DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
4400 PGA BOULEVARD, SUITE 500
PALM BEACH GARDENS, FL 33410

REPLY TO
ATTENTION OF

April 26, 2019

Regulatory Division
South Branch
Palm Beach Gardens Permits Section

PUBLIC NOTICE

Permit Application No. SAJ-2019-00757(SP-LCK)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT:
Broward County Board of County Commissioners
Port Everglades Seaport Engineering & Facilities Maintenance Division
Attn: John Foglesong
1850 Eller Drive
Ft. Lauderdale, FL 33316

WATERWAY AND LOCATION: The project would affect waters of the United States associated with the widening of Slip 1 within Port Everglades adjacent to the Intracoastal Waterway (ICW) at the east end of intersection of Eisenhower Blvd and SE 24th Street, Hollywood (Section 23, Township 50 South, Range 42 East), Broward County Florida.

Directions to the site are as follows: From US1/Federal Highway, East onto SE 17th Street, right (South) onto Eisenhower Blvd., continue to Slip 1 located East of intersection of Eisenhower Blvd and SE 24th Street.

APPROXIMATE CENTRAL COORDINATES: Latitude 26.0925°
Longitude -80.1220°

PROJECT PURPOSE:

Basic: The basic project purpose is to improve waterside access to existing ship berths for continued petroleum off-loading capabilities and operations.

Overall: The overall project purpose is to improve safe waterside access to existing ship berths for continued petroleum off-loading capabilities and operations at slip 1 within Port Everglades, Ft. Lauderdale Broward County, Florida.

EXISTING CONDITIONS: Pier 1 measures approximately 1,200-feet by 506-feet and abuts Slip 1 that measures 1,200-feet by 298-feet. Slip 1 comprises of four berths, Berths

7 and 8 to the north and 9 and 10 to the south. Berth 11 is located along the eastern side of Pier 1. Slip 1 was originally constructed in the 1920's. The existing bulkhead is constructed of steel sheet piles and has exceeded its design life and is in poor, but stable condition. Slip 1 measures approximately 1,200-feet long by 298-feet wide and is currently maintained to a dredge elevation of -44.3 feet NAVD 88 (-42 feet MLLW) plus a 2-foot overdredge allowance.

A coral and benthic survey was conducted in May 2017 for Slip 1 (Berths 9, 10 and 11). The survey concluded that no seagrass was present within the project footprint. A total of 67 stony corals colonies were observed, only 12 corals (*Oculina spp., Rhizosmilia spp.* and *Porites spp.*) were greater than 10 cm.

PROPOSED WORK: The applicant seeks authorization to widen Slip 1 at Port Everglades approximately 159-feet to the south by conducting the following activities:

1. Excavate and/or dredge approximately 350,000 CY of material from 4.4 acres of uplands to a depth of -44.3 feet NAVD 88 (-42 feet MLLW) (plus 2-foot over-dredge) for permittable depth of -46.3 feet NAVD 88 (-44 feet MLLW);
2. Remove approximately 2,500 CY of existing scour protection stone (24,000 SF) and 4,000 CY of bottom material (55,000 SF) at the toe of the existing bulkhead;
3. Remove approximately 1,360 linear feet of existing vertical, steel sheet pile and installation of approximately 1,390 linear feet of new vertical, steel sheet pile bulkhead in a new location;
4. To stabilize the new location of the northeast corner of Pier 1, the applicant proposes to dredge approximately 650 CY of bottom material (2,800 SF) to an approximate maximum depth of -60.7 feet NAVD 88 at the northeast of Pier 1, and replace the material removed with 1,000 CY of fill (filter stone and armor stone) (2,800 SF) at a 2:1 slope; and also install approximately 30 linear feet, of the 1,390 total, of new steel sheet pile bulkhead;
5. Excluding material to be removed by FDEP as part of the site remediation, excavated material would be short-term staged at either of two placement sites within Port Everglades. Material suitable for re-use would ultimately be re-used or be sold by the contractor and unsuitable materials would be disposed at an authorized disposal facility.

AVOIDANCE AND MINIMIZATION INFORMATION – The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment: Best Management Practices for erosion and turbidity control shall be implemented and maintained at all times during construction to prevent siltation and turbid discharges in excess of state water quality standards. Turbidity curtains will be deployed as necessary to prevent sediment plumes from exceeding the standards. Turbidity curtains will surround the ongoing work footprint in the smallest footprint possible to minimize potential impacts to local navigation. Turbidity will be controlled via curtains and a Turbidity Control Monitoring Plan. Impacts to the aquatic environment will be minimized by installing the vast majority of the bulkhead upland. Conceptual, sequential demolition of the existing bulkhead, subject to the contractor's preferred

means and methods, would be to temporarily brace the existing wall with a temporary structure (e.g. sheet pile wall) located landward of existing bulkhead, excavate contaminated soils within upper 12 feet, slope excavation of remaining soil from temporary wall down to near dredge depth behind existing bulkhead. Divers will then perform cuts to remove existing pilings and concrete from the existing bulkhead and then the remainder of the submerged soils would be removed to complete the widening. All work is anticipated to be completed via a combination of upland and barge supported construction plant. Removal of contaminated soils and remediation of soil and groundwater will be conducted by an Agency Term Contractor contracted by the Florida Department of Environmental Protection (FDEP) in accordance with a FDEP approved Remedial Action Plan. Corals greater than 10 cm on the existing bulkhead will be relocated offshore.

COMPENSATORY MITIGATION –The applicant has provided the following explanation why compensatory mitigation should not be required: The applicant has stated that compensatory mitigation is not required because no impacts to submerged aquatic vegetation and/or other aquatic resources (i.e. corals) are proposed or anticipated.

CULTURAL RESOURCES: The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

ENDANGERED SPECIES: Since the proposal by the applicant is for in-water construction, potential impacts to the threatened West Indian manatee (*Trichechus manatus*) were evaluated using The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida, April 2013 (Key). Use of this Key produced the sequential determination A-B (8)-may affect the West Indian manatee. However, the Corps has determined that the project may affect, but is not likely to adversely affect the manatee, given the specific avoidance and minimization measures proposed by the applicant The Corps will request informal consultation with U.S. Fish and Wildlife Service (FWS) pursuant to Section 7 of the Endangered Species Act by separate letter.

The Corps has determined the proposed project may affect, but is not likely to adversely affect the endangered smalltooth sawfish (*Pristis pectinata*), swimming sea turtles: the endangered green sea turtle (*Chelonia mydas*), the endangered hawksbill sea turtle (*Eretmochelys imbricata*), the endangered leatherback sea turtle (*Dermochelys coriacea*), the endangered Kemp's ridley sea turtle (*Lepidochelys kempii*), and the threatened loggerhead sea turtle (*Caretta caretta*). The Corps will request concurrence with theses determinations from the National Marine Fisheries Service (NMFS), Protected Resources Division pursuant to Section 7 of the Endangered Species Act by separate letter.

ESSENTIAL FISH HABITAT (EFH): This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. Approximately 61,200 square feet of the existing bulkhead contains barnacles, flat encrusting sponges, bryozoans, hydrozoans, and stony/soft corals (total of 67 stony corals). Soft and hard corals were only located 4-feet below the bulkhead down to 23-feet below the MLW. The benthic habitat adjacent to the existing bulkhead is unvegetated mud, sand, shell and rock habitat utilized by various life stages of penaeid shrimp complex, reef fish, stone crab, spiny lobster, migratory/pelagic fish, and snapper/grouper complex. Because the applicant proposes to relocate the existing corals, the Corps has determined that the project as proposed will not have a substantial adverse impact on EFH or federally managed fisheries based on the applicant's implemented avoidance and minimization measures. Our final determination relative to project impacts and the need for mitigation measures is subject to review by, and coordination with, the National Marine Fisheries Service.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The jurisdictional line has been verified by Corps personnel.

AUTHORIZATION FROM OTHER AGENCIES: Water Quality Certification may be required from the Florida Department of Environmental Protection and/or one of the state Water Management Districts.

COMMENTS regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Ms. Linda C. Knoeck Permits Section, 4400 PGA Boulevard, Palm Beach Gardens, FL 33410, within 21 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

QUESTIONS concerning this application should be directed to the project manager, Ms. Linda C. Knoeck, in writing at the Palm Beach Gardens Permits Section, 4400 PGA Boulevard, Palm Beach Gardens, FL 33410; by electronic mail at Linda.C.Knoeck@usace.army.mil; or by telephone at (561)472-3531.

IMPACT ON NATURAL RESOURCES: Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That 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 proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) 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 to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

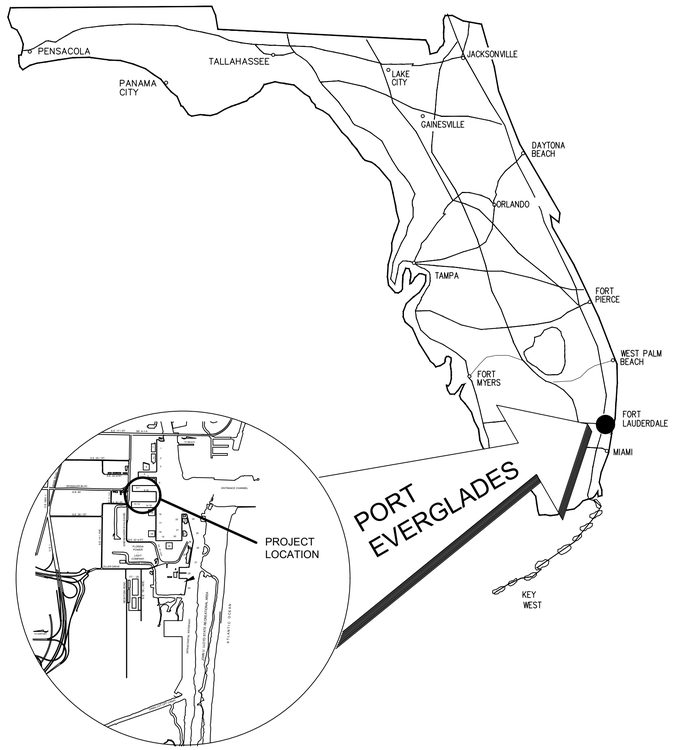
PRELIMINARY

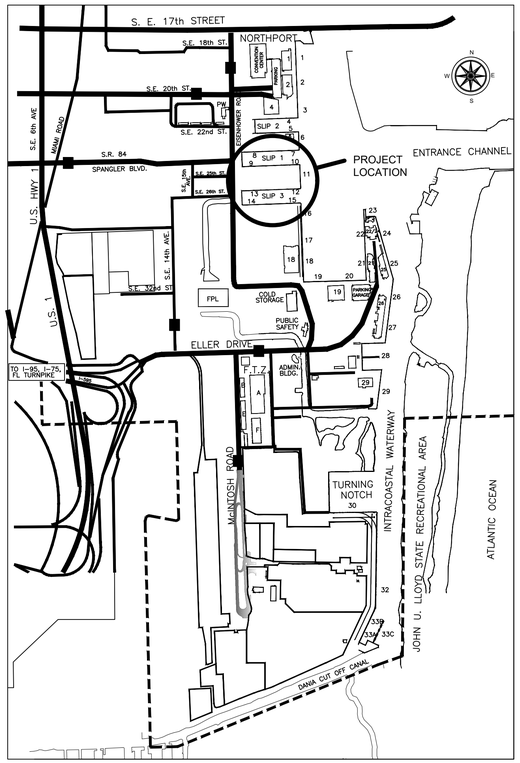
NOT FOR CONSTRUCTION

PORT EVERGLADES SEAPORT ENGINEERING
& FACILITIES MAINTENANCE DIVISION

PORT EVERGLADES - SLIP 1 EXPANSION

ISSUED FOR PERMIT (04-23-2019)





PROJECT LOCATION MAP

BOARD OF COUNTY COMMISSIONERS

BEAM FURR□DISTRICT 6	MAYOR
MARK D. BOGEN□DISTRICT 2	VICE-MAYOR
NAN H. RICH□DISTRICT 1	COMMISSIONER
MICHAEL UDINE□DISTRICT 3	COMMISSIONER
LAMAR FISHER□DISTRICT 4	COMMISSIONER
STEVE GELLER□DISTRICT 5	COMMISSIONER
TIM RYAN□DISTRICT 7	COMMISSIONER
BARBARA SHARIEF□DISTRICT 8	COMMISSIONER
DALE V.C. HOLNESS□DISTRICT 9	COMMISSIONER

PORT EVERGLADES

STEVEN CERNAK□P.E.	CHIEF EXECUTIVE □ PORT DIRECTOR
JOHN C. FOGLESONG□P.E.	DIRECTOR OF SEAPORT ENGINEERING □ FACILITIES MAINTENANCE DIVISION

PREPARED BY:

HDR Engineering, Inc.
3250 West Commercial Boulevard
Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

IN ASSOCIATION WITH:

CRAVEN THOMPSON AND ASSOCIATES□INC.
ENGINEERS • PLANNERS• SURVEYORS
3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
FAX: (954) 739-6409 TEL: (954) 739-6400
FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS No. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS No. C000114

HAMMOND & ASSOCIATES, INC.
CONSULTING ENGINEERS
150 NW 70th AVE
PLANTATION, FLORIDA 33317
TEL: (954) 327-7111 FAX (954) 327-7154
ERIC J. HAMMOND P.E.
MECHANICAL / ELECTRICAL ENGINEER
P.E. #39048 EB 5315

CORDOVA RODRIGUEZ & ASSOCIATES, INC.
□941 SW 19□th Avenue, Suite 2□
Pem□ro□e Pines, Florida 33332
Certificate of Authorization No. □459
Tel□954□□0-01□0

Plot Time: Tuesday, April 23, 2019 - 10:09am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-0-0000.dwg Layout Name: G-0-0000 COVER SHEET

DRAWING INDEX

SHEET NUMBER	SHEET TITLE
G-0-0000	COVER
G-0-0010	DRAWING INDEX
G-0-0020	CONVENTIONS □ SYMBOLOGY
G-0-1000	GENERAL NOTES
G-0-1200	WORK AREAS □ SITE ACCESS
G-1-1000	INITIAL CONDITIONS SITE PLAN
G-1-1010	INITIAL CONDITIONS TYPICAL SECTIONS
G-1-1100	DEMOLITION PLAN
G-2-1000	PROJECT SITE PLAN
G-2-1100	CIVIL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) (1 OF 2)
G-2-1110	CIVIL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) (2 OF 2)
G-2-1120	TURBIDITY CONTROL PLAN
G-2-4000	CONSTRUCTION SE□UENCE CONCEPT - STAGE 1
G-2-4010	CONSTRUCTION SE□UENCE CONCEPT - STAGE 2
G-2-4020	CONSTRUCTION SE□UENCE CONCEPT - STAGE 3
G-2-4030	CONSTRUCTION SE□UENCE CONCEPT - STAGE 4
G-2-4040	CONSTRUCTION SE□UENCE CONCEPT - STAGE 5
G-2-4050	CONSTRUCTION SE□UENCE CONCEPT - STAGE 6
G-2-4060	CONSTRUCTION SE□UENCE CONCEPT - STAGE 7
G-2-4070	CONSTRUCTION SE□UENCE CONCEPT - STAGE 8
D-2-1000	DREDGING PLAN
D-2-1100	TEMPORARY DREDGED MATERIAL STAGING SITES (1 OF 4)
D-2-1110	TEMPORARY DREDGED MATERIAL STAGING SITES (2 OF 4)
D-2-1200	TEMPORARY DREDGED MATERIAL STAGING SITES (3 OF 4)
D-2-1210	TEMPORARY DREDGED MATERIAL STAGING SITES (4 OF 4)
D-2-3000	DREDGING SECTIONS
D-2-5000	BERTH 11 REVETMENT
S-2-1000	STRUCTURAL SITE PLAN
S-2-1010	STRUCTURAL PLAN ENLARGEMENT (1 OF 3)
S-2-1020	STRUCTURAL PLAN ENLARGEMENT (2 OF 3)
S-2-1030	STRUCTURAL PLAN ENLARGEMENT (3 OF 3)
S-2-3000	BULKHEAD SECTIONS (1 OF 3)
S-2-3010	BULKHEAD SECTIONS (2 OF 3)
S-2-3020	BULKHEAD SECTIONS (3 OF 3)

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HDR Engineering, Inc.
3250 West Commercial Boulevard
Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

DRAWING INDEX

0 1" 2"

FILENAME	G-0-0010.dwg
SCALE	AS SHOWN

SHEET **G-0-0010**

SHEET NAMING CONVENTION

DISCIPLINE DESIGNATOR

G	GENERAL
T	SURVEY
B	GEOTECHNICAL
D	DREDGING
S	STRUCTURAL
C	CIVIL
W	WATER □ SEWAGE
E	ELECTRICAL
A	ARCHITECTURAL

CATEGORY DESIGNATION

0	GENERAL
1	EXISTING / DEMOLITION
2	NEW

SHEET DESCRIPTION

0□□	GENERAL
1□□	PLANS
2□□	ELEVATIONS
3□□	SECTIONS
4□□	PHASING OR SE□UENCE
5□□	DETAILS
6□□	SCHEDULES AND TABLES

EXAMPLE

DISCIPLINE DESIGNATOR

S – □ – □□□□

CATEGORY DESIGNATION

□ – 2 – □□□□

SHEET DESCRIPTION

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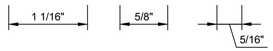
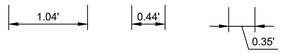
DIMENSION STYLES

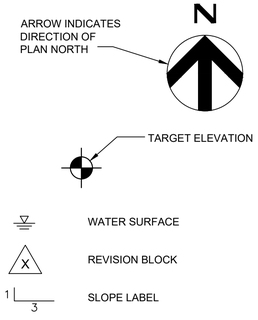
ARCHITECTURAL



ENGINEERING



GENERAL SYMBOLOGY

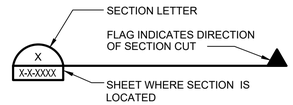


GENERAL SYMBOLOGY (CONT.)

PLAN

SCALE

PLAN TITLE



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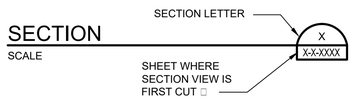

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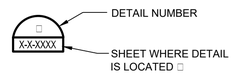

DETAIL MARKER

FOR REFERENCING DETAILS INCLUDED IN DRAWING SET.

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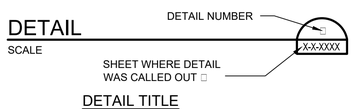
DETAIL MARKER

FOR REFERENCING DETAILS BOUND IN SPECIFICATIONS OR SEPARATE VOLUME.



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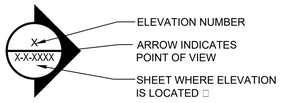
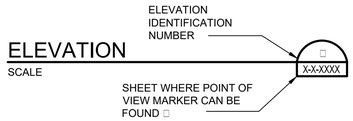


ELEVATION MARKER



ELEVATION TITLE

□EXCEPTIONS WHERE THE SHEET NUMBER IS REPLACED BY A DASH (-).

1) FOR COMMON DETAILS□SECTIONS□ELEVATIONS OR DETAILS THAT ARE CUT OR CALLED OUT ON MULTIPLE SHEETS.
2) SECTIONS□ELEVATIONS OR DETAILS THAT ARE LOCATED ON THE SAME SHEET THEY ARE CUT OR CALLED OUT ON.

SCALES

ARCHITECTURAL

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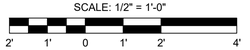
SCALE: 3/16" = 1'-0"

SCALE: 1/4" = 1'-0"

SCALE: 1/2" = 1'-0"



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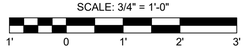

ENGINEERING

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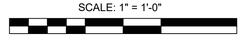

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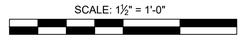

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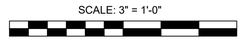

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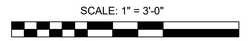

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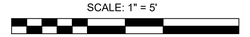
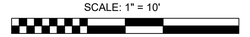
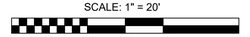


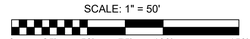
SCALE: 1" = 10'



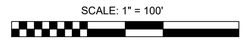
SCALE: 1" = 20'



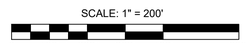
SCALE: 1" = 50'



SCALE: 1" = 100'



SCALE: 1" = 200'



NOTES:

1. THIS IS A STANDARD SHEET SHOWING COMMON SYMBOLOGY. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT.
2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASI□E PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.

HDR Engineering, Inc.
3250 West Commercial Boulevard
Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

CONVENTIONS □ SYMBOLOGY

0 1" 2"

FILENAME	G-0-0020.dwg
SCALE	AS SHOWN

SHEET G-0-0020

Plot Time: Tuesday, April 23, 2019 – 10:10am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design – PERMIT – USACE\03 Sheet Files\G-0-0020.dwg Layout Name: G-0-0020 CONVENTIONS & SYMBOLS

GENERAL

1. ALL DRAWINGS AND DETAILS PROVIDED HEREIN ARE CONCEPTUAL AND NOT FOR CONSTRUCTION OR PERMITTING.

2. UNLESS OTHERWISE NOTED□ALL DIMENSIONS AND ELEVATIONS ARE IN DECIMAL FEET AND ALL STRUCTURAL DETAILS ARE IN FEET AND INCHES.

SURVEY

1. VERTICAL CONTROL:
   - □. NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
   - □. MEAN LOWER LOW WATER (MLLW) PER NATIONAL OCEANIC AND ATMOSPHERIC ADMINSTRATION (NOAA) STATION 8722956. ACCEPTED MAY 7□2018. 1983-2001 EPOCH.

2. HORI□ONTAL CONTROL:
   - □. NORTH AMERICAN DATUM OF 1983 (NAD83)□1990 NATIONAL READJUSTMENT□STATE PLATE COORDINATES□FLORIDA EAST □ONE.

3. TOPOGRAPHIC SURVEY:
   - □. "TOPOGRAPHIC SURVEY□PORT EVERGLADES SLIP 1 EXPANSION PROJECT". SIGNED OCTOBER 19□2017. CRAVEN THOMPSON AND ASSOCIATES□INC. FORT LAUDERDALE□ FLORIDA.
   - □. ALL TOPOGRAPHIC ELEVATIONS AND CONTOURS DEPICTED IN THE DRAWINGS ARE REFERENCED TO NAVD88□UNLESS OTHERWISE NOTED.

4. SUBSURFACE SURVEY:
   - □. "SUBSURFACE UTILITY ENGINEERING SERVICES□PORT EVERLGADES SLIP ONE WIDENING□ MAP OF SPECIFIC PURPOSE SURVEY." SIGNED OCTOBER 13□2017. CRAIG A. SMITH □ ASSOCIATES. BOCA RATON□FLORIDA.

4. HYDROGRAPHIC SURVEY:
   - □. "POST-IRMA CLEARANCE SURVEY". SURVEY NUMBER 2017-200 PRELIMINARY. PERFORMED SEPTEMBER 13□2017. UNITED STATES ARMY CORPS OF ENGINEERS (USACE).
   - □. ALL HYDROGRAPHIC ELEVATIONS AND CONTOURS DEPICTED IN THE DRAWINGS ARE REFERENCED TO MLLW□UNLESS OTHERWISE NOTED.

SUBSURFACE INVESTIGATIONS

1. GEOTECHNICAL ENGINEERING REPORT:
   - □. "GEOTECHNICAL ENGINEERING STUDY□PORT EVERGLADES SLIP 1□HOLLYWOOD□FLORIDA". TSF FILE NO. 7111-16-083. OCTOBER 6□2017 REVISION. TIERRA SOUTH FLORIDA□WEST PALM BEACH□FLORIDA.

