

# SEAWALL REPAIR AT KELLY PARK

400 E KELLY PARK RD., APOPKA, FL 32717

ORANGE COUNTY, FLORIDA

PARCEL ID NO. 10-20-28-0000-00-010



## LEGAL DESCRIPTION:

KELLY PARK

A PORTION OF SECTION 10, TOWNSHIP 20 SOUTH, RANGE 28 EAST, LYING IN ORANGE COUNTY, FLORIDA.

TERESA JACOBS

MAYOR

ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS

S. SCOTT BOYD

DISTRICT 1

BRYAN NELSON

DISTRICT 2

PETE CLARKE

DISTRICT 3

JENNIFER THOMPSON

DISTRICT 4

TED B. EDWARDS

DISTRICT 5

VICTORIA P. SIPLIN

DISTRICT 6

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## OWNER

ORANGE COUNTY CAPITAL PROJECTS  
400 E. SOUTH ST., 5TH FLOOR  
ORLANDO, FL 32801  
(407) 836-0050

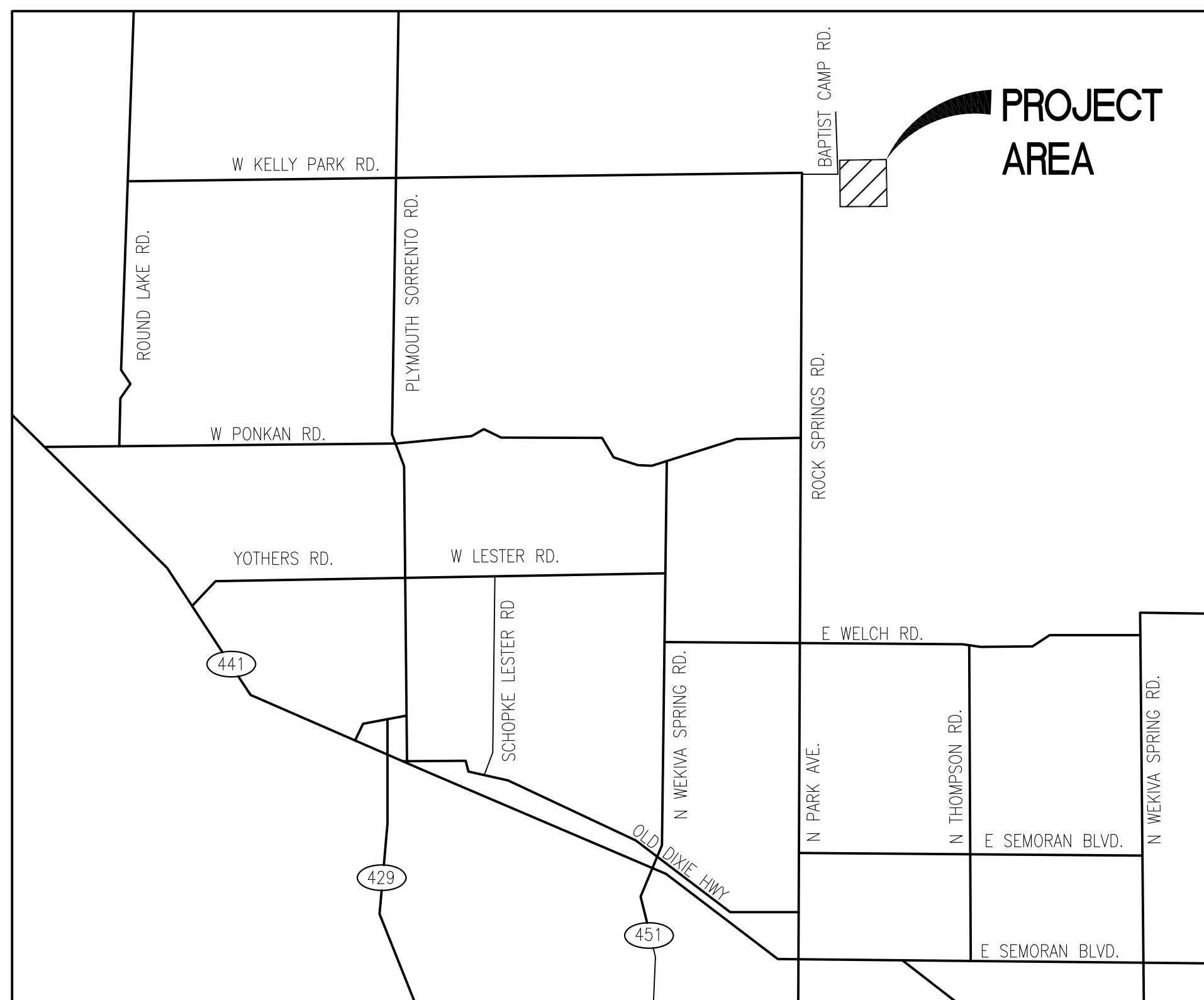
ORANGE COUNTY PARKS & RECREATION  
4801 WEST COLONIAL DR.  
ORLANDO, FL 32808  
(407) 836-6200

