



**US Army Corps
of Engineers**
Philadelphia District

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

Public Notice

Public Notice No.	Date
CENAP-OP-R-2009-1256-46	
Application No.	File No.

In Reply Refer to:
REGULATORY BRANCH

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: NATIONAL GYPSUM OF NEW JERSEY

AGENT: Urban Engineers, Incorporated
530 Walnut Street
Philadelphia, Pennsylvania 19106

WATERWAY: Delaware River

LOCATION: 1818 River Road, identified as Lot 2 of both Block 154 and 154.01,
Burlington City, Burlington County, New Jersey.

ACTIVITY: The applicant proposes to rehabilitate the existing loading dock facility. The work would include the construction of 5 new dolphins and associated catwalk ramps from the existing structures. All dolphins would consist of cast-in-place concrete caps supported by vibratory and impact hammer-driven HP14x117 steel piles (14 to 15 inches wide, approximately 80 feet long), encased in tremie-poured concrete-filled 24" steel sleeves. Two new mooring dolphins would be placed, upstream and downstream of the existing structure, involving the placement of 36 batter piles per dolphin (totaling a disturbance to 1350 square feet of open waters below the high tide line, but above the mudline, and 270 square feet of lost waterway bottom). Three breasting dolphins would be placed along the shore-parallel dock and walkway and would involve the placement of 27 steel piles per dolphin (totaling a disturbance of 1839 square feet of open waters below the high tide line, but above the mudline, and 252 square feet of lost waterway bottom). The project would result in a total of 3189 square feet of waterway disturbance from overall mooring and breasting dolphin construction and a direct loss of 520 square feet of waterway bottom from pile placement for the five dolphins. Each concrete pile cap would be constructed of poured concrete in tightly sealed forms. Additionally, 4 support piles would be placed for catwalks to the new upstream and downstream dolphins. Such pile placement would impact a total of 4 square feet of waterway below the high tide line. A total of 55 linear feet of 3.5 foot wide metal catwalk would be constructed for the 2 walkways.

It should be noted that this project would not involve dredging although such was approved by DA permit (issued March 14, 2011) which remains valid until 2021. Additionally, it should be noted that the initial loading facility as currently exists was originally approved by this office in a Department of the Army permit dated March 31, 1956.

PURPOSE: The applicant's stated purpose is to replace existing elements exhibiting significant deterioration and section loss and to improve the dock's ability to serve modern vessels.

A preliminary review of this application indicates that the proposed work may affect shortnose and Atlantic sturgeons (Federally-listed species) and potential critical habitat pursuant to Section 7 of the Endangered Species Act (ESA) as amended. To minimize impacts to such fisheries, the applicant shall employ a turbidity barrier around the construction site as well as would use vibratory pile driving methodologies for pile placement for setting the piles and timber-damped impact hammer driving to minimize vibrational effects on listed fisheries. Additionally, all work would be restricted from March 15 and May 31 to minimize impacts to shortnose sturgeon.

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 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 review of the "Guide to Essential Fish Habitat Designations in the Northeastern United States, Volume IV: New Jersey and Delaware", dated March 1999, suggests that the site is not located in essential fish habitat. However, to minimize impacts to food source fisheries associated with species of concern in Essential Fish Habitat, the applicant has stated that all in-water work would be restricted from the period of March 1 through June 30.

Compensatory Mitigation:

Pursuant to 33 CFR 332, the applicant's agent has noted the following points concerning compensatory mitigation.

This section of the Delaware River has limited in stream habitat structures that can be used as resting and protective areas for prey species. The addition of 153 piles and 5 raised concrete caps will contribute to such key resources. Over a short time these new structures will act as fish attractants making the habitat more valuable. It is anticipated that there will be only one arriving vessel per month using the facility, which allows these new in-water structures to be use by local fishers.

No compensatory mitigation would be necessary for this project since the proposed work would enhance available fish habitat by providing submerged structures, which are limited in this section of the Delaware River. The direct loss of waterway bottom would be limited to 520 square feet from the pile placement for the dolphins. An additional 3,189 square feet of impacts would occur below the AHT but this fill is located above the mudline allowing for access by fish and benthic organisms this would create additional foraging areas.

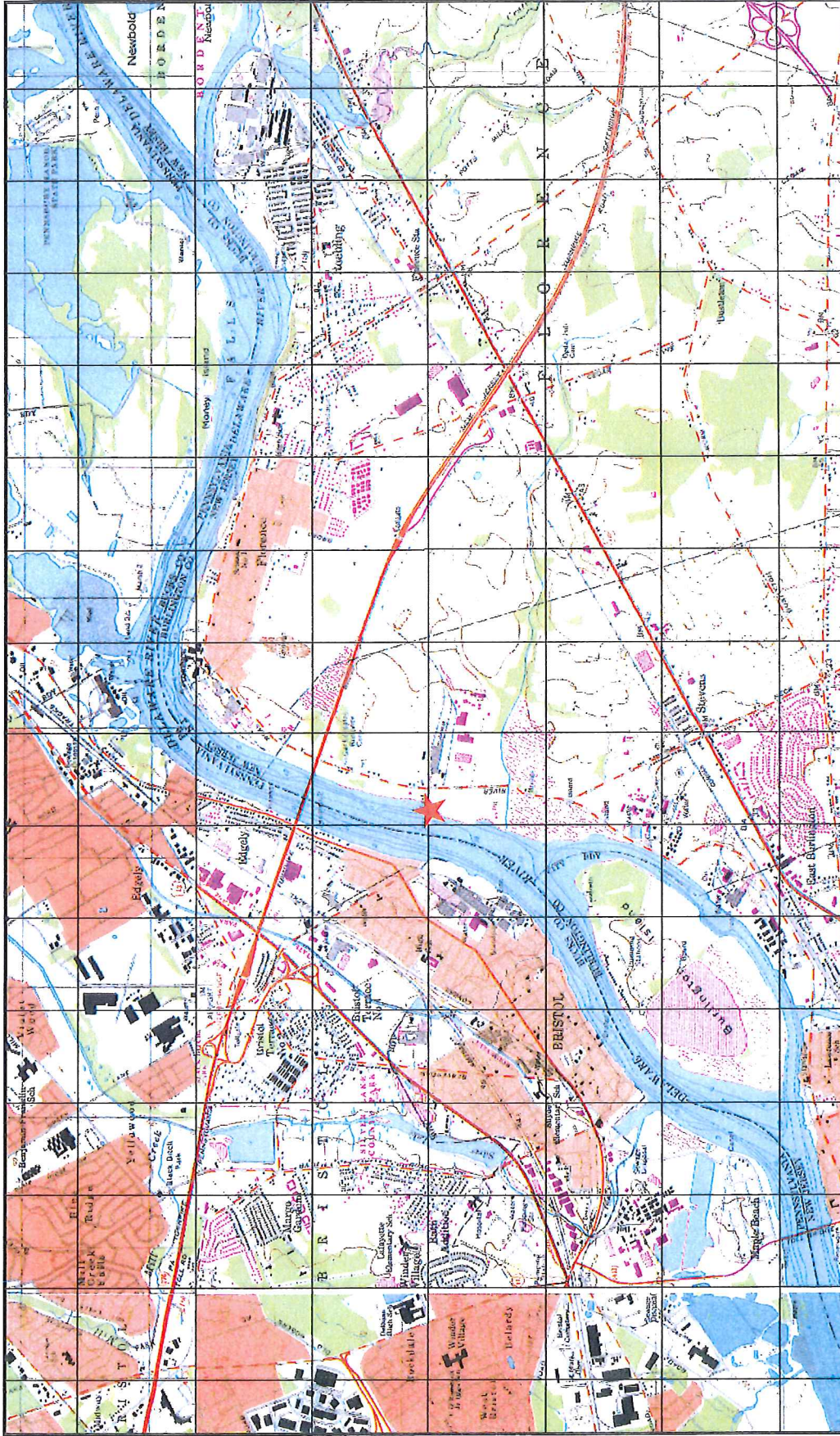
In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management Program. 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. 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.

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 David Caplan at 215-656-6731 or writing to this office at the above address.

