSIONAL ENGINEER	24-000137700	
DATE:	FEB. 2016				

11-13-11  
MATCHLINE - SEE SHEET 37

**PARSONS  
BRINCKERHOFF**







2.15 MTL 04/05/05  
1.77 MMT  
0.03 MANDP  
-0.29 MTL  
-2.22 MTL  
-2.74 MTL

RANGE OF TIDE IF  
NOT TO SCALE

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

**TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS  
FOR ABSECON CREEK, TUNIS BASIN, LAKES BAY, LAKES  
BAY SPUR AND RISLEYS CHANNELS  
PROPOSED CONFINED DISPOSAL FACILITY**

PROJECT: GATEWAY CDF  
CITY OF ABSECON / ATLANTIC CITY / CITY OF PLEASANTVILLE / EGG HARBOR TOWNSHIP  
CITY OF VENTNOR / CITY OF MARGATE, ATLANTIC COUNTY, NEW JERSEY

PROJECT NO.	24
GARGAN & BRYANT ASSOCIATES, INC. CERTIFICATION OF AUTHORIZATION NO. 24C6426187700	<i>[Signature]</i>
RAVN BY: BES	
CHECKED BY: MRS	

SCALE: AS SHOWN	STAN LULEWICZ NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04770920	SHEET 35 OF 35
DATE: JANUARY 2016		DWG. NO. PERMIT-35

[illegible]