



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

May 12, 2020

Regulatory Division  
South Branch  
Palm Beach Gardens Permits Section

## ***PUBLIC NOTICE***

Permit Application No. SAJ-2019-04349(SP-RHF)

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 Parks & Recreation  
c/o Martin Gross  
950 NW 38<sup>th</sup> Street  
Oakland Park, FL 33687

WATERWAY AND LOCATION: The project would affect waters of the United States associated within the Intracoastal Waterway at 3601 North Ocean Drive within Section 1, Township 51 South, Range 40 East, Hollywood, Broward County, Florida.

Directions to the site are as follows: Take I-95 to exit 21 and proceed east on Sheridan Street for 3.1 miles. The project site is on either side of Sheridan Street approximately 0.1 miles before reaching South Ocean Drive.

APPROXIMATE CENTRAL COORDINATES: Latitude 26.035617°  
Longitude -80.116236°

### **PROJECT PURPOSE:**

Basic: The basic project purpose is to construct two mooring fields.

Overall: The overall project purpose is to construct two mooring fields in southern Broward County, Florida.

EXISTING CONDITIONS: The project area consists of two lagoon areas on either side of Sheridan Street in Hollywood, Florida. The northern project area is approximately 6 acres and features no existing structures. The southern project area is approximately 2.3 acres and also contains no existing structures. The shorelines of both basins contains a mixed of red and black mangroves. A benthic survey was completed on April 10, 2018.

In the southern lagoon, one species of seagrass, paddle grass (*Halophila decipiens*), was observed within the southern section of the survey area (Figure 2). Patches of *H. decipiens* were scattered along the shallow areas (<4') adjacent to the northwestern and northeastern shorelines. Specifically, *H. decipiens* was observed starting at approximately 9' from edge of canopy on the northwestern shoreline and increased to 13' from canopy moving north. On the northeastern side of the basin, *H. decipiens* was observed 26' from the canopy and 20' south of the existing derelict barge. On the central eastern side of the basin, a long patch of *H. decipiens* was observed up until 30' north of the existing dock on the adjacent property. At the southwestern extents of the survey area, *H. decipiens* was observed in dense patches, beginning at 10-15' waterward of the mean high water line (MHWL) with 30-40% coverage.

In the northern lagoon, one species of seagrass, paddle grass (*Halophila decipiens*), was observed within the northern section of the survey area (Figure 2). Patches of *H. decipiens* were scattered along the shallow areas (<4') adjacent to the shoreline. Specifically, small 5'x5' patches and 3'x3' patches were observed along the southern shoreline curve with sparse coverage (10-15%). A larger patch, 8'x16', was observed in the central portion of the survey area along the eastern shoreline. A long patch of *H. decipiens* was observed on the eastern side of the basin, 22' from the canopy line, and a dense patch begins approximately 34' waterward of the northeastern seawall (30% coverage). *Halophila decipiens* was also observed in the north central portion of the basin, extending west towards the ICWW (10-20% coverage).

**PROPOSED WORK:** The applicant proposes construction of two mooring fields with a total of 28 slips. The proposed work will dredging of approximately 11,175 cubic yards of material from a 141,311 square feet area to a depth of -7 feet MLW, installation of 46 mooring balls with anchors, and construction of two floating docks totaling 1031 square feet. All dredging will be more than 10-feet from seagrass beds.

**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:

Impacts to waters of the United States have been avoided and minimized to the greatest extent possible. The proposed dredging avoids all seagrass in the area and provides a 10 foot minimum buffer. Impact to mangroves is limited to trimming with no removal.

**COMPENSATORY MITIGATION** – The applicant has provided the following explanation why compensatory mitigation should not be required:

Impacts to seagrasses have been avoided through the use of buffers and mangrove impacts have been reduced and will be limited to trimming. Therefore, no compensatory mitigation is proposed.

**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, if applicable, those federally recognized tribes with concerns in Florida and the Permit Area.

#### ENDANGERED SPECIES:

The project is within the range and consultation area of the American Crocodile (*Crocodylus acutus*), eastern indigo snake (*Drymarchon corais couperi*), Piping plover (*Charadrius melodus*), swimming sea turtles: [green sea turtle (*Chelonia mydas*), Kemp's Ridley sea turtle (*Lepidochelys kempii*), and Loggerhead sea turtle (*Caretta caretta*)], smalltooth sawfish (*Pristis pectinata*) and wood stork (*Mycteria americana*).

- American Crocodile (*Crocodylus acutus*): The project is located in the species consultation area for the American Crocodile. This species is found primarily in mangrove swamps and along low-energy mangrove lined bays, creeks, and inland swamps. Nesting habitat can include areas sandy shorelines or raised creek/canal banks adjacent to deep water. The project is located in two mangrove lined lagoons which may provide habitat for this species. However, the proposed work will not require alteration of the shoreline and the work in open waters would be temporary. The lagoons are currently utilized by numerous vessels for storage. Therefore, the Corps has determined this project may affect, but is not likely to adversely affect the American crocodile.
- Eastern indigo snake: The project site consists of open water and adjacent uplands (approximately 1.75 acres). The upland staging and construction area may contain holes or cavities that could provide habitat for the eastern indigo snake. By use of the Eastern Indigo Snake Key dated 1 August 2017, the project results in a path of A-B-C-D-E, may affect but is not likely to adversely affect the eastern indigo snake provided the permit is conditioned such that all gopher tortoise burrows, active or inactive, be evacuated prior to site manipulation. With an outcome of "not likely to adversely affect (NLAA)" as outlined in the key, the requirements of Section 7 of the Endangered Species Act are fulfilled for the eastern indigo snake and no further action is required.
- Johnson's seagrass and Johnson's Critical Habitat: A benthic resource survey was conducted on April 10, 2018. Varying coverage of paddle grass (*Halophila decipiens*) was present throughout the project area, but no seagrass was present within the footprint of the proposed activities. All dredging and structures will avoid seagrass with a minimum of 10 feet. The project is not located in Johnson's seagrass designated critical habitat. Therefore, the Corps has determined that the project would have no effect of Johnson's seagrass and its designated critical habitat. An updated seagrass survey will be required to confirm the locations of

resources within the project area.

- Piping Plover: The project is located within the species consultation area. Piping Plovers nest on coastal beaches, sandflats at the ends of sand spits and barrier islands, gently sloped foredunes, sparsely vegetated dunes, and washover areas cut into or between dunes. The project area consists only of an upland areas and the mangrove lined lagoon. There is no suitable habitat within the footprint of the proposed work. Based on the above information, the Corps has determined that the proposed work will have no effect on the piping plover.
- Swimming sea turtles, smalltooth sawfish: Work will occur in waters accessible to the swimming sea turtles and smalltooth sawfish. Smalltooth sawfish and swimming sea turtles may be affected by being unable to use an area for forage or refuge habitat due to potential avoidance of construction activities. Because these species are motile and likely to leave the area during construction, the risk of injury from this type of construction activity is insignificant. The applicant has also agreed to adhere to the JaxBO PDC's for In-Water Activities. Disturbance from construction activities and related noise will be intermittent and only occur during the day for part of the construction period. Turbidity curtains will be used in the project area, will be removed upon project completion, and will not appreciably interfere with use of the area by listed species.
- West Indian Manatee: The project is located in and adjacent to waters accessible by the manatee. Use of The Corps of Engineers, Jacksonville District and the State of Florida Effect Determination Key for the Manatee in Florida (Manatee Key) dated 25 April 2013 and the May 13, 2019 addendum results in a path of A-B-C-G-H-I-J-K-N-O-P (paragraph 1) May affect, not likely to adversely affect. The proposed work will result in the connection of a new slips in a county with a State Approve Manatee Protection Plan. However, the applicant has provided verification that the proposed work is consistent with the Broward County Manatee Protection Plan. The applicant has agreed to adhere to the standard manatee construction conditions during the in-water work.
- Wood stork: The action area is located within 18.6 miles of the nearest wood stork nesting colonies according the google earth RAR layers. According to the Habitat Management Guidelines for the Wood Stork in the Southeast Region, written by John C. Ogden, storks feed primarily on small fish between 1-8 inches in length. Suitable foraging sites are those where the water is between 2-15 inches deep. Suitable foraging habitat is not located in the project footprint because water depths are too deep for the wood stork foraging. Use of the key resulted in the following sequential determination: A (3), "no effect" for the wood stork.

**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. The proposal would impact approximately

3.25 acres of substrate and water column EFH utilized by various life stages of penaeid shrimp complex, reef fish, stone crab, spiny lobster, migratory/pelagic fish, and snapper/grouper complex. A benthic resource survey completed on April 10, 2018, showed varying coverage of paddle grass (*Halophila decipiens*) was present throughout the project area. However, no seagrass was present within the footprint of the proposed activities. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the South Atlantic Region. 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.

**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 Palm Beach Gardens Permits Section, 4400 PGA Boulevard Suite 500, Palm Beach Gardens, Florida 33410 within 30 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, Trey Fraley, in writing at the Palm Beach Gardens Permits Section, 4400 PGA Boulevard Suite 500, Palm Beach Gardens, Florida 33410; by electronic mail at [robert.h.fraley@usace.army.mil](mailto:robert.h.fraley@usace.army.mil), or, by telephone at (561) 472-3526.

**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.



PLOTTED BY: T&A-RHubbard  
 PLOT DATE: 4/13/2020  
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# HOLLYWOOD NORTH BEACH PARK

## MOORING FIELDS

### CITY OF HOLLYWOOD, FLORIDA



COUNTY COMMISSION

- MARK D. BOGEN

DALE V.C. HOLNESS

NAN H. RICH

MICHAEL UDINE

LAMAR P. FISHER

STEVE GELLER

BEAM FURR

TIM RYAN

DR. BARBARA SHARIEF
- MAYOR, DISTRICT 2

VICE MAYOR, DISTRICT 9

DISTRICT 1

DISTRICT 3

DISTRICT 4

DISTRICT 5

DISTRICT 6

DISTRICT 7

DISTRICT 8

COUNTY ADMINISTRATION

BERTHA HENRY

CONSULTANT

THOMPSON & ASSOCIATES, INC.

SUB-CONSULTANTS

- CRAVEN THOMPSON & ASSOCIATES, INC.

OSBORN ENGINEERING

THE CHAPPELL GROUP, INC.

TIERRA SOUTH FLORIDA, INC.
- SURVEY AND MAPPING

MECHANICAL ENGINEERING

BENTHIC SURVEY, ENVIRONMENTAL PERMITTING

GEOTECHNICAL ENGINEERING



SHEET INDEX		
SHEET No	DESC	SHEET TITLE
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08	C-1	PAVING AND GRADING PLAN
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11	C-4	MOORING FIELD SECTIONS
12	C-5	CIVIL DETAILS
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17 - 18	WS-2 THRU WS-3	WATER AND SEWER DETAILS
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21	SW-3	STORM WATER POLLUTION PREVENTION NOTES AND DETAILS
22	GN-1	GENERAL NOTES

## PROJECT MAP

SCALE: 1" = 300'  
SECTION, TOWNSHIP, RANGE:  
S01&12, T51S, R42E  
SITE ADDRESS:  
4008 N OCEAN DRIVE  
HOLLYWOOD, FL 33019

PERMIT STATUS			
AGENCY (LICENSE)	PERMIT No	STATUS	DATE
FDEP (ERP)		N/A	ISSUE: EXPIRATION:
FDEP (SUBMERGED LANDS LEASE)		N/A	ISSUE: EXPIRATION:
BCEPGMD (ERL)		N/A	ISSUE: EXPIRATION:
USACOE (INDIVIDUAL)		N/A	ISSUE: EXPIRATION:
CITY OF HOLLYWOOD (REVIEW ONLY)		N/A	ISSUE: EXPIRATION:



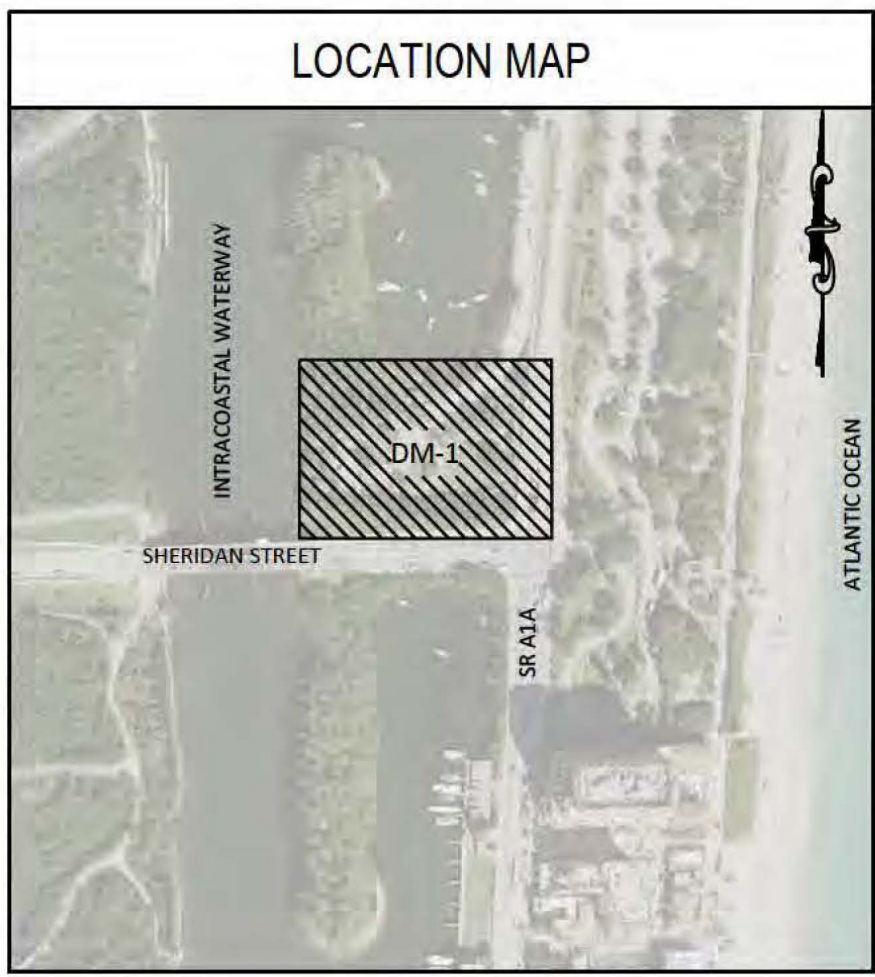
DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731  
DATE: April 13, 2020

90% SUBMITTAL

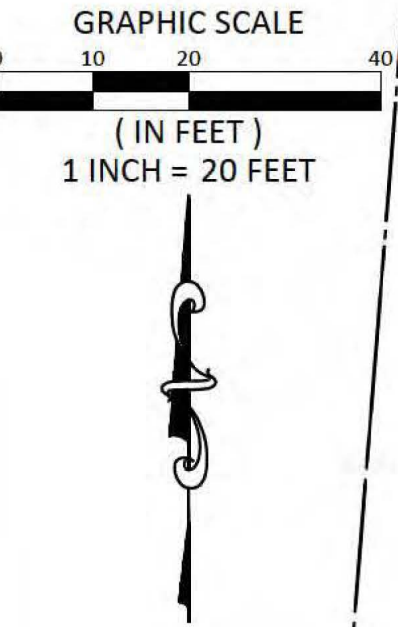
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01 OF 22



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LEGEND	
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BOS	BOTTOM OF SILT
CB	CATCH BASIN
CLEAR	CLEARANCE
CONC	CONCRETE
DR	DRAINAGE
ELEC	ELECTRIC
ELEV	ELEVATION
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
IE	INVERT ELEVATION
LF	LINEAR FEET
NAVD	NORTH AMERICAN VERTICAL DATUM
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE PIPE
PROP	PROPOSED
RE	RIM ELEVATION
RIM	RIM OF STRUCTURE
R/W	RIGHT OF WAY
SCH	SCHEDULE
STR	STRUCTURE
SW	SIDEWALK
TOP	TOP OF PIPE
TOS	TOP OF SILT
TYP	TYPICAL
WM	WATER MAIN
W/	WITH
EXIST GRADE (FT-NAVD)	
ELEVATIONS RECORDED BY	
SOUNDINGS (FT-NAVD)	
ELEVATIONS MEASURED BY	
SEDIMENT PROBES (FT-NAVD)	
PROP GRADE (FT-NAVD)	
STR-1	DRAINAGE STRUCTURE ID
1	CONFLICT MARKER
○	CONCRETE MOORING ANCHOR
	TYPE "F" CONC CURB & GUTTER
	TYPE "D" CONC CURB
→	FLOW ARROW
	TO BE REMOVED
	TO BE DREDGED
TOTAL AREA = 141,311 SF	
= (11,175 CY)	
	TO BE FILLED
	SEAGRASS BED
	FLOATING DOCK
	GANGWAY
	SIDEWALK
	TO BE REMOVED
	CHAIN LINK FENCE
	DECORATIVE FENCE
	PROPERTY LINE
	LOT LINE
	SECTION LINE
	EASEMENT LINE
	R/W LINE
	TOP OF BANK



90% SUBMITTAL

No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

DESIGNED: NR  
DATE: 03/27/18  
DRAWN: RH  
DATE: 03/27/18  
CHECKED: DB  
DATE: 07/15/18

**TA** THOMPSON & ASSOCIATES  
CERTIFICATE OF AUTHORIZATION 28185  
PO BOX 22398, FORT LAUDERDALE, FLORIDA 33335  
MIAMI-DADE (786) 897.5919  
BROWARD (954) 761.1073  
PALM BEACH (561) 932.1668

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

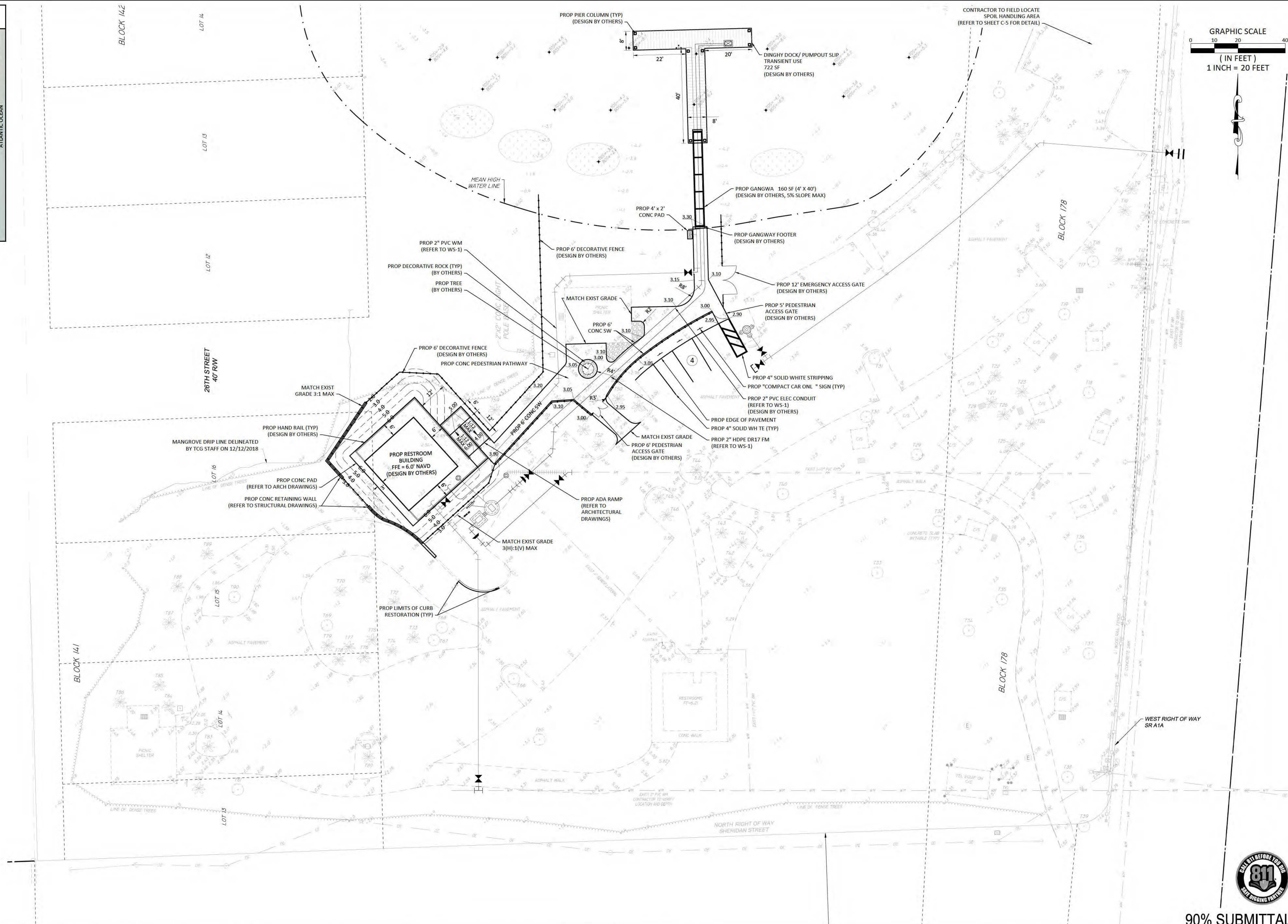
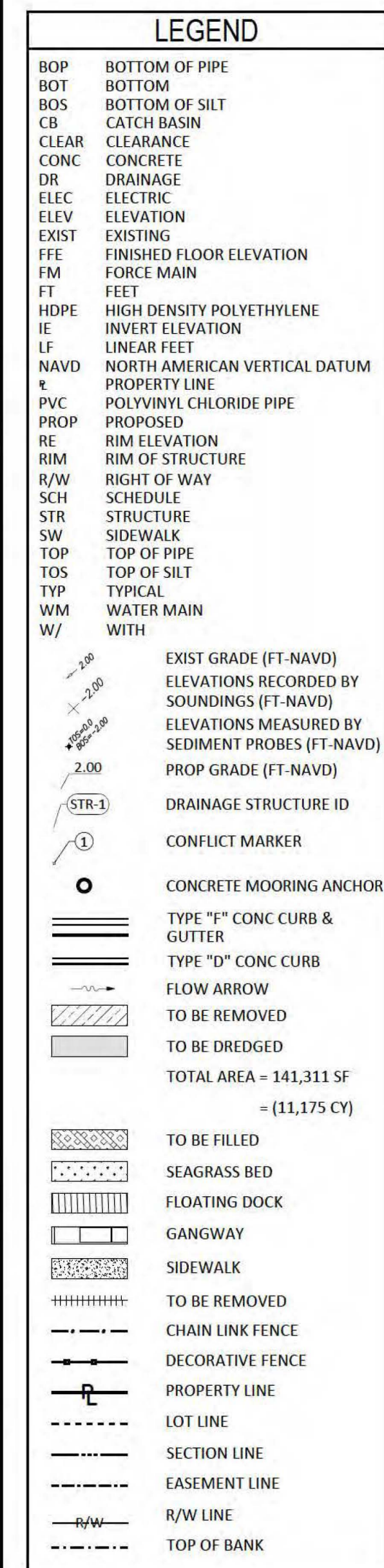
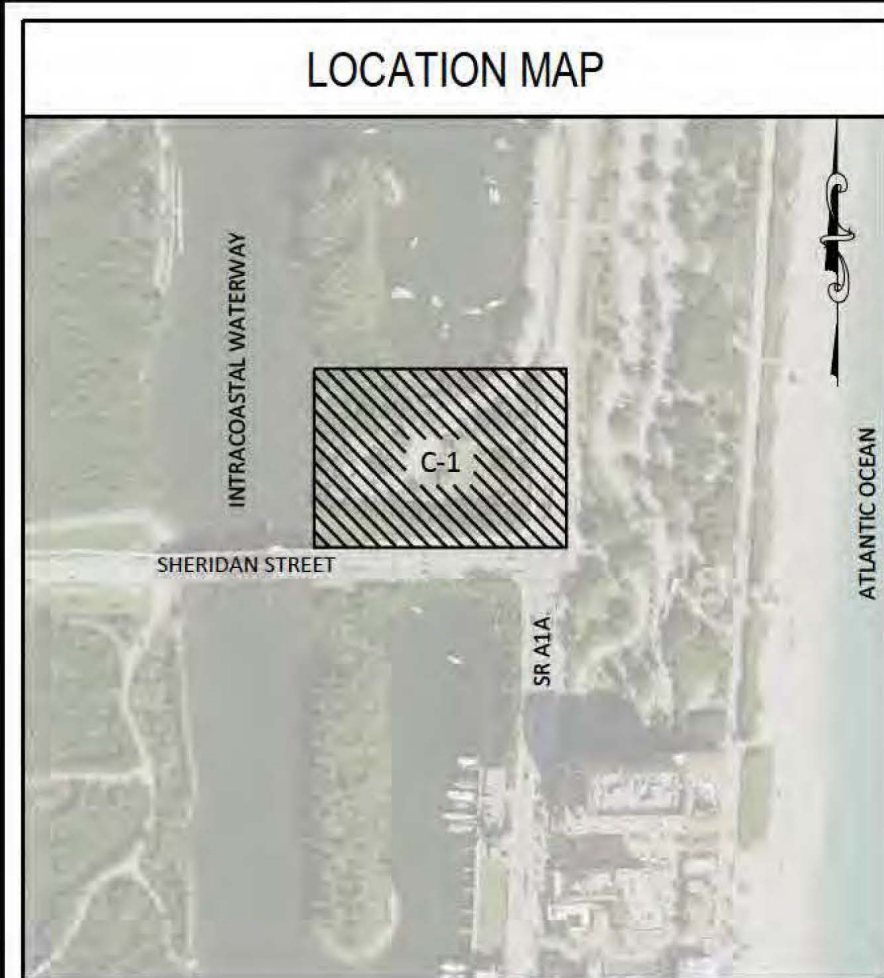
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DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731  
DATE: April 13, 2020