## PLANNERS + ENGINEERS

SK CONSORTIUM, INC.  
1053 N. ORLANDO AVE, SUITE 3  
MAITLAND, FL 32751  
(407) 629-4288

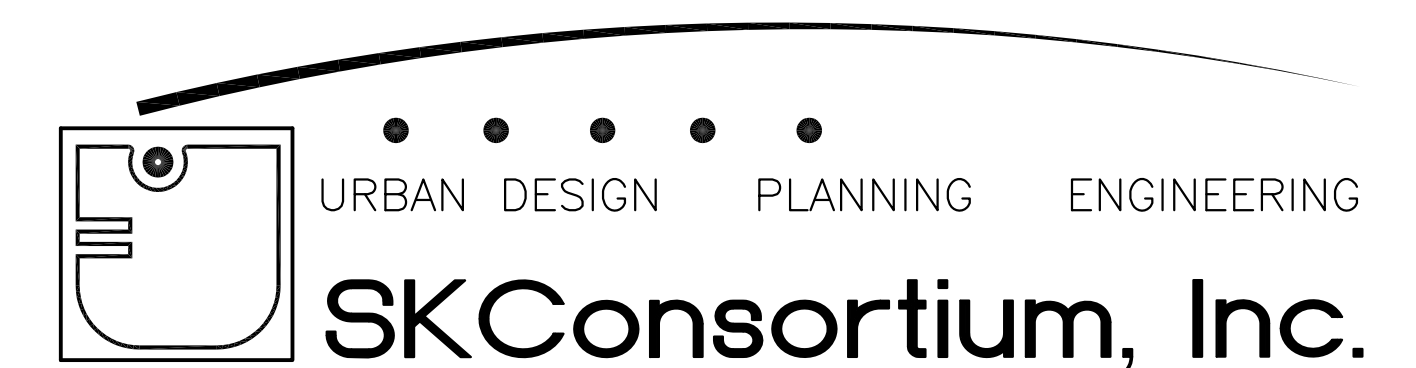
## SURVEYORS

SOUTHEASTERN SURVEYING AND MAPPING CORP.  
6500 ALL AMERICAN BLVD.  
ORLANDO, FL 32810  
(407) 292-8580

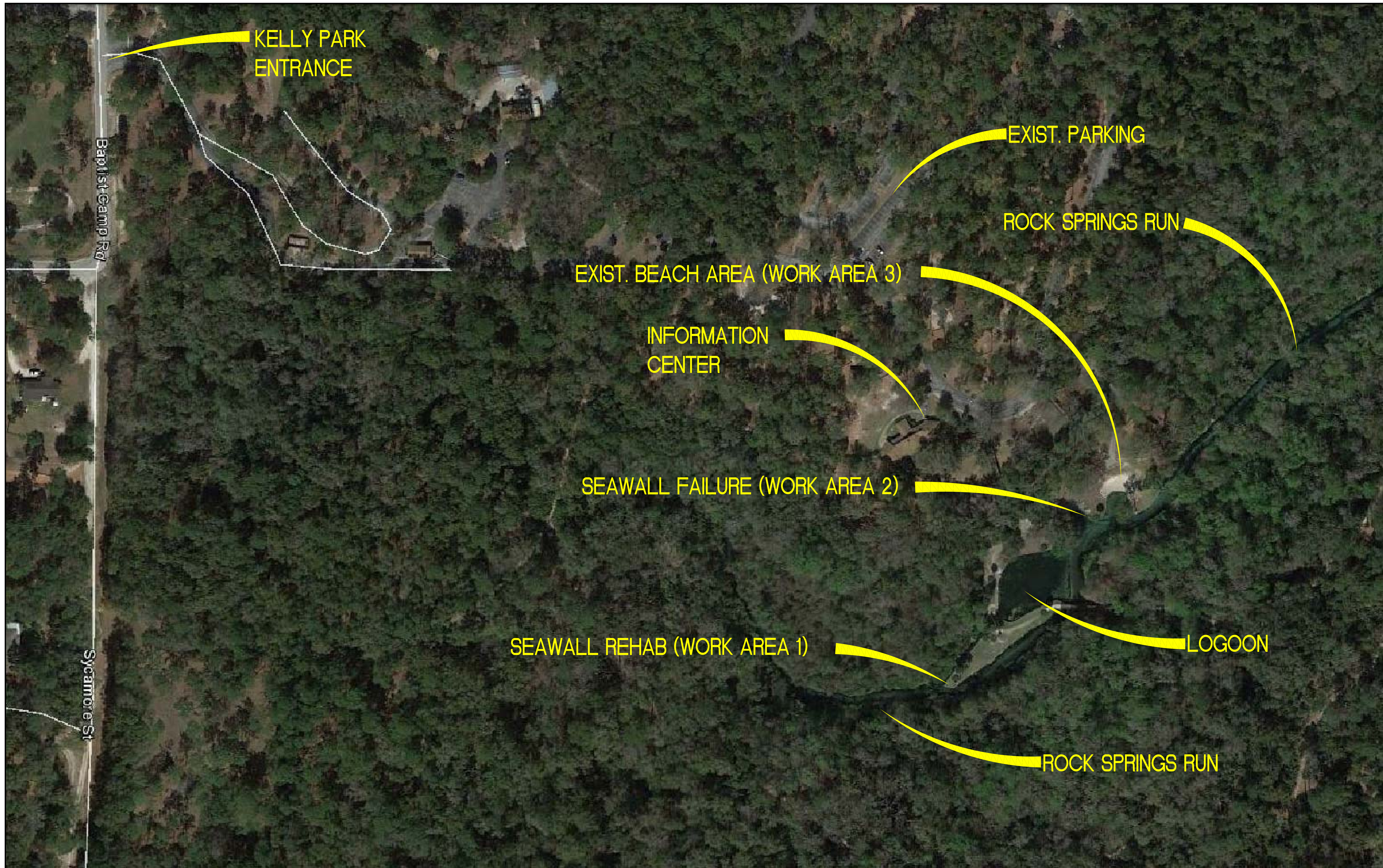


VICINITY MAP

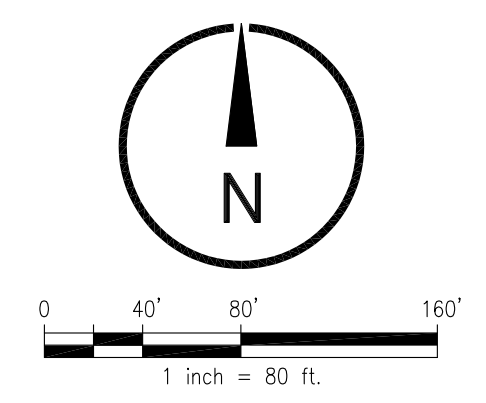
SCALE: NTS



1053 N. ORLANDO AVE. ■ SUITE 3 • MAITLAND ▲ FLORIDA 32751  
TELEPHONE 407-629-4288 ■ FACSIMILE 407-629-1656 • EB# 7080



OVERALL EXIST. AERIAL SITE PLAN  
 SCALE: 1" = 80'



Soil: Majid Kalaghchi P.E. 41046

OVERALL EXISTING AERIAL SITE PLAN  
 SEAWALL REPAIR AT KELLY PARK  
 OC CAPITAL PROJECTS

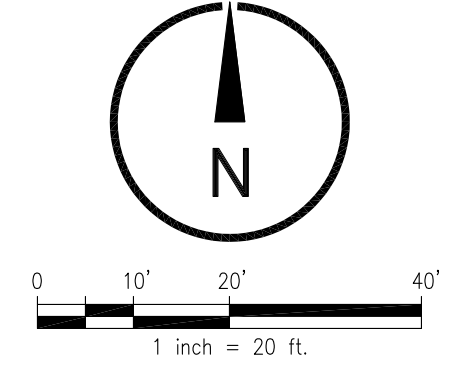
ORANGE COUNTY, FLORIDA

60% SUBMITTAL 2-5-16  
 90% SUBMITTAL 9-8-16  
 PERMIT AND BID SET 10-7-16

Issue Date and Purpose	
Project Number:	1578
Drawn by:	D. FORSYTH
Checked:	M. KALAGHCHI
File No.:	L:\Bids\OC\162436
	C000

**EXISTING SITE DATA:**

400 E KELLY PARK RD., APOPKA, FL 32717  
 PARCEL ID NO. 10-20-28-0000-00-010



**SOIL EROSION AND SEDIMENTATION CONTROL NOTES**

- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS OF ORANGE COUNTY, ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, AND FDEP NPDES CONSTRUCTION GENERIC PERMIT, 62-621.300(4)(A) FAC. BMP'S USED ON SITE MUST MEET THE MINIMUM SPECS IN THE 2013 STATE OF FLORIDA E&S/C DESIGNER AND REVIEWER MANUAL.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN, CONSTRUCTION.
- SOIL MATERIALS, FROM WORK ON THIS PROJECT SHALL BE CONTAINED, AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. THESE INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.