2. ENVIRONMENTAL SOIL BORINGS REPORT:
   - □. "PORT EVERGLADES - SLIP 1 EXPANSION PROJECT". CEI PROJECT NO. 70604.1. NOVEMBER 8□ 2017. CHEROKEE ENGINEERS □ CONTRACTORS□MIAMI LAKES□FLORIDA.

TIDE ELEVATIONS

TIDE	ELEVATION (FEET)	
	NAVD 88	MLLW
MEAN HIGHER HIGH WATER (MHHW)	0.53	2.81
MEAN HIGH WATER (MHW)	0.38	2.66
MEAN LOW WATER (MLW)	-2.13	0.15
MEAN LOWER LOW WATER (MLLW)	-2.28	0.00

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PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

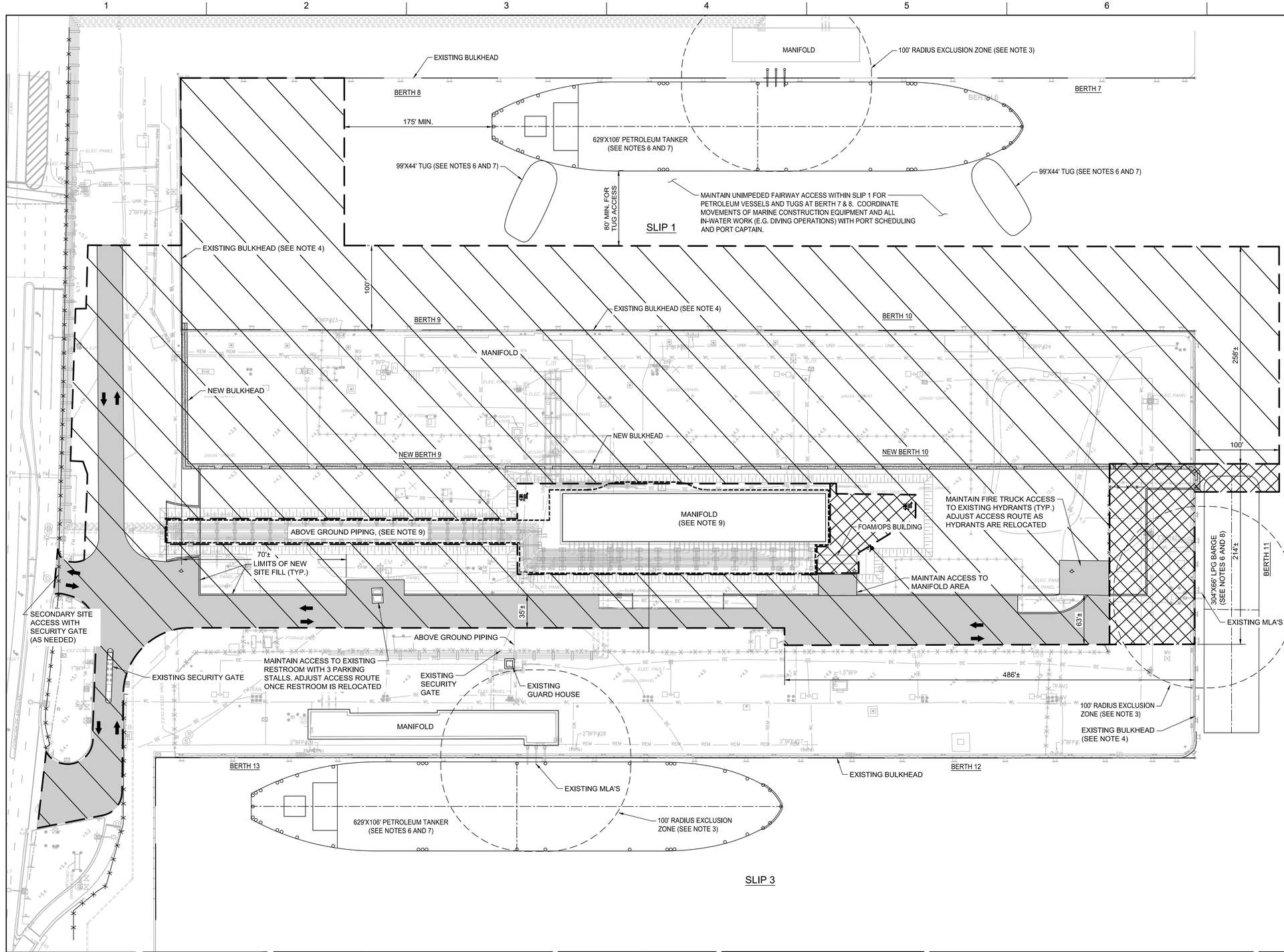
GENERAL NOTES

0 1" 2"

FILENAME	G-0-1000.dwg
SCALE	AS SHOWN

SHEET **G-0-1000**

Plot Time: Tuesday, April 23, 2019 - 10:12am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-0-1000.dwg Layout Name: G-0-1000 GENERAL NOTES



LEGEND

- CONTRACTOR WORK AREA
- SHARED OPERATIONS: FIRE & CONSTRUCTION ACCESS ROUTES THROUGH CONTRACTOR WORK AREA
- TENANT WORK AREAS IMPACTED BY CONTRACTOR WORK AREA
- PORT OPERATIONS AREAS (NO CONTRACTOR ACCESS UNLESS APPROVED BY PORT)

NOTES:

1) CONTRACTOR IS PRECLUDED FROM ENTERING AREAS OUTSIDE THE DELINEATED WORK AREA UNLESS OTHERWISE APPROVED BY THE PORT IN ADVANCE. SHARED ACCESS ROUTES MUST BE MAINTAINED CLEAR AND NOT IMPEDE OPERATIONS OR FIRE TRUCK ACCESS UNLESS COORDINATED WITH AND APPROVED BY THE PORT AND TENANT(S) IN ADVANCE.
2) CONTRACTOR MAY NOT IMPEDE PETROLEUM OPERATIONS OR VESSEL MOVEMENTS AT ANY BERTH. COORDINATE MOVEMENTS OF MARINE CONSTRUCTION E&UIPMENT AND ALL IN-WATER WORK (E.G. DIVING OPERATIONS) IN ADVANCE WITH THE PORT AND PORT CAPTAIN.
3) EXCLUSION &ONES ARE MEASURED FROM MANIFOLD CONNECTIONS. DURING PRODUCT TRANSFER:"HOT WORK" (E.G. GASOLINE ENGINES:WELDING& ELECTRICAL WORK&ETC.) IS NOT PERMITTED WITHIN THE EXCLUSION &ONES.
4) PRESERVE AND PROTECT EXISTING BULKHEADS TO REMAIN. DO NOT EXCEED 200 PSF LIVE LOAD BEHIND THE EXISTING BULKHEADS. STOCKPILING SOIL OR OTHER BULK MATERIALS WITHIN 75' IS PROHIBITED. PROTECT OR EXTERNALLY STABILI&E EXISTING BULKHEADS AS NECESSARY PRIOR TO AND DURING DEMOLITION.
5) BELOW-GRADE PETROLEUM PIPING IS NOT SHOWN FOR CLARITY. PRESERVE AND PROTECT ALL PETROLEUM PIPING:BOTH ABOVE AND BELOW GRADE. DO NOT EXCEED PERMISSIBLE SURCHARGE LOADING SPECIFIED BY PIPE OWNER FOR BELOW-GRADE PIPING (INCLUDING STOCKPILING AND AXLE LOADS).
6) VESSEL SI&E AND DIMENSIONS MAY VARY AND ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. VESSEL ORIENTATION MAY BE BOW-IN OR STERN-IN. ON-BOARD MANIFOLD POSITION FOR EACH VESSEL ALSO VARIES:AND LONGITUDINAL VESSEL POSITIONING RELATIVE TO MLAS MAY VARY AS A RESULT.
7) OPERATIONS WILL BE CONTINUALLY MAINTAINED AT BERTHS 7 -8 AND 12-13 WITH A HIGH VOLUME OF VESSEL CALLS. POSITION & SE&UENCE WATER-BASED CONSTRUCTION E&UIPMENT AND PERSONNEL WITH CONSIDERATION OF WAKE& PROPELLER CURRENTS AND TURBIDITY GENERATED BY LARGE SHIPS.
8) OPERATIONS WILL BE OCCASIONAL AT BERTH 11. CONTRACTOR MAY UTILI&E BERTH WHEN NOT IN USE. MAINTAIN MINIMUM 75' CLEAR DISTANCE FROM THE BULKHEAD AND OUTSIDE EXCLUSION &ONE WHILE A VESSEL IS AT BERTH. CONTINUOUSLY MAINTAIN STRUCTURE AND BOLLARDS SUCH THAT MOORING AND BERTHING AT BERTH 11 IS UNRESTRICTED.
9) TENANT WORK AREA. UNLESS OTHERWISE COORDINATED AND PERMITTED BY PORT & TENANT&MAINTAIN THE FOLLOWING:
   a. MIN 10' CLR FROM EDGE OF MANIFOLD CANOPY AND TO FIRE MONITORS.
   b. MIN 2' CLR TO FACE OF PIPE RACKS
   c. UNOBSTRUCTED LINE OF SIGHT FROM FIRE MONITORS TO MANIFOLD.
   d. UNIMPEDED VEHICULAR ACCESS TO FOAM/OPS BUILDING.
   e. CONSTRUCTION-INDUCED VIBRATIONS WITHIN SPECIFIED TOLERANCES FOR PETROLEUM PIPING AND INFRASTRUCTURE.

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

HDR Engineering, Inc.
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Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

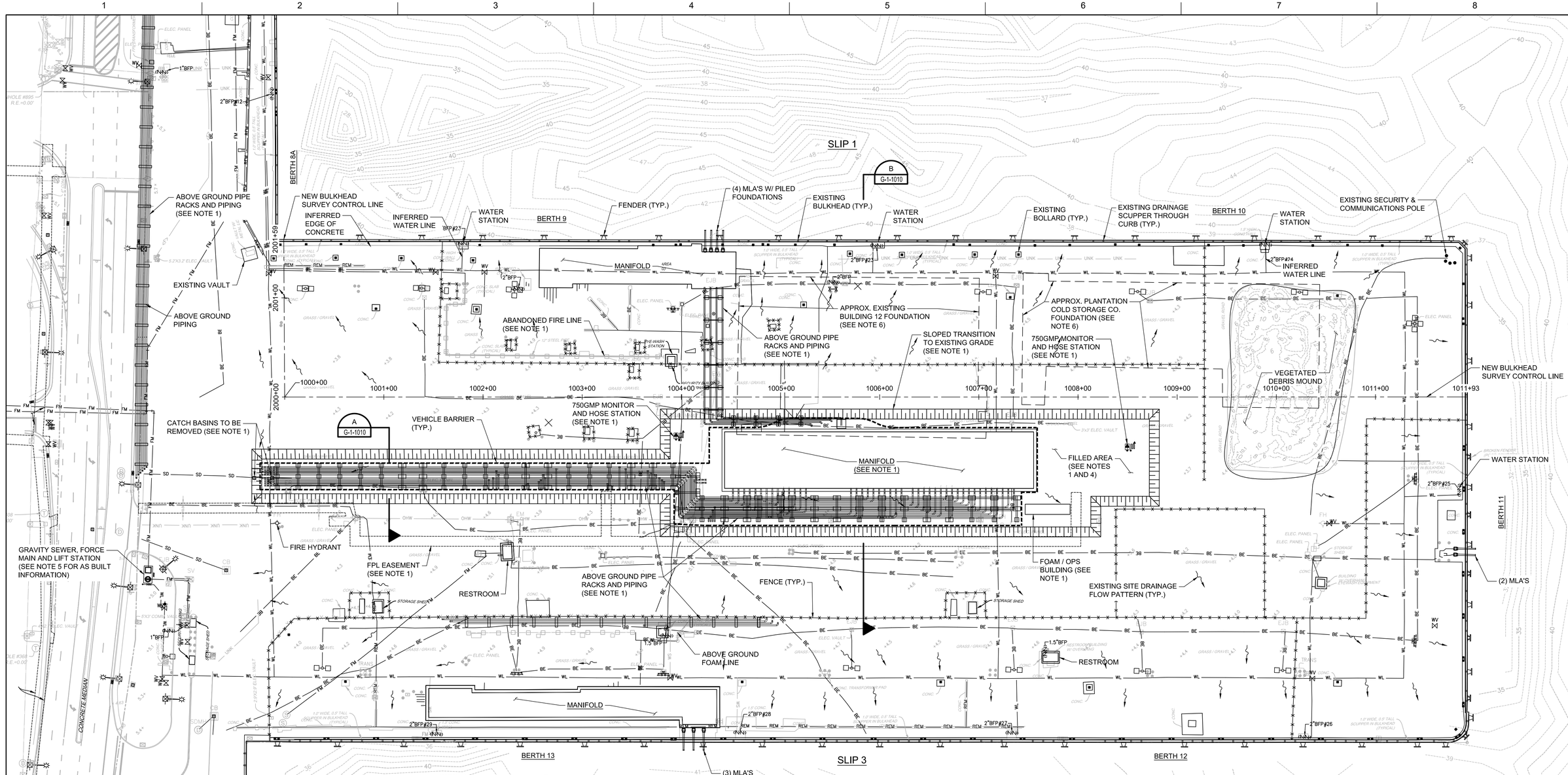
WOR& AREAS AND SITE ACCESS

0 1" 2"

FILENAME	G-0-1200.dwg
SCALE	AS SHOWN

SHEET G-0-1200

Plot Time: Tuesday, April 23, 2019 - 8:16am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-0-1200.dwg Layout Name: G-0-1200 WORK AREAS AND SITE ACCESS



NOTES:

1. **CONDITIONS SHOWN ARE INDICATIVE OF THE ANTICIPATED CONDITIONS AT START OF CONSTRUCTION, FOLLOWING COMPLETION OF THIRD PARTY PRO□ECTS. NOTABLY, THIS INCLUDES THE CENTRAL MANIFOLD, PIPE RAC□S, PIPING AND VARIOUS ELECTRICAL, WATER AND DRAINAGE IMPROVEMENTS. COORDINATION IS ONGOING, AND INFORMATION SHOWN IS BASED ON CURRENTLY AVAILABLE DIRECTION AND IS SUB□ECT TO CHANGE.**
2. CONDITIONS SHOWN ARE BASED ON AVAILABLE TOPOGRAPHIC AND HYDROGRAPHIC SURVEYS. SOME SURVEYED ELEMENTS AND ALL SUBSURFACE PIPING IS NOT SHOWN FOR CLARITY.
3. ADDITIONAL INFORMATION ON EXISTING PETROLEUM LINES AND UTILITIES□INCLUDING THOSE TO BE MODIFIED AND/OR INACTIVATED BY OTHERS□WILL BE INCORPORATED INTO SUBSE□UENT CONSTRUCTION DRAWING ISSUES ONCE SAID INFORMATION BECOMES AVAILABLE.
4. IT IS ASSUMED THAT ALL EXISTING ABOVE AND BELOW-GRADE FEATURES AND UTILITIES WITHIN THE FOOTPRINT OF THE RAISED AREA WILL BE REMOVED OR RELOCATED PRIOR TO CONSTRUCTION UNLESS NOTED OTHERWISE. THIS RE□UIRES FURTHER COORDINATION AND WILL BE ADDRESSED IN SUBSE□UENT CONSTRUCTION DRAWING ISSUES.
5. GRAVITY SEWER□FORCE MAIN AND LIFT STATION AS BUILT INFORMATION WAS PROVIDED BY CRAVEN THOMPSON □ ASSOCIATES□INC. PROJECT: SEAPORT AND CONVENTION CENTER SECURITY IMPROVEMENT PROJECT. PORT DRAWING NUMBER: 2010-G-5044. SEE SUPPLEMENTAL DRAWINGS FOR MORE INFORMATION.
6. LOCATIONS OF EXISTING BUILDING FOUNDATIONS WERE TAKEN FROM BROWARD COUNTY PORT AUTHORITY□BULKHEAD MODIFICATIONS - SLIP NO. 1 DRAWING NUMBER 63-E-1382 3. SEE SUPPLEMENTAL DRAWINGS FOR MORE INFORMATION.

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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3250 West Commercial Boulevard
Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

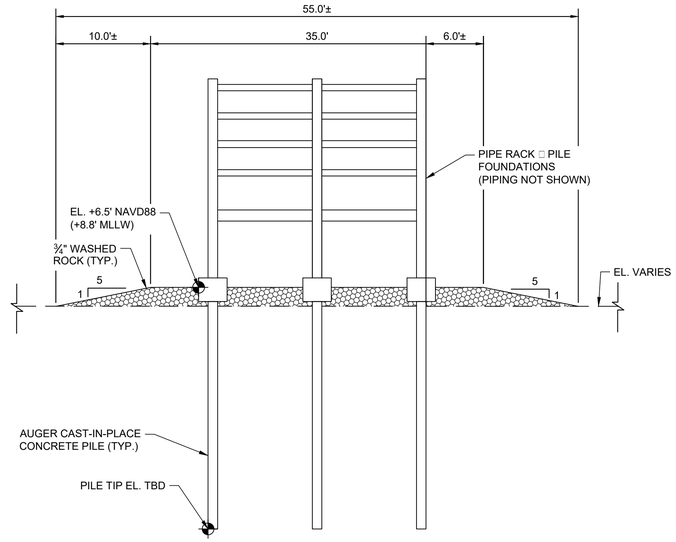
INITIAL CONDITIONS SITE PLAN

0 1" 2"

FILENAME	G-1-1000.dwg
SCALE	AS SHOWN

SHEET G-1-1000

Plot Time: Tuesday, April 23, 2019 - 11:22am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-1-1000.dwg Layout Name: G-1-1000 INITIAL CONDITIONS SITE PLAN 1 OF 2

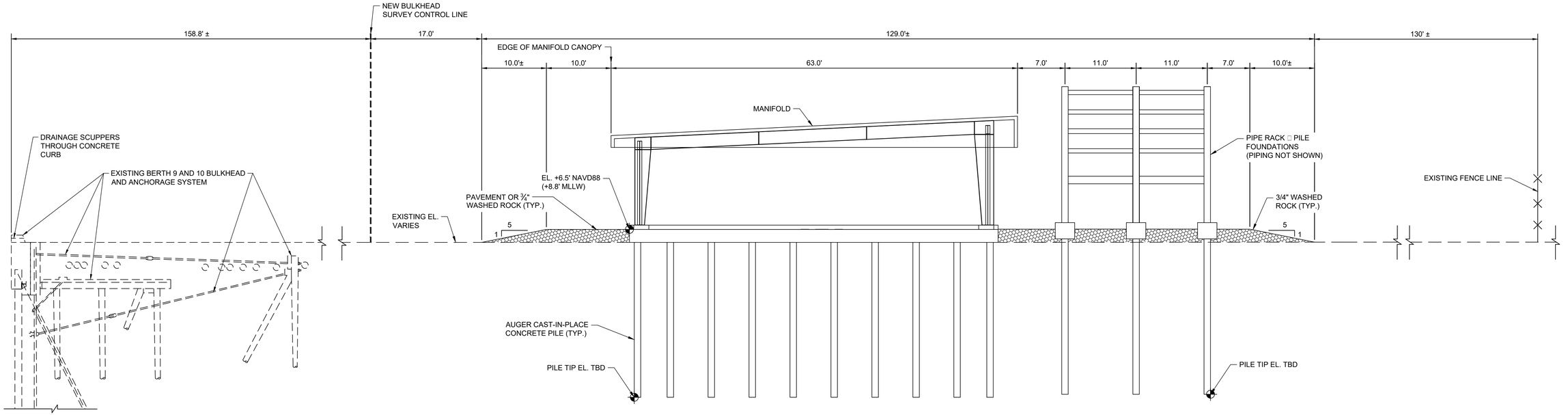


SECTION - PIPE RACK FOUNDATION

1/8" = 1'-0"

A G-1-1000

NOTE:
INITIAL CONDITIONS SHOWN ARE BASED ON LATEST DRAWINGS AND VERBAL DIRECTION RECEIVED FROM SFPS AND/OR THE PORT. THEY ARE TO PROVIDED TO FACILITATE ONGOING COLLABORATIVE EFFORTS AND WILL BE REVISED ACCORDINGLY IN FUTURE SUBMITTALS AS INFORMATION BECOMES AVAILABLE.



SECTION - MANIFOLD □ PIPE RACK

1/8" = 1'-0"

B G-1-1000

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

8 6 4 2 0 4 8 16

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Certificate of Authorization No. 4213

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A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

INITIAL CONDITIONS TYPICAL SECTIONS

0 1" 2"

FILENAME	G-1-1010.dwg
SCALE	AS SHOWN

SHEET G-1-1010

Plot Time: Tuesday, April 23, 2019 - 8:23am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-1-1010.dwg Layout Name: G-1-1010 INITIAL CONDITIONS TYPICAL SECTIONS 2 OF 2

SLIP 1

BERTH 8A

BERTH 9

BERTH 10

BERTH 11

BERTH 12

BERTH 13

SLIP 3

PRESERVE AND PROTECT ABOVE GROUND PIPE RACKS AND PIPING

DEMOLISH CONCRETE (TYP.)

DEMOLISH WATER LINE (TYP.)

COORDINATE DEMOLITION OF MANIFOLD AND RELATED INFRASTRUCTURE WITH SFPS

DEMOLISH FENDER (TYP.)

EXISTING MLA'S TO BE REMOVED BY SFPS (BY OTHERS)

EXISTING BULKHEAD (TYP.), REFER TO CONSTRUCTION SEQUENCE CONCEPT DRAWINGS FOR DETAILED BULKHEAD DEMOLITION

DEMOLISH BOLLARD (TYP.)

REMOVE EXISTING SECURITY & COMMUNICATIONS POLE

MANIFOLD

DEMOLISH BUILDING 12 FOUNDATION

DEMOLISH PLANTATION COLD STORAGE CO. FOUNDATION

NEW BULKHEAD SURVEY CONTROL LINE

DEMOLISH ABANDONED FIRE LINE

SALVAGE OF SELECT PETROLEUM PIPE COMPONENTS BY SFPS (BY OTHERS)

DISCONNECTIONS FROM MANIFOLD (BY OTHERS)

EXISTING MOUND TO BE REMOVED

CATCH BASINS TO BE REMOVED (BY OTHERS)

VEHICLE BARRIER (TYP.)

MANIFOLD

FPL EASEMENT

DEMOLISH RESTROOM ONCE NEW RESTROOM IS OPERATIONAL

PRESERVE AND PROTECT ABOVE GROUND PIPE RACKS AND PIPING

SOUTHERN LIMITS OF DEMOLITION TO MATCH FILL LIMITS AS SHOWN ON SHEET S-2-1000

FENCING TO BE DEMOLISHED (TYP.)