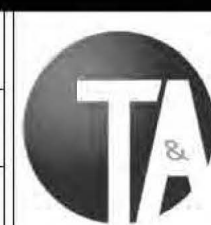
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DESIGNED:	NR
DATE:	03/27/18
DRAWN:	RH
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**THOMPSON & ASSOCIATES**  
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 PALM BEACH (561) 932.1668

CITY OF HOLLYWOOD, FLORIDA

PAVING AND GRADING PLAN

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731

DATE: April 13, 2020

SCALE:

 $1^{\text{st}} = 20^{\text{th}}$ 

PROJECT No.:

CAD FILE:

17014 PGD.d

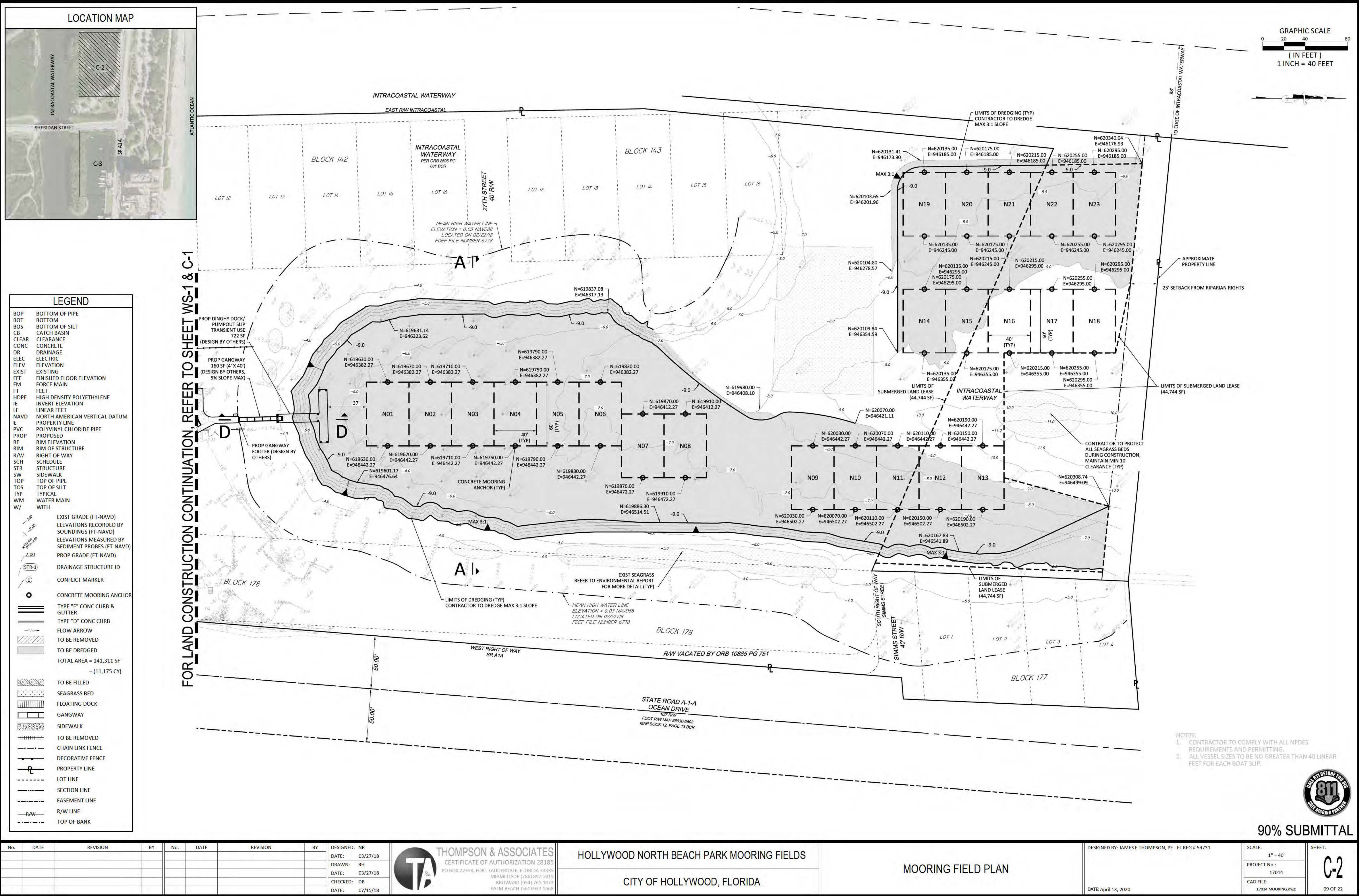
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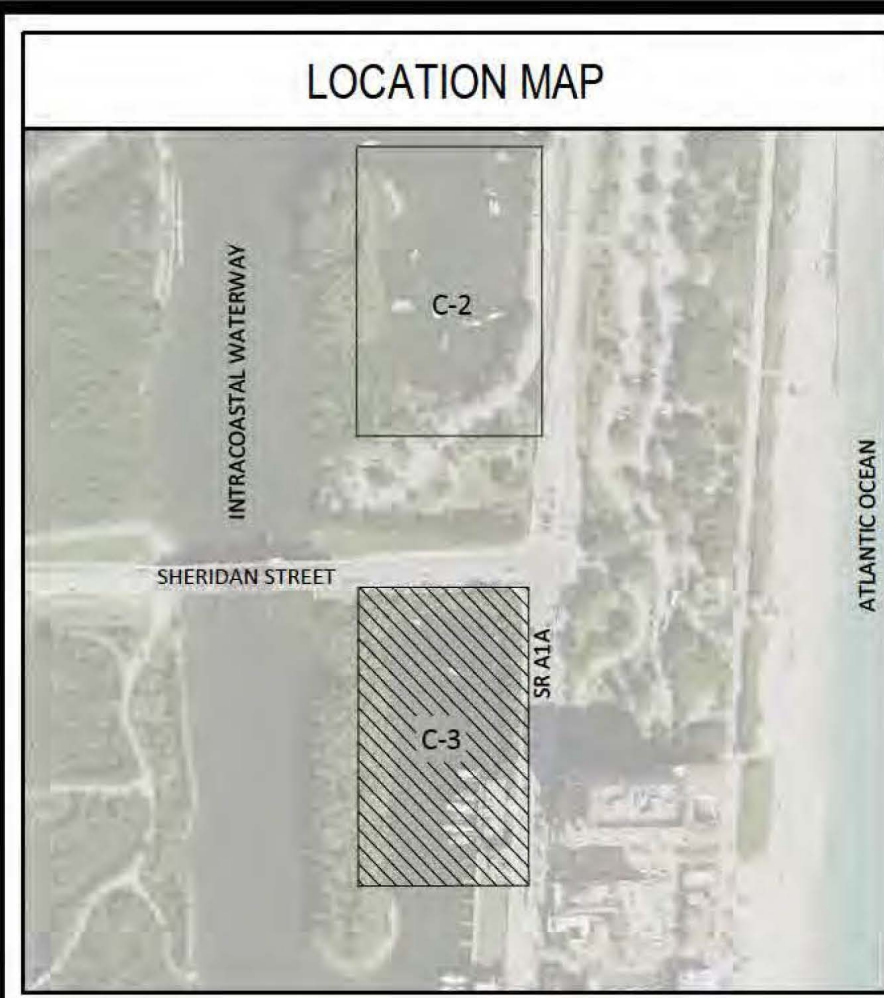
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PLOT DATE: 4/13/2020  
PLOTTED BY: T&A-Rhubard



No.	DATE	REVISION	BY	No.	DATE	REVISION	BY



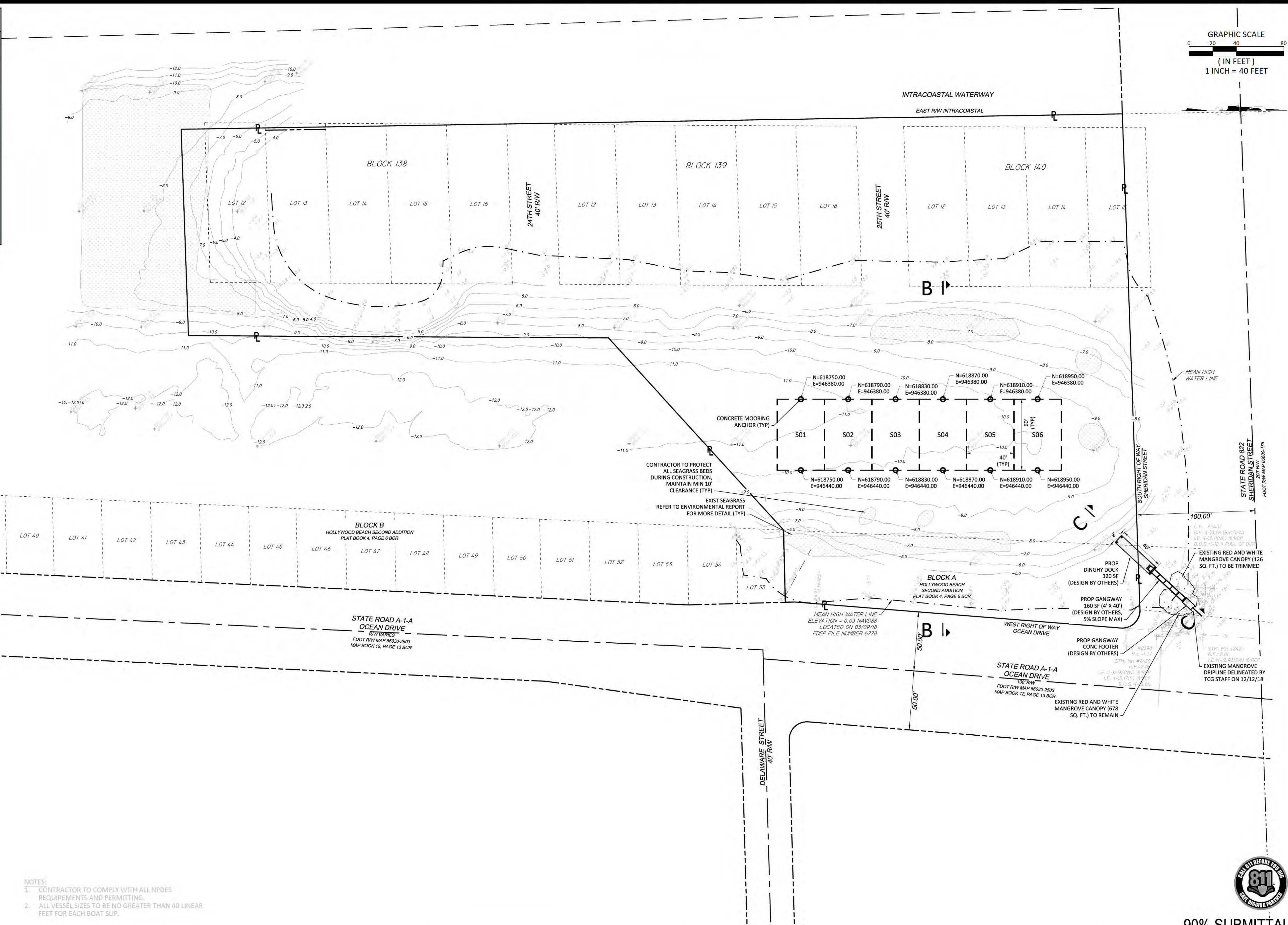
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**LEGEND**

BOP	BOTTOM OF PIPE
BOT	BOTTOM
BOS	BOTTOM OF SILT
CB	CATCH BASIN
CLEAR	CLEARANCE
CONC	CONCRETE
DR	DRAINAGE
ELEC	ELECTRIC
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DRAINAGE STRUCTURE ID  
CONFLICT MARKER  
CONCRETE MOORING ANCHOR  
TYPE "F" CONC CURB & GUTTER  
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FLOW ARROW  
TO BE REMOVED  
TO BE DREDGED  
TOTAL AREA = 141,311 SF  
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FLOATING DOCK  
GANGWAY  
SIDEWALK  
TO BE REMOVED  
CHAIN LINK FENCE  
DECORATIVE FENCE  
PROPERTY LINE  
LOT LINE  
SECTION LINE  
EASEMENT LINE  
R/W LINE  
TOP OF BANK



NOTES:  
1. CONTRACTOR TO COMPLY WITH ALL NPDES REQUIREMENTS AND PERMITTING.  
2. ALL VESSEL SIZES TO BE NO GREATER THAN 40 LINEAR FEET FOR EACH BOAT SLIP.

No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

DESIGNED: NR	DATE: 03/27/18
DRAWN: RH	DATE: 03/27/18
CHECKED: DB	DATE: 07/15/18

**THOMPSON & ASSOCIATES**  
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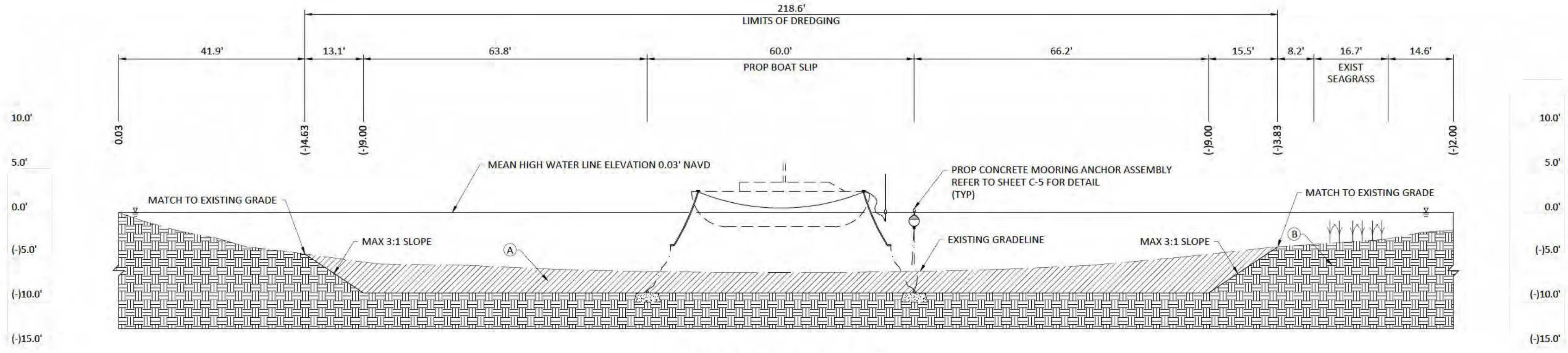
HOLLYWOOD NORTH BEACH PARK MOORING FIELDS  
CITY OF HOLLYWOOD, FLORIDA

MOORING FIELD PLAN

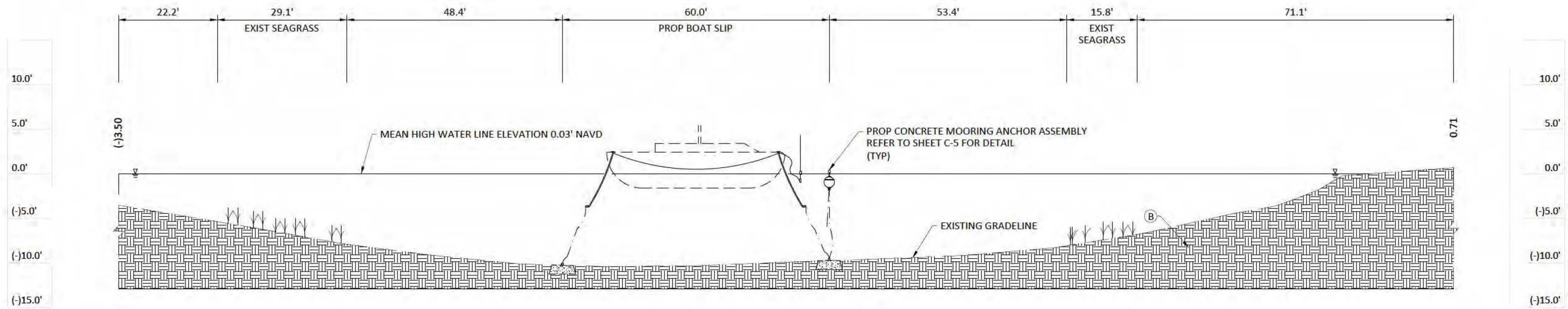
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DATE: April 13, 2020		



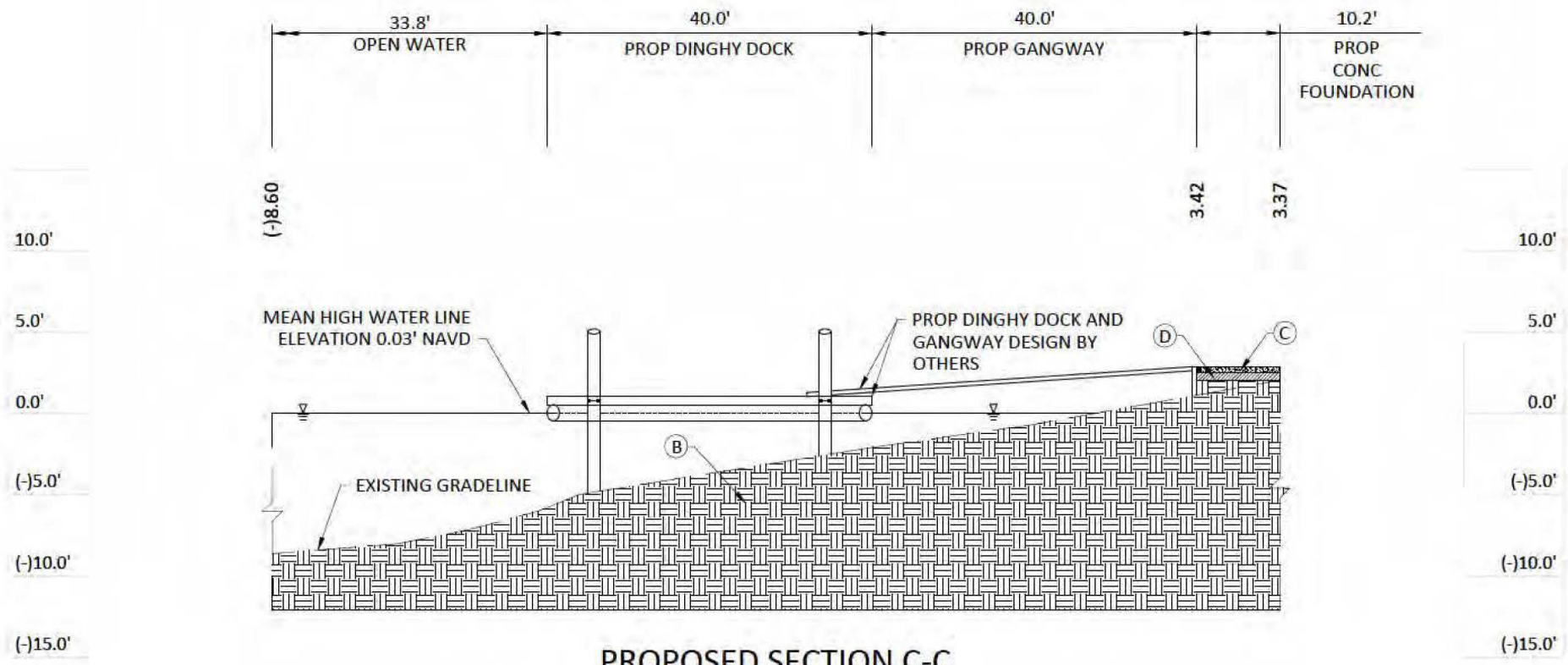
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PROPOSED SECTION A-A



PROPOSED SECTION B-B



PROPOSED SECTION C-C

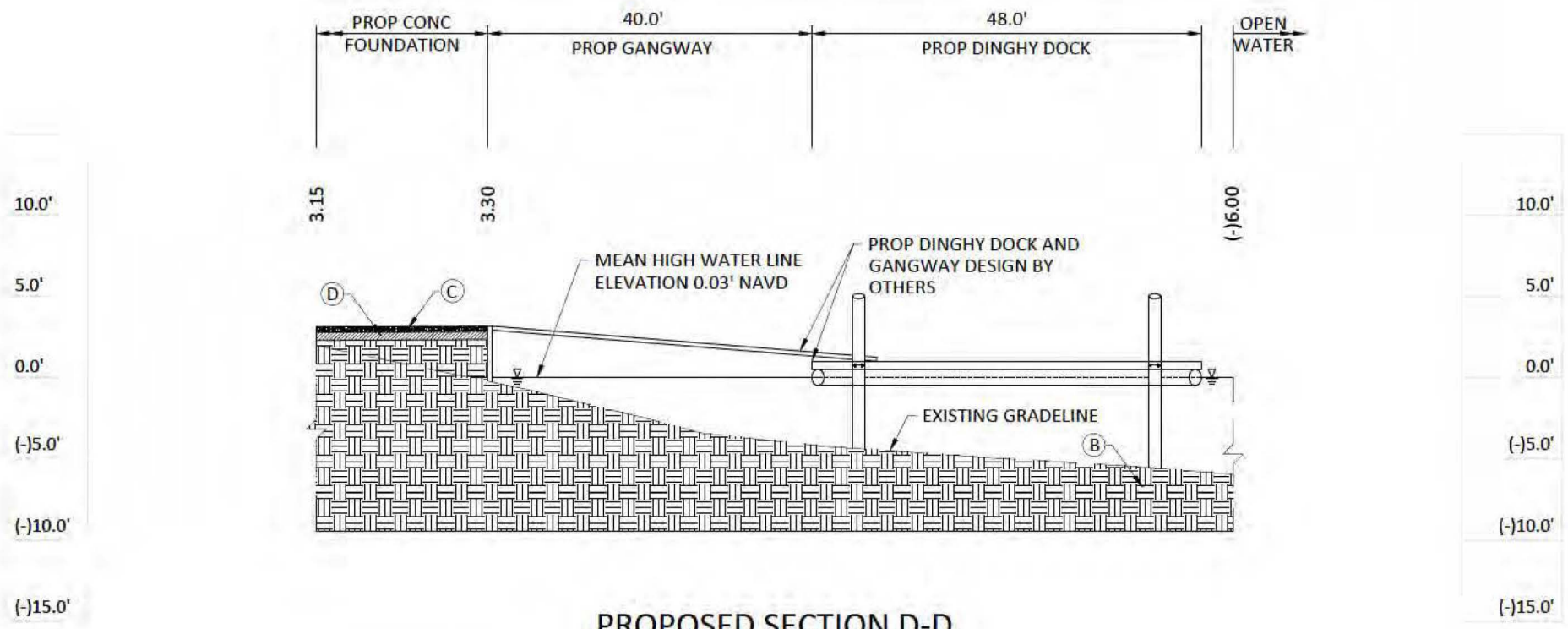
A TO BE DREDGED

B EARTH

C CONC FOUNDATION

D 12" STABILIZED SUBGRADE (MIN LBR 40)

SCALE: 1" = 20' HORIZONTAL  
1" = 10' VERTICAL



PROPOSED SECTION D-D

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS  
CITY OF HOLLYWOOD, FLORIDA