Edward E. Bonner
Chief, Regulatory Branch

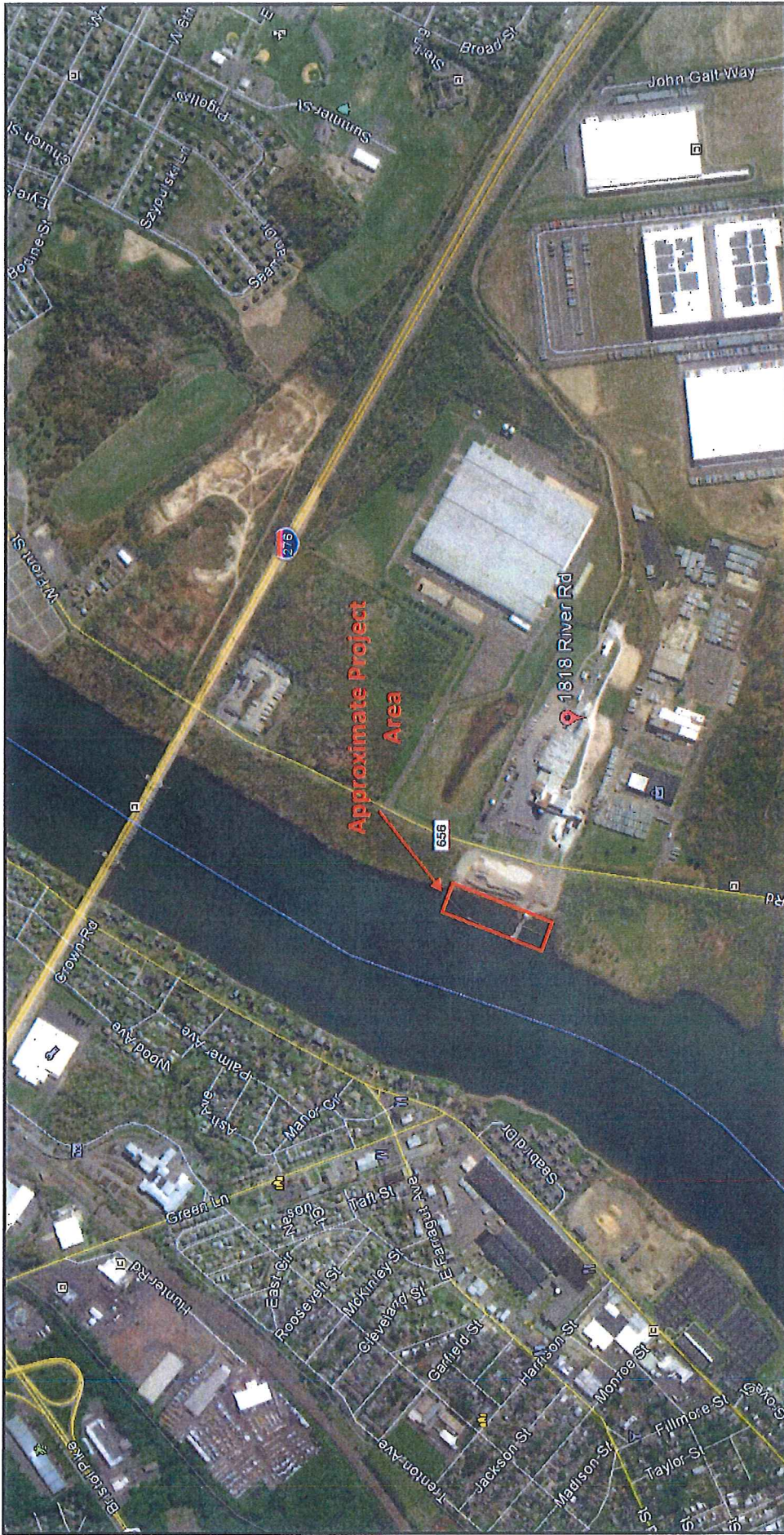


Source: Terrain Navigator®

USGS Location Map
 National Gypsum Company – Breasting Dolphin Replacement
 Burlington, New Jersey



★ **Approximate Site Location**



Aerial Location Map
National Gypsum Company – Breasting Dolphin Replacement
Burlington, New Jersey

Source: Google Earth®

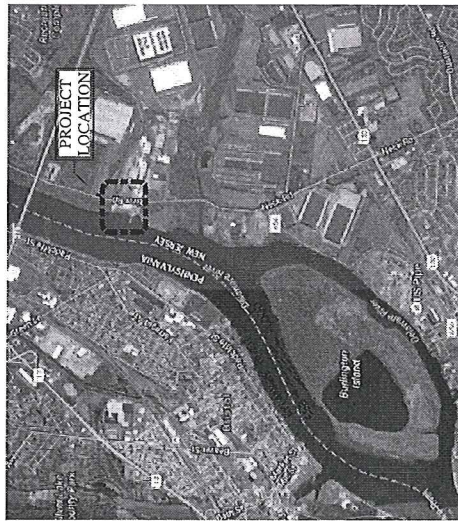
BURLINGTON DOCK REHABILITATION

1818 RIVER ROAD, BURLINGTON, NJ 08016

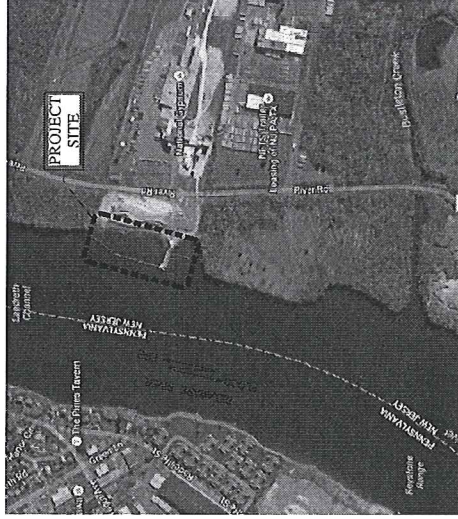
FOR

NATIONAL GYPSUM COMPANY

2001 REXFORD ROAD,
CHARLOTTE, NC 28211



VICINITY MAP



LOCATION MAP

Sheet Number	Sheet Title
CS-1	COVER SHEET
GN-1	GENERAL NOTES - 1
GN-2	GENERAL NOTES - 2
GA-1	EXISTING PLAN
GA-2	PROPOSED PLAN
GA-3	PROPOSED PILE PLAN
S-1	BREASTING DOLPHIN PILE PLAN
S-2	MOORING DOLPHIN PILE PLAN
S-3	BREASTING DOLPHIN PLAN & SECTIONS
S-4	MOORING DOLPHIN PLAN & SECTIONS
S-5	WALKWAY SECTIONS



ISSUED FOR PERMIT
DATE 2/6/17

URBAN PROJECT NO. 2016610115

<p>URBAN ENGINEERS, INC. PORTS AND WATERWAYS DIVISION 530 WALNUT STREET, 14TH FLOOR PHILADELPHIA, PA 19106-3685 PHONE (415) 922-6000 FAX (415) 922-6002</p>		PROJECT NO. 2016610115 DRAWN BY: PB/FC DESIGNED BY: PB APPROVED BY: SVM
NATIONAL GYPSUM COMPANY BURLINGTON, NJ		COVER SHEET
REV.	DESCRIPTION	BR
2	ISSUED FOR PERMIT	PB
1	ISSUED FOR PERMIT	PB
0	ISSUED FOR PERMIT	PB

DATE: 8-12-16	SHEET 1 OF 11
CS-1	
SEAL	
BY:	DATE:

GENERAL NOTES

- DRAWING SCALES SHOWN ON DRAWINGS ARE FOR DRAWINGS PLOTTED TO 22"x34" ONLY, U.N.O.
- DESIGN AND CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE STATE AND LOCAL CODES AND STANDARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DRAWINGS SHALL TAKE PRECEDENCE OVER PROJECT SPECIFICATIONS, SPECIFICATIONS, STATE AND LOCAL CODES SHALL TAKE PRECEDENCE OVER PROJECT SPECIFICATIONS AND NOTES ON DRAWINGS.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO MOBILIZING. ALL EXISTING & PROPOSED DIMENSIONS AND ELEVATIONS SHOWN ON DRAWINGS SHALL BE FIELD VERIFIED. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON FABRICATION OR ERECTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
- THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL WASTE MATERIAL, DEMOLISHED MATERIAL, EXCESS MATERIAL, AND OTHER DEBRIS AS NECESSARY TO PREVENT POLLUTION OF THE COURSE OF THE WORK, U.N.O. THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE COURSE OF THE WORK, U.N.O. DISPOSAL OF ALL GENERATOR WASTE MATERIALS AND DEBRIS TO BE PROVIDED BY THE APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
- THE CONTRACTOR SHALL PLACE SEWAGE CONTROL DEVICES, BRACKS, TRAPVAINS, FLOATS, STAGERS, TURBIDITY BARRIERS, AND OTHER DEVICES AS NECESSARY TO PREVENT CONSTRUCTION MATERIALS FROM ENTERING THE WATER AND LEAVING THE IMMEDIATE VICINITY OF THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF ALL MATERIALS.
- THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE ENVIRONMENTAL PROTECTION STANDARDS, CODES, LAWS, REGULATIONS, AND PERMITS.
- THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO NOT INTERFERE WITH, OR BE DETRIMENTAL TO, VESSEL AND VEHICULAR TRAFFIC DURING THE COURSE OF THE WORK.
- ALL STRUCTURES ARE DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER ERECTION IS FULLY COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ERECTION PROCEDURES AND SEQUENCE AND TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACKS, GUYS OR THE DOWNING THAT MAY BE NECESSARY. SUCH NECESSARY BRACKS SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

CONCRETE AND REINFORCING STEEL

- ALL CONCRETE WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF ACI 301 AND ACI 318, UNLESS OTHERWISE SPECIFIED.
- FOLLOW THE REQUIREMENTS OF ACI 308 WHEN POURING CONCRETE IN COLD WEATHER.
- CAST-IN-PLACE CONCRETE STRENGTH SHALL BE A MINIMUM OF 4000 PSI AT 28 DAYS, U.N.O.
- NONMETALLIC NON-SHRINK GROUT STRENGTH SHALL BE A MINIMUM OF 5000 PSI AT 28 DAYS, U.N.O.
- THE CONTRACTOR SHALL MAINTAIN PROPER CURING PROCEDURES FOR A MINIMUM OF 7 DAYS.
- ALL DETAILS, FABRICATION AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILS REINFORCED CONCRETE STRUCTURES, ACI 315.
- REINFORCING STEEL FOR CAST-IN-PLACE CONCRETE SHALL CONFORM TO ASTM A 615, OR 80, EXCEPT REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A 706.
- MINIMUM CONCRETE COVER FOR ALL REINFORCING SHALL BE 2 INCHES, U.N.O.
- ALL CONSTRUCTION JOINTS SHALL BE KEPT U.N.O. JOINTS SHALL BE PROVIDED AS NECESSARY AT LOCATIONS, AND USING METHODS, APPROVED BY THE ENGINEER.
- ALL REINFORCING BAR SPLICES SHALL BE TENSION LAP SPLICES, IN ACCORDANCE WITH ACI 318, U.N.O.
- CHAMFER ALL EXTERNAL EXPOSED CORNERS OF CONCRETE WITH A 1 INCH, 45-DEGREE CHAMFER, U.N.O.
- WELDING OF REINFORCING STEEL SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.4.