MANIFOLD

CONCRETE MEDIAN

1000+00 1001+00 1002+00 1003+00 1004+00 1005+00 1006+00 1007+00 1008+00 1009+00 1010+00 1011+00 1011+93

2000+00 2001+00 2001+59

LEGEND

LIMITS OF DEMOLITION. REFER TO CONSTRUCTION SEQUENCE CONCEPT DRAWINGS FOR DETAILED DEMOLITION SEQUENCING

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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PROJECT NUMBER	10029043

PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

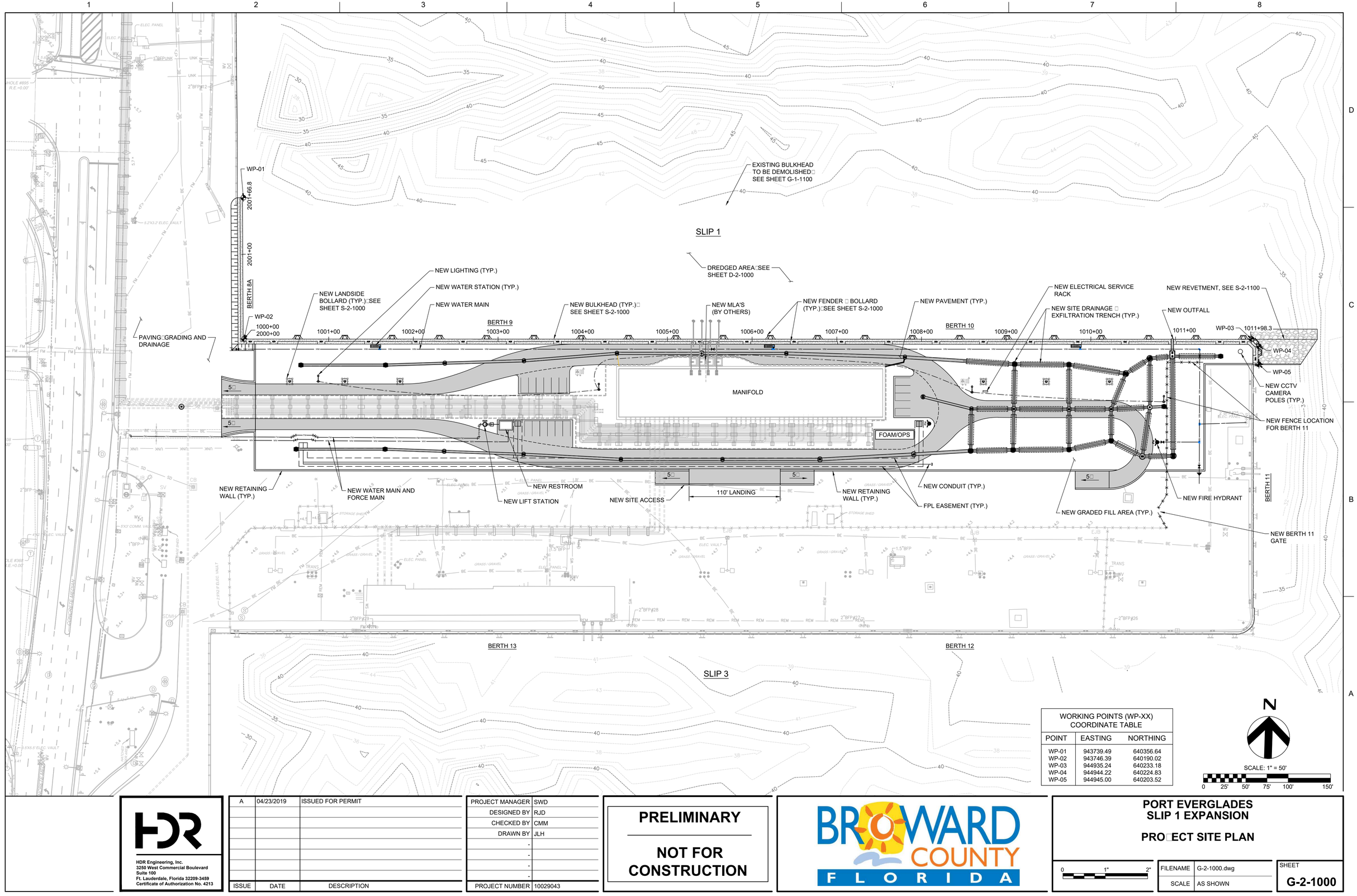
DEMOLITION PLAN

0 1" 2"

FILENAME	G-1-1100.dwg
SCALE	AS SHOWN

SHEET G-1-1100

Plot Time: Tuesday, April 23, 2019 - 8:25am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-1-1100.dwg Layout Name: G-1-1100 DEMOLITION PLAN



WORKING POINTS (WP-XX) COORDINATE TABLE		
POINT	EASTING	NORTHING
WP-01	943739.49	640356.64
WP-02	943746.39	640190.02
WP-03	944935.24	640233.18
WP-04	944944.22	640224.83
WP-05	944945.00	640203.52

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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-	
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PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

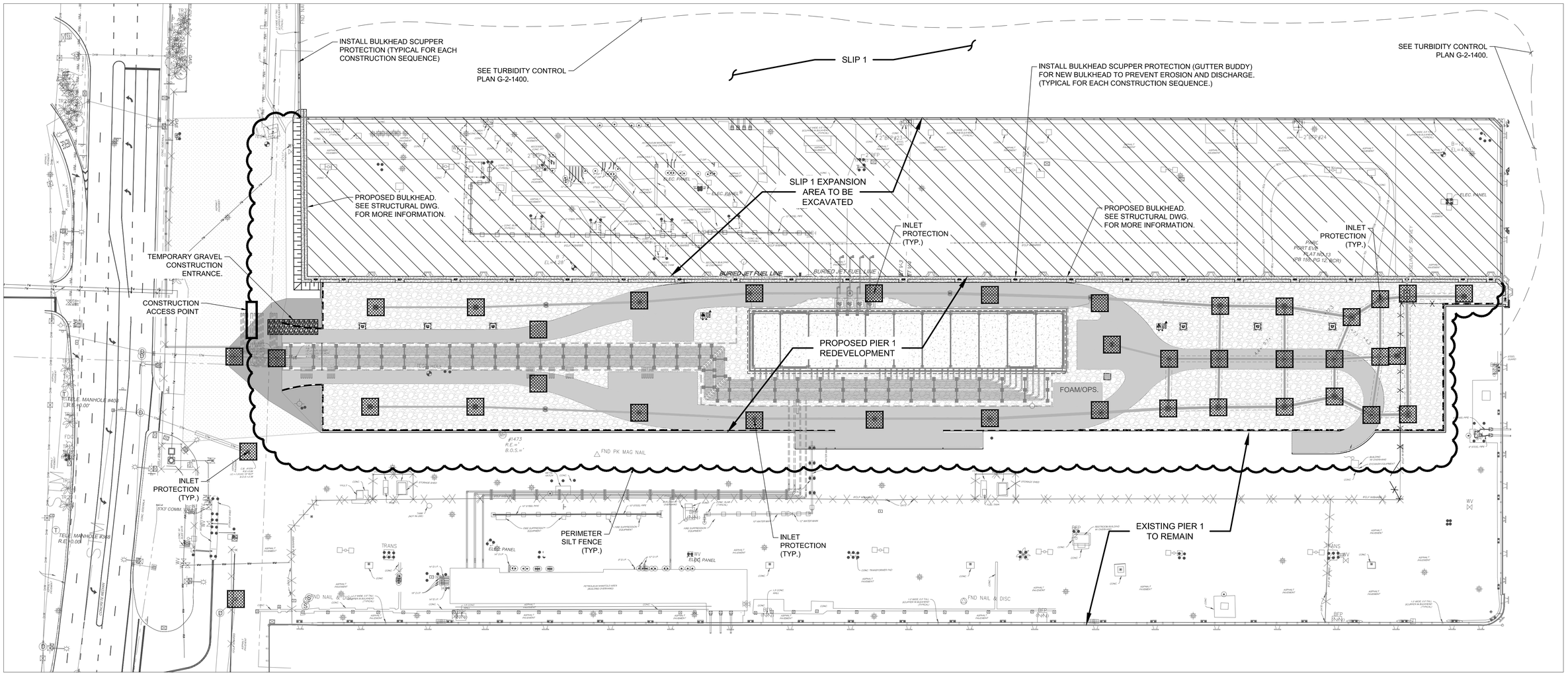
PROJECT SITE PLAN

0 1" 2"

FILENAME	G-2-1000.dwg
SCALE	AS SHOWN

SHEET G-2-1000

Plot Time: Tuesday, April 23, 2019 - 8:27am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-1000.dwg Layout Name: G-2-1000 PROJECT SITE PLAN



NPDES / EROSION CONTROL NOTES:

1. CONTRACTOR TO EMPLOY BEST MANAGEMENT PRACTICES THROUGHOUT CONSTRUCTION IN ORDER TO ENSURE POLLUTION PREVENTION. CONTRACTOR TO COMPLY WITH ALL LOCAL, STATE AND OTHER GOVERNMENTAL ENVIRONMENTAL REGULATIONS THROUGHOUT CONSTRUCTION.

2. DURING CONSTRUCTION ALL CATCH BASINS TO BE EQUIPPED WITH INLET PROTECTION PER DETAILS.

3. SILT FENCES SHALL BE INSTALLED AS NECESSARY TO CONTROL OR PREVENT DISCHARGE OF SEDIMENT ONTO ADJACENT UNDISTURBED AREAS, OR OFF-SITE AREAS.

4. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITHIN A REASONABLE PERIOD OF TIME TO ASSURE MINIMUM EROSION OF SOILS.

5. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

6. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.

7. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.

8. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.

9. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.

10. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.

11. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.

12. ALL EXISTING STRUCTURES, FENCING, TREES, AND ETC. WITHIN CONSTRUCTION AREA TO BE REMOVED SHALL BE DISPOSED OF OFF SITE.

13. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.

14. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATER WAYS. IN ADDITION CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE IF IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES. EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC. THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. EROSION CONTROL BARRIER SHALL BE ESTABLISHED AS THE FIRST ITEM OF WORK.

15. SITE ACTIVITIES SHALL BE SHUT-DOWN IMMEDIATELY IF THE DOWNSTREAM OR UPSTREAM WATERWAYS ARE DEEMED TO BE AFFECTED DUE TO EARTHWORK ACTIVITIES, OR AT THE COUNTY, CITY'S OR ENGINEER OF RECORDS DISCRETION.

16. SPILL KIT MUST BE PROVIDED ONSITE DURING ENTIRE DURATION OF PROJECT OR UNTIL REMOVAL IS APPROVED BY THE GOVERNING AGENCY. SPILL KIT MUST BE APPROPRIATE FOR SCOPE OF WORK AND EQUIPMENT ONSITE.

17. CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES ON THE EXISTING DRAINAGE STRUCTURES PRIOR TO COMMENCEMENT OF DEMOLITION WORK.

18. INLET PROTECTION SHALL BE USED IN THE CATCH BASINS UNTIL CONSTRUCTION IS COMPLETED AND THE SYSTEM IS READY FOR OPERATION.

19. CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING PLANS, PERMITTING AND CONSTRUCTION AS REQUIRED FOR THE PROJECT.

20. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEWATERING PERMITS AS SITE CONDITIONS AND CONSTRUCTION ACTIVITIES REQUIRE.

21. CONTRACTOR TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THROUGH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) AND USE BEST MANAGEMENT PRACTICES TO ENSURE COMPLIANCE WITH NPDES, DEP AND WATER MANAGEMENT DISTRICT REGULATIONS FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES AND DEWATERING OPERATIONS.

22. NO SOLID MATERIALS SHALL BE DISCHARGED TO SURFACE WATERS.

23. OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED.

24. ANY CONTRACTOR CONDUCTING WORK ON THE SITE SHALL SIGN THE CONTRACTOR CERTIFICATION. SEE TABLE ON THIS SHEET.

*IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BMPS. THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS NECESSARY TO CONFORM TO CURRENT CITY, FDEP, NPDES AND COUNTY CODES AND SPECIFICATIONS.

LEGEND

- SILT FENCE
- INLET PROTECTION
- EXCAVATION AREA

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER".

NAME	TITLE	COMPANY NAME, ADDRESS AND PHONE NUMBER	DATE

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS No. C000114

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Suite 100
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Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RMC
CHECKED BY	PJG
DRAWN BY	JA/RMC
–	
–	
–	
–	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

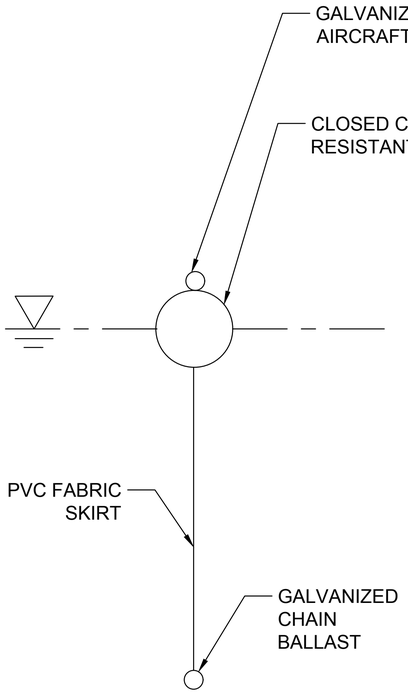
PORT EVERGLADES SLIP 1 EXPANSION

CIVIL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) (1 OF 2)

0 1" 2"

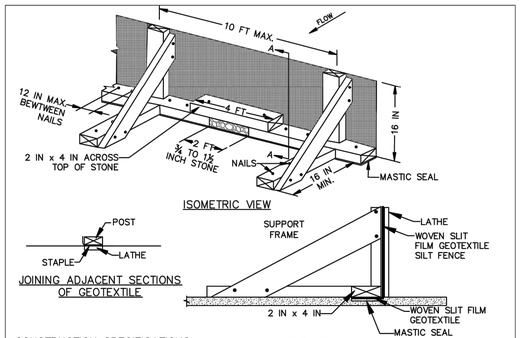
FILENAME	17-0022-SWPPP.dwg
SCALE	AS SHOWN

SHEET G-2-1100



DETAIL - FLOATING OIL CONTAINMENT BOOM

N.T.S.

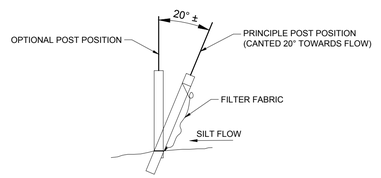


CONSTRUCTION SPECIFICATIONS

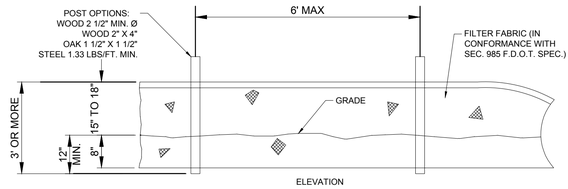
1. USE NOMINAL 2 INCH X 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS.
3. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H–1 MATERIALS.
4. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
5. PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
6. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
7. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
8. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT–LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
9. SECURE BOARDS TO PAVEMENT WITH 40D 5 INCH MINIMUM LENGTH NAILS.
10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

SILT FENCE ON PAVEMENT

N.T.S.

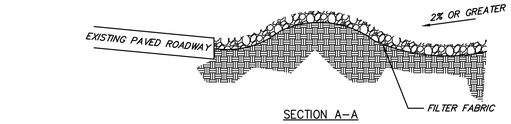


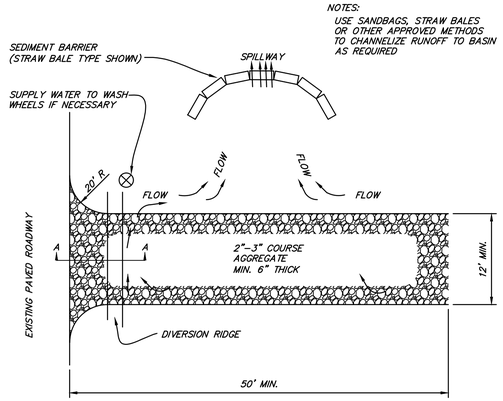
SECTION



TYPE III SILT FENCE

N.T.S.



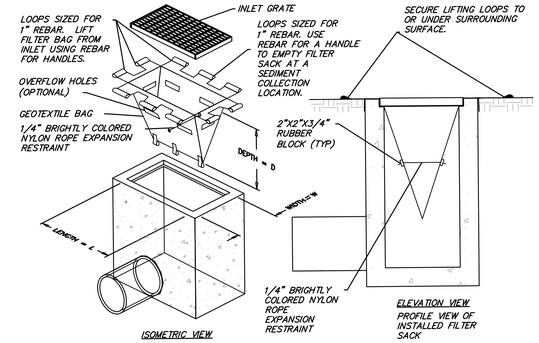


NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABLIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

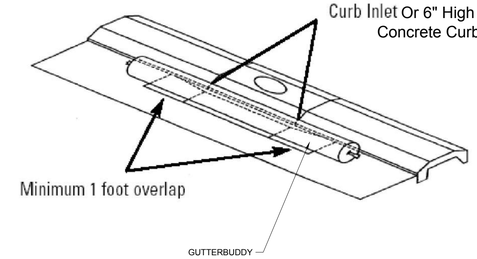
SCALE: NONE



LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	120 LBS
MULLEN BURST	ASTM D–3786	800 PSI
TRAPEZOID TEAR	ASTM D–4533	120 LBS
UV RESISTANCE	ASTM D–4355	80 %
APPARENT OPENING SIZE	ASTM D–4751	40 US SIEVE
FLOW RATE	ASTM D–4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	0.55 SEC –1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	135 LBS
MULLEN BURST	ASTM D–3786	420 PSI
TRAPEZOID TEAR	ASTM D–4533	45 LBS
UV RESISTANCE	ASTM D–4355	90 %
APPARENT OPENING SIZE	ASTM D–4751	20 US SIEVE
FLOW RATE	ASTM D–4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	1.5 SEC –1

FILTER SACK INLET PROTECTION

N.T.S.



GUTTERBUDDY

SCALE: NONE

GUTTERBUDDY NOTES:

2.1 GUTTERBUDDY ®
THE GUTTERBUDDY ® SHALL BE A SYNTHETIC FILTER MANUFACTURED FROM RECYCLED SYNTHETIC FIBERS.

2.1.1 THE GUTTERBUDDY ® WILL BE MANUFACTURED TO BE 9" IN DIAMETER AND ARE AVAILABLE IN 3', 6', 12' AND 16' LENGTHS AND A MINIMUM OF TWENTY FOUR (24) INCHES LONGER THAN THE CURB INLET OPENING. THIS WILL ALLOW FOR SUFFICIENT LENGTH TO COVER THE INLET WITH TWELVE (12) INCHES BEYOND THE INLET ON BOTH ENDS.

3.0 CONSTRUCTIONS SEQUENCE

3.1 GENERAL

3.1.1 INSTALL THE GUTTERBUDDY ® IN FRONT OF THE CURB INLET OPENING. EACH END OF THE GUTTERBUDDY ® SHOULD OVERLAP THE CURB INLET APPROXIMATELY 12".

3.1.2 THE GUTTERBUDDY SHOULD BE CLEANED IF VISUAL INSPECTION SHOWS SILT AND DEBRIS BUILD UP AROUND THE GUTTERBUDDY ®.

3.1.3 TO REMOVE THE GUTTERBUDDY ®, LIFT OUT OF THE OPENING.

3.1.4 THE GUTTERBUDDY ® IS REUSABLE ONCE THE CONSTRUCTION PROJECT IS COMPLETE AND IT IS NO LONGER NEEDED FOR SEDIMENT CONTROL, REMOVE, CLEAN AND STORE OUT OF THE SUNLIGHT UNTIL NEEDED ON THE NEXT PROJECT.

3.15 PONDING IS LIKELY IF SEDIMENT IS NOT REMOVED REGULARLY. INSPECTION OF GUTTERBUDDY ® SHOULD BE ON A REGULAR BASIS AND IMMEDIATELY AFTER MAJOR EVENTS.

CURB INLET AND BULKHEAD SCUPPER PROTECTION

N.T.S.

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Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RMC
CHECKED BY	PJG
DRAWN BY	JA/RMC
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

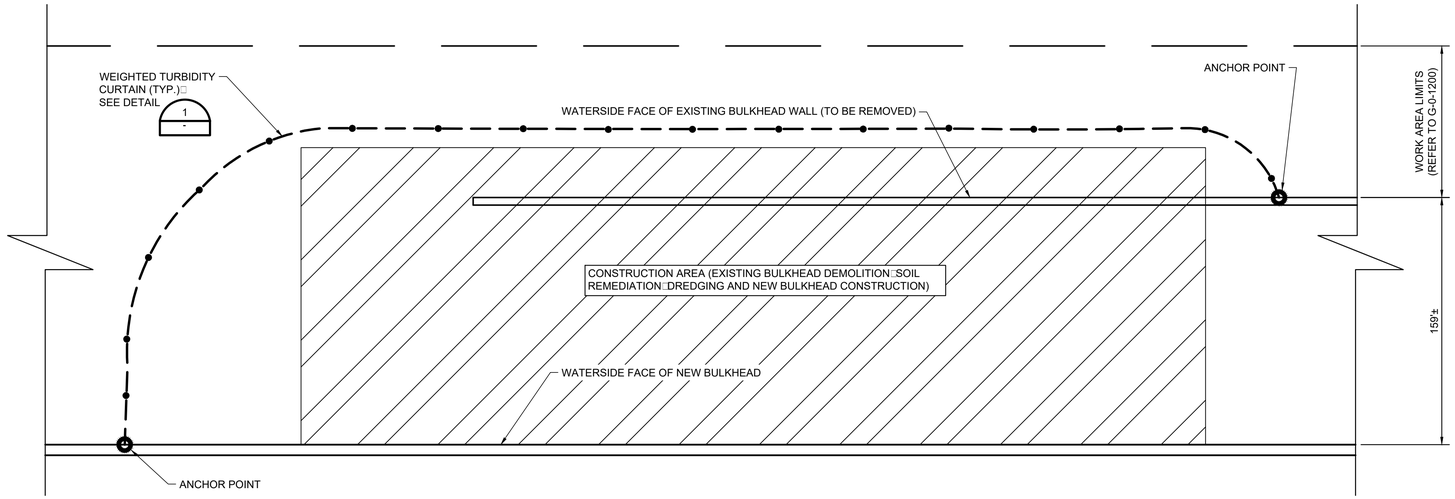
BROWARD COUNTY FLORIDA

PORT EVERGLADES
SLIP 1 EXPANSION

CIVIL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) (2 OF 2)

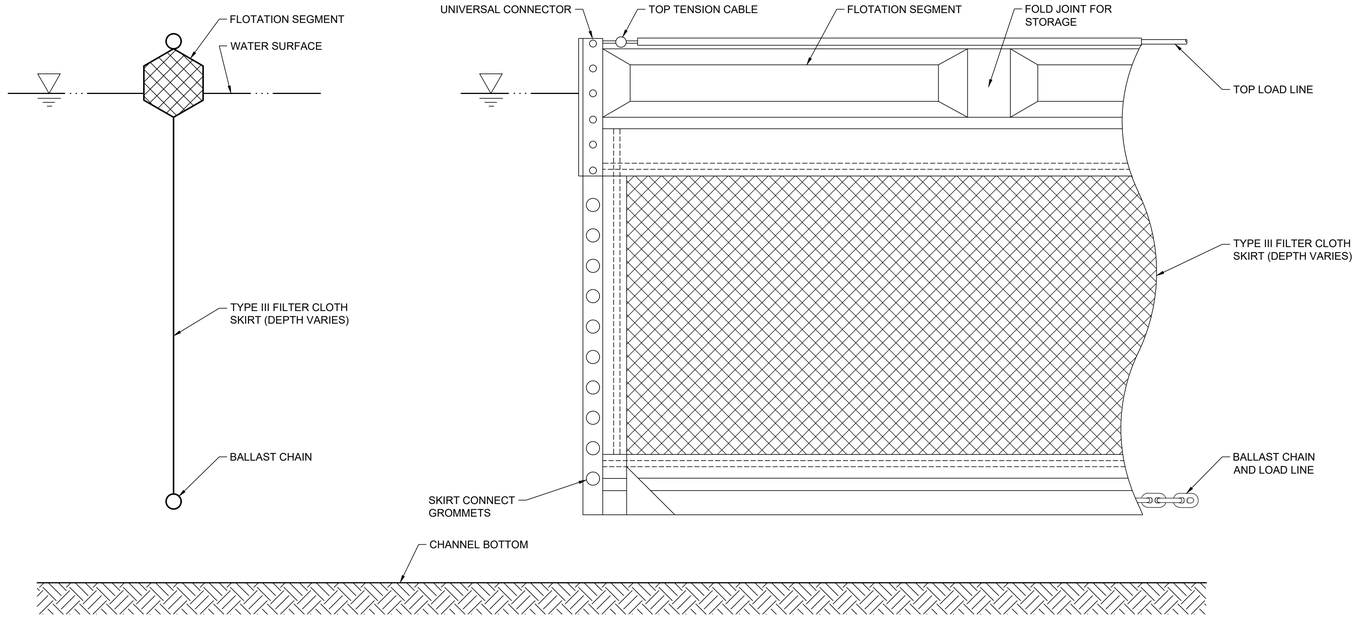
0 1" 2"