MOORING FIELD SECTIONS

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731  
DATE: April 13, 2020

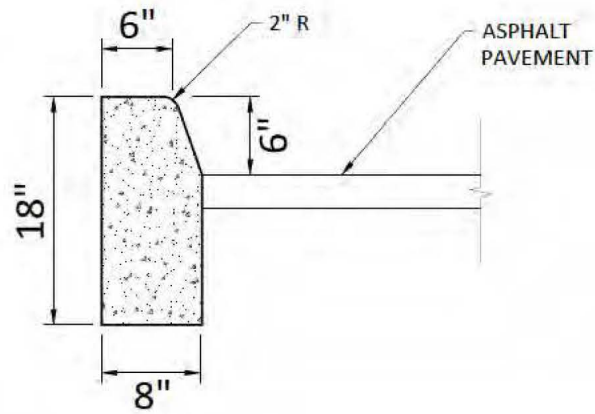
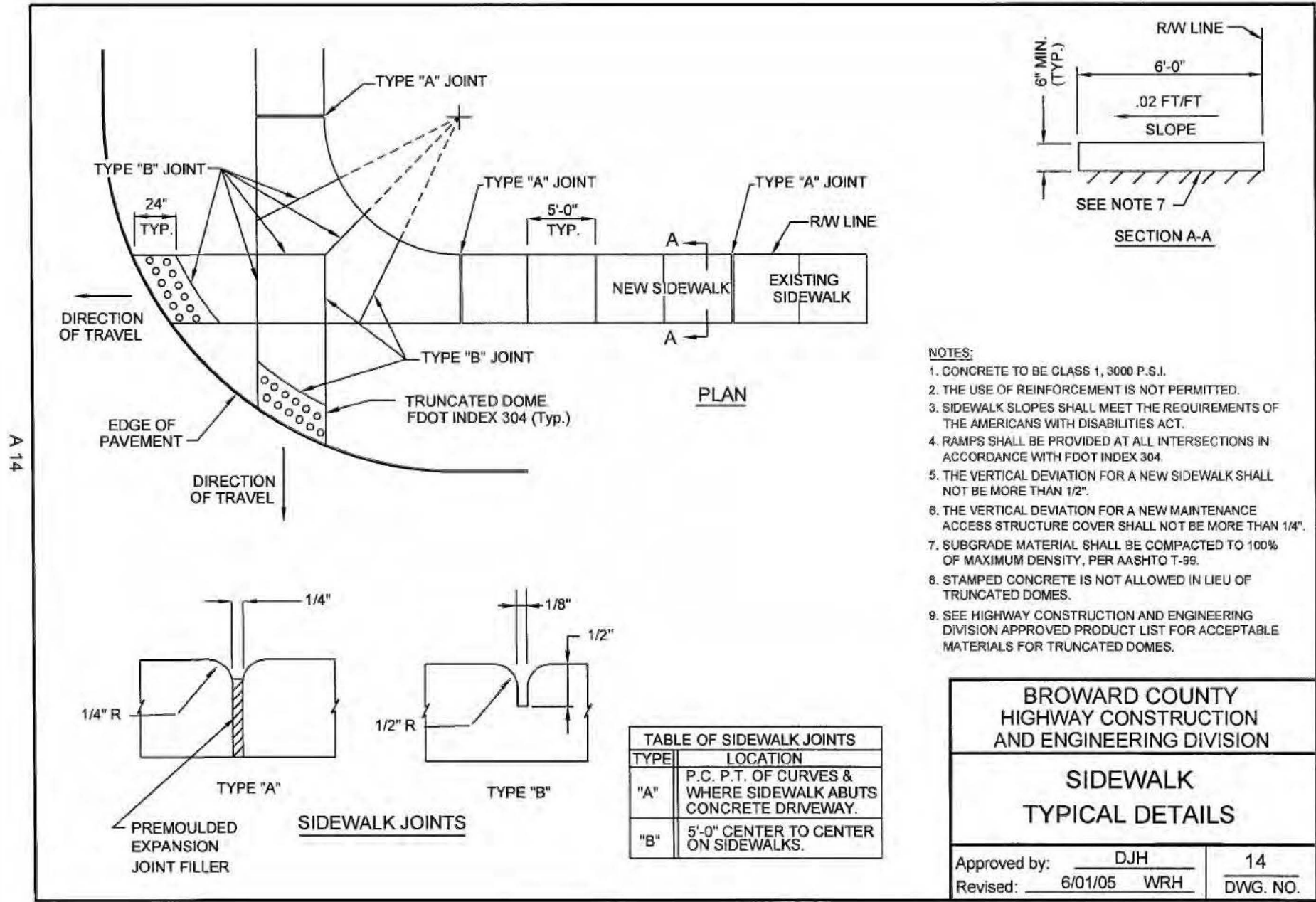
90% SUBMITTAL

SCALE: AS NOTED  
PROJECT No.: 17014  
CAD FILE: 17014 SECT.dwg

SHEET: C-4  
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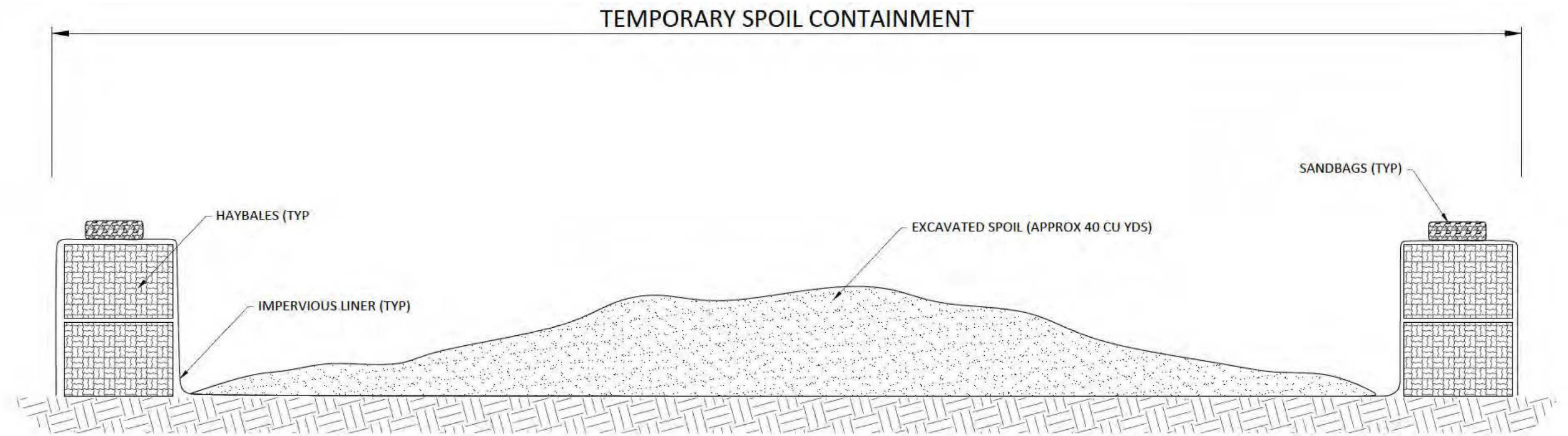


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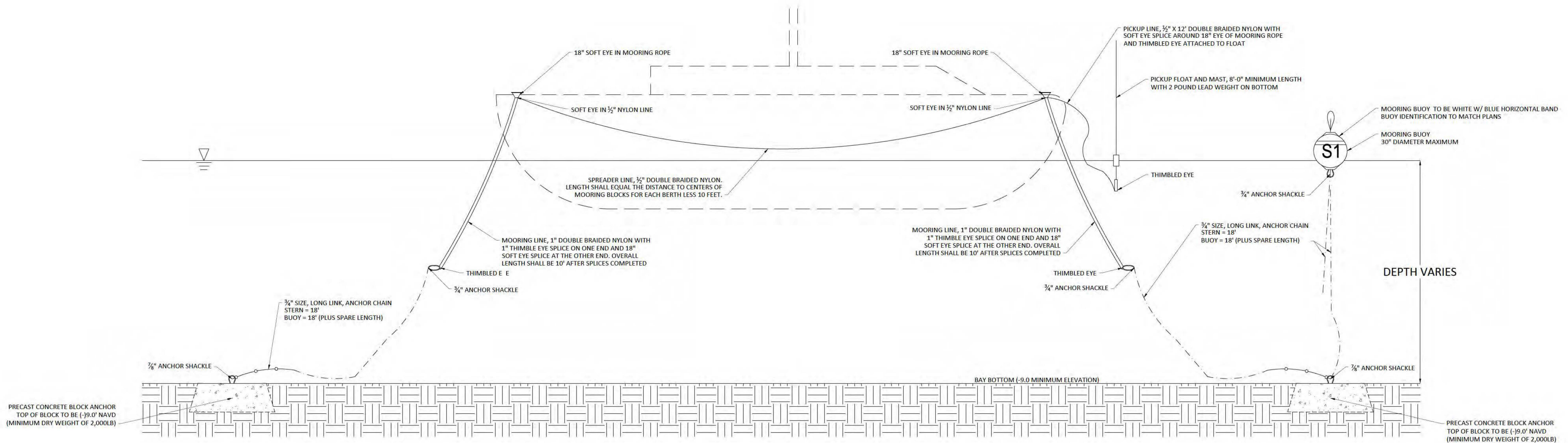
NOTE:  
ALL CONCRETE SHALL HAVE A MINIMUM  
COMPRESSIVE STRENGTH OF 3,000 PSI AT 28  
DAYS.

TYPE 'D' CURB



NOTE:  
1. SPOIL CONTAINMENT AREA TO INCLUDE A SYNTHETIC, IMPERVIOUS LINER (PVC OR SIMILAR) TO ELIMINATE LEACHING DURING THE DRYING PROCESS.  
2. ONCE SPOIL MATERIAL IS DRY, ALL MATERIAL WILL BE USED BY CONTRACTOR OR TRANSPORTED WITH LINED TRUCKS TO AN APPROVED UPLAND LANDFILL.  
3. DREDGED MATERIAL WILL BE REMOVED FROM THE TEMPORARY CONTAINMENT AREA AND HAULED AWAY BY THE CONTRACTOR AS NEEDED.

TEMPORARY SPOIL CONTAINMENT  
N.T.S.



TYPICAL CONCRETE MOORING ANCHOR DETAIL  
N.T.S.

90% SUBMITTAL

No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

TA

THOMPSON & ASSOCIATES

CERTIFICATE OF AUTHORIZATION 28185

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HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

CIVIL DETAILS

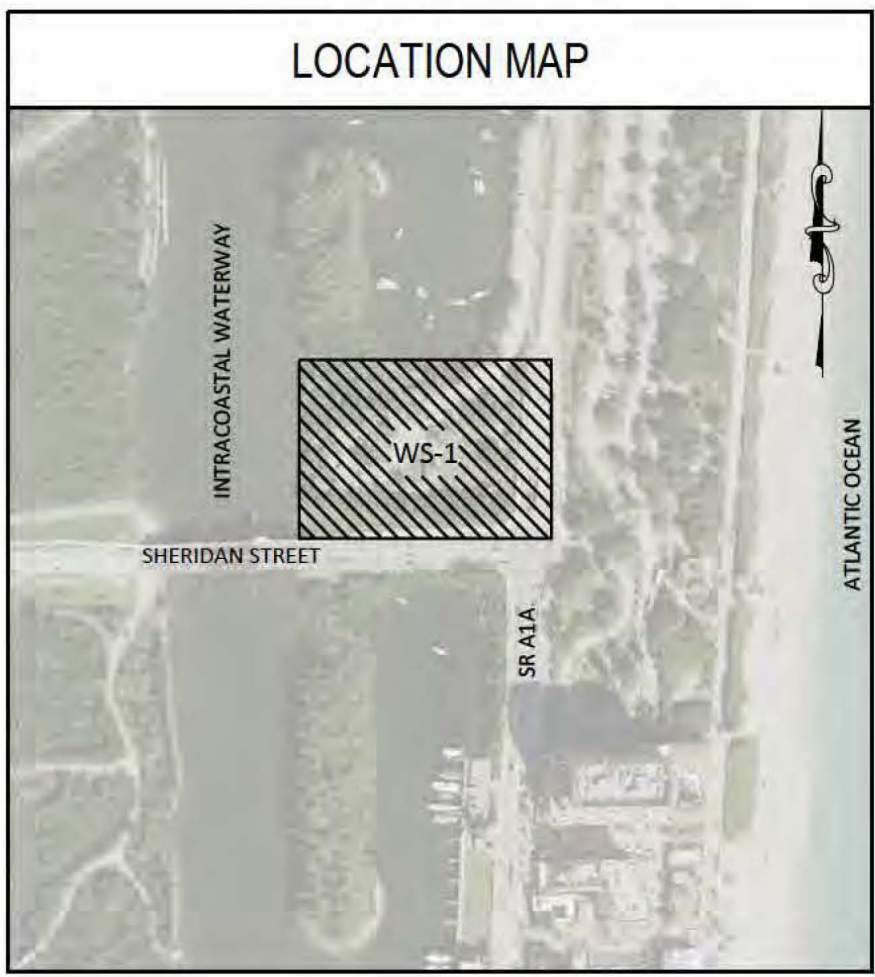
DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731  
DATE: April 13, 2020

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PROJECT No.: 17014  
CAD FILE: 17014 GN.dwg

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LEGEND

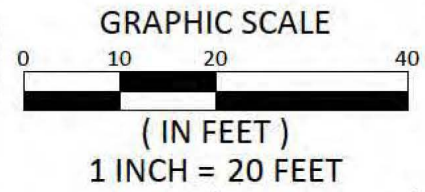
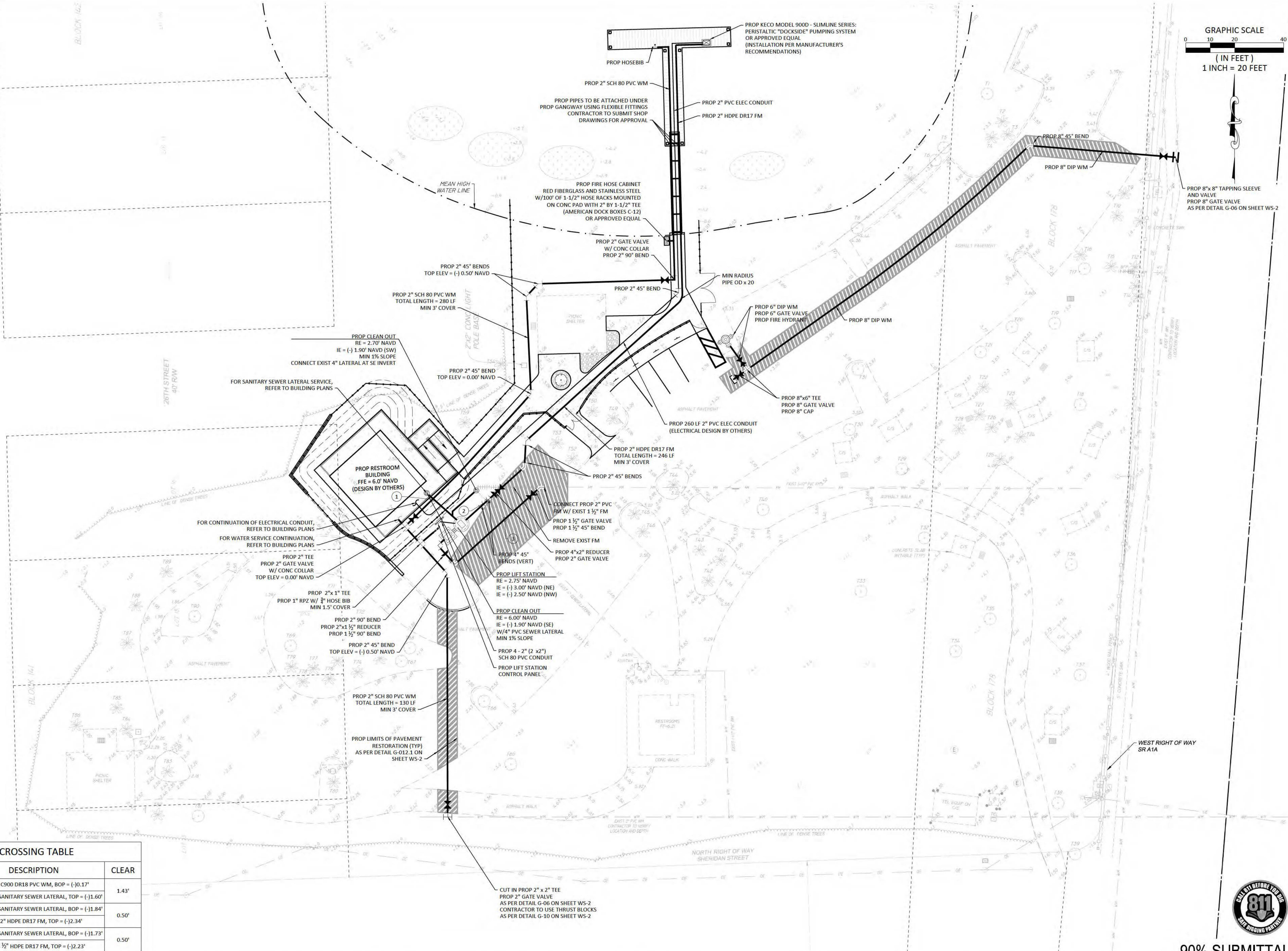
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BOS	BOTTOM OF SILT
CB	CATCH BASIN
CLEAR	CLEARANCE
CONC	CONCRETE
DR	DRAINAGE
ELEC	ELECTRIC
ELEV	ELEVATION
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
IE	INVERT ELEVATION
LF	LINEAR FEET
NAVD	NORTH AMERICAN VERTICAL DATUM
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE PIPE
PROP	PROPOSED
RE	RIM ELEVATION
RIM	RIM OF STRUCTURE
R/W	RIGHT OF WAY
SCH	SCHEDULE
STR	STRUCTURE
SW	SIDEWALK
TOP	TOP OF PIPE
TOS	TOP OF SILT
TYP	TYPICAL
WM	WATER MAIN
W/	WITH

	EXIST GRADE (FT-NAVD)
	ELEVATIONS RECORDED BY SOUNDINGS (FT-NAVD)
	ELEVATIONS MEASURED BY SEDIMENT PROBES (FT-NAVD)
	PROP GRADE (FT-NAVD)
	DRAINAGE STRUCTURE ID
	CONFLICT MARKER
	CONCRETE MOORING ANCHOR
	TYPE "F" CONC CURB & GUTTER
	TYPE "D" CONC CURB
	FLOW ARROW
	TO BE REMOVED
	TO BE DREDGED
	TOTAL AREA = 141,311 SF = (11,175 CY)
	TO BE FILLED
	SEAGRASS BED
	FLOATING DOCK
	GANGWAY
	SIDEWALK
	TO BE REMOVED CHAIN LINK FENCE
	DECORATIVE FENCE
	PROPERTY LINE
	LOT LINE
	SECTION LINE
	EASEMENT LINE
	R/W LINE
	TOP OF BANK

UTILITIES CROSSING TABLE

NO.	GRADE	DESCRIPTION	CLEAR
1	5.60'	PROP 2" C900 DR18 PVC WM, BOP = (-)0.17'	1.43'
		PROP 4" PVC SANITARY SEWER LATERAL, TOP = (-)1.60'	
2	2.45'	EXIST 4" PVC SANITARY SEWER LATERAL, BOP = (-)1.84'	0.50'
		PROP 2" HDPE DR17 FM, TOP = (-)2.34'	
3	2.40'	EXIST 4" PVC SANITARY SEWER LATERAL, BOP = (-)1.73'	0.50'
		PROP 1 1/2" HDPE DR17 FM, TOP = (-)2.23'	



90% SUBMITTAL

No.	DATE	REVISION	BY

DESIGNED: NR  
DATE: 03/27/18  
DRAWN: RH  
DATE: 03/27/18  
CHECKED: DB  
DATE: 07/15/18



HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

WATER AND SEWER PLAN

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731

DATE: April 13, 2020

SCALE: 1" = 20'

PROJECT No.: 17014

CAD FILE: 17014 WS.dwg

SHEET: WS-1

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PLOTTED BY: T&A-Rhubard  
 PLOT DATE: 4/13/2020  
 FILE PATH: C:\Users\T&A-Rhubard\Desktop\OFFLINE PROJECTS\17014\PLANS\17014 GN.dwg

- 1) PADLOCKABLE NEMA 4X TYPE 316SS DUPLEX ELECTRICAL CONTROL PANEL, OR APPROVED EQUAL, TO INCLUDE AS A MINIMUM: INTERLOCKED MAIN/EMERGENCY CIRCUIT BREAKERS, EMERGENCY GENERATOR CONNECTION, PUMP CIRCUIT BREAKERS, 120V DUPLEX GFCI CONVENIENCE RECEPTACLE, MOTOR STARTERS WITH THERMAL OVERLOAD PROTECTION, HAND-OFF-AUTO SWITCHES, RUN LIGHTS, NON-RESETTABLE ELAPSED TIME METERS, AND OIL SEAL FAIL INDICATION FOR EACH PUMP, LIGHTNING ARRESTOR, SURGE ARRESTOR, PHASE/VOLTAGE MONITOR, DUPLEX ALTERNATOR WITH MODE SELECTOR, 12VDC BATTERY-BACKUP HIGH WATER ALARM LIGHT WITH HORN, SILENCE AND TEST, AND 4-POINT INTRINSICALLY-SAFE FLOAT CONTROL.
- 2) CONTROL PANEL TO BE MODEL NUMBER 4XSS/M-5021-A7D1EGILM02RSV, OR APPROVED EQUAL
- 3) BOTTOM OF CONTROL PANEL TO BE MOUNTED AT/ABOVE 100 YEAR FLOOD ELEVATION OF 6.00' NAVD
- 4) HATCHES TO BE EQUIPPED WITH AUTOMATIC HOLD OPEN ARMS, HORIZONTAL COMPRESSION SPRINGS, WATERTIGHT SLAM LOCKS, RECESSED OVERSIZE AN"12" PADLOCK BOX, AND SAFETY CHAINS. HINGES TO BE ATTACHED USING TAMPER PROOF CARRIAGE BOLTS WITH WELDED NUTS.
- 5) PANEL TO MANUFACTURED AND LABELED IN ACCORDANCE WITH UL STANDARDS FOR SAFETY 508A & 698A
- 6) ELECTRICAL SYSTEMS AND COMPONENTS IN RAW WASTEWATER WET WELLS SHALL COMPLY WITH CURRENT NEC CODE REQUIREMENTS FOR CLASS 1, DIVISION 1, GROUP D LOCATIONS. IN ADDITION, EQUIPMENT LOCATED IN THE WET WELL SHALL BE SUITABLE FOR USE UNDER CORROSIVE CONDITIONS