ELEVATIONS:



STRUCTURAL AND MISCELLANEOUS STEEL

- ALL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STEEL STRUCTURES, AISC STEEL CONSTRUCTION MANUAL, 13TH EDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DRAWINGS SHALL TAKE PRECEDENCE OVER PROJECT SPECIFICATIONS, SPECIFICATIONS, STATE AND LOCAL CODES SHALL TAKE PRECEDENCE OVER PROJECT SPECIFICATIONS AND NOTES ON DRAWINGS.
- STRUCTURAL AND MISCELLANEOUS STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING, U.N.O.:
 - WIDE FLANGE SHAPES: ASTM A 992, GRADE 50
 - PIPE: ASTM A 572, GRADE 50
 - PIPE PILES: ASTM A 572, GRADE 50
 - HOLLOW STRUCTURAL SECTIONS (HSS): ASTM A 583, GRADE B, TYPE S
 - HEAVY SHAPES: ASTM A 572, GRADE 50
 - ANCHOR BOLTS: ASTM A 308, Fy = 36 KSI
 - STEEL SHEET PILE (SSP): ASTM A 449
 - WASHERS: ASTM A 563
 - ASTM F 436
- IF OVERSIZED HOLES ARE USED, WASHERS MUST BE EXTRA THICK, AND MAY REQUIRE WELDING.
- ALL MISCELLANEOUS METALS INCLUDING BOLTS, WASHERS, NUTS, ANGLES, INSERTS, PLATES, AND OTHER FABRICATIONS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A 123 AND/OR ASTM A 153, AS APPLICABLE AFTER FABRICATION, UNLESS OTHERWISE NOTED OR SPECIFIED. STAINLESS STEEL ITEMS SHALL NOT BE GALVANIZED.
- FIELD TREAT DAMAGED GALVANIZED FINISH WITH TWO COATS OF HIGH ZINC DUST OXIDE PAINT. COLD GALVANIZING COMPOUNDS OR APPROVED EQUIVALENT GALVANIZING COMPOUNDS SHALL BE USED. GALVANIZING COMPOUNDS SHALL BE APPLIED TO BOTH SURFACES OF HIGH ZINC DUST OXIDE PAINT AFTER INSTALLATION OF THE NUT(S).
- THE TYPE, SIZE, SPACING, AND ALIGNMENT OF CONNECTING HARDWARE SHOWN ARE CRITICAL AND MUST BE MAINTAINED.
- ALL WELDING SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1, U.N.O. ALL WELDS SHALL BE MADE WITH EPOXY ELECTRODES, UNLESS HIGHER STRENGTH ELECTRODES ARE REQUIRED BY AWS D1.1. GENERALLY, ELECTRODES SHALL BE NEW OR BAKED AT THE START OF EACH SHIFT. FOLLOW THE ATMOSPHERIC EXPOSURE LIMITS AND BAKING REQUIREMENTS OF CLAUSE 9 OF AWS D1.1.
- WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D1.1, U.N.O.
- MINIMUM SIZE OF FILLET WELDS SHALL BE 1/4" U.N.O.
- WHEN THE "ALL-AROUND" WELDING SYMBOL IS USED AT AN END CONNECTION OF A ROLLED SHAPES, THE CONTRACTOR SHALL TERMINATE THE WELD AT EACH OF THE FLANGE OR WEB OF EACH MEMBER. THE WELD THICKNESS SHALL BE THE THICKNESS OF THE WEBS AND FLANGE, U.N.O.
- DOMES, BOLTS, REINFORCEMENT OR OTHER STEEL TO BE EMBEDDED IN CONCRETE SHALL BE INSTALLED USING MILK MILK-HY-200 EPOXY, U.N.O.

REBAR TABLE

BAR SIZE	MIN. LAP SPLICE		MIN. DEVELOPMENT LENGTH	
	TOP BAR (INCHES)	OTHER BAR (INCHES)	TOP BAR (INCHES)	OTHER BAR (INCHES)
#4	19	16	15	12
#5	24	19	19	14
#6	28	22	22	17
#7	42	32	32	25
#8	48	37	37	28
#9	60	46	46	35
#10	74	57	57	44
#11	88	68	68	52

LEGEND:



CIVIL/STRUCTURAL ABBREVIATIONS, U.N.O.

ASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ACI	AMERICAN CONCRETE INSTITUTE
ASC	AMERICAN SOCIETY OF CIVIL ENGINEERS
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWG	AMERICAN WELDING SOCIETY
B.P.	BACK TO BACK
C/C	CENTER TO CENTER
C/J	CAST-IN-PLACE CONSTRUCTION JOINT
CLR	CLEAR
CONC	CONCRETE
CONST	CONSTRUCTION
COV	COVER
CR	CRITICAL
D	DIAMETER
D/R	DEPTH
DEG	DEGREES
DETL	DETAILS
DIST	DISTANCE
DWG	DRAWING
DWT	DEAD WEIGHT TONNAGE
EA	EACH
EF	EACH FACE
EL	ELEVATION
EL/ELEV.	ELEVATION
ELEC	ELECTRICAL
EXT	EXTENDING
EXT.	EXTENDING
FIN	FINISH
FR	FRAMING
FRP	FIBERGLASS REINFORCED PLASTIC
F	FEET
FY	YIELD STRESS
GALV	GALVANIZED
GRNG	GRATING
GUSSET	GUSSET
HAT	HIGHEST ASTRONOMICAL TIDE
HIL	HIGH TIDE LINE
HT	HOT
I/S	IN SHORE
INVT	INVERT
KIP	KILOGRAMS
KIP	KILOPOUNDS
KIP	KILOPOUNDS
LAT	LONGITUDE
LB	LINEAR FEET
LG	LONG
LV	LONG LEAF VERTICAL
LONG	LONG

BURLINGTON DOCK REHABILITATION
GENERAL NOTES - 1

NATIONAL OPSIM COMPANY
BURLINGTON, NJ

URBAN ENGINEERS INC.
520 WALNUT STREET, 14TH FLOOR
PHILADELPHIA, PA 19108-3665
PHONE (215) 922-8090
FAX (215) 922-8092

DESIGNED BY: P8
APPROVED BY: PSM

DRAWN BY: P8/TC
PROJECT NO: 201610115

DATE: 8-2-16
SHEET 2 OF 11
GN-1

ISSUED FOR PERMIT
DATE: 3/16/17

DESIGN VESSELS

- LARGEST DESIGN VESSEL CHARACTERISTICS:
 MAX. DWT = 71,000 TONNES
 MAX. DISPLACEMENT = 67,500 TONNES
 MAX. DESIGN DISPLACEMENT = 62,000 TONNES
 LCA = 750 FT.
 CG = 33 FT.
 MAX. DESIGN DRAFT (PARTIAL) = 33 FT.
 MIN. BALLASTED DESIGN DRAFT = 22 FT.

DESIGN LOADS

- LIVE LOADS:
 WALKWAY AND DOULPHIN LIVE LOAD = 100 PSF
- WIND:
 MAXIMUM OPERATING WIND VELOCITY = 50 MPH
 STORM WIND VELOCITY (PERMANENT STRUCTURE ONLY) = 90 MPH
- CURRENT:
 MAX CURRENT VELOCITY = 2.5 KNOTS

FENDERS

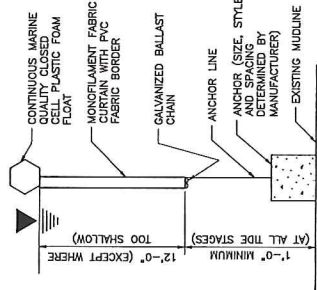
- FENDERS SHALL HAVE THE FOLLOWING RATED PROPERTIES, U.N.O.:
 MINIMUM ENERGY = 281 K-FT
 MAXIMUM REACTION = 172 KP
 DEFLECTION = 52.5%
- BERTHING PARAMETERS:
 MAXIMUM BERTHING VELOCITY = 0.50 FT./SEC.
 ABNORMAL IMPACT FACTOR = 1.50
- ALL CHAINS, SHACKLES, PANELS AND HARDWARE SHALL BE DESIGNED AND SUPPLIED TO WITHSTAND THE FULL TENSIONER RATED TENSILE STRENGTH. APPROXIMATE SIZES SHOWN AND SHALL LIMIT PULL PRESSURES TO 20 PSI.