FILENAME	17–0022–SWPPPD.dwg	SHEET
SCALE	AS SHOWN	G-2-1110



TURBIDITY BARRIER PLAN

NTS



DETAIL - FLOATING TURBIDITY CURTAIN 1

NTS

NOTES:

1. TURBIDITY CONTROLS PLAN IS A GENERAL REPRESENTATION ONLY AND IS PROVIDED TO REGULATORY REVIEW AND APPROVAL. REFER TO THE CONSTRUCTION SEQUENCE DRAWINGS G-2-4020 THROUGH G-2-4040 FOR A CONCEPTUAL REPRESENTATION OF TURBIDITY CONTROL BARRIERS DURING CONSTRUCTION. INSTALLED AND MAINTAINED CONFIGURATION IS TO BE ACCORDING TO CONTRACTOR'S MEANS AND METHODS. THE OWNER'S OPERATING REQUIREMENTS AND REGULATORY REQUIREMENTS.
2. A MIXING ZONE OF 100M (328 FEET) IS REQUESTED IN ALL DIRECTIONS BEYOND TURBIDITY CONTROLS.
3. NUMBER OF SEGMENTS, TYPE AND DEPTH OF TURBIDITY CURTAIN TO BE DETERMINED BY CONTRACTOR TO SATISFY REGULATORY REQUIREMENTS.
4. TURBIDITY CONTROLS MUST BE IN PLACE DURING DEMOLITION, SOIL REMEDIATION, DREDGING AND NEW BULKHEAD CONSTRUCTION. TURBIDITY CONTROL CURTAIN AND ANCHORAGE SHALL NOT INTERFERE WITH TRAFFIC OUTSIDE THE WORK ZONE.
5. A LIGHTED BUOY SHALL BE PROVIDED (CHANNEL SIDE) AT EACH ANCHORAGE POINT. THE LIGHTED BUOY SHALL BE NO LESS THAN 5 FEET TO CHANNEL SIDE OF THE FURTHEST CHANNEL SIDE COMPONENT (SUBMERGED OR EXPOSED, WHICHEVER IS GREATER) AND EXTENDED A MINIMUM OF 2 FEET ABOVE WATER SURFACE. THE LIGHT SHALL BE AUTOMATIC FLASHING LIGHT (ON AT DUSK/OFF AT DAWN, TYP).
6. ALL ANCHORAGE AND APPURTENANCES (LIGHTED BUOY) RELATED TO TURBIDITY BARRIER MUST BE CONFINED TO THE DEFINED WORKING ZONE. FINAL WIDTH TO BE ACCORDING TO CONTRACTOR'S MEANS AND METHODS AND THE OWNER'S OPERATING REQUIREMENTS.

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ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

TURBIDITY CONTROL PLAN

0 1" 2"

FILENAME	G-2-1120.dwg
SCALE	AS SHOWN

SHEET G-2-1120

Plot Time: Tuesday, April 23, 2019 – 8:28am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design – PERMIT – USACE\03 Sheet Files\G-2-1120.dwg Layout Name: G-2-1120 TURBIDITY CONTROL PLAN

STAGE 1 - SITE PREPARATION
CLEAR SITE □DEMOLISH ABOVE-GRADE LANDSIDE STRUCTURES AND DECOMMISSION UTILITY LINES

EXISTING BULKHEAD WALL TO REMAIN THIS STAGE

EXISTING MANIFOLD BUILDING TO BE REMOVED

RELOCATE CORALS

EXISTING MLA'S REMOVED (BY OTHERS)

RELOCATE CORALS

DISCONNECT AND CAP WATER MAIN

NEW TEMPORARY SSP SURVEY CONTROL LINE

BEGIN CLEARING DRIVE LINES

NEW BULKHEAD SURVEY CONTROL LINE

STAGE 1 - SITE PREPARATION

2001+59
2001+00
2000+00
1000+00
1001+00
1003+00
1005+00
1006+00
1007+00
1008+00
1009+00
1010+00
1011+00
1011+93

PIPE DISCONNECTS (BY OTHERS)

MANIFOLD

STAGE 1 - MOBILI□ATION AND SITE PREPARATION

1" = 50'

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

Plot Time: Tuesday, April 23, 2019 - 8:32am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4000.dwg Layout Name: G-2-4000 CONST SEQ STAGE 1

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PROJECT MANAGER	SWD
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CHECKED BY	CMM
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-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

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BROWARD COUNTY FLORIDA

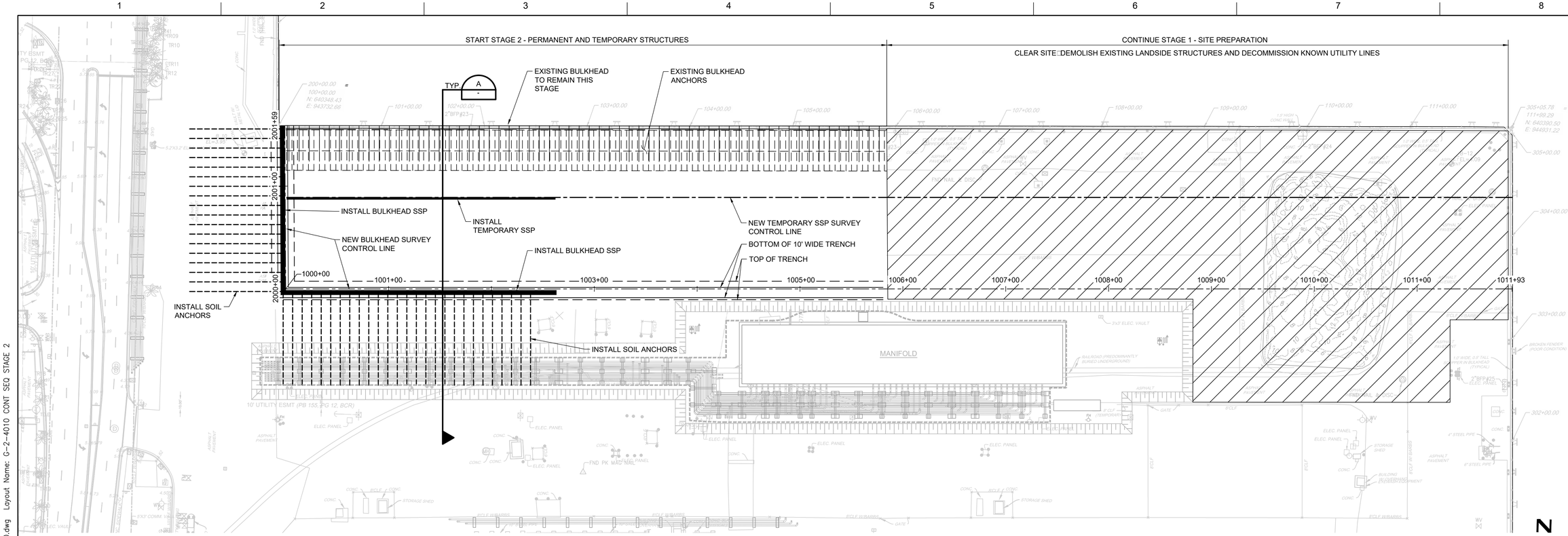
PORT EVERGLADES SLIP 1 EXPANSION

CONSTRUCTION SE□UENCE CONCEPT STAGE 1

0 1" 2"

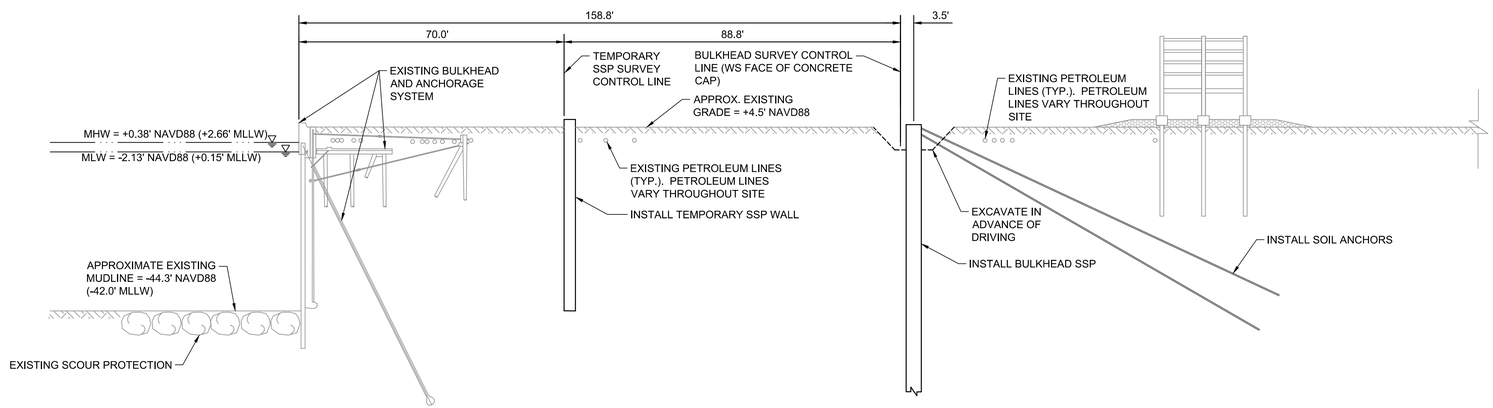
FILENAME	G-2-4000.dwg
SCALE	AS SHOWN

SHEET
G-2-4000



STAGE 2 - PERMANENT AND TEMPORARY STRUCTURE INSTALLATION

1" = 50'



STAGE 2 - TYPICAL SECTION

A

1" = 20'

SCALE: 1" = 20'

0 10' 20' 30' 40' 60'

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
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CHECKED BY	CMM
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PROJECT NUMBER	10029043

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

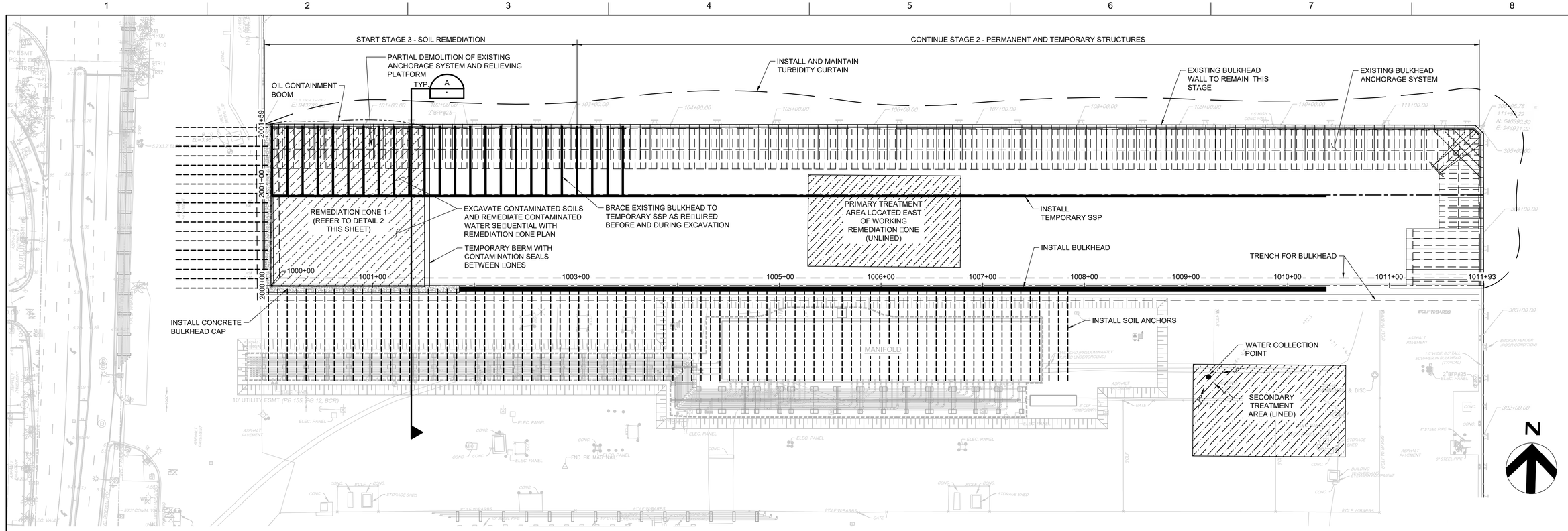
CONSTRUCTION SE□UENCE CONCEPT STAGE 2

0 1" 2"

FILENAME	G-2-4010.dwg
SCALE	AS SHOWN

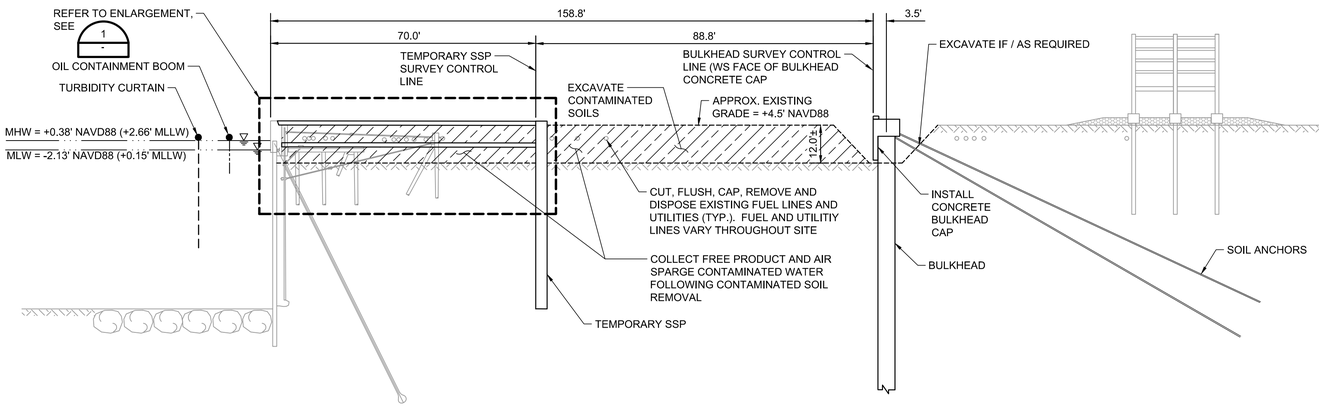
SHEET G-2-4010

Plot Time: Tuesday, April 23, 2019 - 8:33am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4010.dwg Layout Name: G-2-4010 CONT SEQ STAGE 2



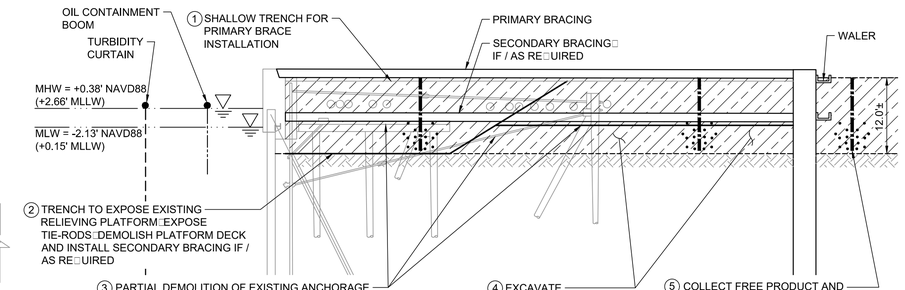
STAGE 3 - SOIL REMEDIATION

1" = 50'



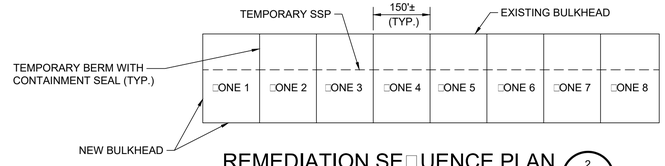
STAGE 3 - TYPICAL SECTION A

1" = 20'



STAGE 3 - ENLARGEMENT OF BRACING AND REMEDIATION SEQUENCING 1

1" = 10'



REMEDIATION SEQUENCE PLAN 2

NTS

SCALE: 1" = 10'
0 5' 10' 15' 20' 30'

SCALE: 1" = 20'
0 10' 20' 30' 40' 60'

SCALE: 1" = 50'
0 25' 50' 75' 100' 150'

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CHECKED BY	CMM
DRAWN BY	JLH
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PRELIMINARY

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BROWARD COUNTY FLORIDA

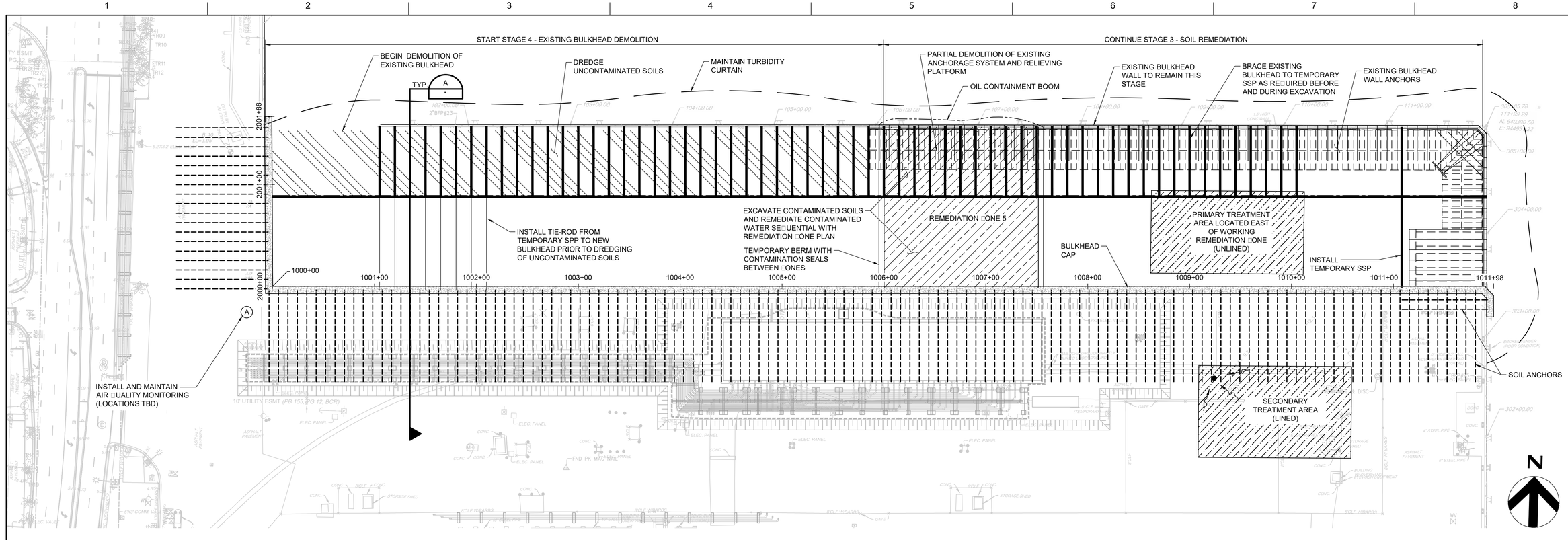
PORT EVERGLADES SLIP 1 EXPANSION

CONSTRUCTION SEQUENCE CONCEPT STAGE 3

FILENAME	G-2-4020.dwg
SCALE	AS SHOWN

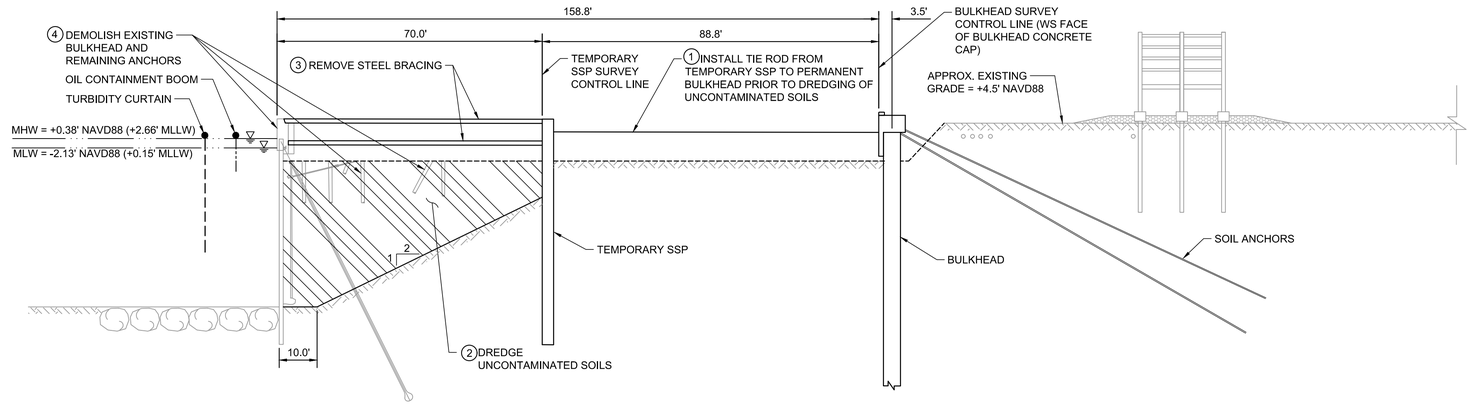
SHEET G-2-4020

Plot Time: Tuesday, April 23, 2019 - 8:37am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4020.dwg Layout Name: G-2-4020 CONST SEQ STAGE 3



STAGE 4 - EXISTING BULKHEAD DEMOLITION

1" = 50'



STAGE 4 - TYPICAL SECTION A

1" = 20'

SCALE: 1" = 20'
0 10' 20' 30' 40' 60'

SCALE: 1" = 50'
0 25' 50' 75' 100' 150'

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

HDR Engineering, Inc.
3250 West Commercial Boulevard
Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