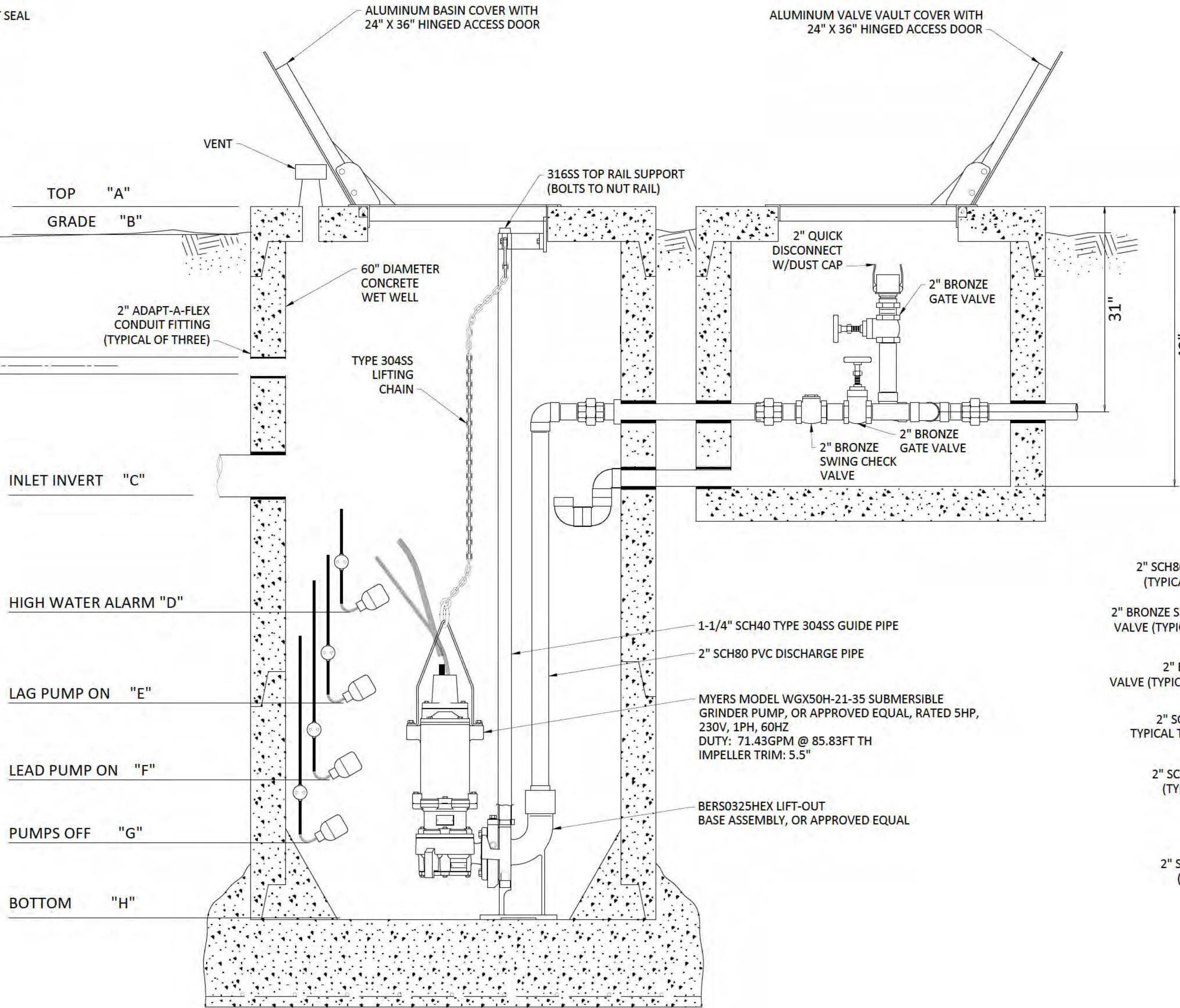
PUMP SCHEDULE

PUMP TYPE	SUBMERSIBLE GRINDER
NUMBER OF PUMPS	2
FLOW RATE (GPM)	71.43
TOTAL HEAD (FT)	85.83
PUMP MANUFACTURER	MYERS, OR APPROVED EQUAL
PUMP MODEL	WG50H-21-35, OR APPROVED EQUAL
MOTOR HORSEPOWER	5
MOTOR SPEED	3450
VOLTAGE	230
PHASE	1
HZ	60
MOTOR FLA	32

DUPLEX SUBMERSIBLE LIFT STATION  
 CONCRETE WET WELL & VALVE VAULT  
 PUMP MAKE/MODEL: MYERS WG50H  
 LIFT-OUT MAKE/MODEL: BERS0325HEX  
 OR APPROVED EQUAL

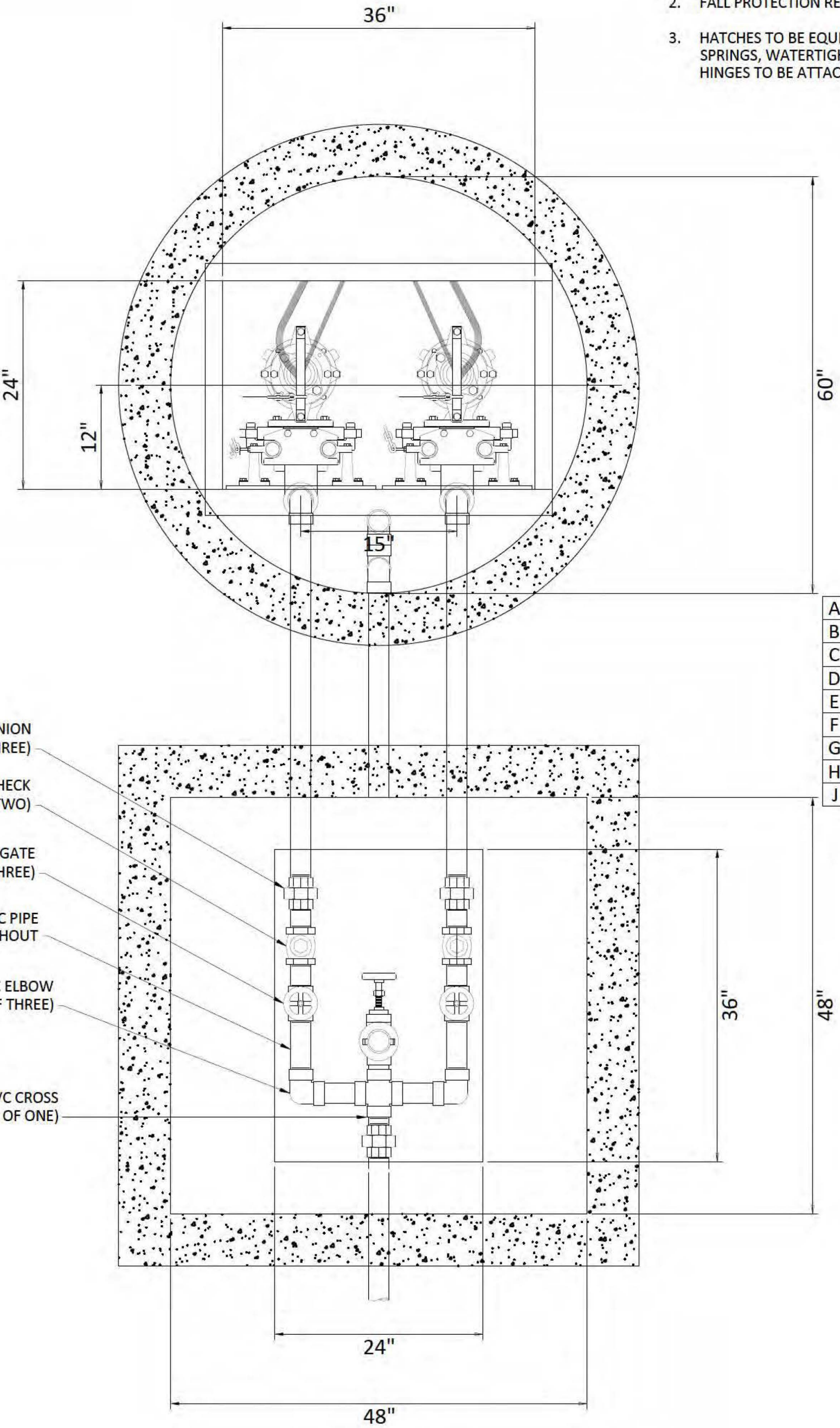
NOTES:

1. WETWELL AND VALVE VAULT HATCHES SHALL BE US FOUNDRY, HALLIDAY (OR APPROVED EQUAL) THD/TPD ALUMINUM ACCESS HATCHES. ALL HARDWARE TO BE 316 STAINLESS STEEL.
2. FALL PROTECTION REQUIRED FOR WETWELL AND VALVE VAULT (SUBMITTAL REQUIRED).
3. HATCHES TO BE EQUIPPED WITH AUTOMATIC HOLD OPEN ARMS, HORIZONTAL COMPRESSION SPRINGS, WATERTIGHT SLAM LOCKS, RECESSED OVERSIZED PADLOCK BOX, AND SAFETY CHAINS. HINGES TO BE ATTACHED USING TAMPER PROOF CARRIAGE BOLTS WITH WELDED NUTS.



SECTION VIEW  
(NOT TO SCALE)

PUMP STATION DETAIL



PLAN VIEW  
(NOT TO SCALE)

A	TOP ELEVATION	2.75	FT NGVD
B	GRADE ELEVATION	2.50	FT NGVD
C	INLET INVERT ELEVATION	-3.00	FT NGVD
D	ALARM FLOAT ELEVATION	-3.00	FT NGVD
E	LAG FLOAT ELEVATION	-3.50	FT NGVD
F	LEAD FLOAT ELEVATION	-4.00	FT NGVD
G	OFF FLOAT ELEVATION	-6.00	FT NGVD
H	BOTTOM ELEVATION	-8.00	FT NGVD
J	INLET PIPE SIZE	6"	

90% SUBMITTAL

No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

DESIGNED: NR	DATE: 03/27/18
DRAWN: RH	DATE: 03/27/18
CHECKED: DB	DATE: 07/15/18



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HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

LIFT STATION PLAN, NOTES AND DETAILS

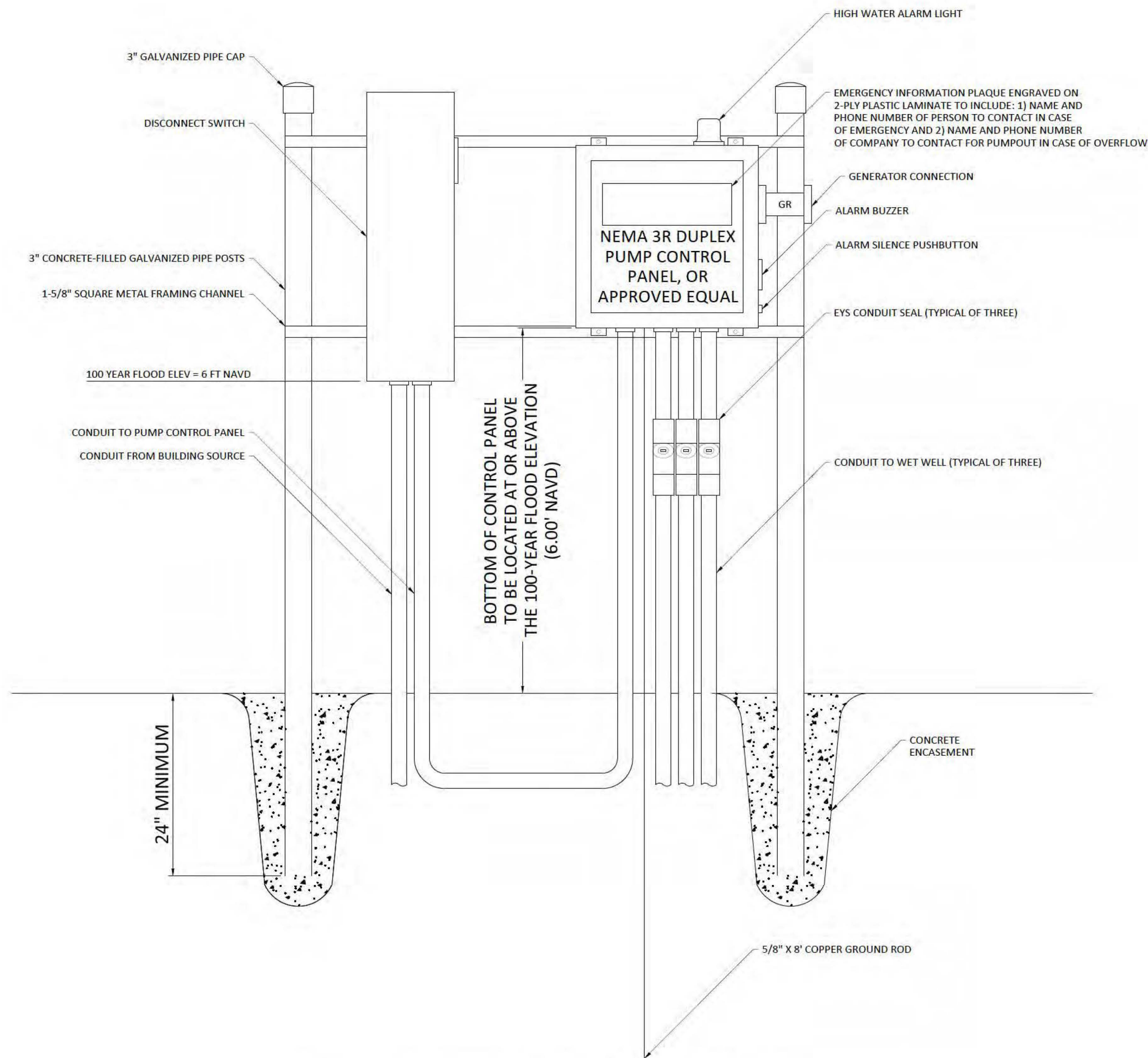
DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731
DATE: April 13, 2020

SCALE: N.T.S.
PROJECT No.: 17014
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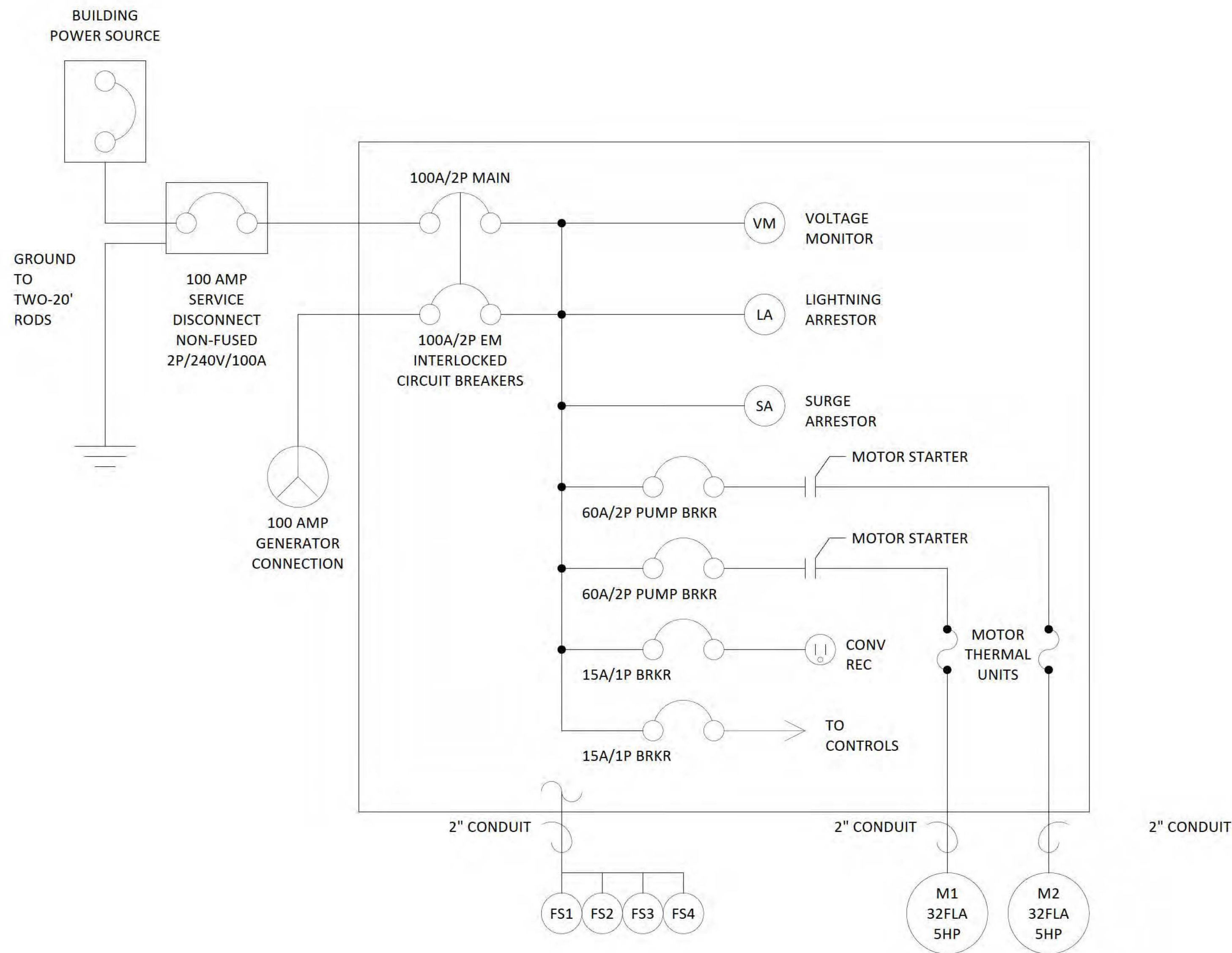
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### ELECTRICAL CONTROL PANEL DETAIL

- PROVIDE PHASE MONITOR FOR THREE PHASE POWER SUPPLY
- PROVIDE VOLTAGE MONITOR FOR SINGLE PHASE POWER SUPPLY
- PROVIDE AUTOMATIC ALTERNATION OF PUMPS ON EACH SUCCESSIVE CYCLE
- PROVIDE LIGHTNING ARRESTOR AND SURGE ARRESTOR INSIDE PUMP CONTROL PANEL

NOTE: LINEAR MOUNTING ARRANGEMENT OF SAFETY SWITCH AND CONTROL PANEL IS SHOWN FOR CLARITY.  
SAFETY SWITCH MAY BE MOUNTED ON THE REAR SIDE OF THE PANEL MOUNTING RACK