FOUNDATION

- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE AVAILABLE SOIL BORING INFORMATION. THE GEOTECHNICAL INVESTIGATION REPORT FOR THIS PROJECT CAN BE OBTAINED FROM THE OWNER.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UNUSUAL SOIL CONDITIONS IMMEDIATELY.
- THE CONTRACTOR SHALL TAKE CARE WHEN USING HEAVY EQUIPMENT IN THE VICINITY OF EXCAVATED SLOPES. NO WORK SHALL BE PERFORMED IN THE VICINITY OF SLOPES THAT ARE SATURATED FROM HEAVY RAINS, OR THROUGH WHICH GROUNDWATER IS ACTIVELY DRAINING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND FINAL CLEARANCE OF ANY REQUIRED NEEDLING, UNDERPINNING, BRACING, TEMPORARY SUPPORT, AND TEMPORARY BRACING OF EXISTING STRUCTURES.
- SPUNNING, PRE-AGEING, AND/OR JETTING OF PILES IS NOT PERMITTED, U.N.O.
- TIMBER PILES SHALL CONFORM TO ASTM D 25. TIMBER PILES SHALL BE UNTREATED SOUTHERN YELLOW PINE, U.N.O.
- DO NOT DRIVE, VIBRATE, OR EXTRACT PILES WITHIN 50 FT. OF RECENTLY POURED CONCRETE UNTIL THE CONCRETE HAS BEEN PROPERLY CURED FOR A MINIMUM OF 7 DAYS.
- EXISTING AND NEW STRUCTURES SHALL NOT BE USED AS FALSEWORK FOR PILE DRIVING, U.N.O.
- STEEL PIPE PILES SHALL BE WELDABLE IN ACCORDANCE WITH AWS D1.1. SPIRAL WELD PIPE PILES SHALL ONLY BE USED WITH THE WRITTEN APPROVAL OF THE ENGINEER.
- PILES SHALL NOT BE PULLED, JACKED, OR OTHERWISE MANIPULATED INTO POSITION. THE CONTRACTOR SHALL ENSURE THAT ALL PILES ARE INSTALLED IN THE LOCATIONS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY BEFORE ANY ATTEMPT TO MEASURE THE PILE POSITION BEFORE THE CONNECTING DRIVEN PILES, AT THE ENGINEER'S DISCRETION. THE FINAL HORIZONTAL TOLERANCE ALLOWED AT THE TOPS OF THE PILE IS 1" HORIZONTAL TOLERANCE SHALL BE MAINTAINED THROUGHOUT THE PILEWORK REMOVAL. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SUBMIT A MODIFIED CONNECTION DETAIL TO THE ENGINEER FOR APPROVAL.

PILE TESTING & DRIVE CRITERIA

- STANDARD PILES SHALL BE DRIVEN TO ACHIEVE THE FOLLOWING ALLOWABLE CAPACITIES:
 1.1. DOULPHIN PLUMB PILES SHALL BE DRIVEN TO ACHIEVE A 80 TON ALLOWABLE CAPACITY IN COMPRESSION, AND A 10 TON ALLOWABLE CAPACITY IN UPLIFT.
 1.2. WALKWAY PILES SHALL BE DRIVEN TO ACHIEVE A 10 TON ALLOWABLE CAPACITY IN COMPRESSION, AND A 10 TON ALLOWABLE CAPACITY IN UPLIFT.
 1.3. WALKWAY PILES SHALL BE DRIVEN TO THE TIP ELEVATIONS SHOWN ON THE DRAWINGS.
 1.4. THE MINIMUM FACTORS OF SAFETY ON THESE ALLOWABLE CAPACITIES SHALL BE 2.25 ON COMPRESSION, AND 3.0 ON UPLIFT.
- THE CONTRACTOR SHALL PERFORM AND SUBMIT THE RESULTS OF DRIVEABILITY ANALYSES BASED ON 3-4 TEST PILES TO THE GEOTECHNICAL ENGINEER TO DETERMINE THE SPECIFICATIONS OF THE HAMMER TO BE USED FOR DRIVING STANDARD PILES. THE REQUIRED ALLOWABLE CAPACITIES, THIS HAMMER WILL BE REVIEWED BY THE ENGINEER PRIOR TO USE.
- THE CONTRACTOR SHALL PERFORM AND SUBMIT THE RESULTS OF DYNAMIC TESTING AND CAPWAP MONITORING DURING INITIAL DRIVE, AND A RESTRIKE TO BE PERFORMED AFTER A MINIMUM OF 48 HOURS.
 3.1. ANALYSES OF THE TEST PILES INDICATED ON THE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
 3.2. TEST PILES SHALL BE DRIVEN AND TESTED FOR THEIR FULL LENGTHS.
 3.3. ALLOWABLE PILE CAPACITIES IN COMPRESSION AND UPLIFT, THE ENGINEER WILL ISSUE DRIVE CRITERIA BASED ON THE RESULTS FROM THE TEST PILES, WHICH SHALL GOVERN THE DRIVING OF PRODUCTION PILES OF EACH TYPE SHALL NOT BE DRIVEN UNTIL THAT TYPE HAS BEEN TESTED AND THE ENGINEER HAS ISSUED DRIVE CRITERIA FOR THAT TYPE.
- SEE THE TECHNICAL SPECIFICATIONS FOR FURTHER DETAILS ON PILE TESTING REQUIREMENTS.



TURBIDITY CURTAIN DETAIL
N.T.S.

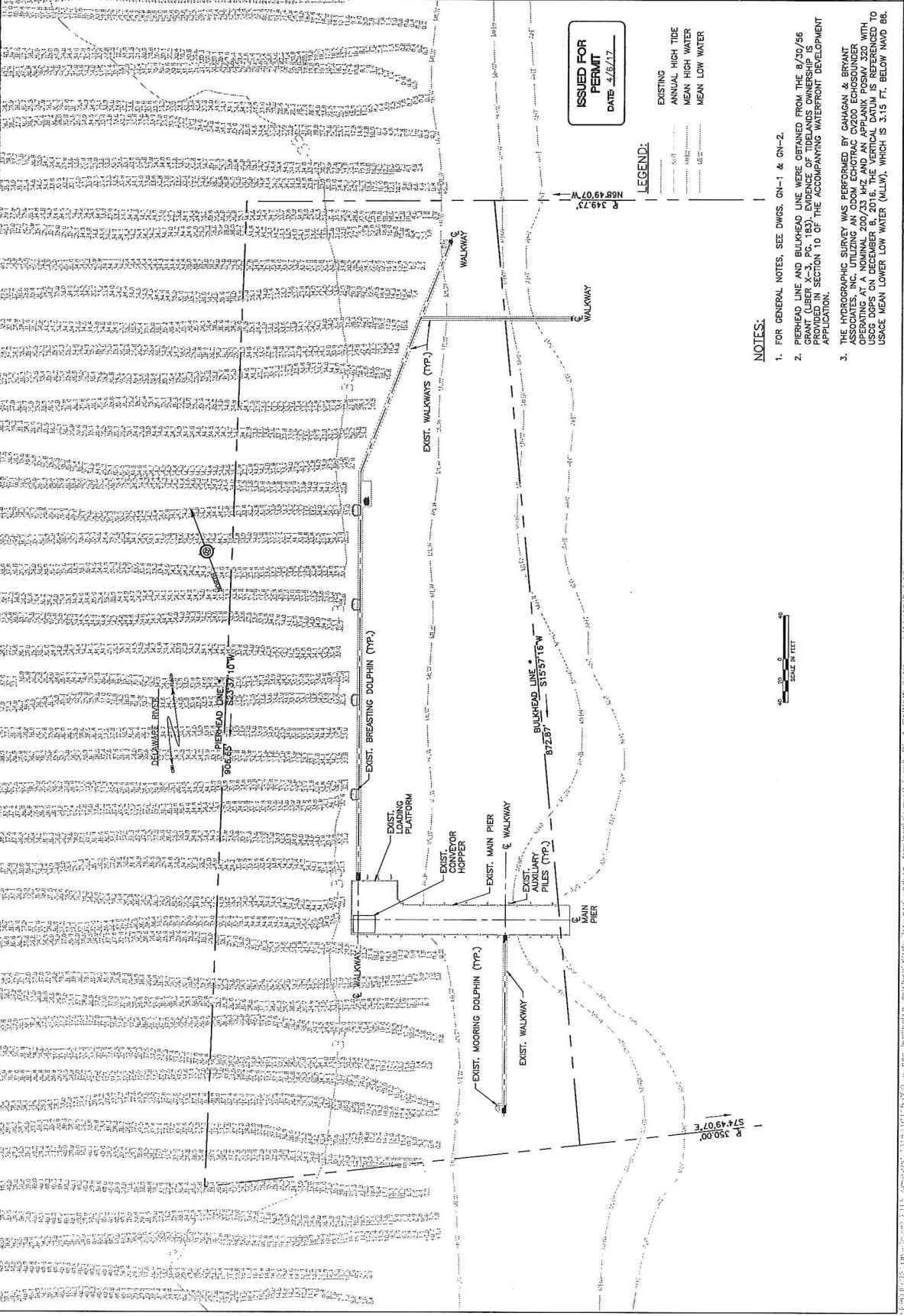
EROSION & SEDIMENT CONTROL NOTES:

- A FLOATING TURBIDITY CURTAIN SHALL BE PLACED TO ENCOMPASS AREAS WHERE HIGH VELOCITY FLOW OF WATER MAY OCCUR. A TURBIDITY CURTAIN MUST BE IN PLACE FOR ACTIVITIES THAT MAY GENERATE TURBIDITY, INCLUDING: PILE INSTALLATION OR EXTRACTION, PLACING CONCRETE UNDERWATER, DREDGING OR UNDERWATER DEBRIS REMOVAL, AND DEMOLITION.
 THE CURTAIN HEIGHT SHALL NOT EXCEED 12 FT. AND SHALL BE SHORT ENOUGH TO MAINTAIN A 1 FT GAP BETWEEN ITS BOTTOM AND THE MUDLINE AT MEAN LOW WATER.
- UNLESS NOTED OTHERWISE, THE TURBIDITY CURTAIN SHALL BE A TRITON TYPE II PERMEABLE SILT AND TURBIDITY BARRIER, OR APPROVED EQUIVALENT. WHERE NO TIDAL FLUCTUATION OR CURRENT EXISTS, A TYPE II BARRIER MAY BE USED. PERMIT PROPOSED BARRIER SPECIFICATIONS, ALONG WITH THE MANUFACTURER'S RECOMMENDED CONDITIONS FOR USE.
- 8% EROSION CONTROL SEDIMENT LOGS SHALL BE PLACED ALONG THE WATER'S EDGE IN ALL AREAS WHERE SEDIMENT OR RUNOFF MAY ENTER THE WATER. LOGS SHALL BE INSTALLED TO MONITOR THE DISCHARGE OF SEDIMENTS INTO THE WATER.
- ATTACH BUOYS WITH NAVIGATION LIGHTS WHERE REQUIRED BY THE COAST GUARD.

ISSUED FOR PERMIT
DATE: 4/16/17

		PROJECT NO: 201610115 DRAWN BY: pg/fc PHO: (215) 822-8609 FAX: (215) 822-8022	DESIGNED BY: PG APPROVED BY: SVM
NATIONAL GYPSUM COMPANY BURLINGTON, NJ		BURLINGTON DOCK REHABILITATION GENERAL NOTES - 2	
DATE:	9-12-16		
SHEET:	3 OF 11		
<h1>GN-2</h1>			
BY: _____ DATE: _____			

URBAN ENGINEERS, INC. PORTS AND WATERWAYS DIVISION 530 WALNUT STREET, 14TH FLOOR PHILADELPHIA, PA. 19106-3685 PHONE (215) 922-8000 FAX (215) 922-8002		PROJECT NO: 2016610115 DRAWN BY: Pp/FC DESIGNED BY: Pp	APPROVED BY: SVM
NATIONAL OPSUN COMPANY BURLINGTON, NJ		EXISTING PLAN	
REV.	DESCRIPTION	BY	DATE
2	ISSUED FOR PERMIT	Pp	4/6/17
1	ISSUED FOR PERMIT	Pp	3/13/17
0	ISSUED FOR PERMIT	Pp	2/2/17



ISSUED FOR PERMIT
DATE 4/6/17

LEGEND:
 EXISTING
 ANNUAL HIGH TIDE
 MEAN HIGH WATER
 MEAN LOW WATER

NOTES:

1. FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.
2. PIERHEAD LINE AND BULKHEAD LINE WERE OBTAINED FROM THE 8/19/56 GRANT (LIBER X-3, PG. 183) EVIDENCE OF TIDE LANDS OWNERSHIP AS PROVIDED IN SECTION 10 OF THE ACCOMPANYING WATERFRONT DEVELOPMENT APPLICATION.
3. THE HYDROGRAPHIC SURVEY WAS PERFORMED BY CAHAGAN & BRYANT ASSOCIATES, INC. UTILIZING AN ODOM ECHOTRAC CY200 ECHOSOUNDER OPERATING AT A NOMINAL 200/33 KHZ AND AN APPLANIX POSMV 320 WITH ODOM OPERATING IN MODE 016. THE VERTICAL DATUM IS REFERENCED TO USGS MEAN LOWER LOW WATER (MLLW), WHICH IS 3.19 FT. BELOW MVD 88.



S 74°49'07\"/>

S 53°37'10\"/>

S 49°23'16\"/>

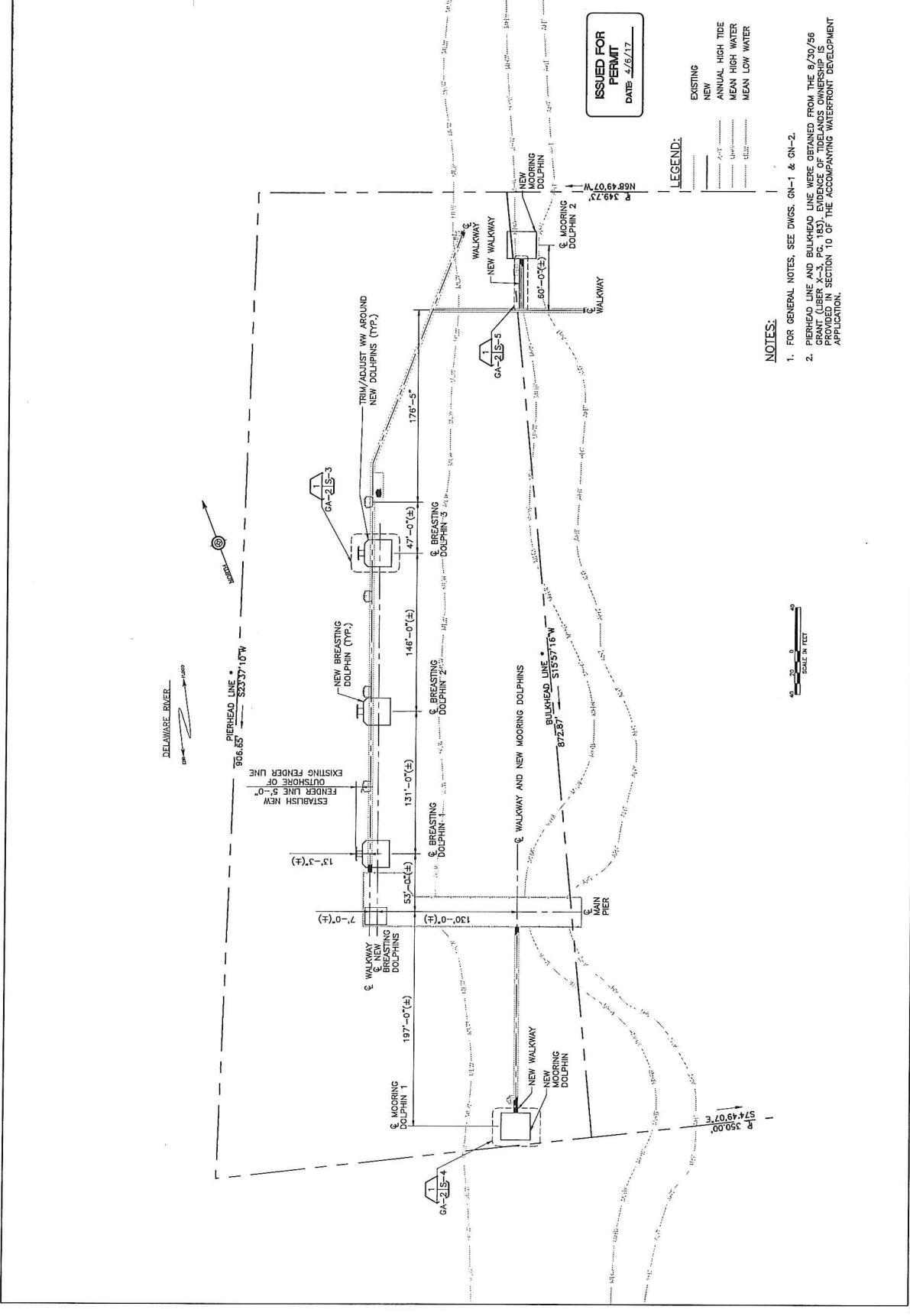
N 68°49'07\"/>

DATE: 8-12-16
 SHEET: 4 OF 11
GA-1
 SEAL

BY: _____
 DATE: _____

REV	DESCRIPTION	BY	DATE	NATIONAL GYPSUM COMPANY BURLINGTON, NJ	PROPOSED PLAN	APPROVED BY: SVM	PROJECT NO: 2016610115
						ISSUED FOR PERMIT	DESIGNED BY: PB
2	ISSUED FOR PERMIT	PB	4/8/17	URBAN ENGINEERS, INC. PORTS AND WATERWAYS DIVISION 530 WALNUT STREET, 14TH FLOOR PHILADELPHIA, PA 19106-3689 PHONE (215) 922-8009 FAX (215) 922-8002	BURLINGTON DOCK REHABILITATION	ISSUED FOR PERMIT	DATE: 8-12-16
1	ISSUED FOR PERMIT	PB	3/13/17			SHEET 5 OF 11	
0	ISSUED FOR PERMIT	PB	2/2/17			GA-2	

BY: _____
DATE: _____



ISSUED FOR PERMIT
DATE 3/16/17

LEGEND:

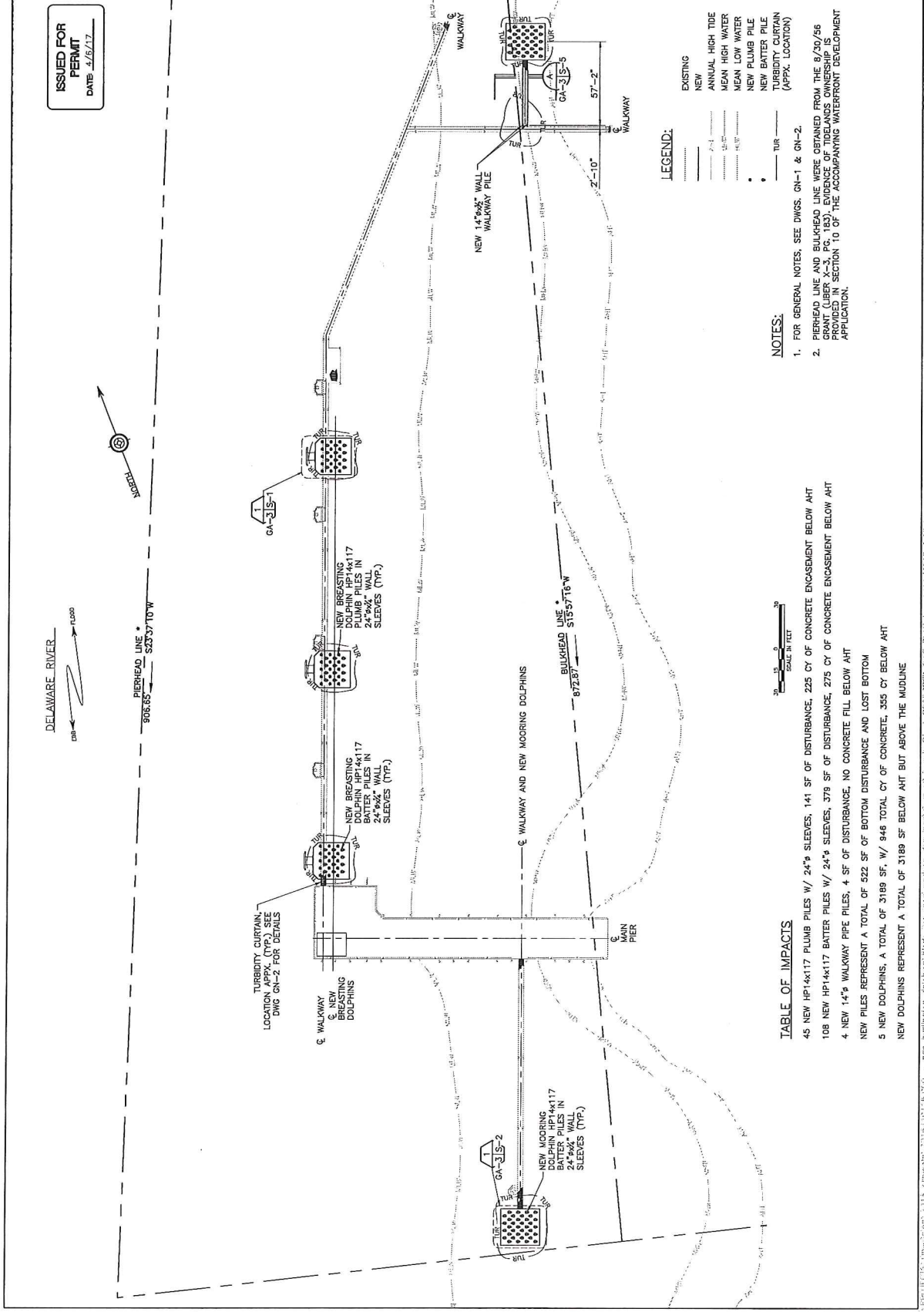
EXISTING
NEW
ANNUAL HIGH TIDE
MEAN HIGH WATER
MEAN LOW WATER

NOTES:

- FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.
- PIERHEAD LINE AND BULKHEAD LINE WERE OBTAINED FROM THE 8/26/56 GRANT (LIBER X-3, PG. 183). EVIDENCE OF TIDELANDS OWNERSHIP IS PROVIDED IN SECTION 10 OF THE ACCOMPANYING WATERFRONT DEVELOPMENT APPLICATION.

SCALE IN FEET
0 10 20

ISSUED FOR PERMIT DATE 4/6/17		ISSUED FOR PERMIT DATE 3/13/17		ISSUED FOR PERMIT DATE 2/2/17	
BY: PB		BY: PB		BY: PB	
DESCRIPTION		DESCRIPTION		DESCRIPTION	
REV. 2		REV. 1		REV. 0	
BURLINGTON, NJ		BURLINGTON, NJ		BURLINGTON, NJ	
NATIONAL CPSUM COMPANY		NATIONAL CPSUM COMPANY		NATIONAL CPSUM COMPANY	
BURLINGTON DOCK REHABILITATION		BURLINGTON DOCK REHABILITATION		BURLINGTON DOCK REHABILITATION	
APPROVED BY: S/M		DESIGNED BY: PB		DRAWN BY: PB/TC	
PROJECT NO: 2016610115		PHONE (215) 922-8000 FAX (215) 922-8032		PHILADELPHIA, PA 19106-3695	
APPROVED BY: S/M		DESIGNED BY: PB		DRAWN BY: PB/TC	
DATE: 8-12-16		SHEET: 6 OF 11		GA-3	
BY: _____		DATE: _____		SEAL	



ISSUED FOR PERMIT
DATE 4/6/17

- LEGEND:**
- EXISTING
 - NEW
 - ANNUAL HIGH TIDE
 - MEAN HIGH WATER
 - MEAN LOW WATER
 - NEW PLUMB PILE
 - NEW BATTER PILE
 - TURBIDITY CURTAIN (APPR. LOCATION)
 - TUR

NOTES:

1. FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.
2. PIERHEAD LINE AND BULKHEAD LINE WERE OBTAINED FROM THE 8/70/86 GRANT (LIBER X-3, PG. 183). EVIDENCE OF TIDELANDS OWNERSHIP IS PROVIDED IN SECTION 10 OF THE ACCOMPANYING WATERFRONT DEVELOPMENT APPLICATION.

TABLE OF IMPACTS

- 45 NEW HP14x117 PLUMB PILES W/ 24" SLEEVES, 141 SF OF DISTURBANCE, 225 CY OF CONCRETE ENCASMENT BELOW AHT
- 108 NEW HP14x117 BATTER PILES W/ 24" SLEEVES, 379 SF OF DISTURBANCE, 275 CY OF CONCRETE ENCASMENT BELOW AHT
- 4 NEW 14" WALKWAY PIPE PILES, 4 SF OF DISTURBANCE, NO CONCRETE FILL BELOW AHT
- NEW PILES REPRESENT A TOTAL OF 522 SF OF BOTTOM DISTURBANCE AND 500 CY BELOW
- 5 NEW DOLPHINS, A TOTAL OF 3189 SF, W/ 946 TOTAL CY OF CONCRETE, 355 CY BELOW
- NEW DOLPHINS REPRESENT A TOTAL OF 3189 SF BELOW AHT BUT ABOVE THE MUDLINE

U:\Projects\2016\20160815_BurlingtonDockRehab\Drawings\Sheet\GA-3.dwg (Date: 8/11/2017 8:28:31 AM)

REV.		DESCRIPTION		BY	DATE
0	ISSUED FOR PERMIT	PB	2/2/17		
1	ISSUED FOR PERMIT	PB	3/13/17		
2	ISSUED FOR PERMIT	PB	4/6/17		

PROJECT NO: 2016610115		APPROVED BY: SM	
DRAWN BY: PB/FC		DESIGNED BY: PB	

DATE: 8-12-18
SHEET: 7 OF 11

S-1

SEAL

BY: _____
DATE: _____

URBAN ENGINEERS, INC.
NATIONAL GRP/SUM COMPANY
BURLINGTON, NJ

BURLINGTON DOCK REHABILITATION

URBAN ENGINEERS, INC.
PHILADELPHIA, PA 19108-3685
530 WALNUT STREET, 14TH FLOOR
PORTS AND WATERWAYS DIVISION
PHONE (215) 922-0000 FAX (215) 922-0002

ISSUED FOR PERMIT
DATE: 4/6/17

NOTES:

- FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.
- NEW PIPE SLEEVES SHALL BE SHORE COATED WITH COAL TAR EPOXY.



6A-315-1 BREASTING DOLPHIN PILE PLAN

SCALE: 3/8" = 1'-0"

TABLE OF IMPACTS (EACH BREASTING DOLPHIN)

- 15 NEW HPI14x117 PLUMB PILES W/ 24" SLEEVES
- 12 NEW HPI14x117 BATTER PILES W/ 24" SLEEVES
- NEW PILES REPRESENT 90 SF OF BOTTOM DISTURBANCE AND LOST BOTTOM AND 143 CY OF CONCRETE ENCUMBRMENT BELOW AHT
- NEW DOLPHINS REPRESENT 613 SF BELOW AHT BUT ABOVE THE MUDLINE, W/ 182 TOTAL CY OF CONCRETE, 97 CY OF CONCRETE BELOW AHT

DATE: 4/6/17

BY: _____

DATE: _____

ISSUED FOR PERMIT

DATE: 4/6/17

URBAN ENGINEERS, INC.

NATIONAL GRP/SUM COMPANY

BURLINGTON, NJ

BURLINGTON DOCK REHABILITATION

URBAN ENGINEERS, INC.