PRELIMINARY

NOT FOR CONSTRUCTION

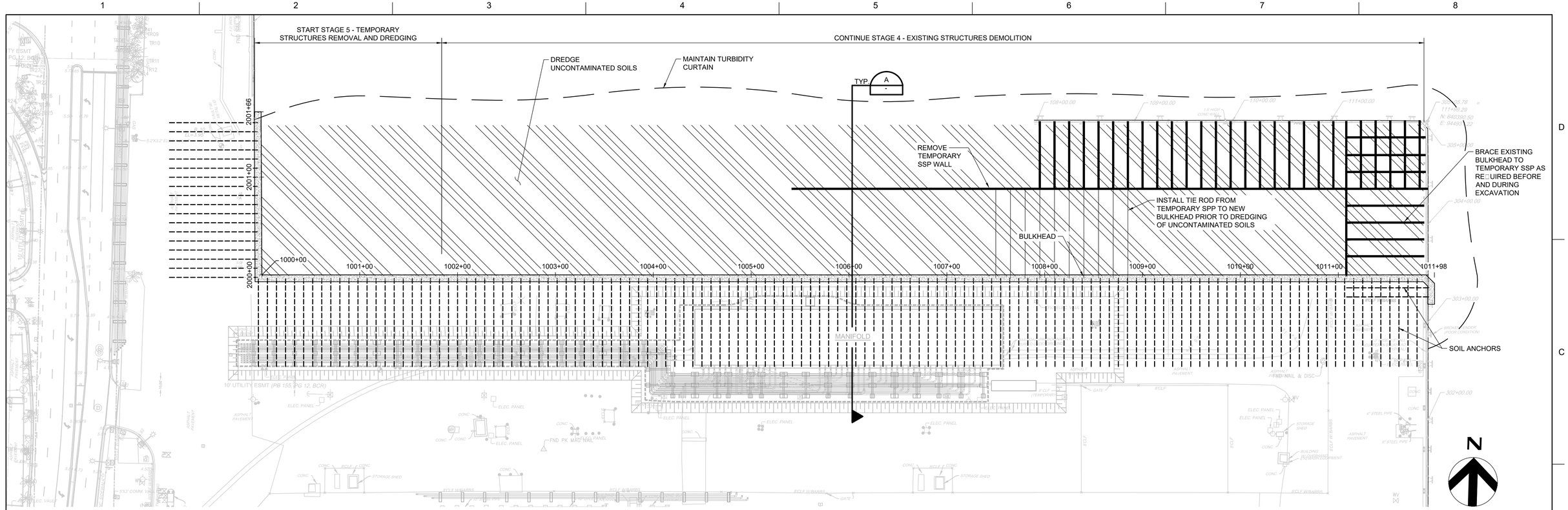
BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

CONSTRUCTION SEQUENCE CONCEPT STAGE 4

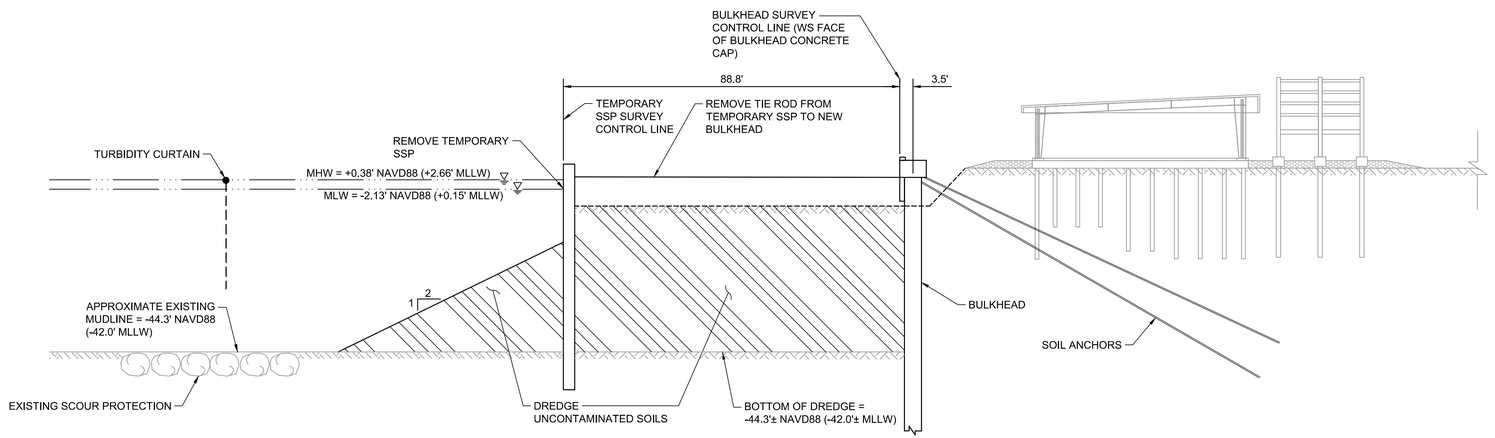
FILENAME	G-2-4030.dwg
SCALE	AS SHOWN
SHEET	G-2-4030

Plot Time: Tuesday, April 23, 2019 - 8:39am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4030.dwg Layout Name: G-2-4030 CONST SEQ STAGE 4



STAGE 5 - TEMPORARY STRUCTURES REMOVAL AND DREDGING

1" = 50'



STAGE 5 - TYPICAL SECTION A

1" = 20'

SCALE: 1" = 20'

0 10' 20' 30' 40' 60'

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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Suite 100
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PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

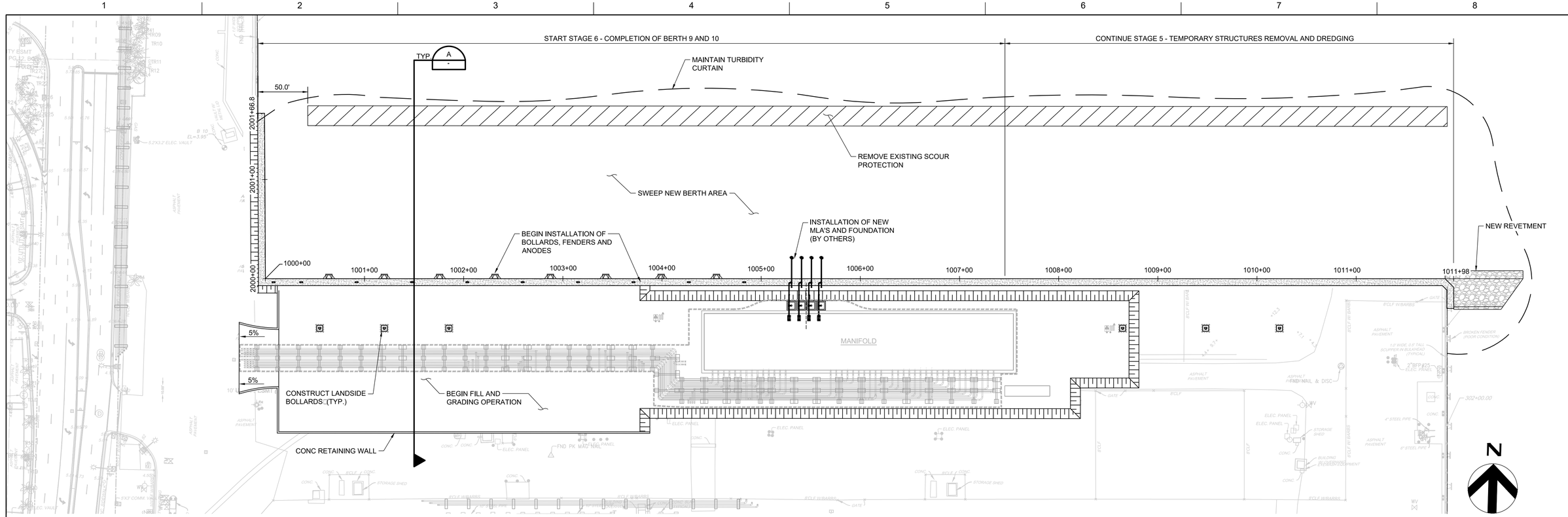
CONSTRUCTION SEQUENCE CONCEPT STAGE 5

0 1" 2"

FILENAME	G-2-4040.dwg
SCALE	AS SHOWN

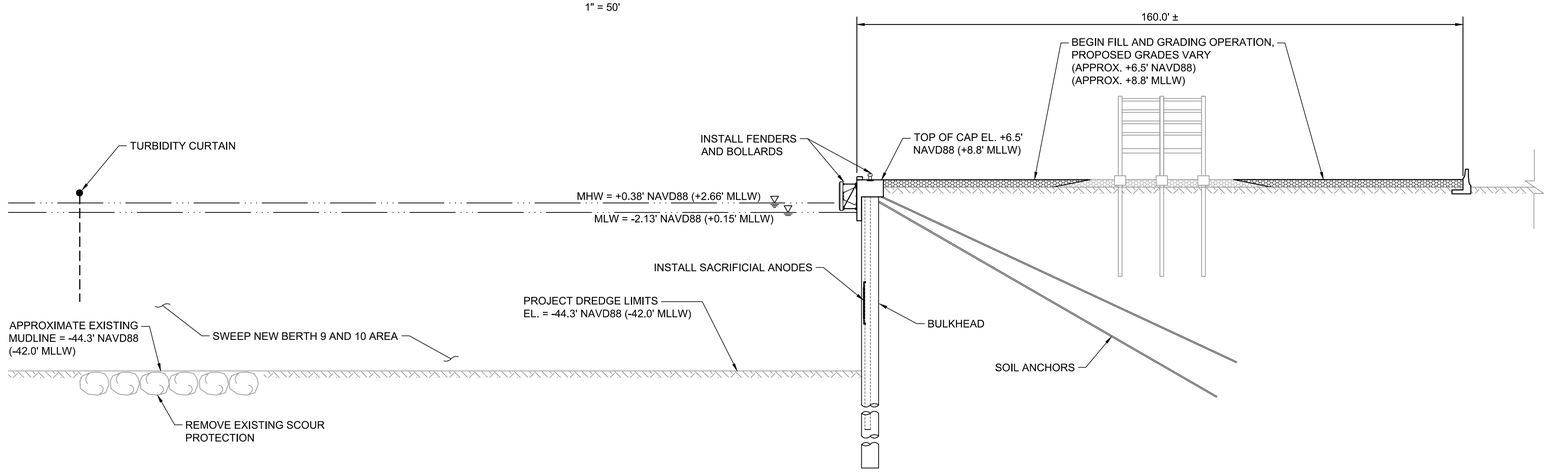
SHEET G-2-4040

Plot Time: Tuesday, April 23, 2019 - 8:42am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4040.dwg Layout Name: G-2-4040 CONST SEQ STAGE 5



STAGE 6 - COMPLETION OF BERTH 9 AND 10

1" = 50'



STAGE 6 - TYPICAL SECTION

A

1" = 20'

SCALE: 1" = 20'

0 10' 20' 30' 40' 60'

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

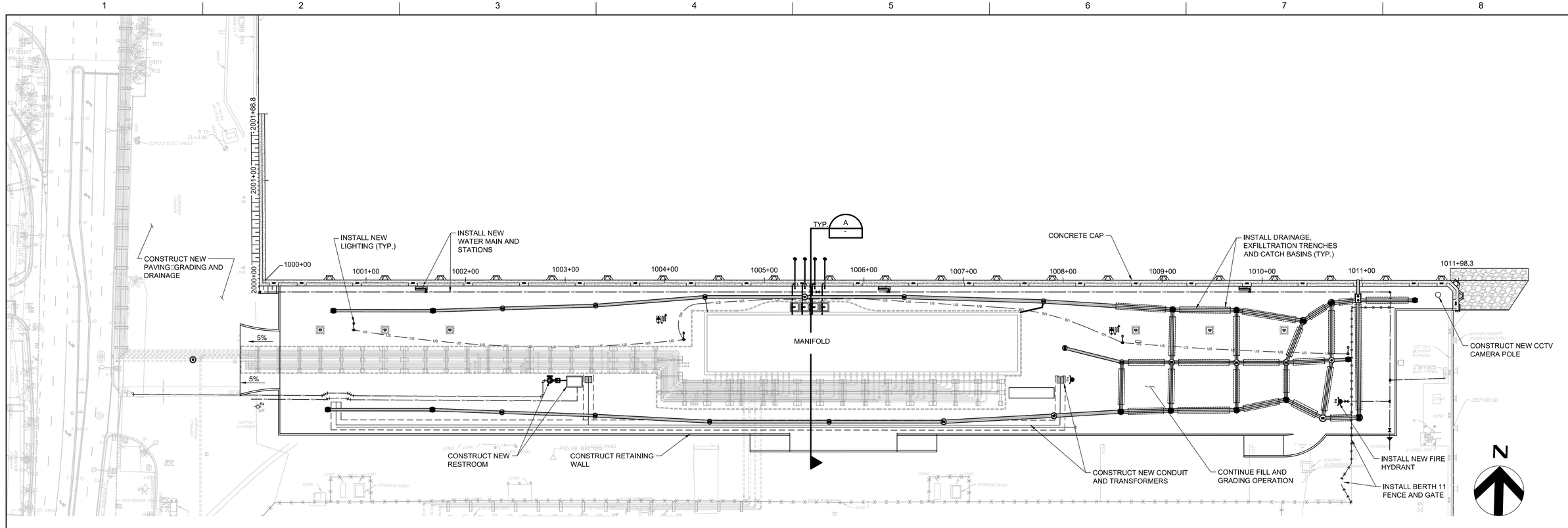
CONSTRUCTION SEQUENCE CONCEPT STAGE 6

0 1" 2"

FILENAME	G-2-4050.dwg
SCALE	AS SHOWN

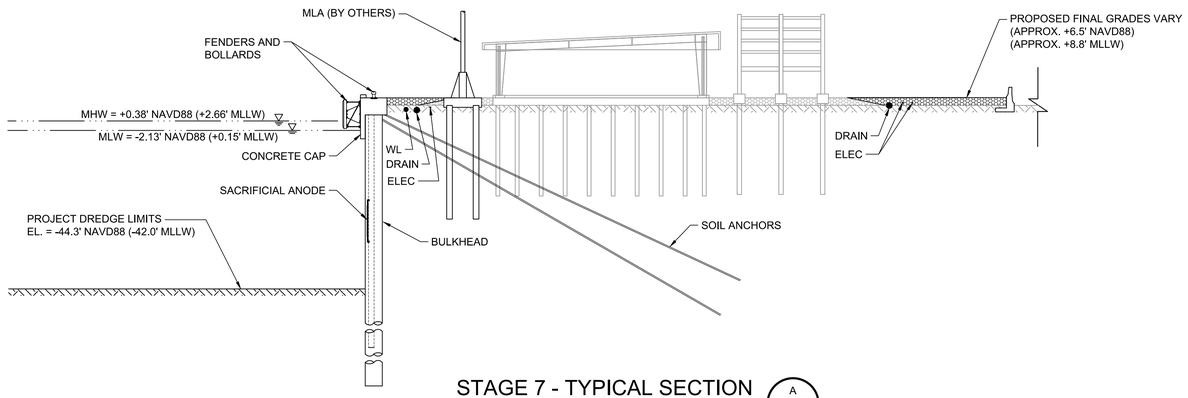
SHEET G-2-4050

Plot Time: Tuesday, April 23, 2019 - 8:44am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4050.dwg Layout Name: G-2-4050 CONST SEQ STAGE 6



STAGE 7 - LANDSIDE IMPROVEMENTS

1" = 50'



STAGE 7 - TYPICAL SECTION

A

1" = 20'

SCALE: 1" = 20'

0 10' 20' 30' 40' 60'

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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BROWARD COUNTY FLORIDA

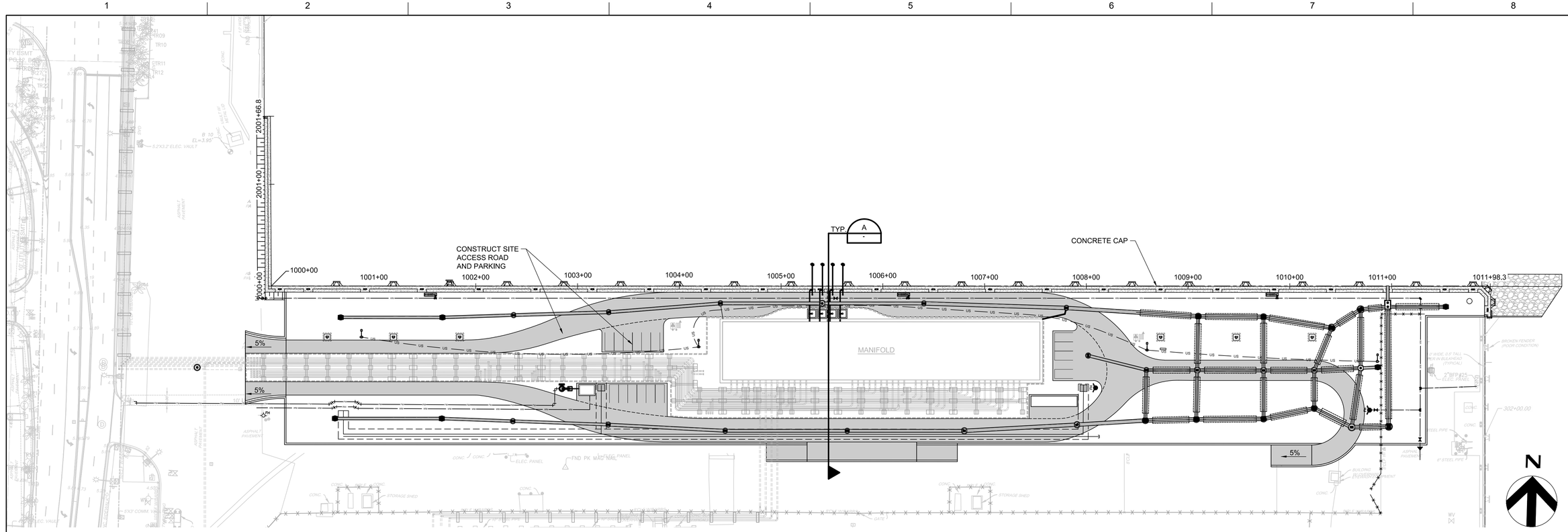
PORT EVERGLADES SLIP 1 EXPANSION

CONSTRUCTION SEQUENCE CONCEPT STAGE 7

0 1" 2"

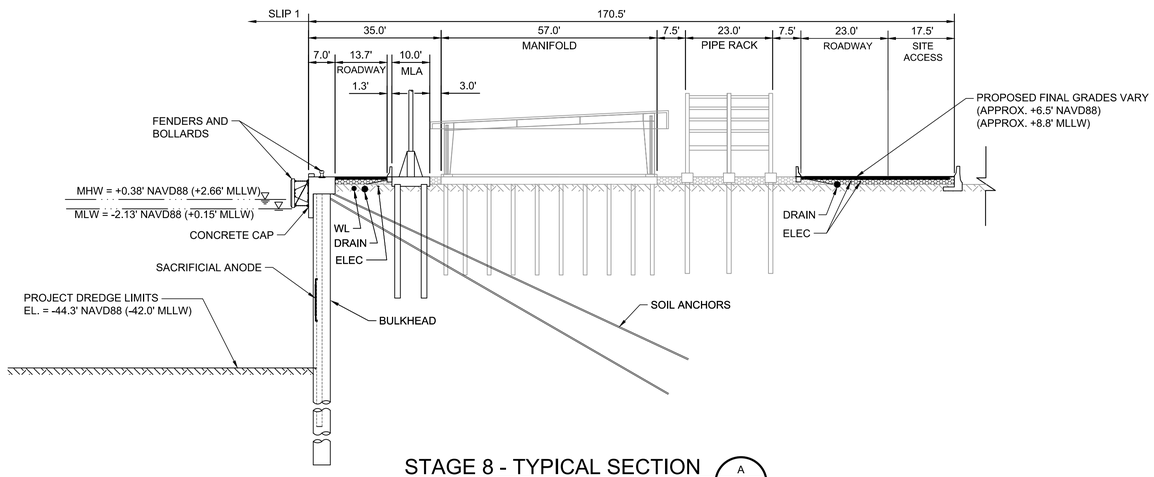
FILENAME	G-2-4060.dwg
SCALE	AS SHOWN
SHEET	G-2-4070

Plot Time: Tuesday, April 23, 2019 - 9:02am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4060.dwg Layout Name: G-2-4060 CONST SEQ STAGE 7



STAGE 8 - PROJECT COMPLETION

1" = 50'



STAGE 8 - TYPICAL SECTION

TYP. A

1" = 20'

SCALE: 1" = 20'

0 10' 20' 30' 40' 60'

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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Suite 100
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ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

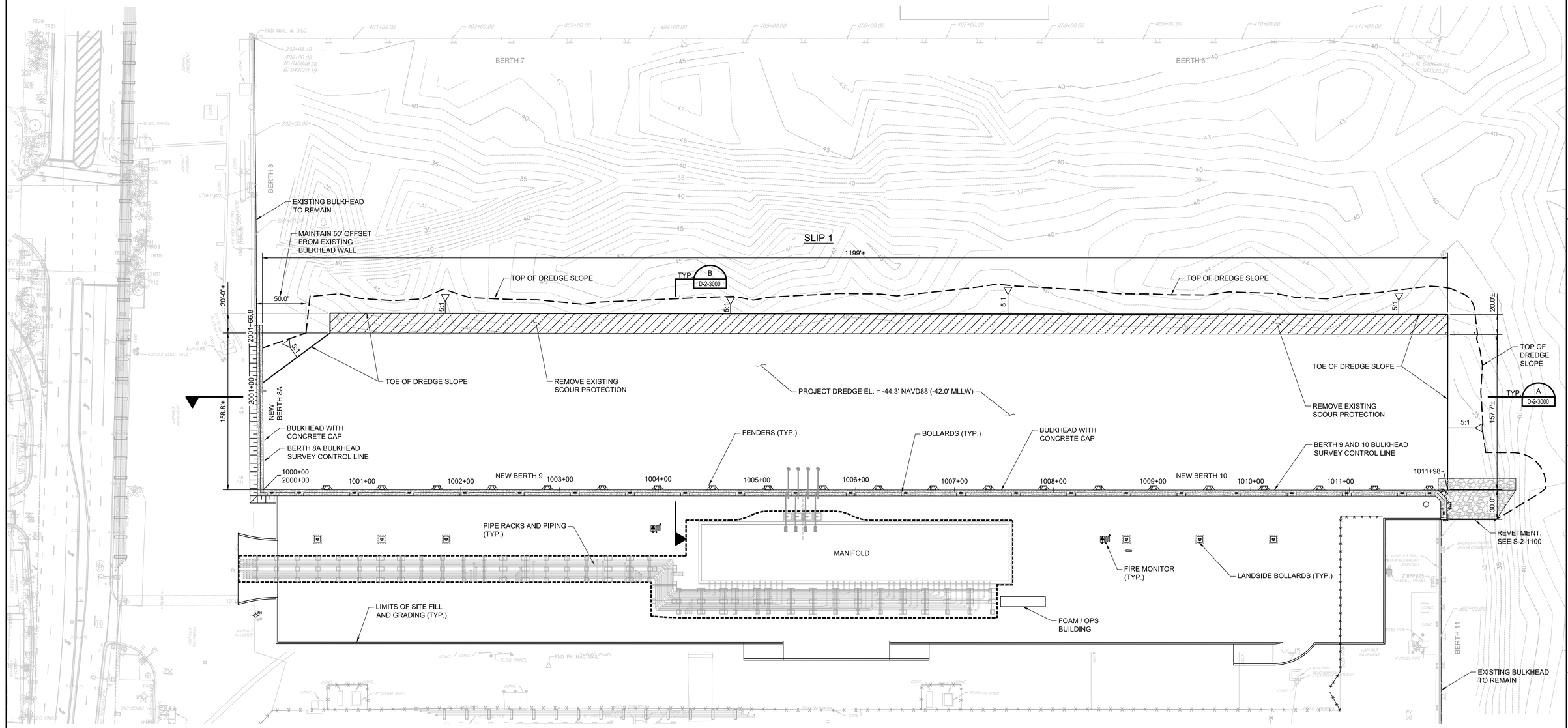
CONSTRUCTION SE□UENCE CONCEPT STAGE □

0 1" 2"