### NEMA 4X 316SS CONTROL PANEL W/DRIPSHIELD, FULL GASKET, DEADFRONT INNER DOOR, OR APPROVED EQUAL

No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

DESIGNED: NR  
DATE: 03/27/18  
DRAWN: RH  
DATE: 03/27/18  
CHECKED: DB  
DATE: 07/15/18



HOLLYWOOD NORTH BEACH PARK MOORING FIELDS  
CITY OF HOLLYWOOD, FLORIDA

### LIFT STATION NOTES AND DETAILS

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731  
DATE: April 13, 2020

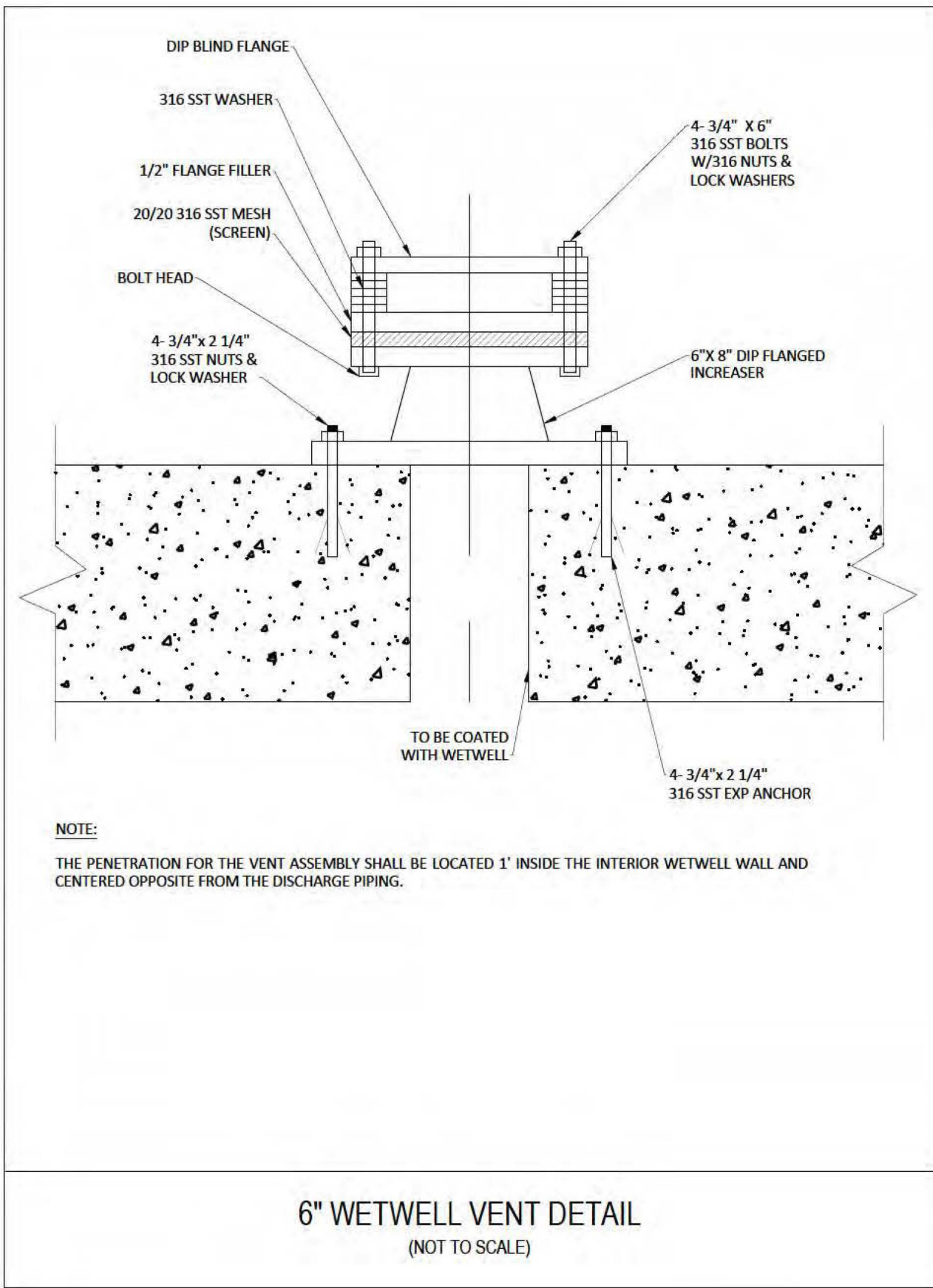
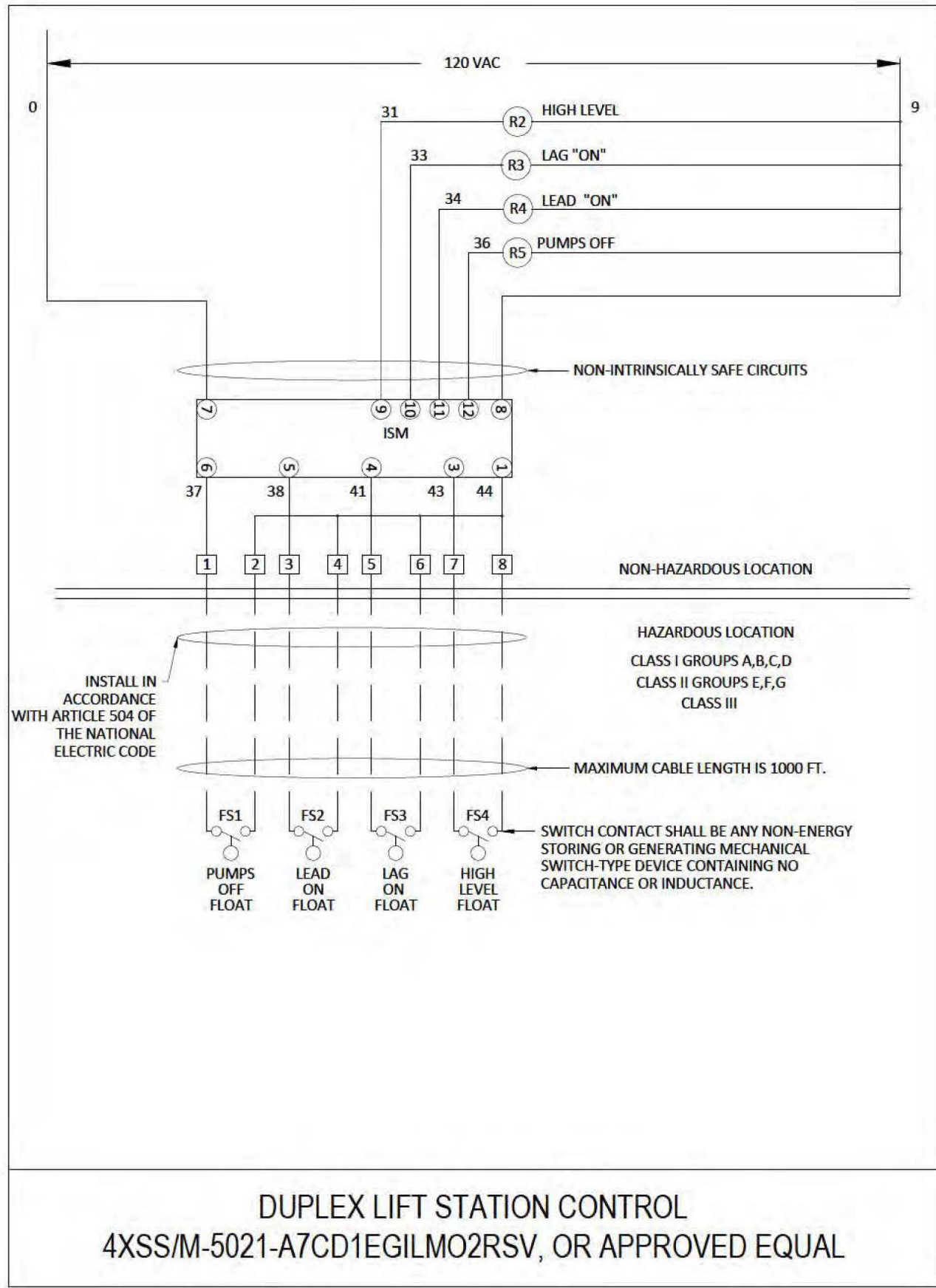
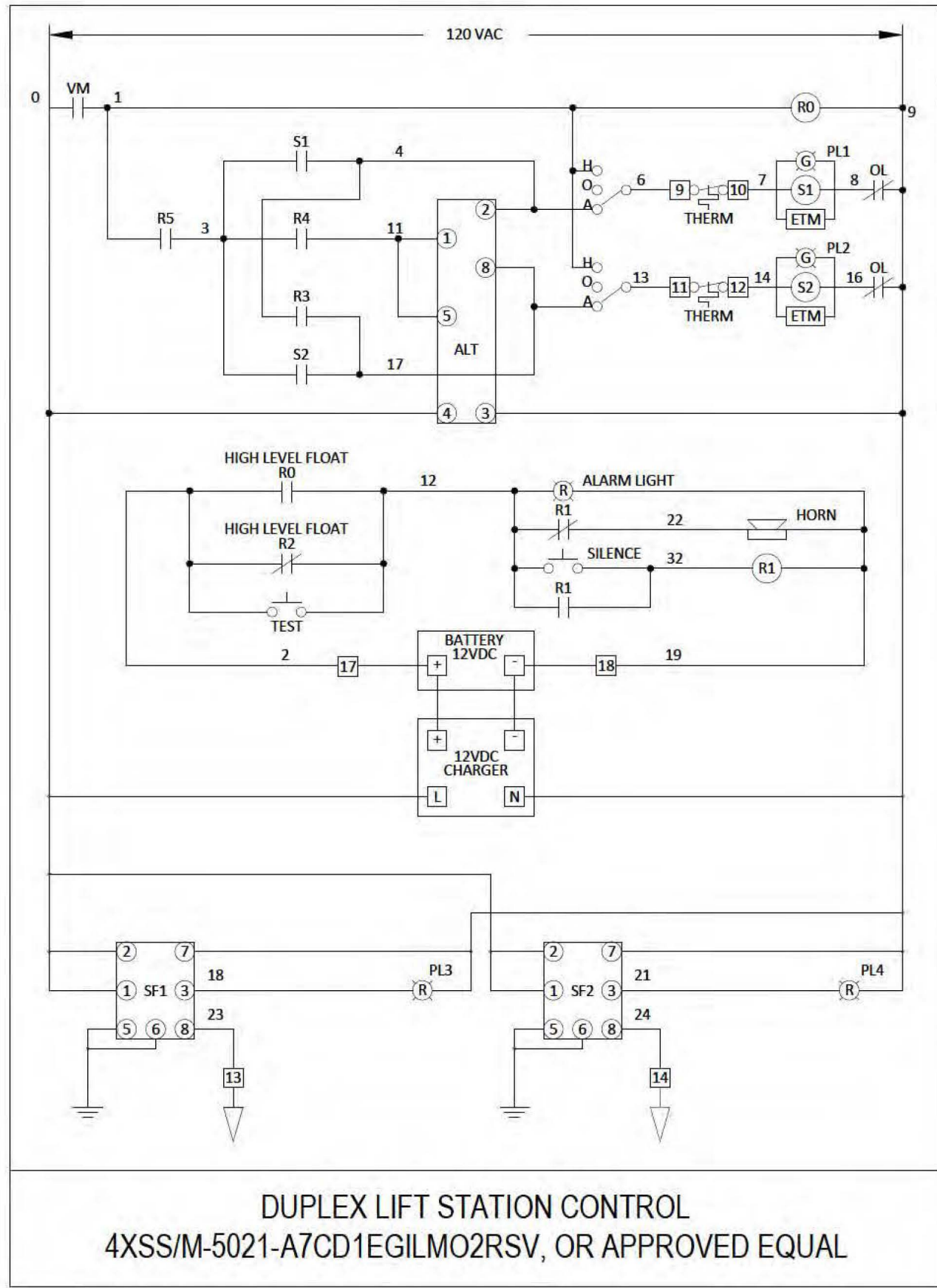
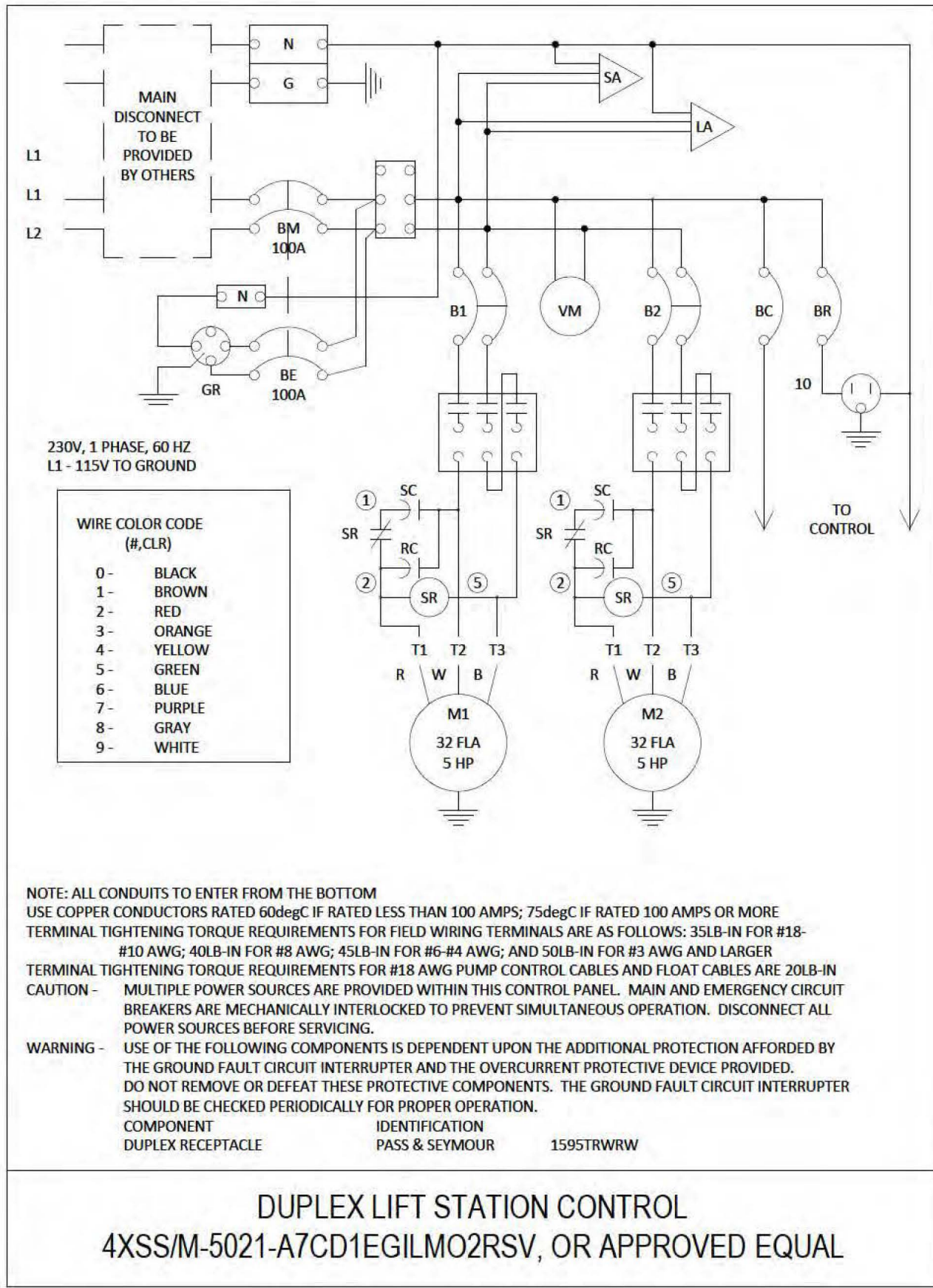
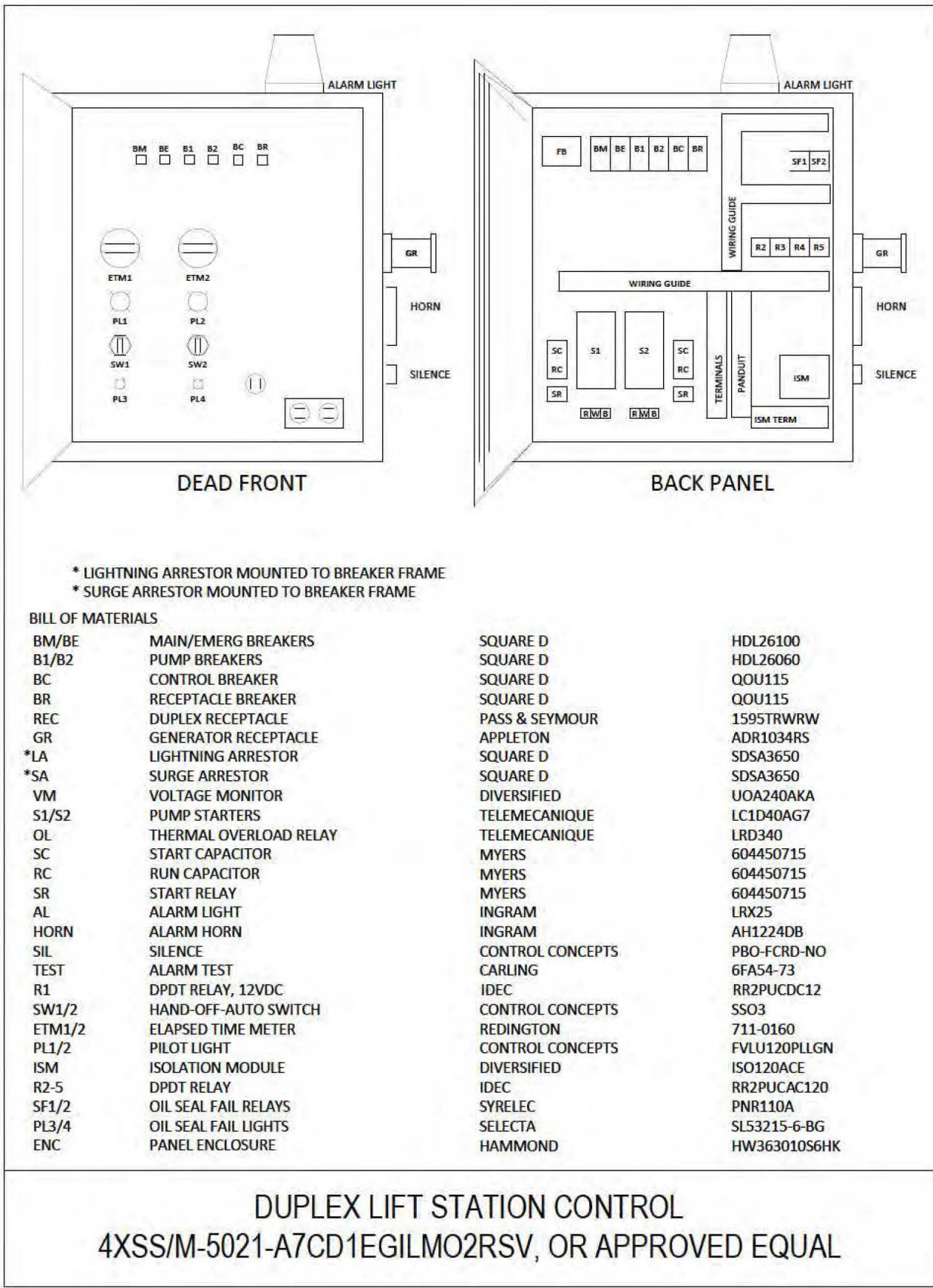
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HOLLYWOOD NORTH BEACH PARK MOORING FIELDS  
CITY OF HOLLYWOOD, FLORIDA

LIFT STATION NOTES AND DETAILS

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731
DATE: April 13, 2020

SCALE: N.T.S.
PROJECT No.: 17014
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WATER MAIN SEPARATION IN ACCORDANCE WITH F.A.C. RULE 62-555.314

JOINT SPACING @ CROSSING (FULLJOINT CENTERED) (8)	CROSSING (1), (4)	HORIZONTAL SEPARATION	OTHER PIPE
Alternate 2 ft minimum 1 WATER MAIN 1 WATER MAIN	2 WATER MAINS 2 WATER MAINS 12 inches to the minimum and 6 inches to the maximum	3 ft minimum 1 WATER MAIN 1 WATER MAIN	STORM WATER FORCE MAIN, RECLAIMED WATER(2)
Alternate 6 ft minimum 1 WATER MAIN 1 WATER MAIN	2 WATER MAINS 2 WATER MAINS 12 inches to the minimum and 6 inches to the maximum	10 ft preferred 6 ft minimum	GRAVITY SANITARY SEWER (3) SANITARY SEWER FORCE MAIN, RECLAIMED WATER
		10 ft minimum	ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM

1. WATER MAINS SHOULD CROSS ABOVE OTHER PIPE, WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM  
2. RECLAIMED WATER SEWER REGULATION PART II OF CHAPTER 62-510, F.A.C.  
3. 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS Laid AT LEAST 6 INCHES ABOVE THE  
4. A MINIMUM 6 FOOT HORIZONTAL SEPARATION REQUIRED BY CITY OF HOLLYWOOD, UNLESS OTHERWISE APPROVED.  
5. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE Laid  
IN A SEPARATE TRENCH OR ON AN UNDISTURBED BATH SHELL LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT  
WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN A PARALLEL INSTALLATION. THE WATER  
MAIN SHALL BE CONSTRUCTED OF DIP AND THE SANITARY SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF RPP WITH A  
WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED  
JOINTS).  
6. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

SEPARATION REQUIREMENTS  
OF  
F.D.E.P. / F.D.N.R.P.

REVISD: 06/08/2014

DRAWING NO.

G-01.1

FOR PAVEMENT RESTORATION  
REFER TO FDOT, BROWARD  
COUNTY PUBLIC WORKS, OR  
CITY OF HOLLYWOOD PAVEMENT  
RESTORATION DETAILS

GENERAL BACKFILL SHALL BE  
PLACED IN LAYERS NOT TO  
EXCEED 12" IN THICKNESS. EACH  
LAYER SHALL BE COMPACTED TO  
100% OF MAXIMUM DRY DENSITY

SELECT BACKFILL SHALL BE  
PLACED IN LAYERS NOT TO  
EXCEED 6" IN THICKNESS.  
EACH LAYER SHALL BE  
COMPACTED TO 98% OF  
MAXIMUM DRY DENSITY

INITIAL BACKFILL

HAUNCHING

PIPE O.D. + 2" MAXIMUM  
PIPE O.D. + 1" MINIMUM

TRENCH WIDTH

FLAT OR RESTORED  
TRENCH BOTTOM

BEDDING MATERIAL PLACED  
UP TO SPRINGLINE OF PIPE  
(SEE NOTE 1 BELOW)

VARIES

6"-12"

NOTES:

1. WHEN PIPE INSTALLATION IS ABOVE THE GROUND WATER TABLE ELEVATION, OR  
WHENEVER BEDDING COPPER PIPE UNDER ANY CONDITION, BEDDING MATERIAL SHALL  
BE CLEAN SANDY SOIL IF AVAILABLE WITHIN THE LIMITS OF CONSTRUCTION. IMPORTED  
BEDDING SHALL BE WELL GRADED, WASHED CRUSHED STONE (OR DRAINFIELD  
LIMESTONE) CRUSHED STONE SHALL CONSIST OF HARD, DURABLE SUB-ANGULAR  
PARTICLES OF PROPER SIZE AND GRADATION, AND SHALL BE FREE FROM ORGANIC  
MATERIAL, WOOD, TRASH, SAND, LOAM, CLAY, EXCESS FINES, AND OTHER  
DETERIMENTAL MATERIALS.
2. ALL BEDDING MATERIAL SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY BEFORE  
ANY PIPE IS Laid. FOR ADDITIONAL MATERIAL SPECIFICATIONS REFER TO  
SPECIFICATION SECTION 02222, "EXCAVATION AND BACKFILL FOR UTILITIES".
3. DENSITY TESTING SHALL BE IN ACCORDANCE WITH ASTM D-1557 AND ASTM  
D-3017.
4. BACKFILL TO COMPLY WITH FDOT DESIGN STANDARD 125-2-B.

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

PIPE LAYING CONDITION TYPICAL  
SECTION (P.V.C.)

REVISD: 06/08/2014

DRAWING NO.

G-03

UTILITY CROSSING USING FITTINGS

REFER TO THRUST  
RESTRAINT NOTES AND  
DETAILS (G-11) THROUGH  
G-11.3) FOR LENGTHS OF  
PIPE TO RESTRAIN

RESTRAIN ALL FITTINGS

GRADE

OBSTRUCTION

VERTICAL BENDS

CENTER A FULL  
LENGTH OF PIPE  
AT THE POINT  
OF CROSSING

UTILITY CROSSING USING JOINT DEFLECTIONS

JOINT DEFLECTION  
ANGLES SHALL NOT  
EXCEED 50% OF THAT  
RECOMMENDED BY THE  
PIPE AND/OR FITTING  
MANUFACTURER

GRADE

OBSTRUCTION

SLOPE UP TO MIN. COVER

CENTER A FULL LENGTH OF PIPE  
AT THE POINT OF CROSSING

REFER TO STANDARD DETAIL G-01.1, "SEPARATION  
REQUIREMENTS", FOR FDEP AND HEALTH DEPARTMENT  
SEPARATION REQUIREMENTS.

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

UTILITY CROSSING DETAIL

REVISD: 06/08/2014

DRAWING NO.

G-04

TAPPING SLEEVE

PLAN

ELEVATION

24"x24"x8" THICK CONCRETE  
IN UNPAVED AREAS ONLY

FINISHED GRADE  
OR PAVEMENT

SAW-CUT AND MATCH  
EXISTING PAVEMENT

OPERATING NUT TO BE  
WITHIN 24" OF  
INSTALLATION  
IF REQUIRED

VALVE BOX (REFER TO  
STANDARD DETAIL G-05)

TAPPING VALVE

CONCRETE THRUST  
BLOCK

EXIST. POTABLE  
WATER AND/OR  
SANITARY SEWER  
FORCE MAIN

STAINLESS STEEL  
TAPPING SLEEVE

CONCRETE BLOCK OR BRICK  
OVER COMPACTED SOIL TO  
MAINTAIN TAPPING VALVE  
STABLE AND LEVEL WITH  
MAIN BEING TAPPED.

NOTES:

1. NOTIFY THE CITY OF HOLLYWOOD 48 HOURS IN ADVANCE OF PROPOSED TAP.
2. TAPPING MUST BE DONE IN THE PRESENCE OF AN AUTHORIZED CITY REPRESENTATIVE.
3. TEMPORARY THRUST BLOCKS TO BE INSTALLED AND REMAIN IN PLACE DURING TAPPING OPERATIONS.
4. FOR SEWAGE FORCE MAINS, REFER TO DETAIL OF PRIVATE FORCE MAIN TIE-IN AT PROPERTY LINE.
5. FOR WATER MAINS, A GATE VALVE OF SAME DIAMETER SHALL BE INSTALLED ON THE DOWNSTREAM  
SIDE OF THE TAPPING VALVE.

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

TYPICAL TAPPING SLEEVE  
AND VALVE SETTING

REVISD: 06/08/2014

DRAWING NO.

G-06

24"x24"x8" THICK  
CONCRETE COLLAR  
ALL AROUND FOR  
UNPAVED AREAS ONLY

FINISHED  
GRADE OR  
PAVEMENT

SAW-CUT AND MATCH  
EXISTING PAVEMENT

6" MIN.

VALVE BOX (REFER TO  
STANDARD DETAIL G-05)

GATE VALVE (MECHANICAL JOINTS)

OPERATING NUT TO BE  
WITHIN 24" OF FINISH  
GRADE. INSTALL  
EXTENSION IF REQUIRED

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

TYPICAL GATE VALVE AND  
VALVE BOX SETTING

REVISD: 06/08/2014

DRAWING NO.

G-07

WOOD BLOCKING TYP.

TEE

TEE WITH PLUG

TEE WITH PLUG

45° BEND

90° BEND

TYPICAL SECTION

CONC. THRUST BLOCK

MINIMUM CONCRETE THRUST BLOCKING BEARING ON  
UNDISTURBED MATERIAL (SQ. FT.)

MARK	4" OR 6"	8"	10"	12"
A				
B				

NOTES:

1. THRUST BLOCKS ARE TO BE USED IN COMBINATION WITH, AND NOT IN LIEU OF, MECHANICAL JOINT  
RESTRAINTS AS REQUIRED BY THE CITY. REFER TO THRUST RESTRAINT DESIGN TABLE IN STANDARD  
DETAIL G-10.
2. THE AREAS IN THE TABLE ARE BASED ON \_\_\_\_\_ POUNDS PER SQUARE FOOT SOIL BEARING AGAINST  
THE UNDISTURBED TRENCH WALL AND ARE TO REPRESENT THE MINIMUM VERTICAL PROJECTED  
AREA AT THE THRUST BLOCK IN A PLANE PERPENDICULAR TO THE LINE BISECTING THE INCLUDING  
ANGLE OF THE FITTING.
3. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN  
DISTURBED, EVACUATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL.
4. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
5. DO NOT COVER COUPLING OR JOINTS WITH CONCRETE.
6. CONCRETE TO BE 2500 P.S.I. MINIMUM 28 DAY STRENGTH.
7. TABLE TO BE COMPLETED BY DESIGN ENGINEER.

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

THRUST BLOCK DESIGN

REVISD: 06/08/2014

DRAWING NO.

G-10

TACK COAT ALL SURFACES, AND PROVIDE 2" MIN. SUPERPAVE ASPHALTIC  
CONC. OVERLAY AS SHOWN ON THE PAVEMENT RESTORATION PLANS

TRENCH WIDTH (W) + 4"  
SURFACE REPLACEMENT

SAW CUT ALONG A  
NEAT AND STRAIGHT  
EDGE. TACK COAT  
ALL SURFACES AND  
EDGES.

EXIST. ASPHALT  
SURFACE

12" THICK (MIN.) LIMESTONE  
BASE W/MIN. LBR 100  
COMPACTED TO NO LESS  
THAN 98% OF MAX. DENSITY  
PER ASHTO T-180

12" TYPE "B" STABILIZED  
SUBGRADE W/MIN. LBR 40  
COMPACTED TO 98% OF MAX.  
DENSITY PER ASHTO T-180

COMPACTED FILL  
(REFER TO DETAILS  
G-02 AND G-03)

12" MAX. PIPE O.D. 12" MAX.

TRENCH WIDTH

1'-6"

1'-6"

TACK COAT  
ALL EDGES

EXIST. ASPHALT  
SURFACE

IF THE DISTANCE TO  
THE EDGE OF THE  
EXISTING LIMESTONE  
BASE IS 2' OR LESS,  
EXTEND THE LIMESTONE  
BASE RECONSTRUCTION  
TO THE EDGE.

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

FLEXIBLE PAVEMENT RESTORATION  
FOR TRENCHES CUT PERPENDICULAR  
AND PARALLEL TO THE ROADWAY

REVISD: 06/08/2014

DRAWING NO.

G-12.1

FOR 1", 1-1/2" & 2" RESIDENTIAL METERS, AND FOR ALL  
COMMERCIAL PIPES REGARDLESS OF METER DIAMETER

PROF. METER VAULT TO BE  
FURNISHED AND INSTALLED BY  
CONTRACTOR (REFER TO NOTE 4)

WATER METER WITH MTU  
TO BE PROVIDED BY CITY

PROF. BACKFLOW PREVENTER  
METER (REFER TO NOTE 5)

WATER SERVICE RISER TO BE  
INSTALLED PARALLEL TO WALL  
AND BE SECURED TO WALL  
WITH PIPE CLAMPS. CONNECT TO  
EXIST. BUILDING SERVICE LINE.