PHILADELPHIA, PA 19108-3685

530 WALNUT STREET, 14TH FLOOR

PORTS AND WATERWAYS DIVISION

PHONE (215) 922-0000 FAX (215) 922-0002

ISSUED FOR PERMIT

DATE: 4/6/17

BY: _____

DATE: _____

URBAN ENGINEERS, INC.

NATIONAL GRP/SUM COMPANY

BURLINGTON, NJ

BURLINGTON DOCK REHABILITATION

URBAN ENGINEERS, INC.

PHILADELPHIA, PA 19108-3685

530 WALNUT STREET, 14TH FLOOR

PORTS AND WATERWAYS DIVISION

PHONE (215) 922-0000 FAX (215) 922-0002

URBAN ENGINEERS, INC. NATIONAL GPS/US COMPANY BURLINGTON, NJ		BURLINGTON DOCK REHABILITATION		MOORING DOLPHIN PILE PLAN	
REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION
0	ISSUED FOR PERMIT	PB	2/2/17	1	ISSUED FOR PERMIT
1	ISSUED FOR PERMIT	PB	3/13/17	2	ISSUED FOR PERMIT
2	ISSUED FOR PERMIT	PB	4/6/17		

URBAN ENGINEERS, INC.
530 WALNUT STREET, 14TH FLOOR
PHILADELPHIA, PA 19108-3685
PHONE (215) 922-0000 FAX (215) 922-0022

DESIGNED BY: PB
APPROVED BY: SVM

PROJECT NO: 201610115

DATE: 9-12-16
SHEET: 8 OF 11
SCALE: S-2

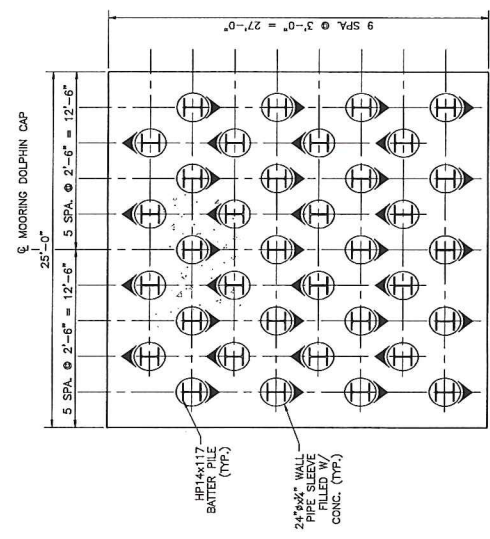
BY: _____
DATE: _____

ISSUED FOR PERMIT
DATE: 4/6/17

NOTES:

1. FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.
2. NEW PIPE SLEEVES SHALL BE SHIPE COATED WITH COAL TAR EPOXY.

EBB → FLOOD
DELAWARE RIVER



1 MOORING DOLPHIN PILE PLAN
GN-3/S-2



TABLE OF IMPACTS (EACH MOORING DOLPHIN)

36 NEW HP14x117 BATTER PILES W/ 24" SLEEVES
 NEW PILES REPRESENT 126 SF OF BOTTOM DISTURBANCE AND LOST BOTTOM AND 36 CY OF CONCRETE ENCASMENT BELOW AHT
 NEW DOLPHINS REPRESENT 675 SF BELOW AHT BUT ABOVE THE MIDLINE, W/ 200 TOTAL CY OF CONCRETE, 32 CY OF CONCRETE BELOW AHT

URBAN ENGINEERS, INC. PROJECT NO. 201610115, SHEET: 8 OF 11, DATE: 9-12-16, SCALE: S-2, MOORING DOLPHIN PILE PLAN, GN-3/S-2

REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR PERMIT	PB	2/2/17
1	ISSUED FOR PERMIT	PB	3/13/17
2	ISSUED FOR PERMIT	PB	4/6/17

BURLINGTON NATIONAL CYCLON COMPANY BURLINGTON, NJ

BREASTING DOLPHIN PLAN & SECTIONS

DESIGNED BY: SMM APPROVED BY: SMM

PROJECT NO: 201610115

URBAN ENGINEERS, INC. URBAN PORTS AND WATERWAYS DIVISION
 530 WALNUT STREET, 14TH FLOOR PHILADELPHIA, PA 19106-3665
 PHONE (215) 922-8050 FAX (215) 922-8052

DATE: 8-12-16

DRAWN BY: Pp/FC SHEET 9 OF 11

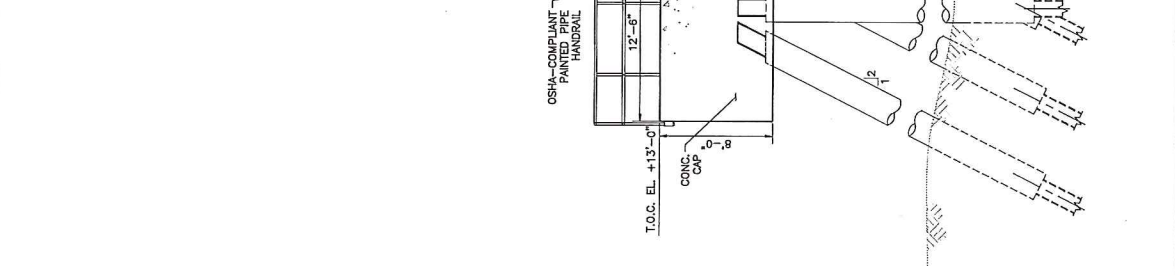
SEAL

BY: DATE:

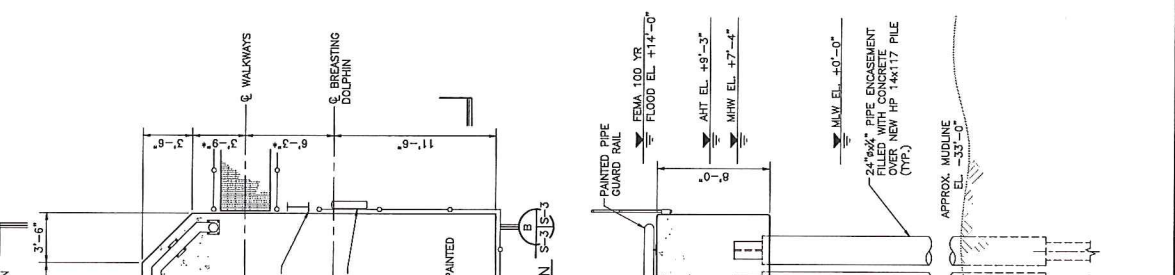
ISSUED FOR PERMIT DATE: 4/6/17

NOTES:

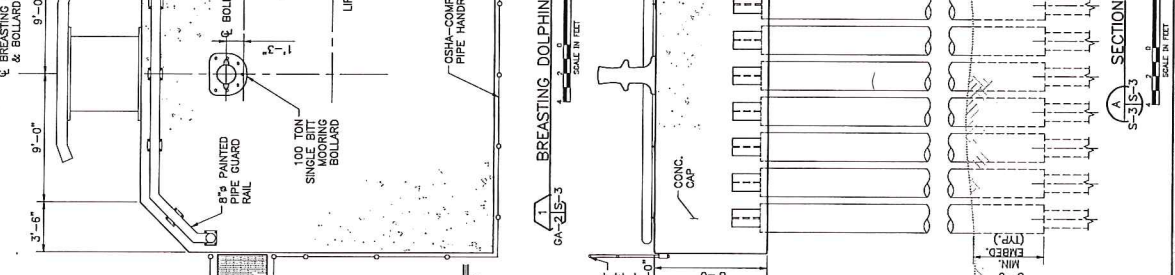
- FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.
- NEW CELL FENDERS SHALL HAVE A MINIMUM RATED ENERGY OF 500 KIP-FT, AND A MAXIMUM RATED DEFLECTION OF 1/8" PER LINEAL FOOT. THE CONTRACTOR SHALL SUBMIT PROPOSED FENDER SPECIFICATIONS FOR APPROVAL PRIOR TO PROCUREMENT.
- NOTE THAT DIMENSIONS LABELED "X" SHALL BE FIELD VERIFIED AND BASED ON THE NEWLY ESTABLISHED FENDER LINE. THE CONTRACTOR SHALL SUBMIT A SURVEY OF THE PROPOSED FENDER LINE TO VERIFY DIMENSIONS. THE CONTRACTOR SHALL VERIFY BREASTING DOLPHINS. SEE SHEET GN-2 FOR FURTHER DETAILS.