FILENAME	G-2-4070.dwg
SCALE	AS SHOWN

SHEET G-2-40□0

Plot Time: Tuesday, April 23, 2019 - 9:13am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\G-2-4070.dwg Layout Name: G-2-4070 CONST SEQ STAGE 8



PLAN - DREDGING

1" = 50'

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

NOTE:

1. REFER TO GENERAL NOTES SHEET (G-0-1000).

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ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

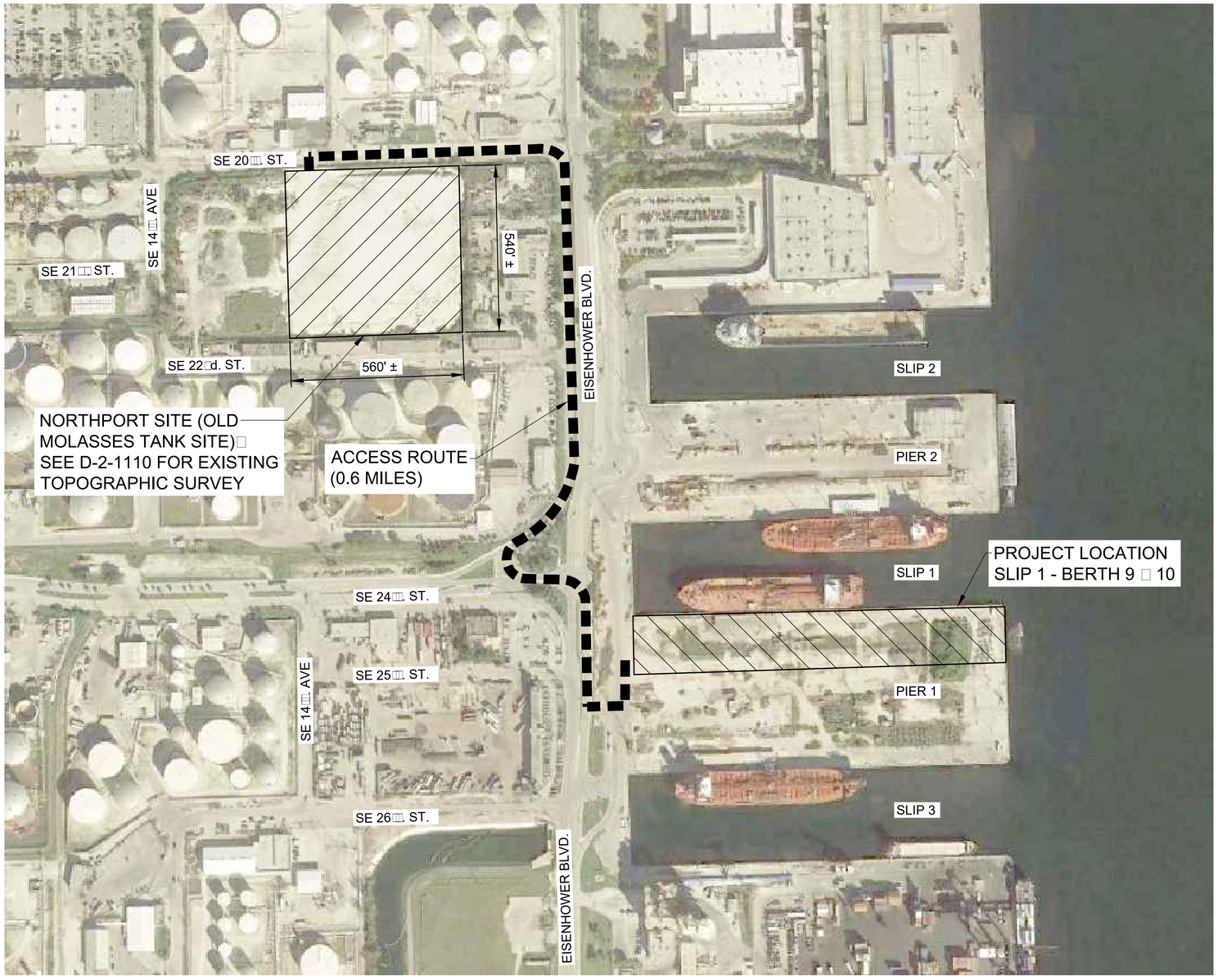
DREDGING PLAN

0 1" 2"

FILENAME	D-2-1000.dwg
SCALE	AS SHOWN

SHEET D-2-1000

Plot Time: Tuesday, April 23, 2019 - 9:20am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\D-2-1000.dwg Layout Name: D-2-1000 DREDGING PLAN



PLAN - NORTHPORT SITE EARTHWORK HAULING PLAN

1" = 200'

NOTES:

1. DREDGING TRANSPORT STAGING AND DISPOSAL OF NON-CONTAMINATED MATERIAL SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH REGULATORY RE UIREMENTS. ESTIMATED VOLUME OF NON-CONTAMINATED MATERIAL IS ±265 000 CUBIC YARDS.
2. DREDGING AND DISPOSAL OF CONTAMINATED MATERIAL WILL BE PERFORMED BY THE FDEP AGENCY TERM CONTRACTOR IN ACCORDANCE WITH THE FDEP REMEDIAL ACTION PLAN. ESTIMATED VOLUME OF CONTAMINATED SOIL IS ±85 000 CUBIC YARDS.
3. THE CONTRACTOR MAY UTILI E A TEMPORARY DREDGE MATERIAL STAGING SITE FOR ALL NON-CONTAMINATED MATERIAL. SITES ARE LIMITED THE NORTHPORT AND SOUTHPORT SITES IDENTIFIED ON THE DRAWINGS. TEMPORARILY STAGED MATERIAL MUST BE REMOVED FROM THE SITE(S) PRIOR TO PROJECT COMPLETION.
4. COLLECTION AND TREATMENT OF RETURN WATER FROM DREDGED MATERIALS SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH REGULATORY RE UIREMENTS. COLLECTION AND TREATMENT SHALL BE PERFORMED EITHER AT THE PROJECT SITE OR AT THE SOUTHPORT SITE.
5. THE CONTRACTOR IS TO IDENTIFY A FINAL DISPOSAL DESTINATION FOR ALL NON-CONTAMINATED MATERIAL THAT IS LOCATED OUTSIDE OF THE PORT EVERGLADES PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRANSPORTATION AND DISPOSAL COSTS INCURRED.
6. THE TRANSPORTATION OF NON-CONTAMINATED MATERIAL SHOULD BE COORDINATED SCHEDULED AND SE UENCED SO AS TO AVOID ADVERSE IMPACTS TO PORT OPERATIONS AND LOCAL TRAFFIC. REFER TO SPECIFICATIONS FOR COMPLETE DETAILS ON RE UIREMENTS AND RESTRICTIONS.

N

SCALE: 1" = 200'

0 100' 200' 300 400' 600'

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Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES
SLIP 1 EXPANSION

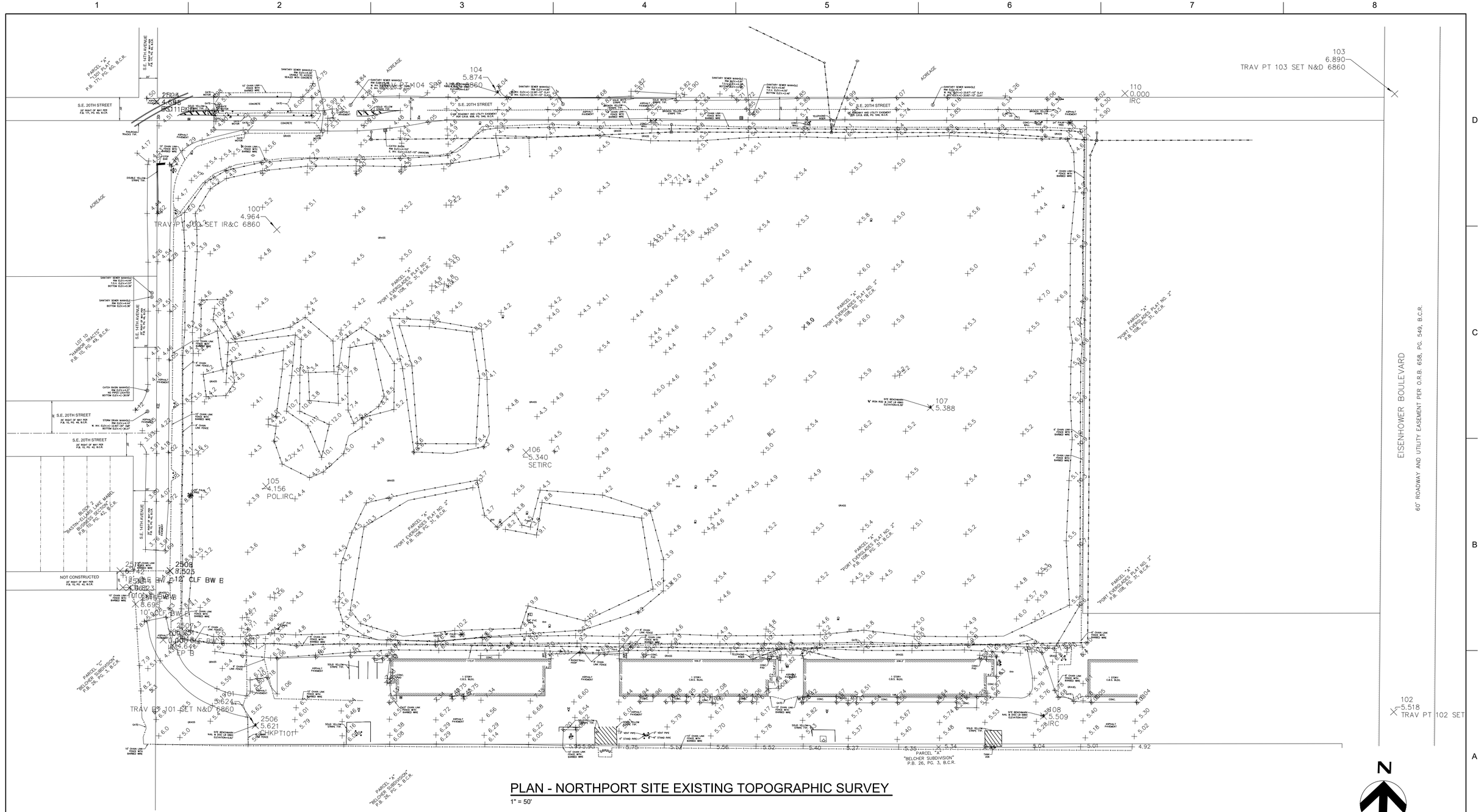
TEMPORARY DREDGED MATERIAL STAGING SITES 1 OF 4

0 1" 2"

FILENAME	D-2-1100.dwg
SCALE	AS SHOWN

SHEET D-2-1100

Plot Time: Tuesday, April 23, 2019 - 9:22am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\D-2-1100.dwg Layout Name: D-2-1100 TEMPORARY DREDGE STAGING SITES 1 OF 4



PLAN - NORTHPORT SITE EXISTING TOPOGRAPHIC SURVEY

1" = 50'

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

NOTE:

1. REFER TO GENERAL NOTES SHEET (G-0-1000).

HDR Engineering, Inc.
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DESIGNED BY	RJD
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DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

TEMPORARY DREDGED MATERIAL STAGING SITES 2 OF 4

0 1" 2"

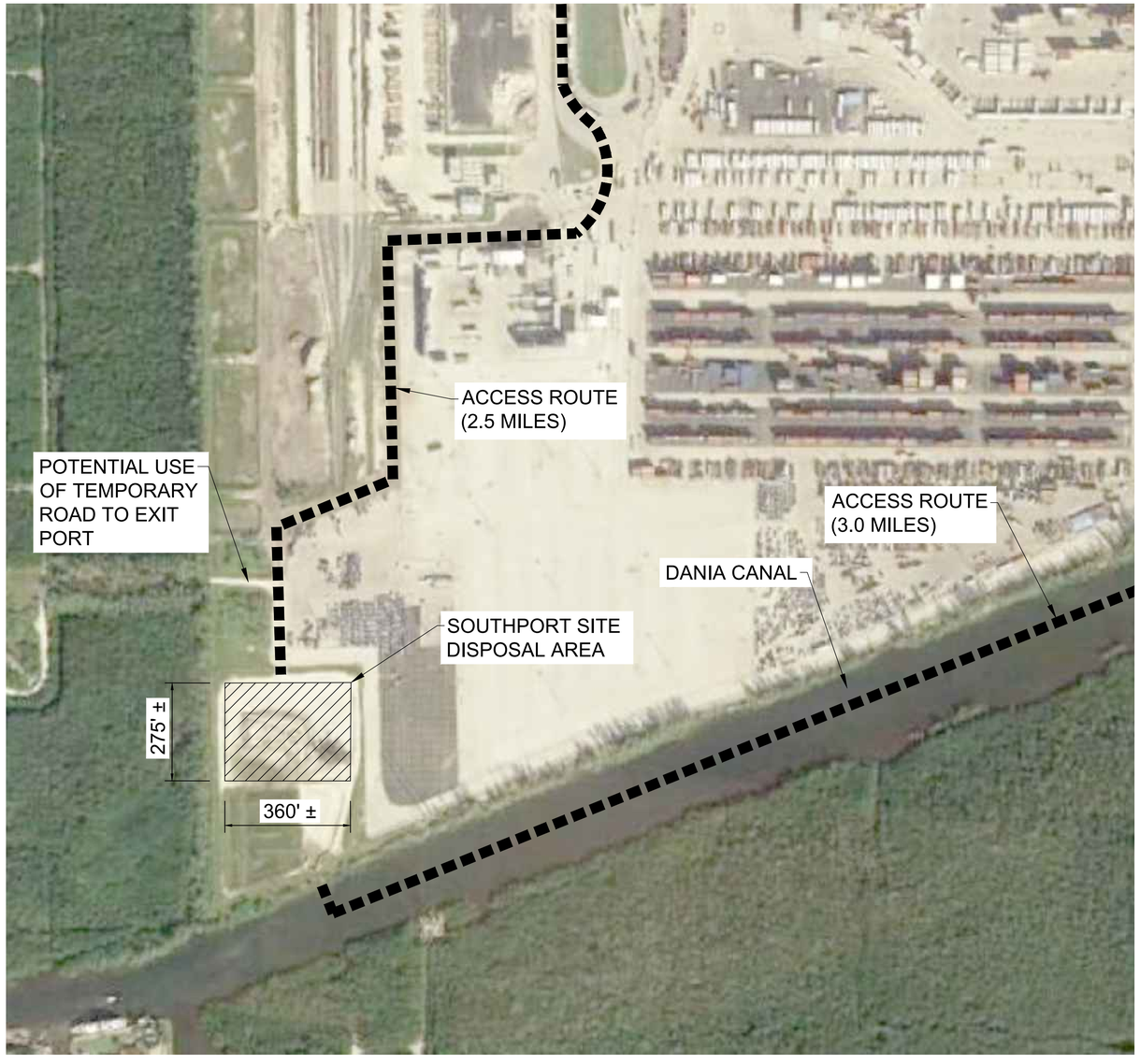
FILENAME	D-2-1110.dwg
SCALE	AS SHOWN

SHEET D-2-1110

Plot Time: Tuesday, April 23, 2019 – 9:25am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design – PERMIT – USACE\03 Sheet Files\D-2-1110.dwg Layout Name: D-2-1110 TEMPRORAY DREDGE STAGING SITE 2 OF 4

PLAN - SOUTHPORT SITE EARTHWORK HAULING PLAN

1" = 1000'



PLAN - SOUTHPORT SITE ENLARGEMENT

1" = 200'

NOTE:

1. REFER TO DRAWING D-2-1100 FOR NOTES.

N

SCALE: 1" = 1000'

0 500' 1000' 1500' 2000' 3000'

SCALE: 1" = 200'

0 100' 200' 300' 400' 600'

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Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

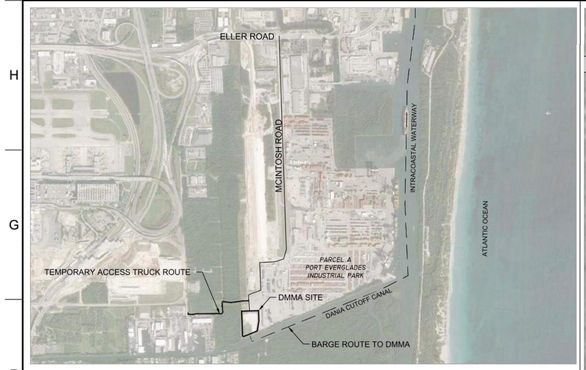
TEMPORARY DREDGED MATERIAL STAGING SITES □3 OF 4□

0 1" 2"

FILENAME	D-2-1200.dwg
SCALE	AS SHOWN

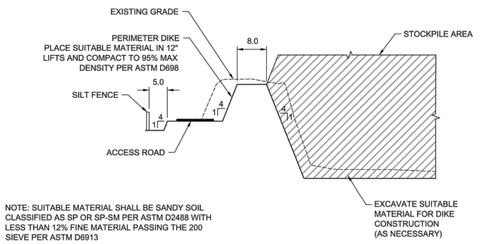
SHEET D-2-1200

Plot Time: Tuesday, April 23, 2019 - 9:26am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\D-2-1200.dwg Layout Name: D-2-1200 TEMPORARY DREDGE STAGING SITES 3 OF 4



KEY MAP

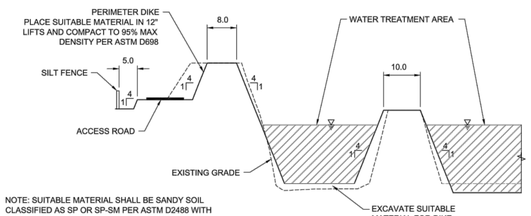
NOT TO SCALE



NOTE: SUITABLE MATERIAL SHALL BE SANDY SOIL CLASSIFIED AS SP OR SP-SM PER ASTM D2488 WITH LESS THAN 12% FINE MATERIAL PASSING THE 200 SIEVE PER ASTM D6913

A TYPICAL DIKE SECTION WITH OPTIONAL STOCK PILE AREA

NOT TO SCALE



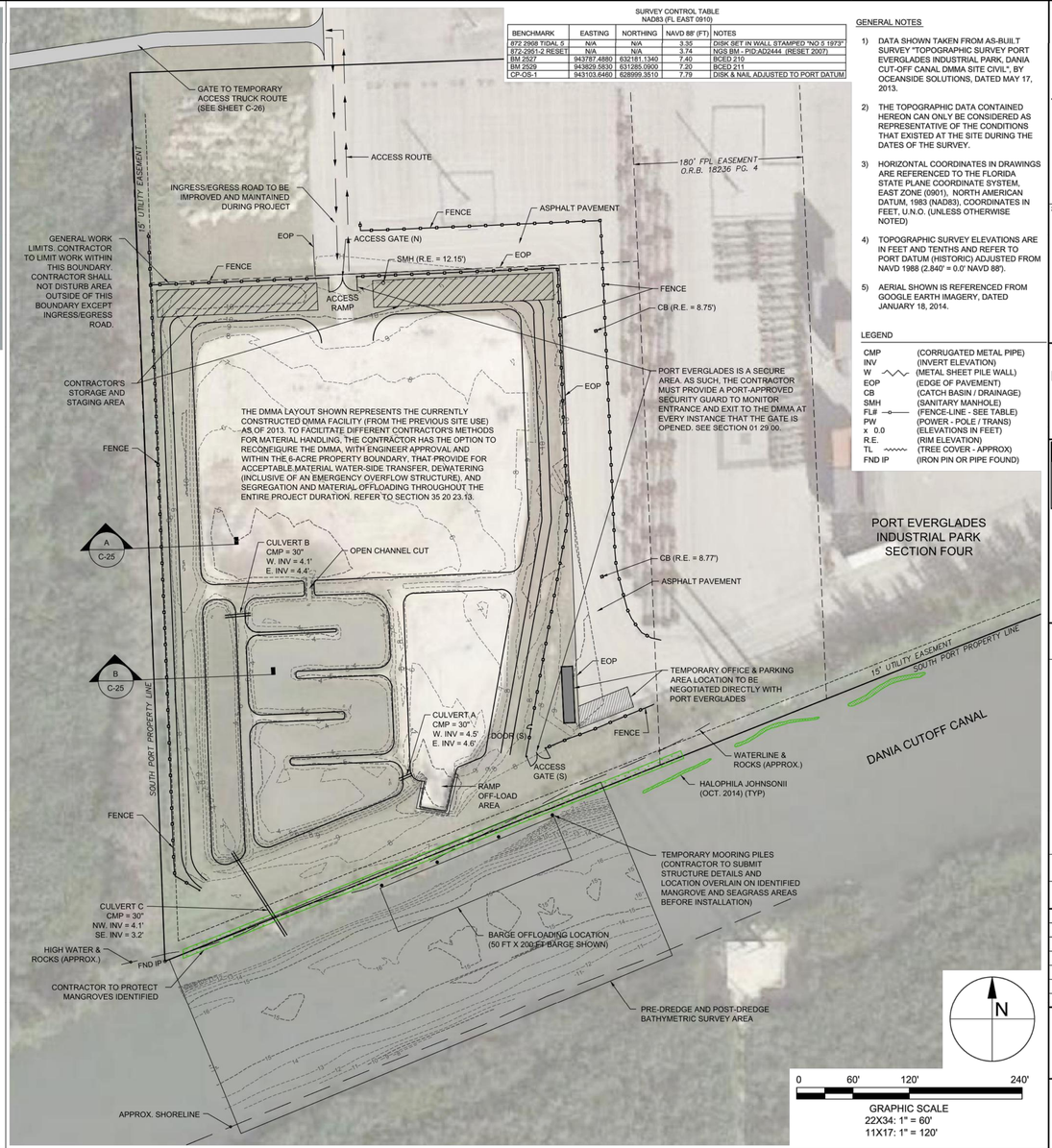
NOTE: SUITABLE MATERIAL SHALL BE SANDY SOIL CLASSIFIED AS SP OR SP-SM PER ASTM D2488 WITH LESS THAN 12% FINE MATERIAL PASSING THE 200 SIEVE PER ASTM D6913

B TYPICAL DIKE SECTION WITH OPTIONAL TREATMENT AREA

NOT TO SCALE

SURVEY CONTROL TABLE
NAD83 (FL EAST 0910)

BENCHMARK	EASTING	NORTHING	NAVD 88' (FT)	NOTES
872 2968 TIDAL 5	N/A	N/A	3.35	DISK SET IN WALL STAMPED "NO 5 1973"
872-2951-2 RESET	N/A	N/A	3.74	NGS BM - PID AD2444 (RESET 2007)
BM 2527	943787.4880	632181.1340	7.40	BCED 210
BM 2529	943829.5830	631285.0900	7.20	BCED 211
CP-OS-1	943103.6460	628999.3510	7.79	DISK & NAIL ADJUSTED TO PORT DATUM



GENERAL NOTES

1) DATA SHOWN TAKEN FROM AS-BUILT SURVEY "TOPOGRAPHIC SURVEY PORT EVERGLADES INDUSTRIAL PARK, DANIA CUT-OFF CANAL DMMA SITE CIVIL" BY OCEANSIDE SOLUTIONS, DATED MAY 17, 2013.
2) THE TOPOGRAPHIC DATA CONTAINED HEREON CAN ONLY BE CONSIDERED AS REPRESENTATIVE OF THE CONDITIONS THAT EXISTED AT THE SITE DURING THE DATES OF THE SURVEY.
3) HORIZONTAL COORDINATES IN DRAWINGS ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE (0901), NORTH AMERICAN DATUM, 1983 (NAD83). COORDINATES IN FEET, U.N.O. (UNLESS OTHERWISE NOTED)
4) TOPOGRAPHIC SURVEY ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO PORT DATUM (HISTORIC) ADJUSTED FROM NAVD 1988 (2.840' = 0.0' NAVD 88').
5) AERIAL SHOWN IS REFERENCED FROM GOOGLE EARTH IMAGERY, DATED JANUARY 18, 2014.