3" MIN. PRESSURE  
RELIEF VALVE (100  
PSI SETTING)

BRASS 90° TURN  
BALL VALVE SAME  
DIA. AS METER OR  
3/4" MIN.

BRASS 90° TURN  
BALL VALVE SAME  
DIA. AS METER OR  
3/4" MIN.

USE PVC SLEEVE WHERE  
CONC. SLAB IS USED

PROF. METER VAULT TO BE  
FURNISHED AND INSTALLED BY  
CONTRACTOR (REFER TO NOTE 4)

WATER METER WITH MTU  
TO BE PROVIDED BY CITY

PROF. BACKFLOW PREVENTER  
METER (REFER TO NOTE 5)

WATER SERVICE RISER TO BE  
INSTALLED PARALLEL TO WALL  
AND BE SECURED TO WALL  
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EXIST. BUILDING SERVICE LINE.

3" MIN. PRESSURE  
RELIEF VALVE (100  
PSI SETTING)

BRASS 90° TURN  
BALL VALVE SAME  
DIA. AS METER OR  
3/4" MIN.

BRASS 90° TURN  
BALL VALVE SAME  
DIA. AS METER OR  
3/4" MIN.

USE PVC SLEEVE WHERE  
CONC. SLAB IS USED

PROF. METER VAULT TO BE  
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CONTRACTOR (REFER TO NOTE 4)

WATER METER WITH MTU  
TO BE PROVIDED BY CITY

PROF. BACKFLOW PREVENTER  
METER (REFER TO NOTE 5)

WATER SERVICE RISER TO BE  
INSTALLED PARALLEL TO WALL  
AND BE SECURED TO WALL  
WITH PIPE CLAMPS. CONNECT TO  
EXIST. BUILDING SERVICE LINE.

3" MIN. PRESSURE  
RELIEF VALVE (100  
PSI SETTING)

BRASS 90° TURN  
BALL VALVE SAME  
DIA. AS METER OR  
3/4" MIN.

BRASS 90° TURN  
BALL VALVE SAME  
DIA. AS METER OR  
3/4" MIN.

USE PVC SLEEVE WHERE  
CONC. SLAB IS USED

NOTES FOR ALL SERVICES:

1. IF EXISTING HOSE BIB IS REMOVED, DAMAGED, OR NO HOSE BIB EXISTS, ONE MUST BE INSTALLED.
2. THREADED PVC FITTINGS (MALE OR FEMALE) NOT ALLOWED. ALL TRANSITIONS FROM PVC TO METAL PIPE/FITTINGS SHALL USE COMPRESSION PACK-JOINT  
COUPLINGS. THIS INCLUDES PVC CONNECTIONS TO WINE CHECK VALVE AND BACKFLOW PREVENTER.
3. PIPE CLAMPS FOR ATTACHING WATER SERVICE RISER TO WALL SHALL BE HOT-DIPPED GALVANIZED, WITH ISOLATION MATERIAL BETWEEN THE PIPE AND  
GALVANIZED METAL.
4. IF EXISTING CONCRETE METER VAULT IS IN ACCEPTABLE CONDITION (AS DETERMINED BY ESD) IT MAY BE RE-USED.
5. IF EXISTING BACKFLOW PREVENTER IS DETERMINED TO BE IN ACCEPTABLE CONDITION IT MAY BE RE-USED PROVIDED IT IS RE-CENTRED.
6. ALL PRIVATE SERVICE LINE INSTALLATIONS SHALL COMPLY WITH THE LATEST REVISION OF THE FLORIDA BUILDING CODES.

ISSUED: 03/01/1994

DRAWN: EAM

APPROVED: XXX

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

TYPICAL WATER SERVICE FROM  
METER TO STRUCTURE FOR 5/8"  
THROUGH 2" METERS

REVISD: 1/08/2014

DRAWING NO.

W-10

No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

DESIGNED: NR  
DATE: 03/27/18  
DRAWN: RH  
DATE: 03/27/18  
CHECKED: DB  
DATE: 07/15/18

THOMPSON & ASSOCIATES

CERTIFICATE OF AUTHORIZATION 28185

PO BOX 22398, FORT LAUDERDALE, FLORIDA 33325

MIAMI-DADE (786) 867-5919

BROWARD (954) 761-1073

PALM BEACH (561) 532-1668

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

WATER AND SEWER DETAILS

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731

SCALE: N.T.S.

PROJECT No.: 17014

CAD FILE: 17014 GN.dwg

DATE: April 13, 2020

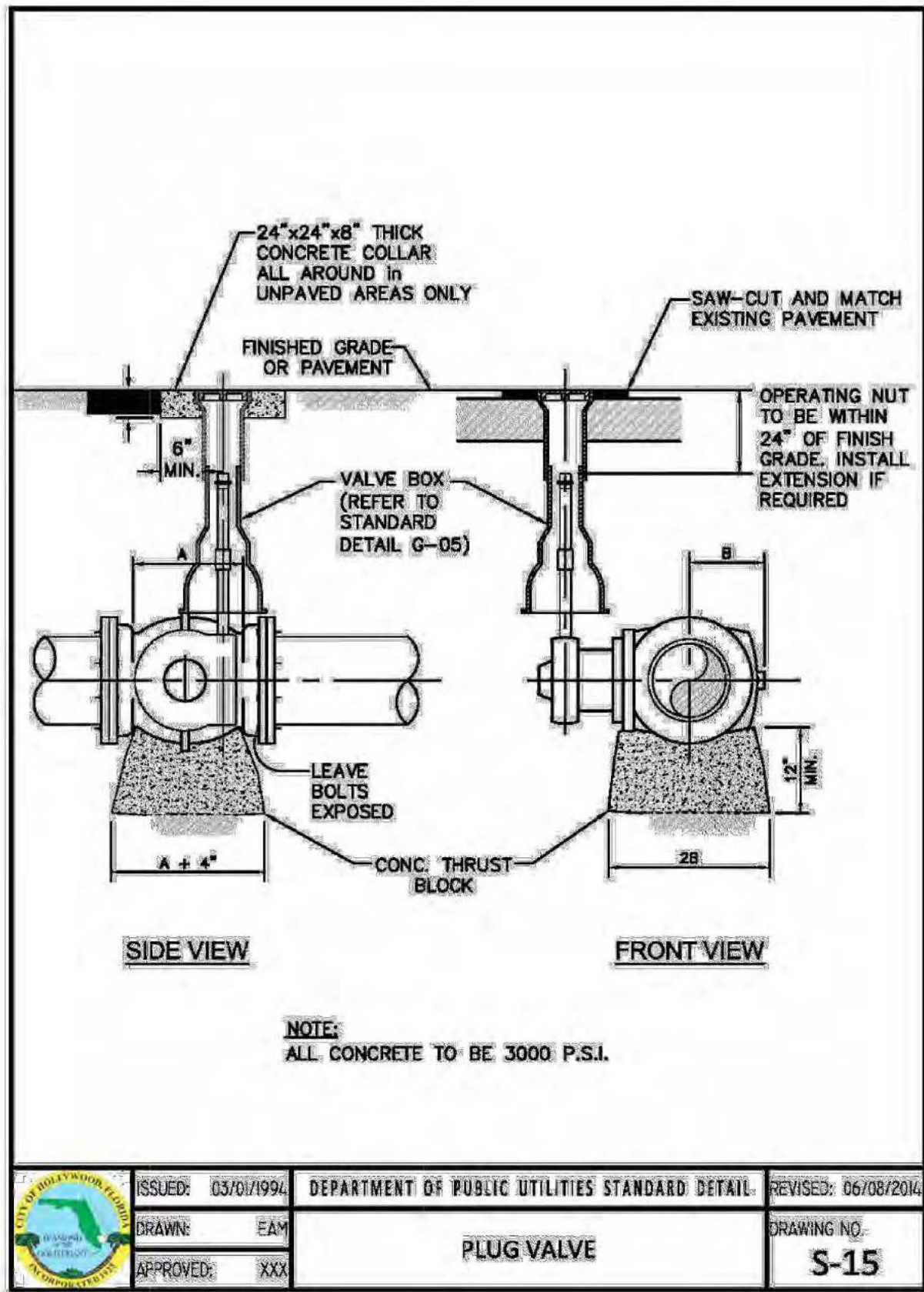
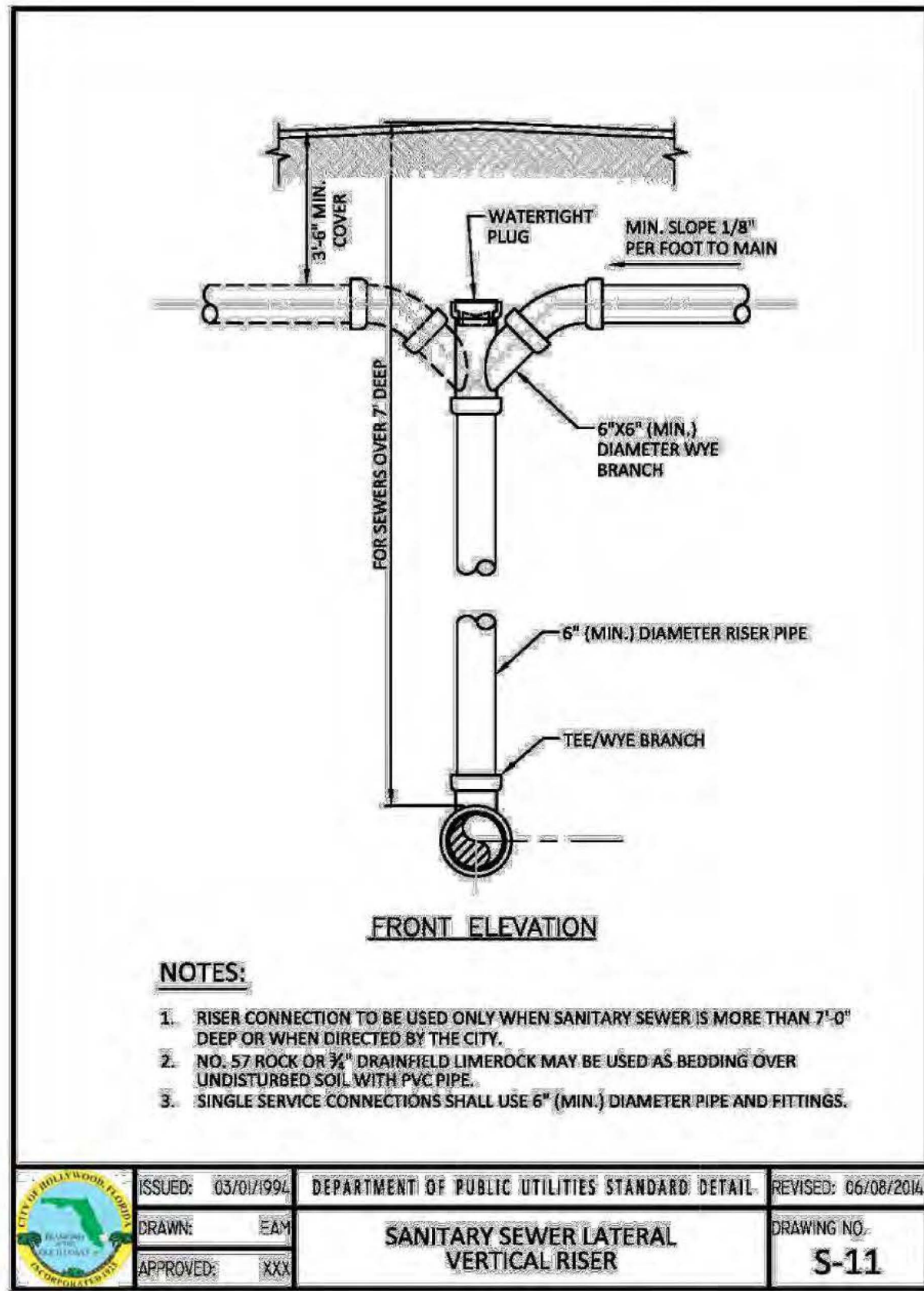
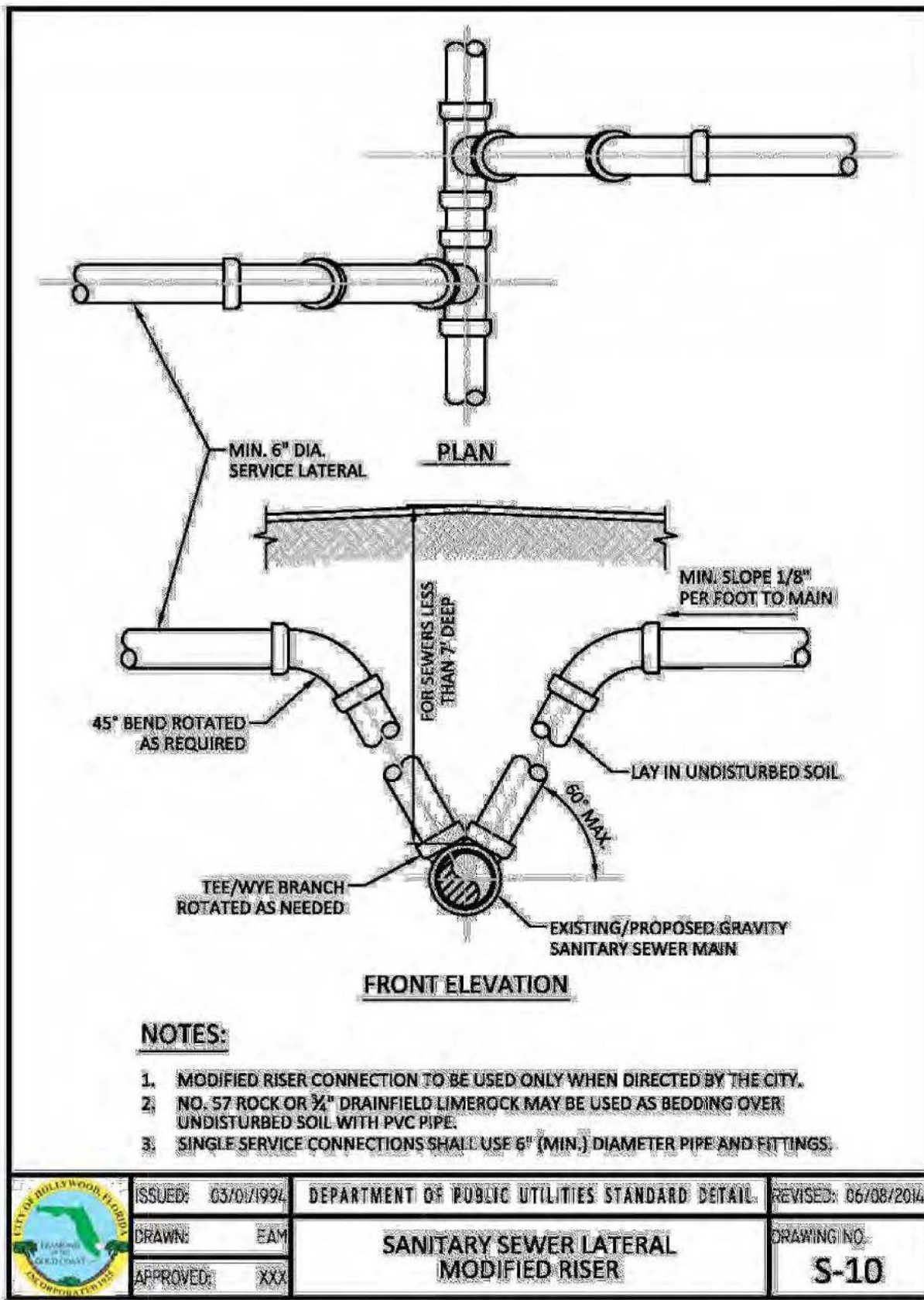
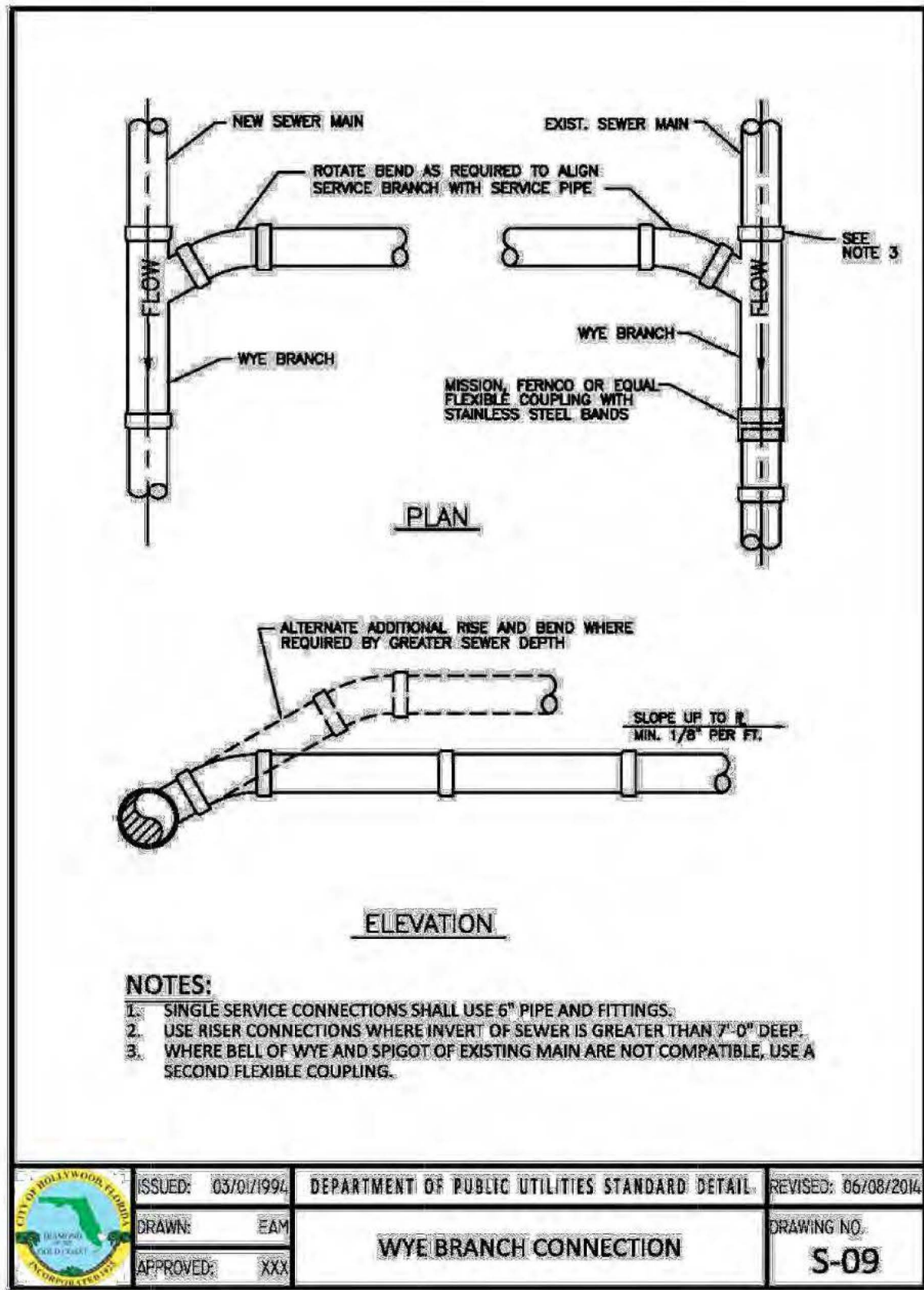
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WS-2

17 OF 22



PLOTTED BY: T&A-Rhubard  
PLOT DATE: 4/13/2020  
FILE PATH: C:\Users\T&A-Rhubard\Desktop\OFFLINE PROJECTS\17014\PLANS\17014 GN.dwg



**SaniSailor CVX400**  
Central Vacuum SaniSailor Pumpout System  
Marine Pump-out Solutions

**The SaniSailor Masterline CVX400**

The SaniSailor Masterline CVX400 Central Vacuum Systems is designed to be used as a high vacuum, high discharge pumpout system. This system is for installation requiring a discharge capable of up to 350 feet vertical or up to thousands of feet horizontally. The SaniSailor Masterline CVX400 is more than just a lift station. With the capability of high vacuum and eliminates the need for a separate lift station.

The SaniSailor Masterline CVX400 Central Vacuum System is used as a dockside pump station. It is designed for rugged use where higher frequency of use and higher capacity applications are required. The SaniSailor Masterline CVX400 develops a high vacuum which enables it to pump out boats located hundreds of feet from the pumpout station.

**CVX400 Specifications**

- Capacity: 40 - 50 GPM
- Vacuum: 29 inch Hg
- Discharge Head: 190 PSI
- Suction Lift: 29 Feet Vertical
- Power Required: 5 HP
- Dimensions: 34" L x 24" W x 46" H
- Weight: 425 lbs

**Patented Technology Inside Every Pump**

**EMP Industries**  
Clean Marinas, Clear Value.  
t. (800) 355-7867  
bestmarinepumps.com | empsales@empind.net

**SaniSailor Stanchions**  
Pumpout Stanchions Pedestal  
Marine Pump-out Solutions

**SaniSailor Stanchions**

SaniSailor Stanchions are used for remote pumpout locations. These heavy duty aluminum stanchion made with marine grade aluminum electromagnetic powder coated for a long lasting, easy care finish with access panels at the bottom for plumbing and an overhanging top for electrical. Strong and durable, SaniSailor stanchions have withstood the test of time in rigorous saltwater environments.

Stanchions are available with the following options:  
Heavy duty hose hanger, low voltage on/off push button controls, wireless on/off controls, and hour meter for low voltage units.

**Electrical Specifications:**  
Electrical Enclosure: NEMA3R containing one on (green) push button switch and one off (red) push button switch with rubber boot for outdoor wet location. Pre-wired buttons in the enclosure are color coded; leads are made to intervening field wiring from the pump inside the access plate on the bottom of the stanchion.

**Plumbing Specifications:**  
Plumbing Internal: a 1-1/2" schedule 40 unionized plumbing connection for connection to the 2" intervening field plumbing.  
Plumbing External: 1-1/2" 45 degree (vertical configuration) polypropylene cam and groove (cam lock) male connector (for connection to pumpout hose via 1-1/2 inch female cam and groove connector).