BREASTING DOLPHIN PLAN SCALE IN FEET



BREASTING DOLPHIN SECTION A-A SCALE IN FEET



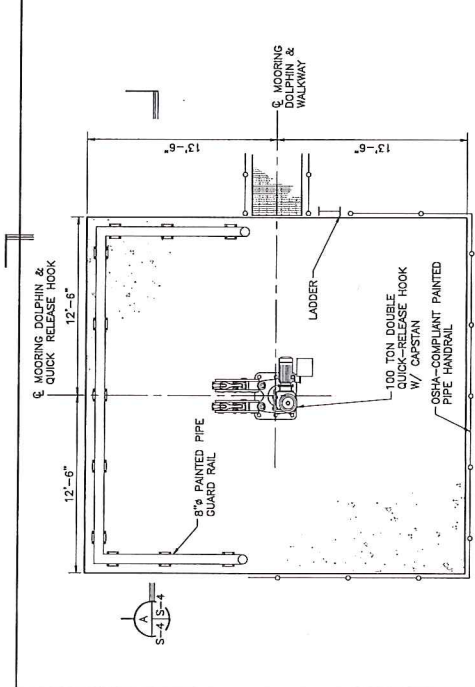
BREASTING DOLPHIN SECTION B-B SCALE IN FEET

APPENDIX A - PLAN & SECTION (PROPOSED BREASTING DOLPHIN) - PLAN & SECTIONS - BREASTING DOLPHIN - PLAN & SECTIONS - SHEET 9 OF 11 - 201610115 - 201610115 - 201610115

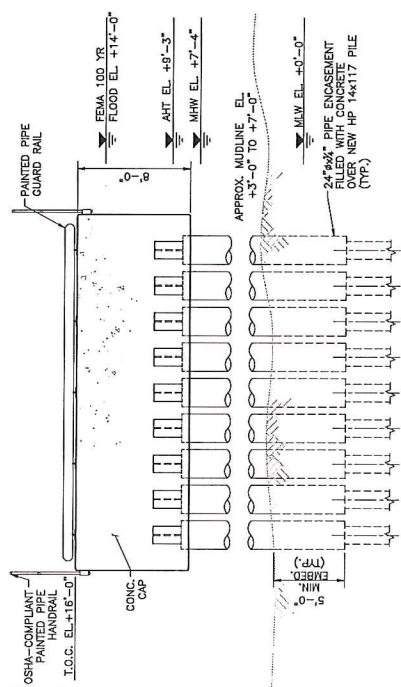
PROJECT NO. 2016810115 DRAWN BY: P8/FC DESIGNED BY: P8 APPROVED BY: SM		URBAN ENGINEERS, INC. PORTS AND WATERWAYS DIVISION 530 WALNUT STREET, 14TH FLOOR PHILADELPHIA, PA 19106-3685 PHONE (215) 922-8000 FAX (215) 922-8082	
NATIONAL GYPSUM COMPANY BURLINGTON, NJ		BURLINGTON DOCK REHABILITATION MOORING DOLPHIN PLAN & SECTIONS	
REV.	DESCRIPTION	BY	DATE
2	ISSUED FOR PERMIT	P8	4/6/17
1	ISSUED FOR PERMIT	P8	3/13/17
0	ISSUED FOR PERMIT	P8	2/2/17

NOTES:
 1. FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.

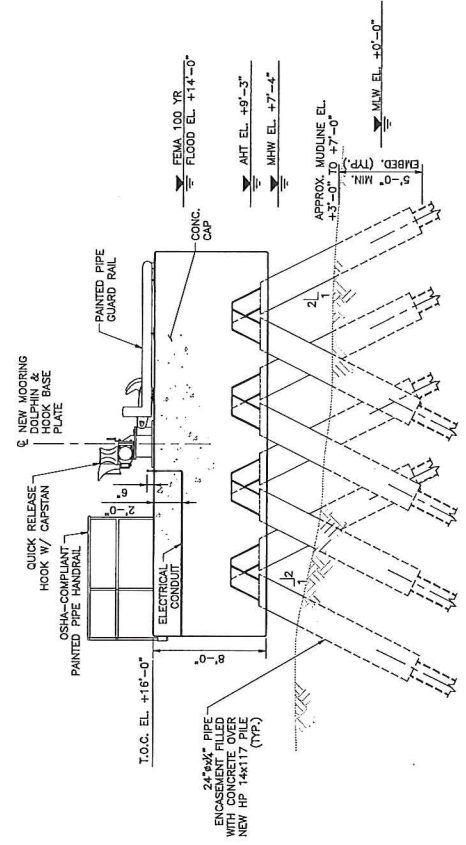
ISSUED FOR PERMIT
 DATE 4/16/17



MOORING DOLPHIN PLAN
 S-4/S-4
 SCALE IN FEET



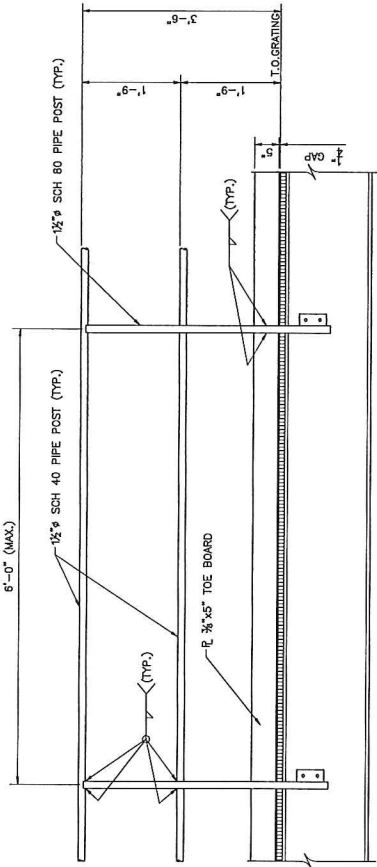
SECTION A-A
 S-4/S-4
 SCALE IN FEET



SECTION B-B
 S-4/S-4
 SCALE IN FEET

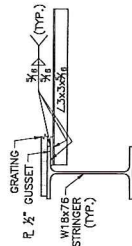
NATIONAL GYPSUM COMPANY, 1115 PENNSYLVANIA AVENUE, WASHINGTON, DISTRICT OF COLUMBIA 20004-4400. MOORING DOLPHIN PLAN & SECTIONS. P8/FC. 4/16/17.

URBAN ENGINEERS, INC. 530 WALNUT STREET, 14TH FLOOR PHILADELPHIA, PA 19106-3585 PHONE (215) 922-6000 FAX (215) 922-6002		PROJECT NO: 201601115 DESIGNED BY: PB APPROVED BY: SVM
NATIONAL EPSILON COMPANY BURLINGTON, NJ		DRAWN BY: PB/TC DATE: 8-12-16
WALKWAY DOCK REHABILITATION WALKWAY SECTIONS		SHEET: 11 OF 11 S-5
REV. 2 ISSUED FOR PERMIT 4/6/17	REV. 1 ISSUED FOR PERMIT 3/13/17	REV. 0 ISSUED FOR PERMIT 2/2/17
DESCRIPTION	BY	DATE



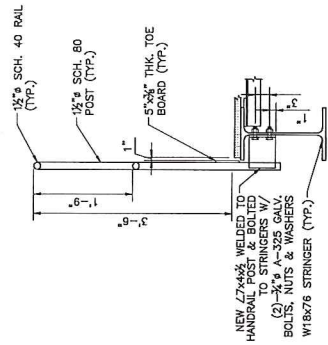
TYPICAL WALKWAY HANDRAIL ELEVATION

SCALE IN FEET



SECTION A-A TYPICAL WALKWAY BRACING CONNECTION

SCALE IN FEET

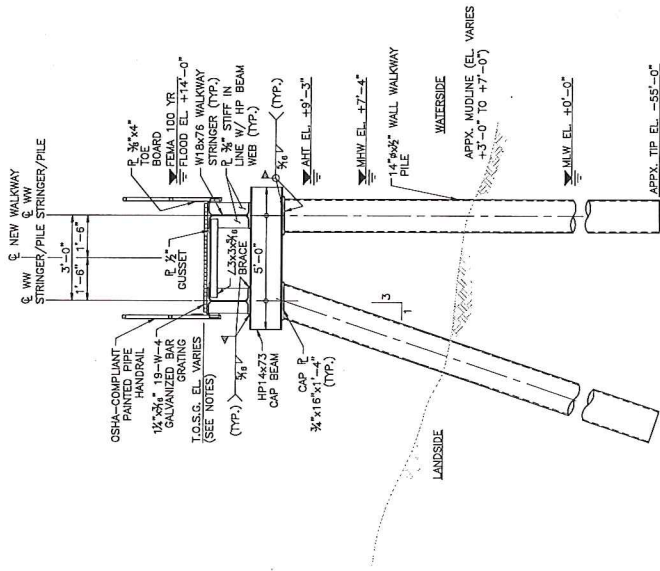


TYPICAL HANDRAIL CONNECTION TO STEEL

SCALE IN FEET

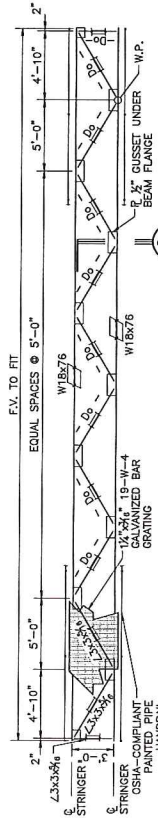
NOTES:

- FOR GENERAL NOTES, SEE DWGS. GN-1 & GN-2.
- WALKWAY TOP OF GRATING ELEVATION VARIES FROM +13'-0" AT NEW CONNECTION TO EXISTING WALKWAYS, TO +16'-0" AT NEW MOORING COUPLING.
- NEW WALKWAY PILES SHALL BE SHOP COATED WITH COAL TAR EPOXY.



SECTION B-B WALKWAY FRAMING PLAN

SCALE IN FEET



SECTION C-C WALKWAY BRACING CONNECTION

SCALE IN FEET

ISSUED FOR PERMIT
DATE: 4/6/17

U:\PROJECTS\2016\1115\010 - High Burlington Shipyard\03-10-16\app\dwgs\Drawings\General\Walkways\Section\WALKWAY SECTIONS.dwg 12/17/2017 9:25:43 AM