LEGEND

CMP	(CORRUGATED METAL PIPE)
INV	(INVERT ELEVATION)
W	(METAL SHEET PILE WALL)
EOP	(EDGE OF PAVEMENT)
CB	(CATCH BASIN / DRAINAGE)
SMH	(SANITARY MANHOLE)
FL#	(FENCE-LINE - SEE TABLE)
PW	(POWER - POLE / TRANS)
x 0.0	(ELEVATIONS IN FEET)
R.E.	(RIM ELEVATION)
TL	(TREE COVER - APPROX)
FND IP	(IRON PIN OR PIPE FOUND)

TAYLOR ENGINEERING INC.
10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FLORIDA 32256
(904)-731-7040
1675 PALM BEACH LAKES, SUITE 210
WEST PALM BEACH, FLORIDA 33401
(561)-640-7310
CERTIFICATE OF AUTHORIZATION # 4815

SEAL

JOHN F. ADAMS P.E.# 20298

PROJECT TITLE

INTRACOASTAL WATERWAY DEEPENING
BROWARD COUNTY, FLORIDA

Always call 811 two full business days before you dig
Sunshine811.com

NO	REVISIONS / SUBMISSIONS	ZONE	DATE

PROJECT NO	C2005-076-11
DATE	JUNE 2015
DESIGNED	JFA
DRAWN	CAS
CHECKED	LSB
REVIEWED	JTA
SCALE	AS SHOWN

DRAWING TITLE

DREDGED MATERIAL MANAGEMENT AREA

C-25

SHEET 25 OF 29

PLAN - SOUTHPORT SITE DETAILED PLAN

HDR Engineering, Inc.
3250 West Commercial Boulevard
Suite 100
Ft. Lauderdale, Florida 32209-3459
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ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

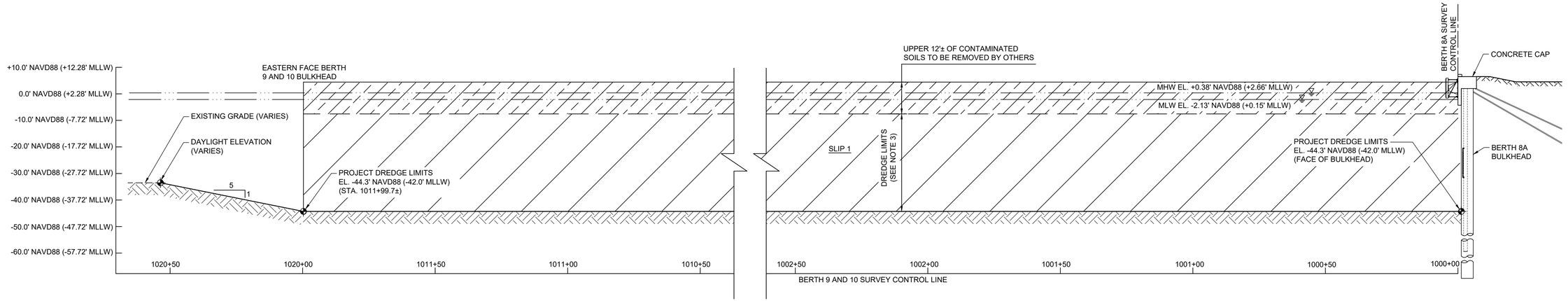
TEMPORARY DREDGED MATERIAL STAGING SITES 4 OF 4

0 1" 2"

FILENAME	D-2-1210.dwg
SCALE	AS SHOWN

SHEET D-2-1210

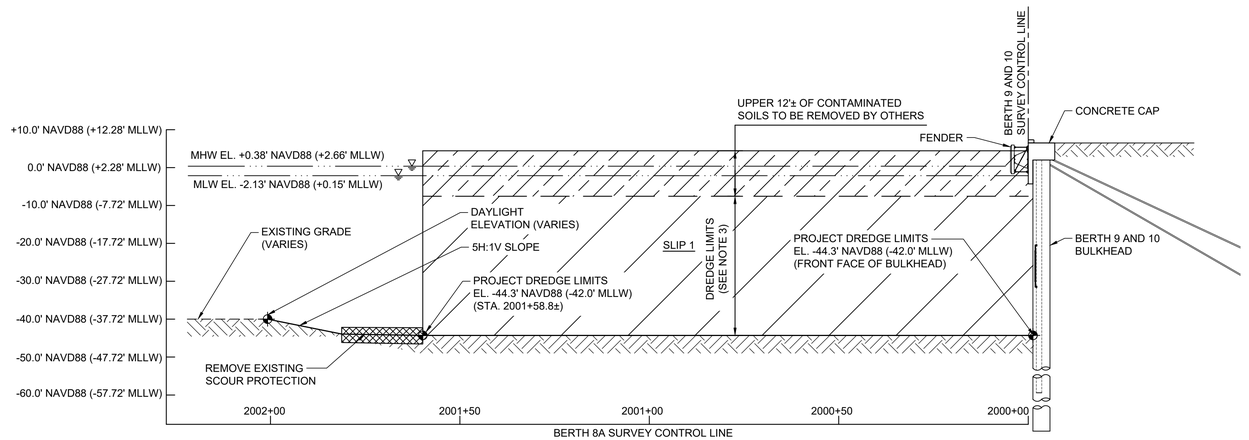
Plot Time: Tuesday, April 23, 2019 - 9:27am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\D-2-1210.dwg Layout Name: D-2-1210 TEMPORARY DREDGE STAGING SITES 4 OF 4
CATHY SHELL, 6/17/2019 9:00:22 AM, X:\sys\Projects\2005-076 Broward County Deepening\Construction\WORK\2005-076-C-Dania DMMA As-built.dwg



SECTION - TYPICAL DREDGE (LOOKING SOUTH)

A D-2-1000

1" = 20'



SECTION - TYPICAL DREDGE

B D-2-1000

1" = 20'

NOTES:

1. ALL DREDGING SHALL BE PERFORMED USING MECHANICAL MEANS / METHODS SUCH AS CLAMSHELL OR BUCKET. HYDRAULIC DREDGING IS NOT ALLOWED.
2. CONTRACTOR SHALL ANTICIPATE POCKETS IF LIMESTONE BEDROCK WITHIN DREDGING TEMPLATE. BLASTING TO REMOVE BEDROCK IS NOT ALLOWED.
3. CONTAMINATED DREDGED MATERIAL ABOVE ELEVATION -7.5' NAVD88 WILL BE REMOVED BY OTHERS. CONTRACTOR SHALL PERFORM DREDGING TO REMOVE UNCONTAMINATED MATERIAL FROM DESIGNATED DREDGING FOOTPRINT BETWEEN ELEVATION -7.5' NAVD88 AND -44.3' NAVD88.
4. ALLOWABLE OVERDREDGE IS 2.0' BELOW ELEVATION -44.3' NAVD88.

SCALE: 1" = 20'

0 10' 20' 40' 80' 160'

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3250 West Commercial Boulevard
Suite 100
Ft. Lauderdale, Florida 32209-3459
Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

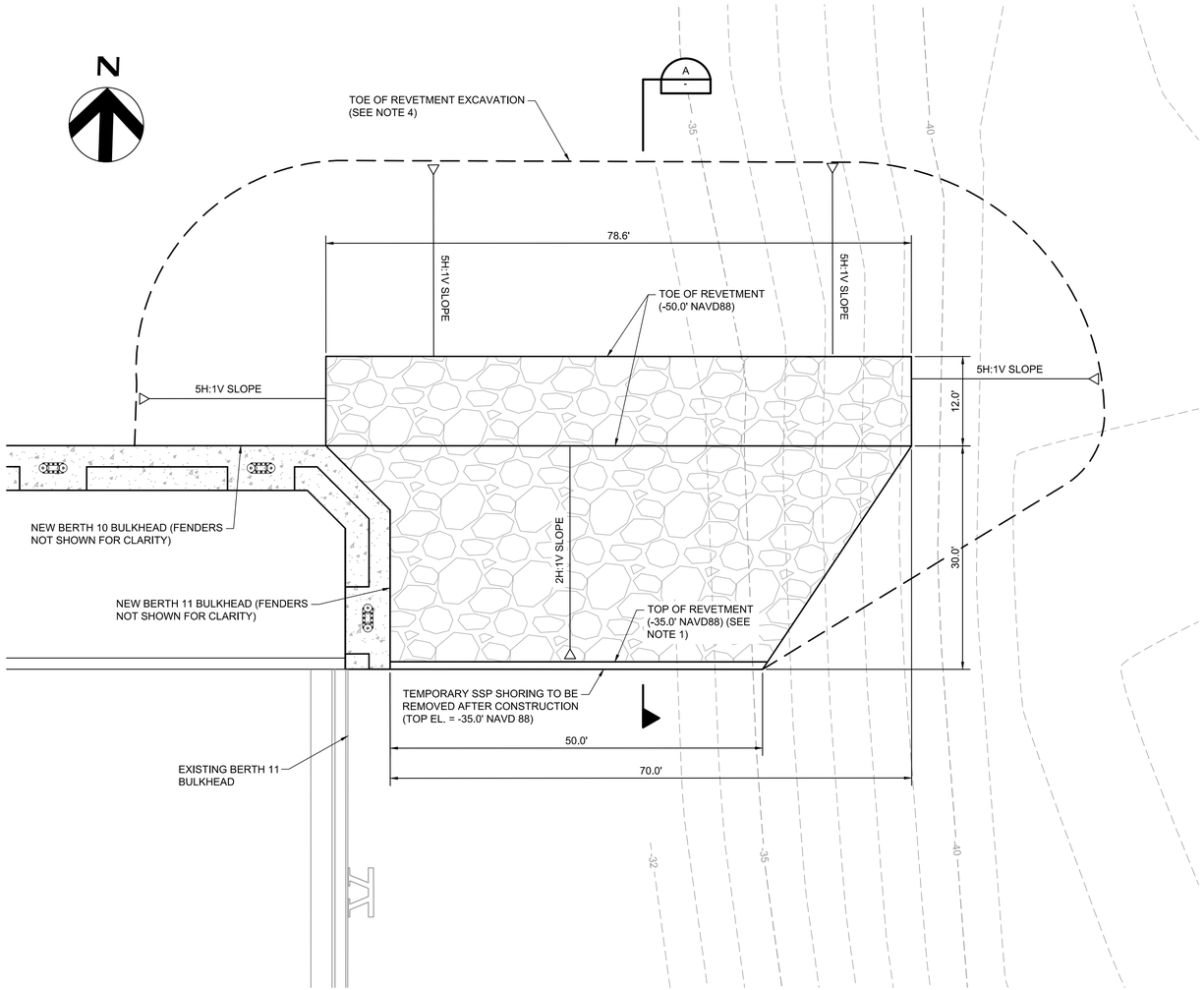
DREDGING SECTIONS

0 1" 2"

FILENAME	D-2-3000.dwg
SCALE	AS SHOWN

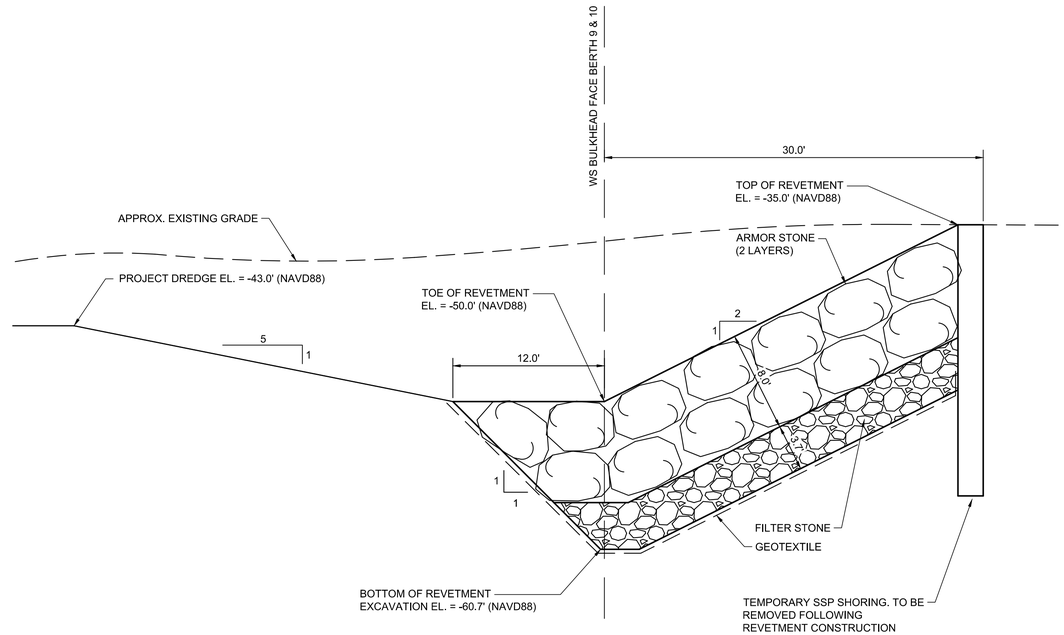
SHEET D-2-3000

Plot Time: Tuesday, April 23, 2019 - 11:25am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\D-2-3000.dwg Layout Name: D-2-3000 DREDGING SECTIONS



PLAN - BERTH 11 REVETMENT

1" = 10'



SECTION - REVETMENT

1" = 6'

NOTES:

1. IF EXISTING GRADE IS BELOW EL. -35.0' NAVD88□TOP OF REVETMENT SHALL MATCH EXISTING GRADE.
2. CONTRACTOR MAY PROPOSE SALVAGING EXISTING STONE REMOVED FROM DREDGING TEMPLATE WITHIN PORTIONS OF SLIP 1 IF STONE MEETS SI□E AND □UALITY RE□UIREMENTS IN SPECIFICATION 35 31 23. IF SALVAGED STONE DOES NOT MEET RE□UIREMENTS□CONTRACTOR MAY PROPOSE ALTERNATIVE DESIGN TO UTILI□E SALVAGED STONE IF DESIGN CAN MEET THE DESIGN INTENT. ENGINEER WILL BE SOLE ASSESSOR OF WHETHER ALTERNATIVE DESIGNS ARE ACCEPTABLE. SALVAGE USE OF EXISTING STONE IS NOT GUARANTEED.
3. LIMESTONE BEDROCK MAY BE PRESENT IN PROPOSED REVETMENT LOCATION. PRIOR TO EXCAVATION FOR REVETMENT SUBGRADE□CONTRACTOR MAY PROBE THE REVETMENT FOOTPRINT TO DETERMINE PRESENCE OF LIMESTONE. IF AREAS OF LIMESTONE ARE IDENTIFIED□CONTRACTOR MAY RE□UEST THAT CONSTRUCTION OF REVETMENT OVER THESE AREAS BE REMOVED FROM THE CONTRACT. ENGINEER WILL BE SOLE ASSESSOR OF PROPOSALS.
4. REFER TO SHEETS D-2-1000 THROUGH D-2-3000 FOR DREDGING AND DREDGED MATERIAL DISPOSAL RE□UIREMENTS. MATERIAL EXCAVATED FOR PREPARATION OF REVETMENT SUBGRADE SHALL BE DREDGE AND DISPOSED FOLLOWING SAME RE□UIREMENTS.

SCALE: 1" = 6'

0 3' 6' 9' 12' 18'

SCALE: 1" = 10'

0 5' 10' 15' 30' 60'

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A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

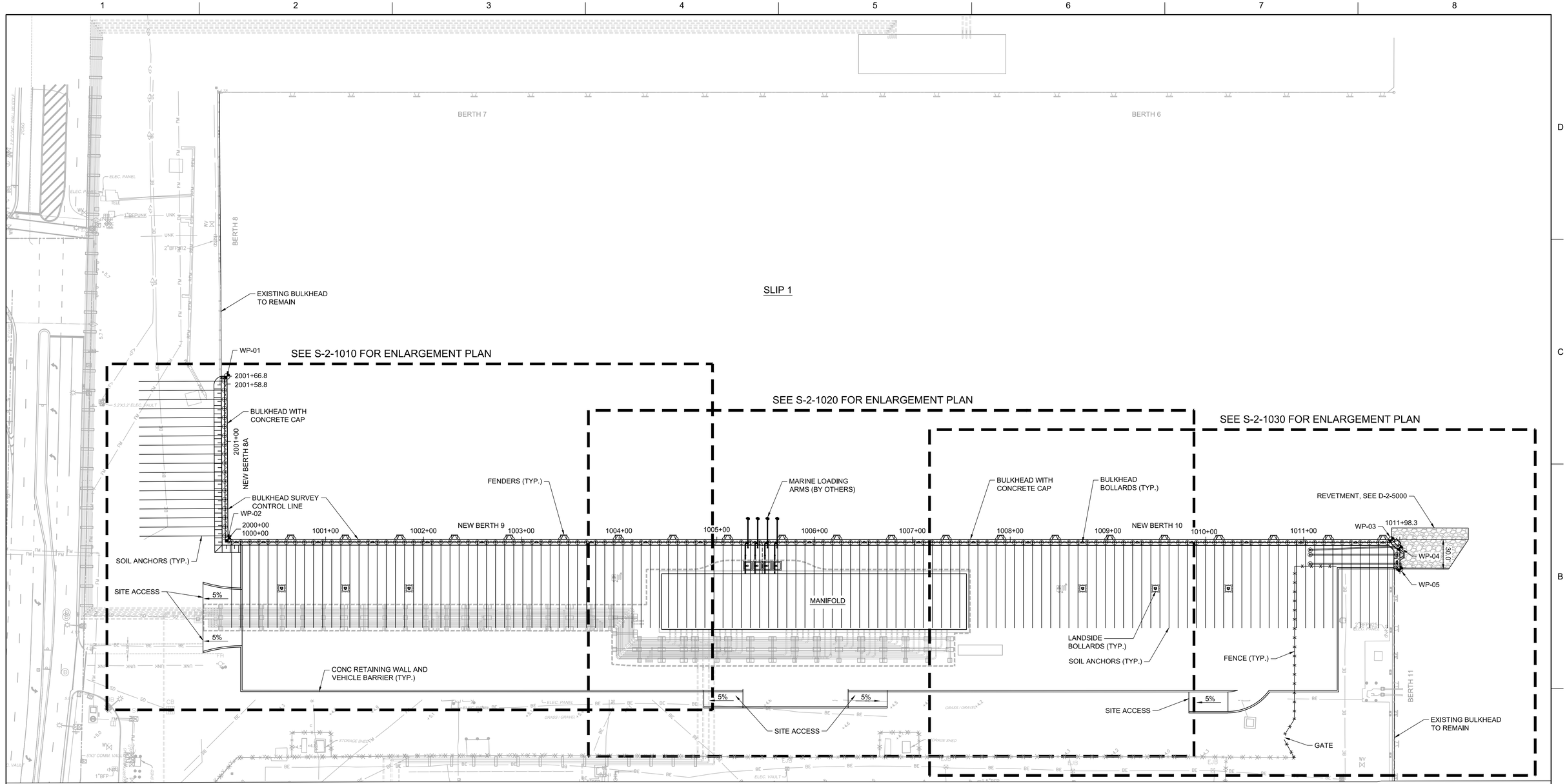
BERTH 11 REVETMENT

0 1" 2"

FILENAME	
SCALE	AS SHOWN

SHEET
D-2-5000

Plot Time: Tuesday, April 23, 2019 - 9:34am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\D-2-5000.dwg Layout Name: D-2-5000 BERTH 11 REVEMENT



PLAN - STRUCTURAL

1" = 50'

WORKING POINTS (WP-XX) COORDINATE TABLE		
POINT	EASTING	NORTHING
WP-01	943738.41	640356.64
WP-02	943745.39	640190.02
WP-03	944934.24	640233.18
WP-04	944943.22	640224.83
WP-05	944945.00	640203.52

N

SCALE: 1" = 50'

0 25' 50' 75' 100' 150'

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PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

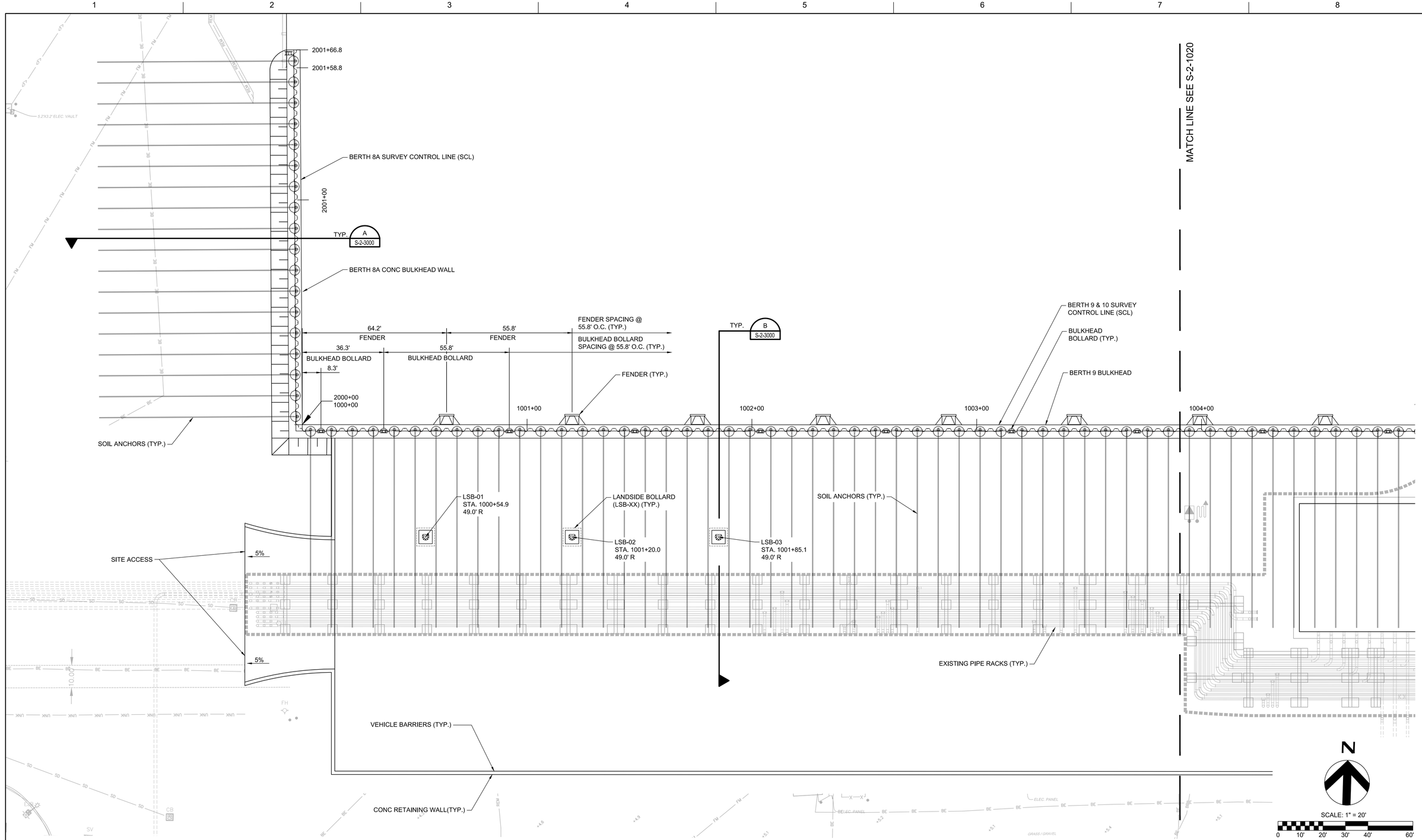
STRUCTURAL SITE PLAN

0 1" 2"

FILENAME	S-2-1000.dwg
SCALE	AS SHOWN

SHEET **S-2-1000**

Plot Time: Tuesday, April 23, 2019 - 9:36am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\S-2-1000.dwg Layout Name: S-2-1000 STRUCTURAL SITE PLAN



Plot Time: Tuesday, April 23, 2019 – 9:43am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design – PERMIT – USACE\03 Sheet Files\S-2-1010.dwg Layout Name: S-2-1010 STRUCTURAL ENLARGEMENT PLAN (1 OF 3)

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Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

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BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

STRUCTURAL ENLARGEMENT PLAN 1 OF 3

0 1" 2"

FILENAME	S-2-1010.dwg
SCALE	AS SHOWN

SHEET S-2-1010

MATCH LINE SEE S-2-1010

MATCH LINE SEE S-2-1030

55.8' FENDER

FENDER SPACING @ 55.8' O.C. (TYP.)