**STB201**  
• Low Voltage ON/OFF push button controls  
• Hose hanger  
• Hose Quick Connect Fitting

**STB200**  
• Hose hanger  
• Hose Quick Connect Fitting

**STB190**  
• Low Voltage ON/OFF push button controls  
• Hose Quick Connect Fitting

**STB200 with optional wireless remote control**

Dimensions: 6" x 6" x 36"  
Mounting: Bottom Tabs With Holes

**EMP Industries**  
Clean Marinas, Clear Value.  
t. (800) 355-7867  
bestmarinepumps.com | empsales@empind.net

90% SUBMITTAL

No.	DATE	REVISION	BY

No.	DATE	REVISION	BY

**THOMPSON & ASSOCIATES**  
CERTIFICATE OF AUTHORIZATION 28185  
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BROWARD (954) 761-1073  
PALM BEACH (561) 932-1668

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

WATER AND SEWER DETAILS

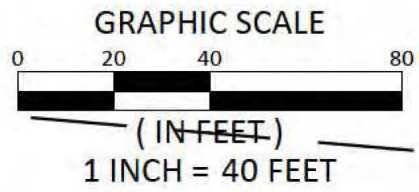
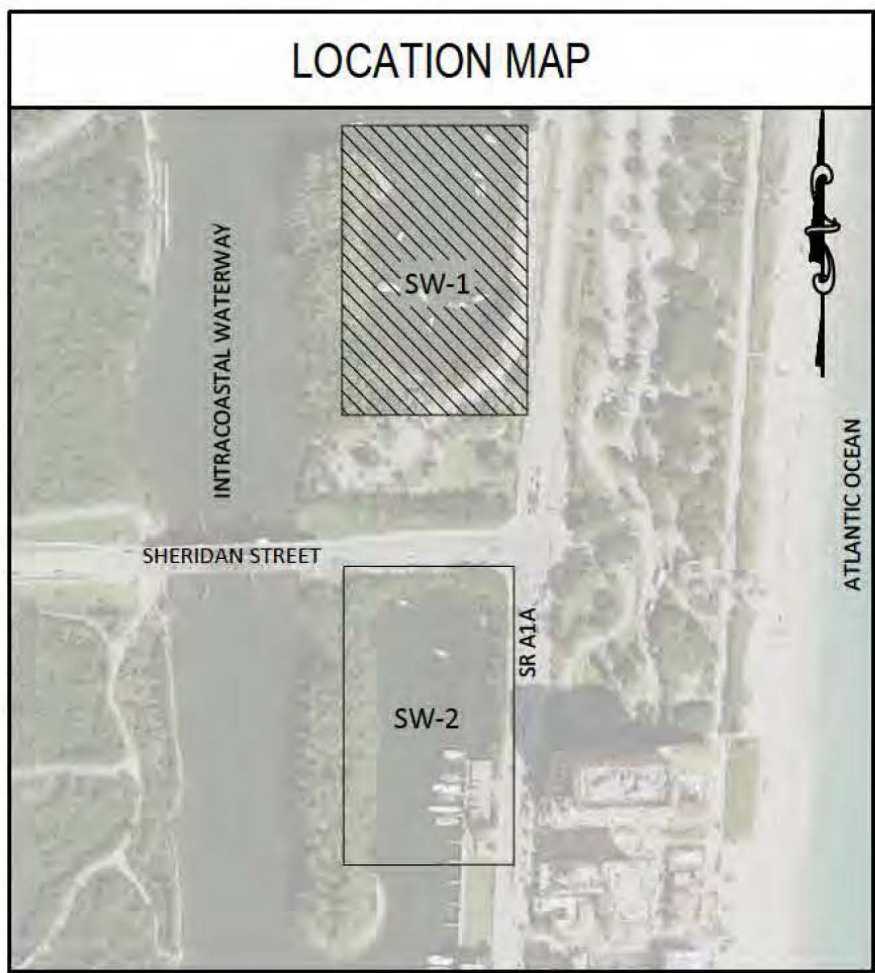
DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731
SCALE: N.T.S.
PROJECT No.: 17014
CAD FILE: 17014 GN.dwg
DATE: April 13, 2020

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731
SCALE: N.T.S.
PROJECT No.: 17014
CAD FILE: 17014 GN.dwg
DATE: April 13, 2020

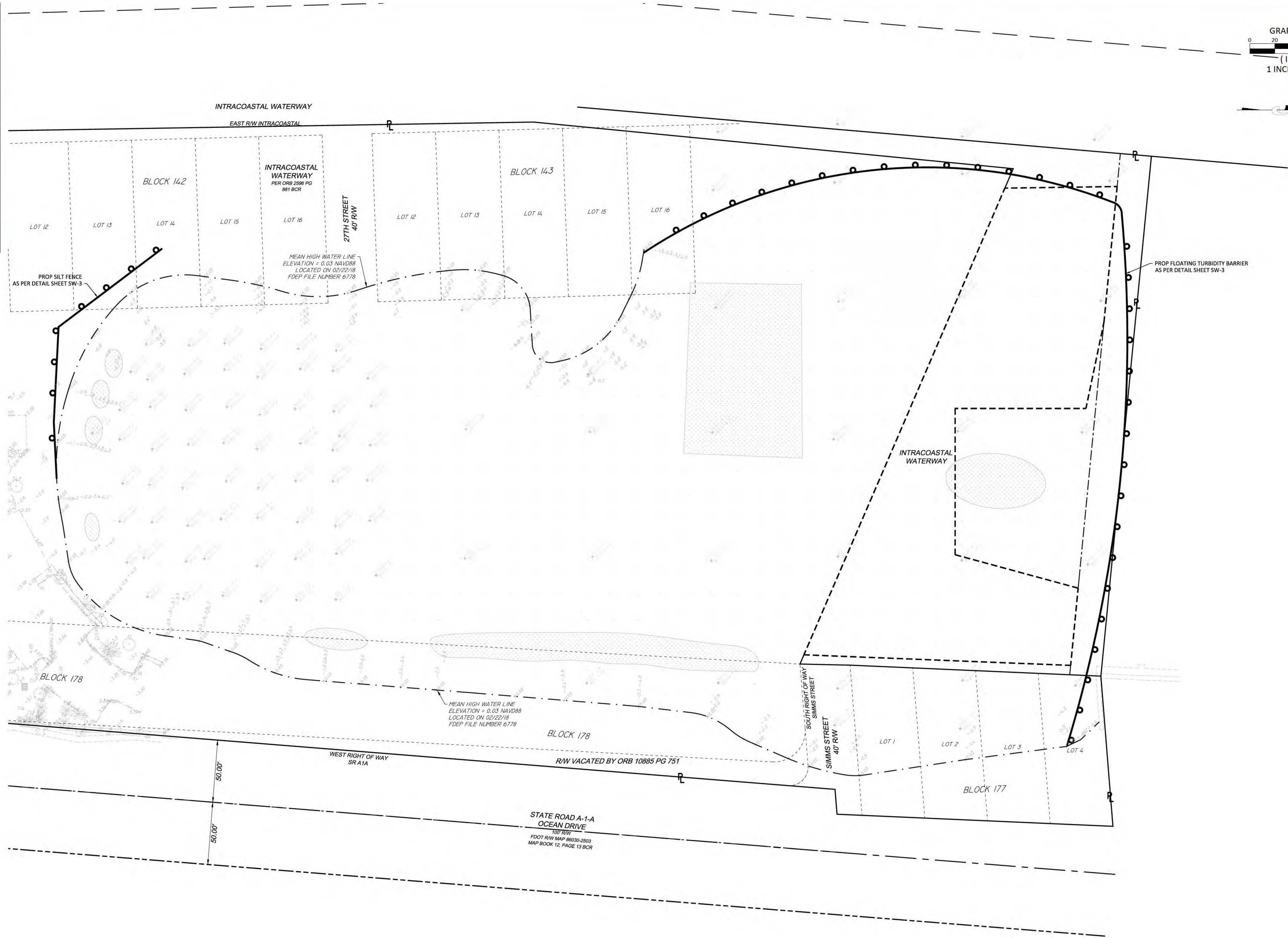
WS-3



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PLOT DATE: 4/13/2020  
PLOTTED BY: T&A-Rhubard



LEGEND	
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BOS	BOTTOM OF SILT
CB	CATCH BASIN
CLEAR	CLEARANCE
CONC	CONCRETE
DR	DRAINAGE
ELEC	ELECTRIC
ELEV	ELEVATION
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
IE	INVERT ELEVATION
LF	LINEAR FEET
NAVD	NORTH AMERICAN VERTICAL DATUM
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE PIPE
PROP	PROPOSED
RE	RIM ELEVATION
RIM	RIM OF STRUCTURE
R/W	RIGHT OF WAY
SCH	SCHEDULE
STR	STRUCTURE
SW	SIDEWALK
TOP	TOP OF PIPE
TOS	TOP OF SILT
TYP	TYPICAL
WM	WATER MAIN
W/	WITH
	EXIST GRADE (FT-NAVD)
	ELEVATIONS RECORDED BY SOUNDINGS (FT-NAVD)
	ELEVATIONS MEASURED BY SEDIMENT PROBES (FT-NAVD)
	PROP GRADE (FT-NAVD)
	DRAINAGE STRUCTURE ID
	CONFLICT MARKER
	CONCRETE MOORING ANCHOR
	TYPE "F" CONC CURB & GUTTER
	TYPE "D" CONC CURB
	FLOW ARROW
	TO BE REMOVED
	TO BE DREDGED
TOTAL AREA = 141,311 SF = (11,175 CY)	
	TO BE FILLED
	SEAGRASS BED
	FLOATING DOCK
	GANGWAY
	SIDEWALK
	TO BE REMOVED
	CHAIN LINK FENCE
	DECORATIVE FENCE
	PROPERTY LINE
	LOT LINE
	SECTION LINE
	EASEMENT LINE
	R/W LINE
	TOP OF BANK



NOTE:  
CONTRACTOR TO COMPLY WITH ALL NPDES REQUIREMENTS  
AND PERMITTING.

No.	DATE	REVISION	BY

DESIGNED: NR
DATE: 03/27/18
DRAWN: RH
DATE: 03/27/18
CHECKED: DB
DATE: 07/15/18



THOMPSON & ASSOCIATES  
CERTIFICATE OF AUTHORIZATION 28185  
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BROWARD (954) 761.1073  
PALM BEACH (561) 932.1668

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

STORM WATER POLLUTION PREVENTION PLAN

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731

DATE: April 13, 2020

SCALE:

1" = 40'

PROJECT No.:

17014

CAD FILE:

17014 SWPPP.dwg

SHEET:

SW-1

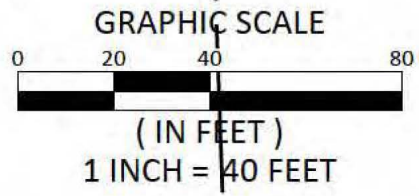
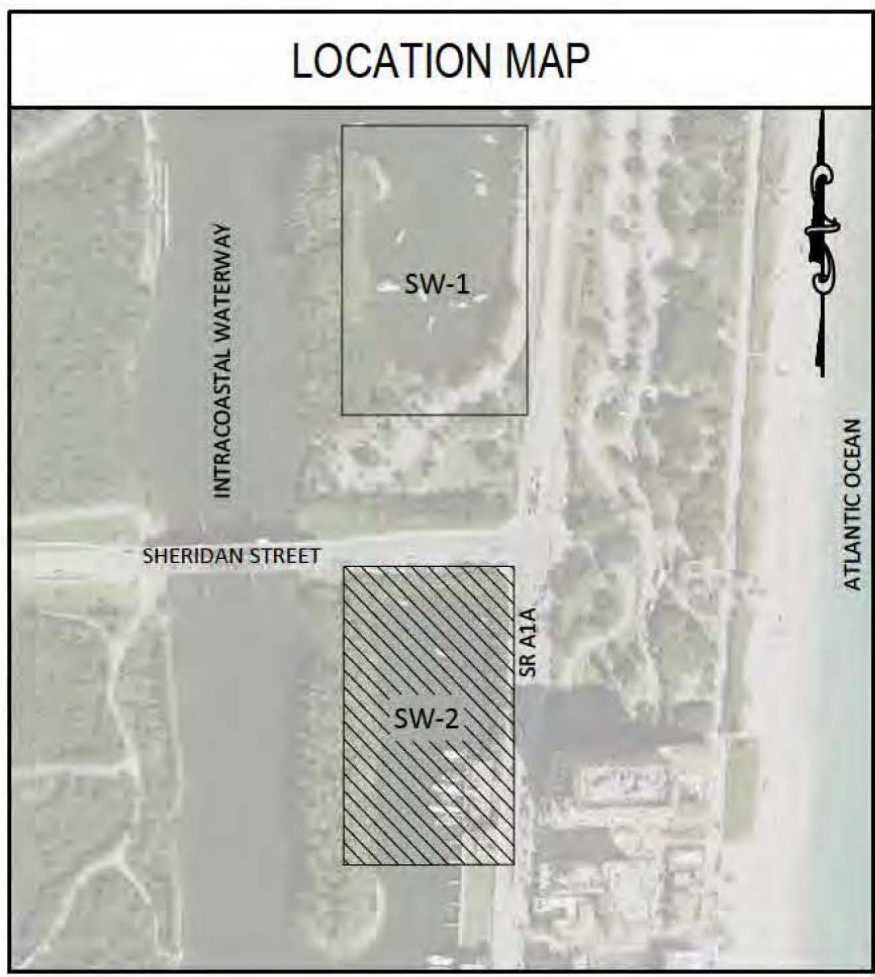
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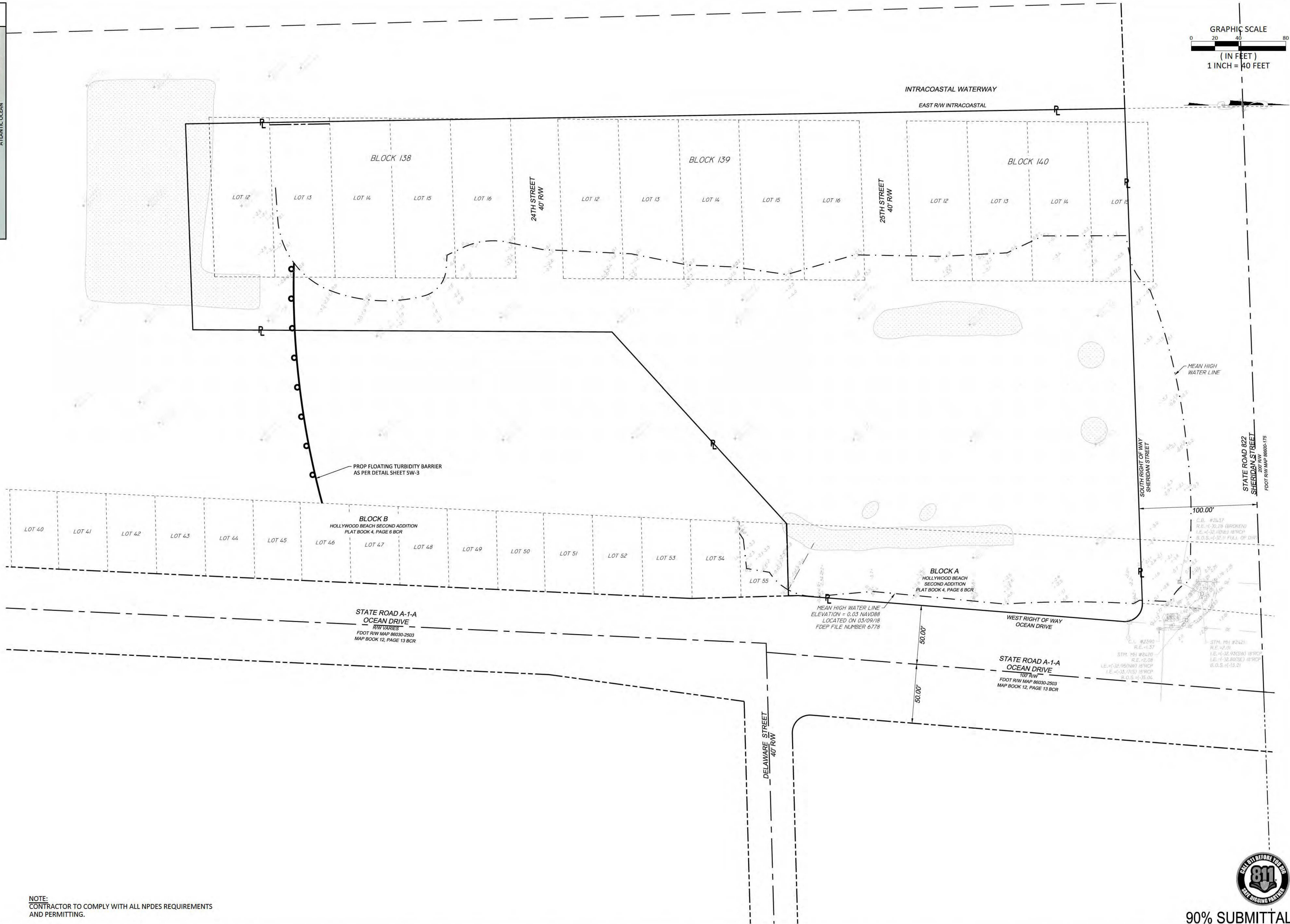




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PLOT DATE: 4/13/2020  
PLOTTED BY: T&A-Rhubard



LEGEND	
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BOS	BOTTOM OF SILT
CB	CATCH BASIN
CLEAR	CLEARANCE
CONC	CONCRETE
DR	DRAINAGE
ELEC	ELECTRIC
ELEV	ELEVATION
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
IE	INVERT ELEVATION
LF	LINEAR FEET
NAVD	NORTH AMERICAN VERTICAL DATUM
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE PIPE
PROP	PROPOSED
RE	RIM ELEVATION
RIM	RIM OF STRUCTURE
R/W	RIGHT OF WAY
SCH	SCHEDULE
STR	STRUCTURE
SW	SIDEWALK
TOP	TOP OF PIPE
TOS	TOP OF SILT
TYP	TYPICAL
WM	WATER MAIN
W/	WITH
2.00	EXIST GRADE (FT-NAVD)
2.00	ELEVATIONS RECORDED BY SOUNDINGS (FT-NAVD)
2.00	ELEVATIONS MEASURED BY SEDIMENT PROBES (FT-NAVD)
2.00	PROP GRADE (FT-NAVD)
STR-1	DRAINAGE STRUCTURE ID
1	CONFLICT MARKER
○	CONCRETE MOORING ANCHOR
=====	TYPE "F" CONC CURB & GUTTER
=====	TYPE "D" CONC CURB
→	FLOW ARROW
	TO BE REMOVED
	TO BE DREDGED
	TOTAL AREA = 141,311 SF = (11,175 CY)
	TO BE FILLED
	SEAGRASS BED
	FLOATING DOCK
	GANGWAY
	SIDEWALK
	TO BE REMOVED
	CHAIN LINK FENCE
	DECORATIVE FENCE
	PROPERTY LINE
---	LOT LINE
---	SECTION LINE
---	EASEMENT LINE
---	R/W LINE
---	TOP OF BANK



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No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

**THOMPSON & ASSOCIATES**  
CERTIFICATE OF AUTHORIZATION 28185  
PO BOX 22398, FORT LAUDERDALE, FLORIDA 33335  
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PALM BEACH (561) 932.1668

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS  
CITY OF HOLLYWOOD, FLORIDA

STORM WATER POLLUTION PREVENTION PLAN

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731	SCALE: 1" = 40'	SHEET: SW-2
PROJECT No.: 17014	CAD FILE: 17014 SWPPP.dwg	20 OF 22
DATE: April 13, 2020		



PLOTTED BY: T&A-Rhubard  
 PLOT DATE: 4/13/2020  
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SITE DESCRIPTION

PROJECT NAME AND LOCATION  
HOLLYWOOD NORTH BEACH PARK - MOORING FIELDS  
CITY OF HOLLYWOOD, FLORIDA

OWNER NAME AND ADDRESS:  
BROWARD COUNTY PARKS AND RECREATION  
1 N UNIVERSITY DR  
PLANTATION, FLORIDA 33324

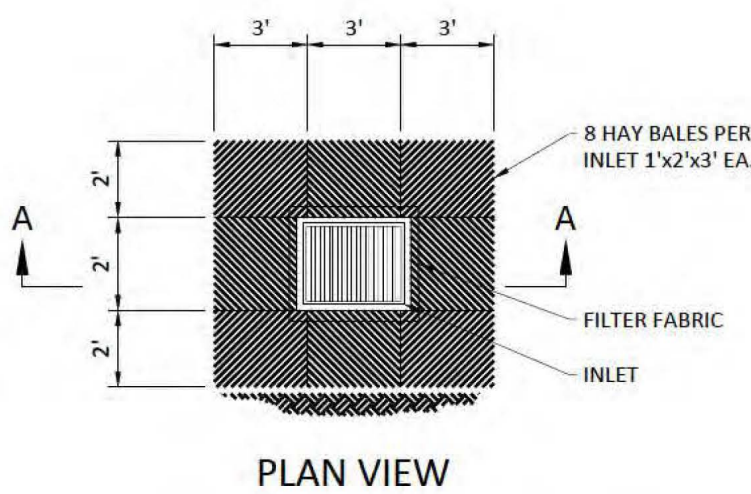
DESCRIPTION:  
THIS PROJECT IS LOCATED ON TWO SECTIONS OF THE WEST PORTION OF THE PARK: NORTH AND SOUTH OF SHERIDAN STREET, BOTH WEST OF NORTH OCEAN DRIVE. IT INVOLVES THE DESIGN OF A MOORING FACILITY INCLUDING NEW MOORING BUOYS. THIS PROJECT ALSO INCLUDES THE CONSTRUCTION OF A 670 SF PUBLIC ACCESS BUILDING, A DINGHY DOCK AND PUMP STATION DOCK AND OTHER ASSOCIATED SITE IMPROVEMENTS (WALKWAYS, FENCING, ETC).

SOIL DISTURBING ACTIVITIES WILL INCLUDE:  
CLEARING AND GRUBBING; EARTHWORK, PAVEMENT AND GRADING; STORM SEWER, UTILITIES, AND PREPARATION FOR FINAL PLANTING; AND SEEDING.

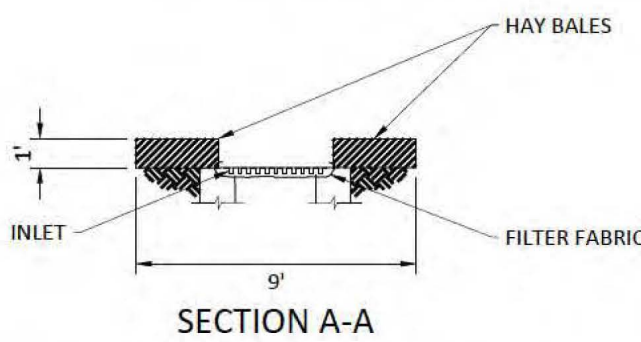
- SITE MAPS:
- SEE ATTACHED GRADING PLAN FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORM WATER DISCHARGE POINTS.
  - SEE ATTACHED EROSION & TURBIDITY CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS.
  - SEE GENERAL NOTES FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

EROSION AND SEDIMENT CONTROL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
- THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
- ADDITIONAL PROTECTION - ON AND OFF-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
- CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
- WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH  $\frac{1}{2}$ -INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
- FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED IN D-903. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
- IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
- BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
- BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
- THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 8 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
- EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
- LOOSE STRAW SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
- STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
- NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
- SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
- THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
- SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO  $\frac{1}{3}$  THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT SPECIFICATIONS AND CRITERIA.
- FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL - A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA SPECIFICATIONS AND CRITERIA.
- EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
- SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
- ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
- DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
- ALL DISTURBED AREAS TO BE STABILIZED THROUGH COMPACTION, SILT SCREENS, HAY BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
- ALL DEWATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED.
- THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
- THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SJRWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.

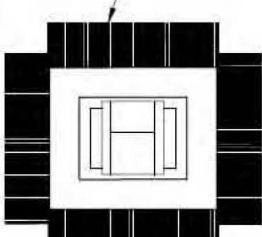


PLAN VIEW



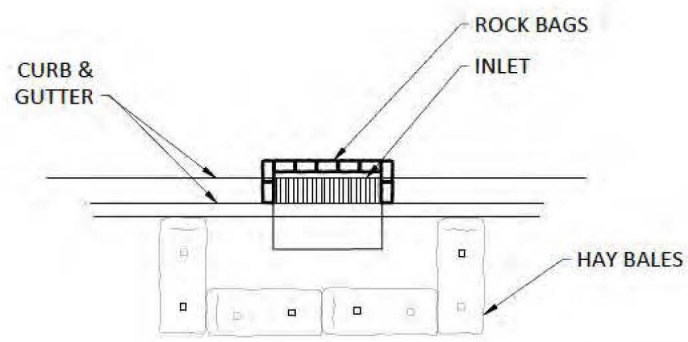
SECTION A-A

ANCHOR HAY BALES WITH 2 - 2" X 2" X 4' STAKES PER BALE.

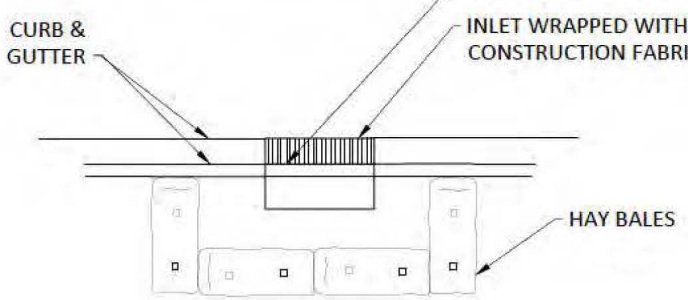


DITCH BOTTOM INLET

INLET DRAINAGE STRUCTURE

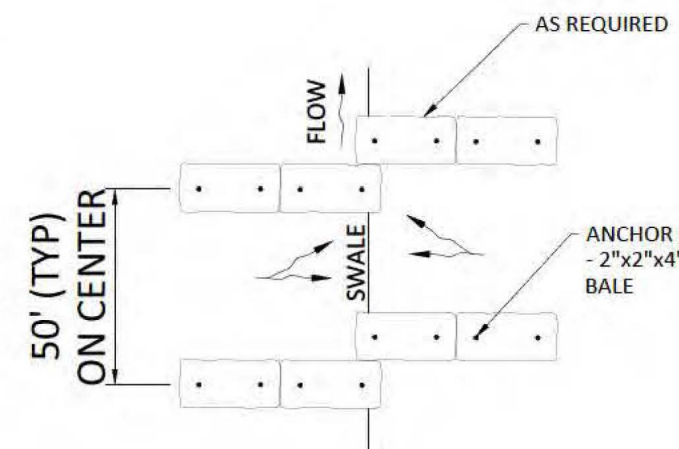


CURB INLET (OPTION 1)

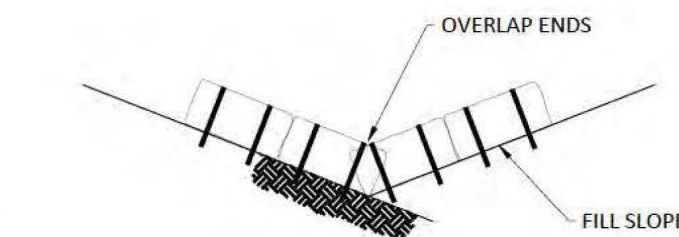


CURB INLET (OPTION 2)

POLLUTION PROTECTION AROUND DRAINAGE STRUCTURES

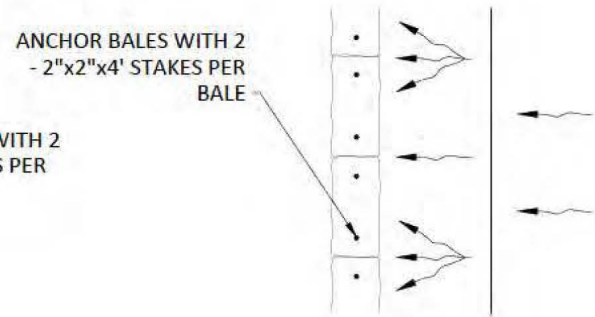


PLAN VIEW

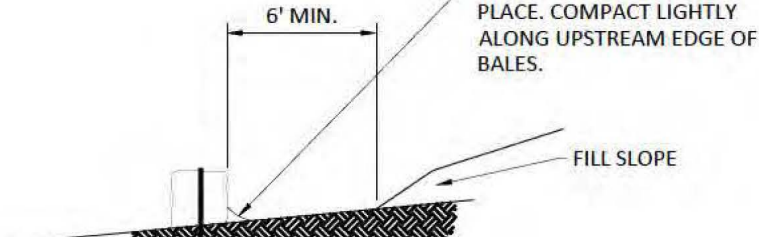


ELEVATION

TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE.

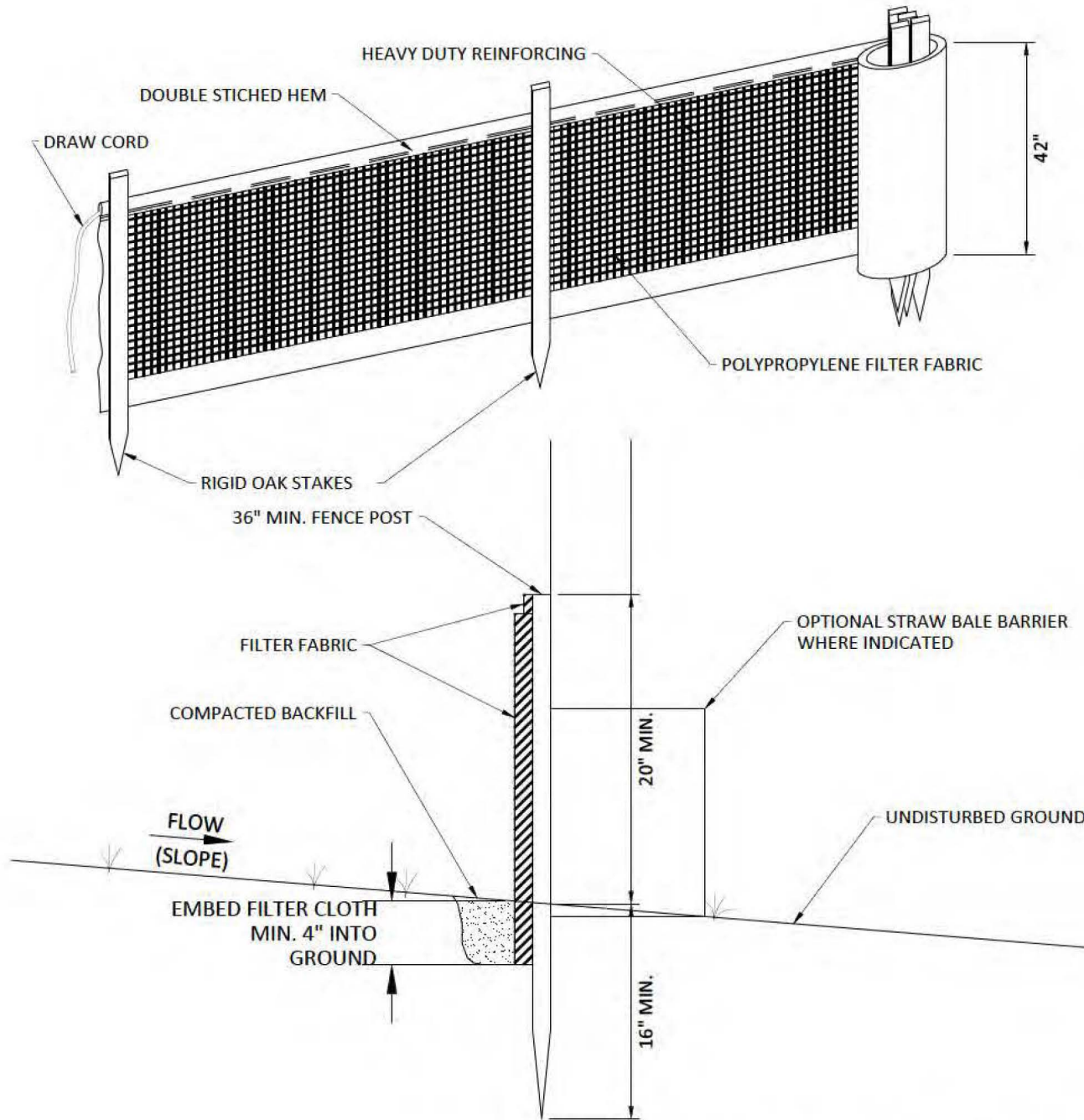


PLAN VIEW



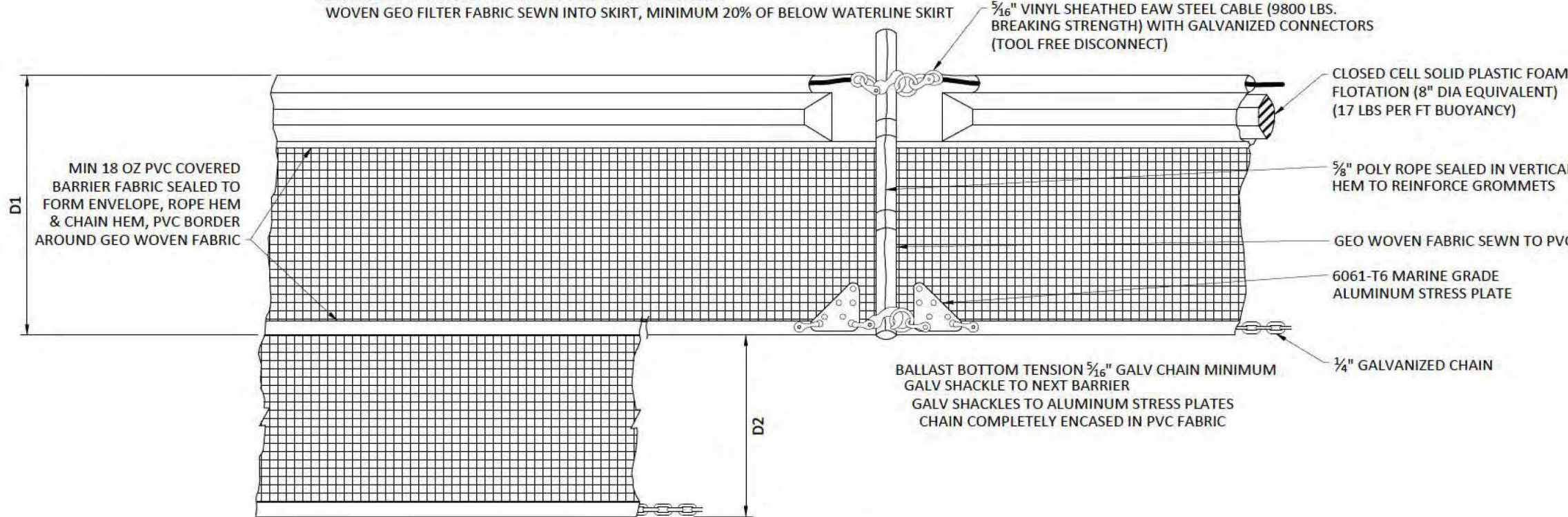
ELEVATION

STORMWATER / DRAINAGE HAY BALE INSTALLATION



STORMWATER / DRAINAGE SILT FENCE INSTALLATION

TOP TENSION MEMBER  $\frac{3}{16}$ " GALV COATED CABLE MINIMUM GALV THIMBLES GALV SHACKLE TO NEXT BARRIER GALV SHACKLES TO STRESS PLATES FLOAT: MIN. 8" POLY CLOSED-CELL FOAM SEALED IN FABRIC WOVEN GEO FILTER FABRIC SEWN INTO SKIRT, MINIMUM 20% OF BELOW WATERLINE SKIRT



TYPE III

NOTE:  
COMPONENTS OF TYPE III MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPE III SHALL BE AS APPROVED BY THE ENGINEER.

D1 = 5' STANDARD (SINGLE PANEL FOR DEPTHS 5' OR LESS).  
D2 = 5' STANDARD (ADDITIONAL PANEL FOR DEPTHS > 5').  
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET  
TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS ARE SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

FLOATING TURBIDITY BARRIERS

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE	BUSINESS NAME AND ADDRESS OF CONTRACTOR AND ALL SUBS	RESPONSIBLE FOR DUTIES

90% SUBMITTAL

No.	DATE	REVISION	BY	No.	DATE	REVISION	BY

DESIGNED: NR  
DATE: 03/27/18  
DRAWN: RH  
DATE: 03/27/18  
CHECKED: DB  
DATE: 07/15/18



THOMPSON & ASSOCIATES  
CERTIFICATE OF AUTHORIZATION 28185  
PO BOX 22398, FORT LAUDERDALE, FLORIDA 33335  
MIAMI-DADE (786) 897-5919  
BROWARD (954) 761-1073  
PALM BEACH (561) 932-1668

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

STORM WATER POLLUTION PREVENTION NOTES  
AND DETAILS

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731

SCALE: N.T.S.

PROJECT No.: 17014

CAD FILE: 17014 GN.dwg

DATE: April 13, 2020

SHEET:

SW-3



PLOTTED BY: T&A-Rhubard

PLOT DATE: 4/13/2020

FILE PATH: C:\Users\T&A-Rhubard\Desktop\OFFLINE PROJECTS\17014\PLANS\17014 GN.dwg

SECTION 1: GENERAL NOTES

1. APPLICABLE CODES

ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) SHALL BE STRICTLY OBSERVED.

ALL CONSTRUCTION WITHIN LIMITS OF PUBLIC RIGHTS OF WAY UNDER CITY OF HOLLYWOOD JURISDICTION SHALL CONFORM TO CITY OF HOLLYWOOD ENGINEERING DEPARTMENT MINIMUM STANDARDS, LATEST EDITION.

ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

COORDINATES ARE BASED ON STATE PLANE COORDINATE VALUES PUBLISHED BY THE BROWARD COUNTY ENGINEERING DIVISION.
2. PRE-CONSTRUCTION RESPONSIBILITY

UPON THE RECEIPT OF THE "NOTICE TO PROCEED", PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE CITY OF HOLLYWOOD ENGINEERING DEPARTMENT, UTILITY OWNERS, THE OWNER AND THE ENGINEER OF RECORD.

THE CONTRACTOR SHALL OBTAIN A "SUNSHINE ONE CALL" CERTIFICATION NUMBER AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING ANY EXCAVATION.

ALL APPLICABLE PERMITS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION.

PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH THE CONTRACTOR FAILS TO REQUEST LOCATIONS FROM SUNSHINE ONE CALL. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.

IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, WHO WILL IN TURN NOTIFY CITY OF HOLLYWOOD UTILITIES DEPARTMENT.

THE CONTRACTOR WILL VERIFY THE RESTRAINT OF EXISTING UTILITY LINES, AND SHALL RESTRAIN AS NECESSARY TO PREVENT BLOWOUTS, PRIOR TO CONNECTING TO EXISTING UTILITIES.
3. INSPECTIONS

THE CONTRACTOR SHALL NOTIFY CITY OF HOLLYWOOD ENGINEERING DEPARTMENT AND THE ENGINEER OF RECORD AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 24 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO THE INSPECTION OF THE FOLLOWING ITEMS, WHERE APPLICABLE.

SANITARY SEWER

WATER SYSTEM

SUBGRADE: SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK

LIMEROCK BASE: SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT

ASPHALTIC CONCRETE

CLEARING AND FILLING

FINAL CLOSEOUT

SHOP DRAWINGS

a. PRIOR TO ISSUANCE OF A CONSTRUCTION PERMIT, REVIEWED AND APPROVED SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD AND CITY OF HOLLYWOOD FOR VALVES, PIPING, AND OTHER ACCESSORIES. CATALOG LITERATURE SHALL BE SUBMITTED FOR WATER AND SEWER PIPES, FITTINGS AND APPURTENANCES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVAL, IF REQUIRED.
4. CONSTRUCTION RESPONSIBILITIES

GENERAL

THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEPED BROOM CLEAN.

WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER, WATER COURSES, GRAVITY SEWER, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.

WHEN WORKING IN AND AROUND EXISTING DRAINAGE CANALS, APPROPRIATE SILT BARRIERS SHALL BE INSTALLED AS REQUIRED BY LOCAL DRAINAGE DISTRICT AND CITY OF HOLLYWOOD.

TEMPORARY UTILITIES

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY TO CONTRACTOR'S EMPLOYEES AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.

CONTRACTOR SHALL OBTAIN CONSTRUCTION METER FOR ALL WATER USED ON JOB. ALL WATER USED FOR CLEANING, TESTING, ETC. WILL BE PAID FOR BY THE CONTRACTOR. IF WATER CANNOT BE METERED THEN IT WILL BE CALCULATED.

TRAFFIC REGULATION

ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.

NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION OF CITY OF HOLLYWOOD.

TRENCH SAFETY

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TRENCH SAFETY SYSTEMS, SUCH AS SHEETING AND BRACING, IN ACCORDANCE WITH STATE, LOCAL AND OSHA REGULATIONS.

CONFINED SPACE SAFETY

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A CONFINED SPACE ENTRY SAFETY SYSTEM IN ACCORDANCE WITH STATE, LOCAL AND/OR OSHA REGULATIONS.

5. PROJECT CLOSEOUT

CLEANING UP

THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER OF RECORD OR CITY OF HOLLYWOOD, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY CONTRACTOR'S WORK, EQUIPMENT, EMPLOYEES OR THOSE OF CONTRACTOR'S SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THIS END, THE CONTRACTOR SHALL DO AS REQUIRED, ALL NECESSARY HIGHWAY OR DRIVEWAY, SIDEWALK AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.

PROJECT RECORD DOCUMENTS

a. THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF ALL WORK ITEMS COMPLETED.

ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER OF RECORD SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO "SATISFY THE ENGINEER OF RECORD THAT THE INFORMATION PROVIDED A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED".

UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF "AS-BUILT" CONSTRUCTION DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONED LOCATIONS AND ELEVATIONS OF ALL IMPROVEMENTS AND SHALL BE SIGNED BY THE CONTRACTOR.

ALL "AS-BUILT" INFORMATION ON ELEVATIONS OF SANITARY SEWAGE, PAVING, DRAINAGE AND UTILITY EASEMENT SHALL BE CERTIFIED BY A REGISTERED SURVEYOR AND MAPPER.

"AS-BUILT" INFORMATION ON THE UTILITY SYSTEM SHALL INCLUDE, BUT IS NOT LIMITED TO LOCATIONS OF ALL VALVES, FITTINGS, FIRE HYDRANTS, WATER AND SEWER SERVICES, TAP AND END, ANY PIPE DEFLECTIONS AND TOP-OF-PIPE ELEVATION ON 100-FOOT INTERVALS AT A MINIMUM.

PRIOR TO A FINAL INSPECTION BY CITY OF HOLLYWOOD, THE CONTRACTOR SHALL SUBMIT TWO (2) SETS OF BLUEPRINTS OF "AS-BUILT" CONSTRUCTION DRAWINGS

UPON A FINAL INSPECTION BY CITY OF HOLLYWOOD, THE CONTRACTOR SHALL SUBMIT TO THE CITY (1) COMPLETE SET OF REPRODUCIBLE MYLARS AND (3) SETS OF BLUEPRINTS OF "AS-BUILT" CONSTRUCTION DRAWINGS THAT HAVE BEEN CERP CERTIFIED BY A REGISTERED SURVEYOR AND MAPPER AND THE ENGINEER OF RECORD. A CERTIFIED VIRUS FREE LABELED CD CONTAINING AN ELECTRONIC DRAWING FILE IN AUTO-CAD 2000 FORMAT OR AN EQUIVALENT DXF FILE SHALL BE SUBMITTED TO CITY OF HOLLYWOOD ENGINEERING DEPARTMENT. THE ELECTRONIC DRAWINGS WILL BE TO SCALE AND SET IN

STATE PLANE COORDINATE SYSTEM, NAVD 83 (FEET).

MONUMENTS

ALL PROPERTY MONUMENTS OR PERMANENT REFERENCES REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

UNPAVED SURFACES

ALL UNPAVED SURFACES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.

WALK THROUGH INSPECTION

THE CONTRACTOR SHALL CONDUCT A WALK THROUGH INSPECTION WITH THE CITY OF HOLLYWOOD UTILITIES DEPARTMENT. THE CONTRACTOR SHALL HAVE PERSONNEL AND EQUIPMENT TO OPERATE ALL VALVES, FIRE HYDRANTS AND OPENING OF MANHOLES FOR INSPECTION.

SECTION 2: EARTHWORK AND COMPACTION NOTES:

1. GENERAL:

QUALITY CONTROL TESTING FOR STABILIZATION, BASE, PAVEMENT, COMPACTION, AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF HOLLYWOOD REQUIREMENTS, AND SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR, COPIES OF ALL TEST REPORTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD AS THEY ARE RECEIVED.

EXISTING ON-SITE BASE MATERIAL SHALL NOT BE REUSED FOR BASE CONSTRUCTION, BUT MAY BE USED FOR BACKFILL AROUND UTILITY LINES, AND FOR SUBGRADE CONSTRUCTION, AND FOR GENERAL FILL IF NECESSARY.

ALL SUBGRADE UNDER PAVED AREAS SHALL HAVE A MINIMUM L.B.R. VALUE OF 40 AND SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

ALL SUBGRADE UNDER SIDEWALK AREAS SHALL HAVE A MINIMUM OF 6" COMPACTED SUBGRADE TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED.

SOD SHALL BE ST. AUGUSTINE, BITTER BLUE OR FLORATAM AND SHALL BE PLACED ON THE GRADED TOP SOIL AND WATERED FOR A MINIMUM OF 30 DAYS TO ENSURE SATISFACTORY CONDITION UPON FINAL ACCEPTANCE OF THE PROJECT.

WHEN WORKING IN AND AROUND EXISTING DRAINAGE CANALS OR LAKES, APPROPRIATE SILT BARRIERS SHALL BE INSTALLED.

NO MUCK BLANKET IS TO BE PLACED ON THE BOTTOM OF RETENTION AREAS OR SWALES.

2. ON-SITE

ALL MATERIAL EXCAVATED EAST OF COASTAL CONSTRUCTION CONTROL LINE (CCCL) MUST STAY EAST OF CCCL.

SUITABLE BACKFILL SHALL BE MINIMUM L.B.R. 40 MATERIAL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 FOR THREE (3) FEET BEYOND THE PERIMETER OF THE PAVING.

EROSION CONTROL MEETING NPDES REQUIRED PERFORMANCE STANDARDS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

SECTION 3: PAVING NOTES

1. GENERAL

ALL UNDERGROUND FACILITIES, INCLUDING WATER, SEWER, STORM DRAINAGE, SLEEVES FOR PUBLIC UTILITIES, AND IRRIGATION LINES SHALL BE INSTALLED PRIOR TO COMPACTION OF ROAD SUBGRADE AND INSTALLATION OF BASE MATERIAL.

ALL EXISTING PAVEMENT CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTORS EXPENSE.

WHERE PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT.

2. MATERIALS

BASE COURSE SHALL BE CRUSHED LIMEROCK MIAMI OOLITE WITH A MINIMUM OF 70% CARBONATES OF CALCIUM AND MAGNESIUM (60% FOR LOCAL STREETS AND PARKING AREAS) AND A MINIMUM LIMEROCK BEARING RATIO 100.

ALL LIMEROCK BASE UNDER PAVED AREAS SHALL HAVE A MINIMUM L.B.R. VALUE OF 100, AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

PRIME COAT AND TACK COAT SHALL MEET F.D.O.T. STANDARDS.

SURFACE COURSE SHALL BE EQUAL TO F.D.O.T. TYPE SP-9 ASPHALT.

REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6"x6" No. 10 GAUGE WIRE MESH, OR AS SHOWN ON THE PLANS.

3. INSTALLATION

LIMEROCK BASE MATERIAL SHALL BE IN THE COMPACTION THICKNESS SHOWN ON THE PLANS AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO OR MORE EQUAL LIFTS.

ASPHALTIC CONCRETE PAVEMENT SHALL BE IN THE THICKNESS SHOWN ON THE PLANS.

PRIME COAT SHALL BE PLACED ON ALL LIMEROCK BASES IN ACCORDANCE WITH F.D.O.T. STANDARDS.

TACK COAT SHALL BE PLACED AS REQUIRED IN ACCORDANCE WITH F.D.O.T. STANDARDS.

4. TESTING

ALL SUBGRADE, LIMEROCK AND ASPHALT TESTS REQUIRED SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OF RECORD AND/OR THE PERMITTING AGENCY.

DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY, CERTIFIED BY THE STATE OF FLORIDA, AND TAKEN AS DIRECTED BY THE ENGINEER OF RECORD AND THE PERMITTING AGENCY.

ALL TESTING COSTS SHALL BE PAID FOR BY THE CONTRACTOR.

SECTION 4: WATER DISTRIBUTION SYSTEM

1. ALL WATER SERVICE LINES, FITTINGS, CONNECTIONS AND RELATED INSTALLATIONS SHALL CONFORM TO THE FLORIDA BUILDING CODE, LATEST EDITION.

SECTION 5: SANITARY SEWER SYSTEM

1. ALL SANITARY SEWER SERVICE LINES, FITTINGS, CONNECTIONS AND RELATED INSTALLATIONS SHALL CONFORM TO THE FLORIDA BUILDING CODE, LATEST EDITION.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTES ON WATER SEWER SEPARATION:

1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE

BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.006(5)(2), F.S., AND RULE 64E-6.002, F.A.C.

2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

THE CONTRACTOR SHALL CONFORM TO THE MOST CURRENT AND MOST STRINGENT STANDARDS AND SPECIFICATION REQUIREMENTS FOR CITY OF HOLLYWOOD, PERTAINING TO ALL UTILITY PIPE SEPARATIONS AND CLEARANCES.

ALL WATER MAIN PIPE, INCLUDING FITTINGS, INSTALLED ON OR AFTER AUGUST 28, 2003, EXCEPT PIPE INSTALLED UNDER A CONSTRUCTION PERMIT FOR WHICH THE DEPARTMENT RECEIVED A COMPLETE APPLICATION BEFORE AUGUST 28, 2003, SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE AT DRINKING WATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED IN ACCORDANCE WITH SUBSECTION 62-555.320(10), F.A.C., AND ALL OTHER ABOVEGROUND PIPE SHALL BE PAINTED BLUE OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.

90% SUBMITTAL

HOLLYWOOD NORTH BEACH PARK MOORING FIELDS

CITY OF HOLLYWOOD, FLORIDA

GENERAL NOTES

DESIGNED BY: JAMES F THOMPSON, PE - FL REG # 54731

DATE: April 13, 2020

SCALE:

N.T.S.

PROJECT No.:

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