55.8' BULKHEAD BOLLARD

BULKHEAD BOLLARD SPACING @ 55.8' O.C. (TYP.)

TYP. A S-2-3010

MARINE LOADING ARMS (BY OTHERS)

BERTH 9 & 10 BULKHEAD

FENDER (TYP.)

BERTH 9 & 10 SURVEY CONTROL LINE (SCL)

BULKHEAD BOLLARD (TYP.)

TYP. B S-2-3010

1004+00 1005+00 1006+00 1007+00 1008+00 1009+00 1010+00

EXISTING MANIFOLD

LANDSIDE BOLLARD (LSB-XX) (TYP.)

LSB-04
STA. 1008+74.1
49.0' R

SOIL ANCHORS (TYP.)

EXISTING FOAM/OPS BUILDING

EXISTING PIPE RACKS (TYP.)

VEHICLE BARRIERS (TYP.)

CONC RETAINING WALL(TYP.)

5%

5%

SITE ACCESS

GRASS / GRAVEL

STORAGE SHED

ELEC. VAULT

N

SCALE: 1" = 20'

0 10' 20' 30' 40' 60'

D C B A

Plot Time: Tuesday, April 23, 2019 - 9:44am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\S-2-1020.dwg Layout Name: S-2-1020 STRUCTURAL ENLARGEMENT PLAN (2 OF 3)

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Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

STRUCTURAL ENLARGEMENT PLAN (2 OF 3)

0 1" 2"

FILENAME	S-2-1020.dwg
SCALE	AS SHOWN

SHEET S-2-1020

MATCH LINE SEE S-2-1020

MATCH LINE SEE S-2-1030

BERTH 9 & 10 SURVEY CONTROL LINE (SCL)

BULKHEAD BOLLARD (TYP.)

TYP. B S-2-3010

BERTH 9 & 10 BULKHEAD

FENDER (TYP.)

1008+00 1009+00 1010+00 1011+00 1011+98.3

FENDER SPACING @ 55.8' O.C. (TYP.)

55.8' FENDER

8.7'

BULKHEAD BOLLARD SPACING @ 55.8' O.C. (TYP.)

55.8'

27.9'

BULKHEAD BOLLARD

18" RCP OUTFALL STA. 1010+97.3

TYP. A S-2-3020

45°

30.0'

REVETMENT, SEE D-2-5000

CORNER FENDER

LANDSIDE BOLLARD (LSB-XX) (TYP.)

LSB-05 STA. 1009+48.4 49.0' R

LSB-06 STA. 1010+23.0 49.0' R

SOIL ANCHORS (TYP.)

FENCE

VEHICLE BARRIERS (TYP.)

SITE ACCESS

5%

CONC RETAINING WALL(TYP.)

GATE

BERTH 11

N

SCALE: 1" = 20'

0 10' 20' 30' 40' 60'

Plot Time: Tuesday, April 23, 2019 – 9:48am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design – PERMIT – USACE\03 Sheet Files\S-2-1030.dwg Layout Name: S-2-1030 STRUCTURAL ENLARGEMENT PLAN (3 OF 3)

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Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

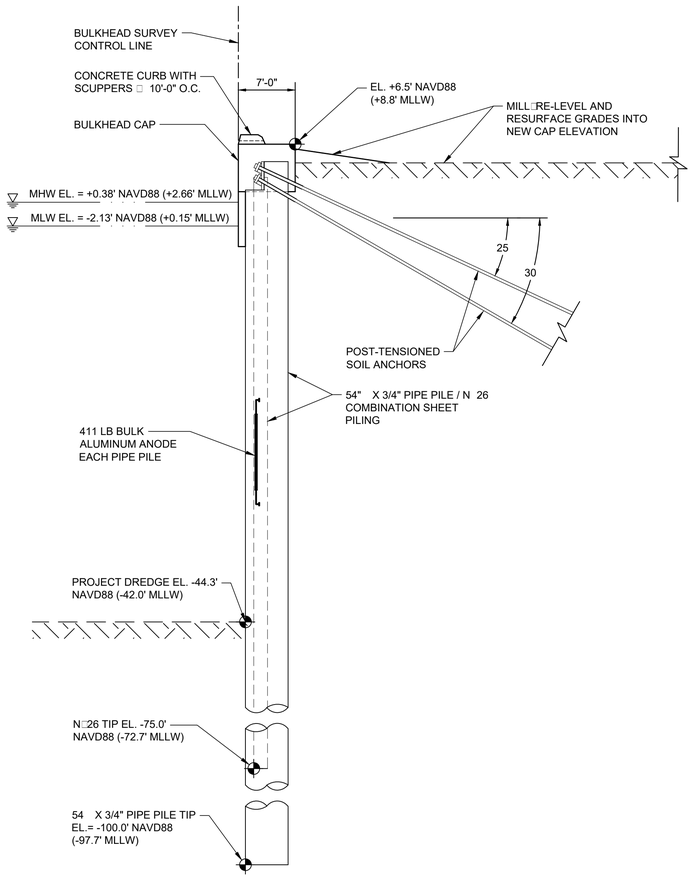
PORT EVERGLADES SLIP 1 EXPANSION

STRUCTURAL ENLARGEMENT PLAN 3 OF 3

0 1" 2"

FILENAME	S-2-1030.dwg
SCALE	AS SHOWN

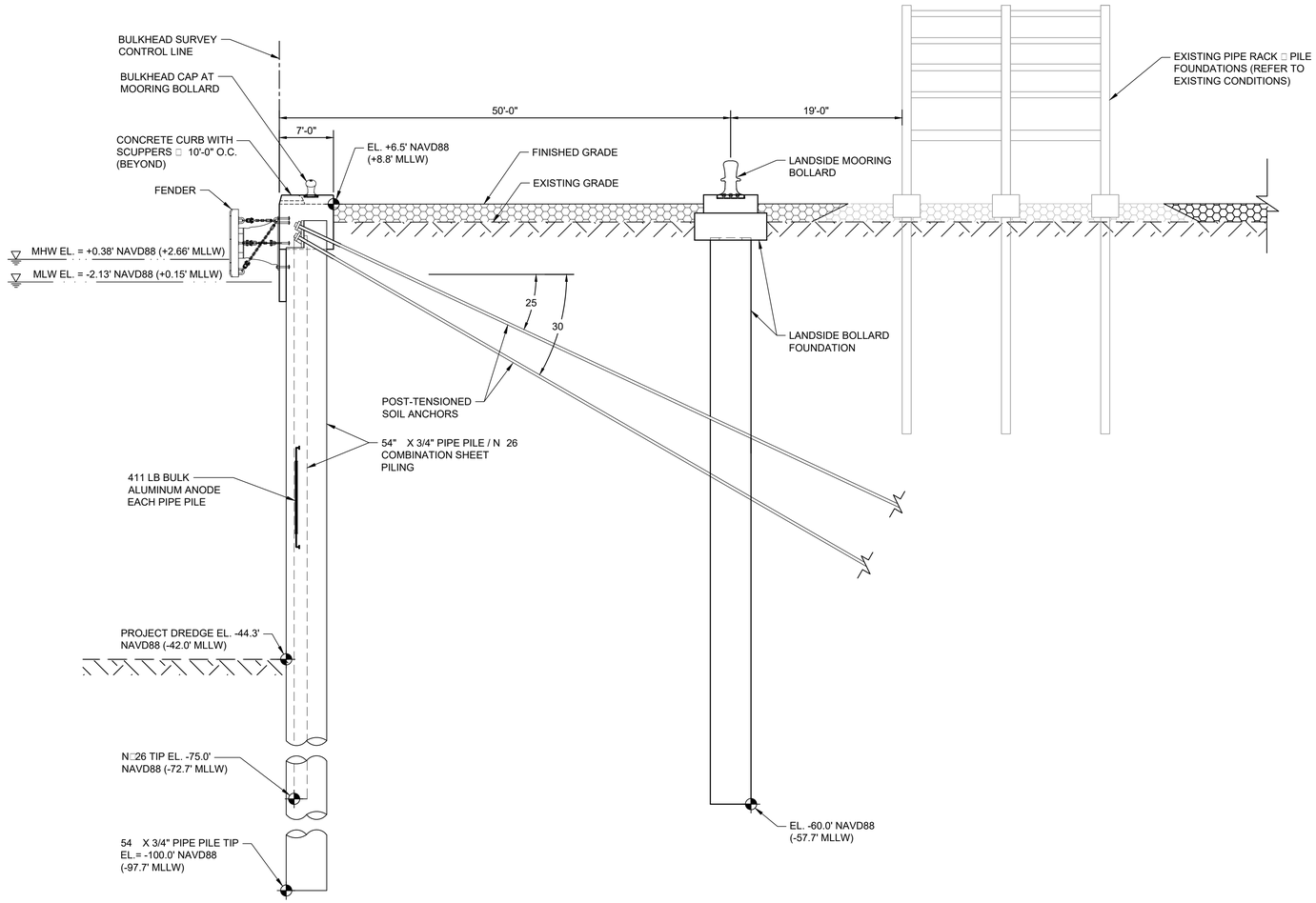
SHEET S-2-1030



SECTION - TYPICAL BULKHEAD BERTH 8A

A S-2-1010

1/8" = 1'-0"



SECTION - TYPICAL BULKHEAD BERTH 9

B S-2-1010

1/8" = 1'-0"

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

8 6 4 2 0 4 8 16

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ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
-	
-	
-	
-	
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

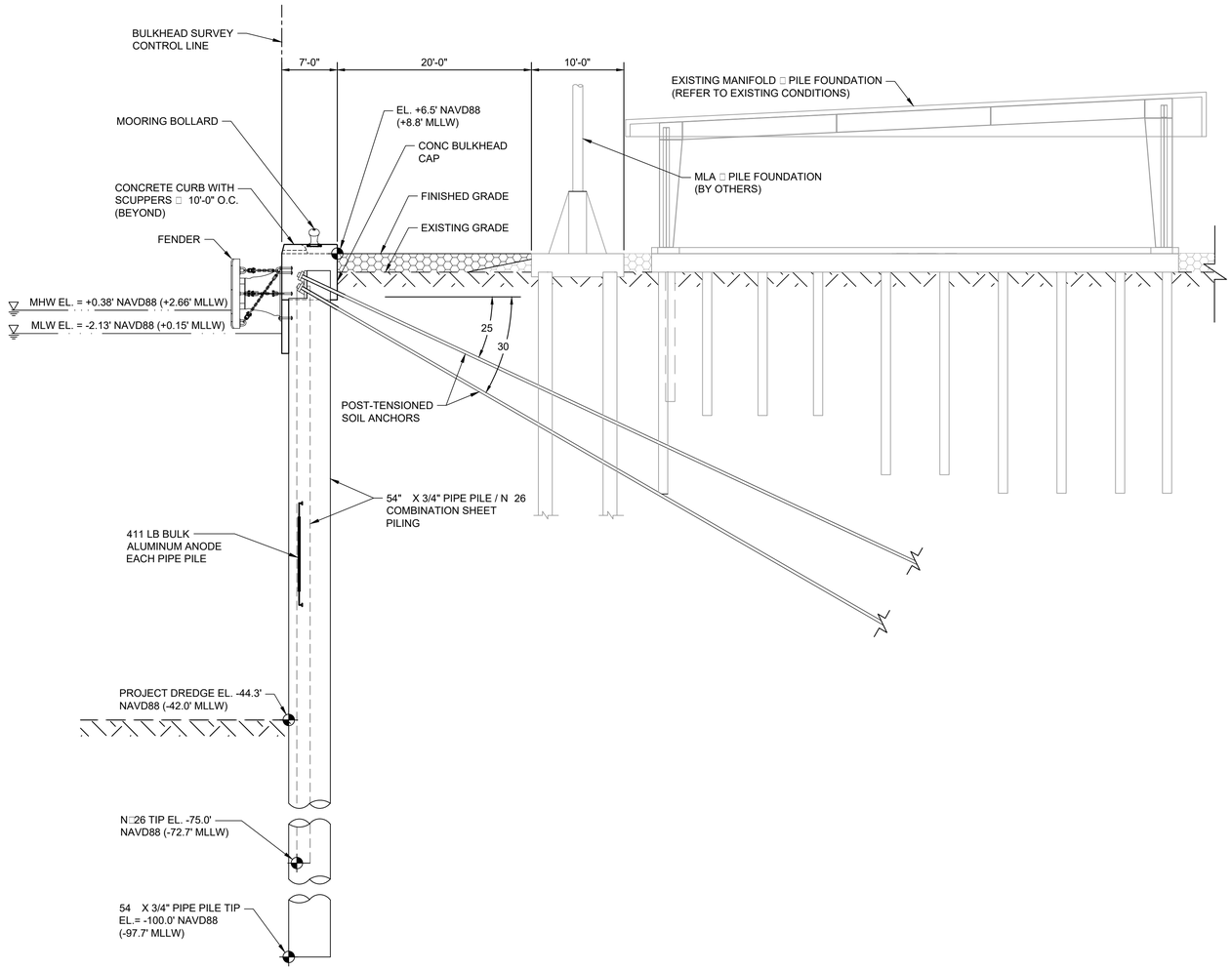
BULKHEAD SECTIONS 1 OF 3

0 1" 2"

FILENAME	S-2-3000.dwg
SCALE	AS SHOWN

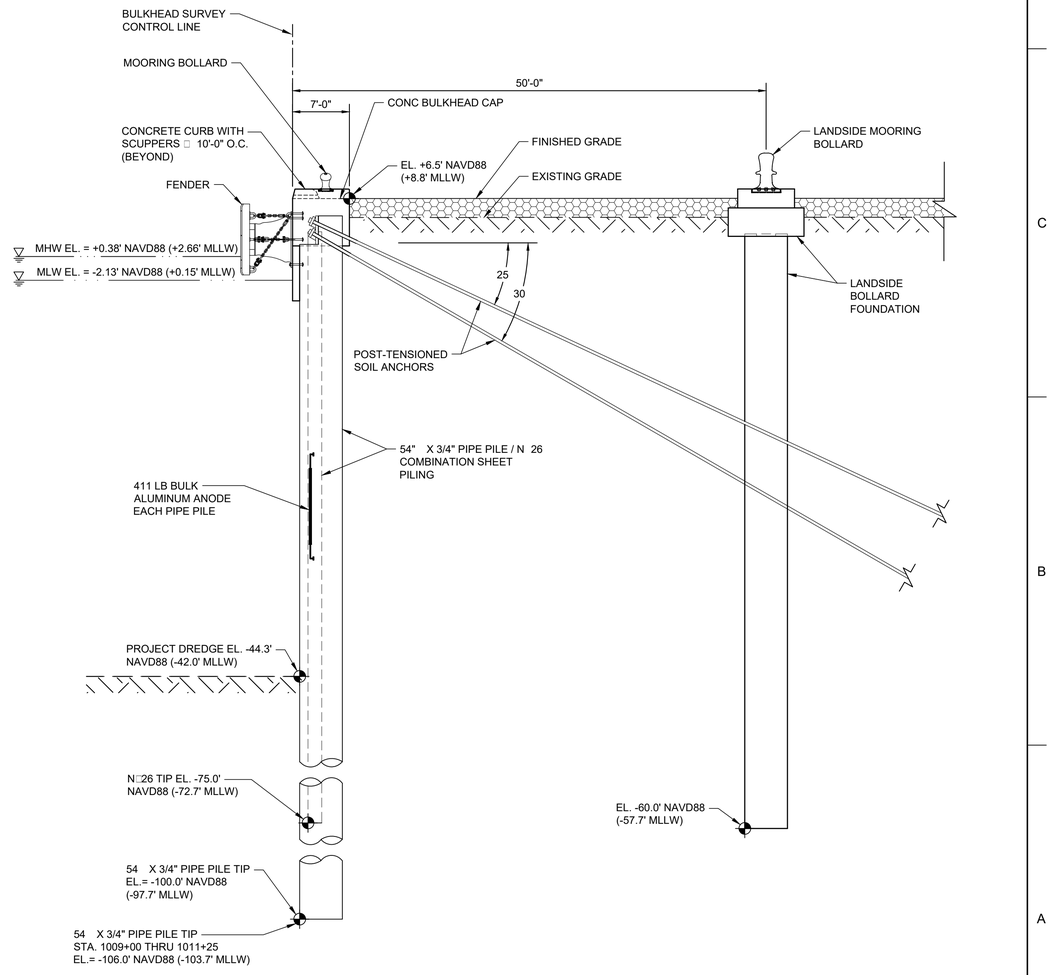
SHEET **S-2-3000**

Plot Time: Tuesday, April 23, 2019 - 10:01am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\S-2-3000.dwg Layout Name: S-2-3000 BULKHEAD SECTIONS (1 OF 3)



SECTION - TYPICAL BULKHEAD SECTION THRU MANIFOLD BUILDING (A / S-2-1020)

1/8" = 1'-0"



SECTION - TYPICAL BULKHEAD BERTH 10 (B / S-2-1020)

1/8" = 1'-0"

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

8 6 4 2 0 4 8 16

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Certificate of Authorization No. 4213

ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

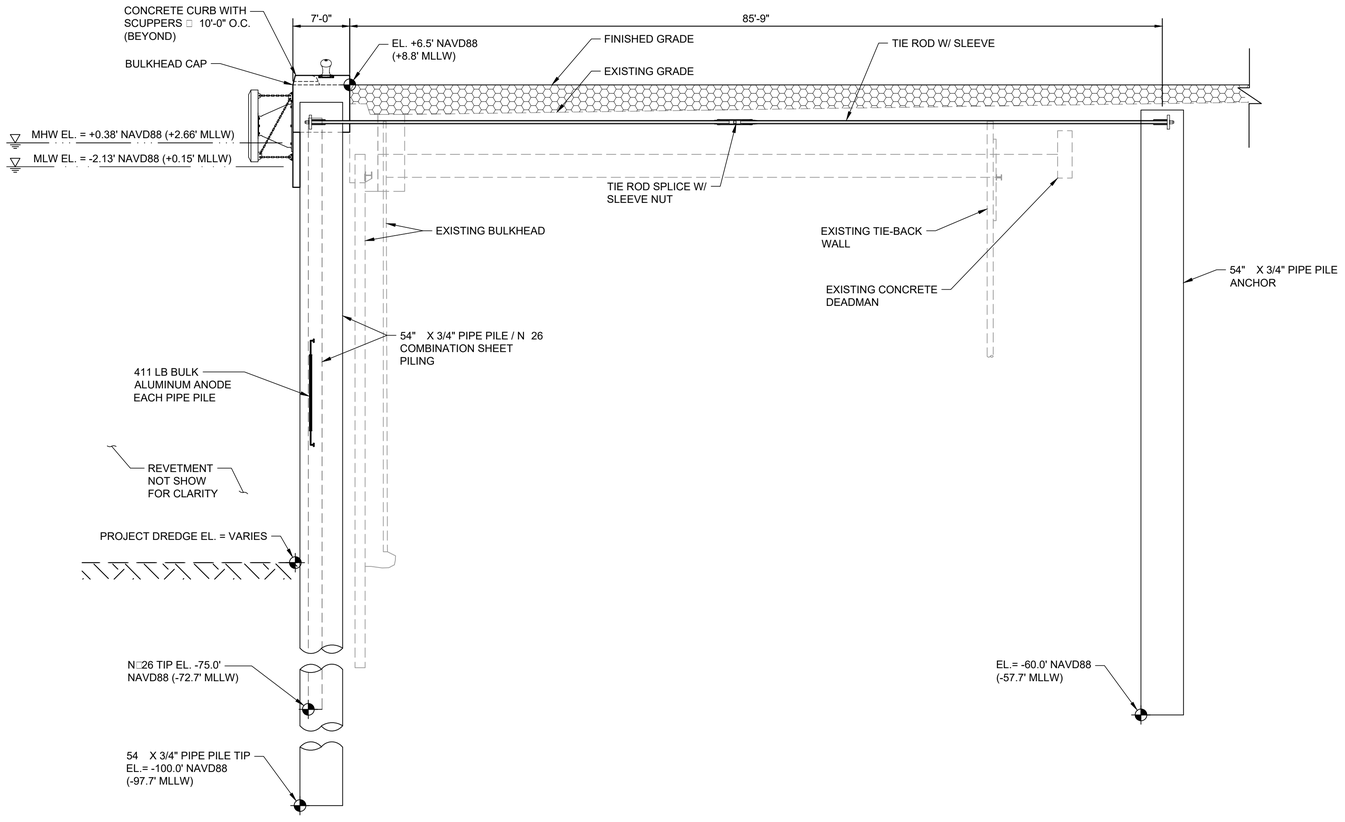
BUL□HEAD SECTIONS □2 OF 3□

0 1" 2"

FILENAME	S-2-3010.dwg
SCALE	AS SHOWN

SHEET S-2-3010

Plot Time: Tuesday, April 23, 2019 - 10:00am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\S-2-3010.dwg Layout Name: S-2-3010 BULKHEAD SECTIONS (2 OF 3)



SECTION - TYPICAL BULKHEAD BERTH 11

1/8" = 1'-0"

A / S-2-1030

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

8 6 4 2 0 4 8 16

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ISSUE	DATE	DESCRIPTION
A	04/23/2019	ISSUED FOR PERMIT

PROJECT MANAGER	SWD
DESIGNED BY	RJD
CHECKED BY	CMM
DRAWN BY	JLH
PROJECT NUMBER	10029043

PRELIMINARY

NOT FOR CONSTRUCTION

BROWARD COUNTY FLORIDA

PORT EVERGLADES SLIP 1 EXPANSION

BULKHEAD SECTIONS 3 OF 3

0 1" 2"

FILENAME	S-2-3020.dwg
SCALE	AS SHOWN

SHEET S-2-3020

Plot Time: Tuesday, April 23, 2019 - 10:04am Plotted by: JEHEL
File Name: H:\P&H PROJECTS_Port Everglades_Slip 1\13.0 CAD DRAWINGS\04-POST JAN 30 Design - PERMIT - USACE\03 Sheet Files\S-2-3020.dwg Layout Name: S-2-3020 BULKHEAD SECTIONS (3 OF 3)