**TEMPORARY EROSION CONTROL MEASURES**

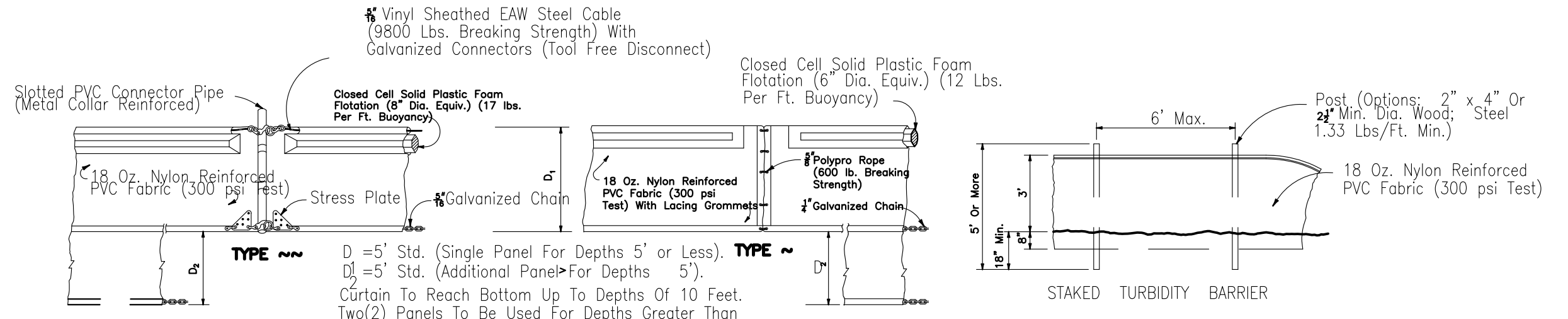
- FILTER FABRIC BARRIERS SHALL BE USED AT THE PERIMETER/LIMITS OF THE PROPOSED CONSTRUCTION TO PREVENT SEDIMENTATION FROM LEAVING THE PROJECT BOUNDARIES OR DISCHARGE INTO OFF SITE DRAINAGE FACILITIES.
- STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
- INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
- TEMPORARY SEEDING AND MULCHING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 7 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WHILE NOT LATTER COMPLETE WITH THE PERMANENT GRASSING. SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH "C" ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
- MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- CONTRACTOR SHALL PLACE FLOATING TURBIDITY BARRIERS WHERE SHOWN ON PLANS AS MIN. MEASURE TO PREVENT SOIL EROSION FROM PROJECT AREA. ALL TURBIDITY BARRIERS SHALL BE ANCHORED AS REQUIRED.

**INSPECTIONS:**

- AN INSPECTOR, CERTIFIED BY ORANGE COUNTY, IS REQUIRED TO INSPECT THE EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON APPROVED STORMWATER POLLUTION PREVENTION PLAN. INSPECTION REPORTS ARE TO BE COMPLETED ON FORMS MEETING THE MINIMUM REQUIREMENTS OF CGP AND SUBMITTED ONCE EVERY WEEK AND AFTER EVERY RAINFALL OF 0.50" OR MORE DURING THE CONSTRUCTION PHASE.
- ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOME ONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
- BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
- SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
- A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
- PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT, AND WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORTS.

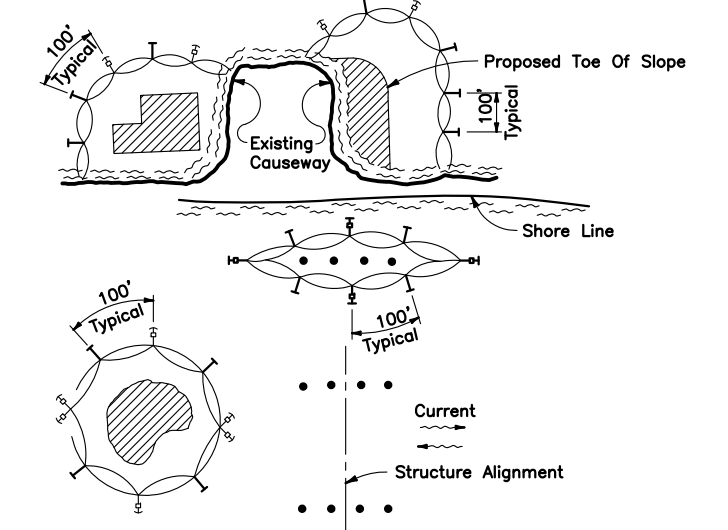
**PERMANENT EROSION CONTROL MEASURES**

- PERMANENT SODDING: ALL AREAS, WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL AS A MIN., BE SODDED.

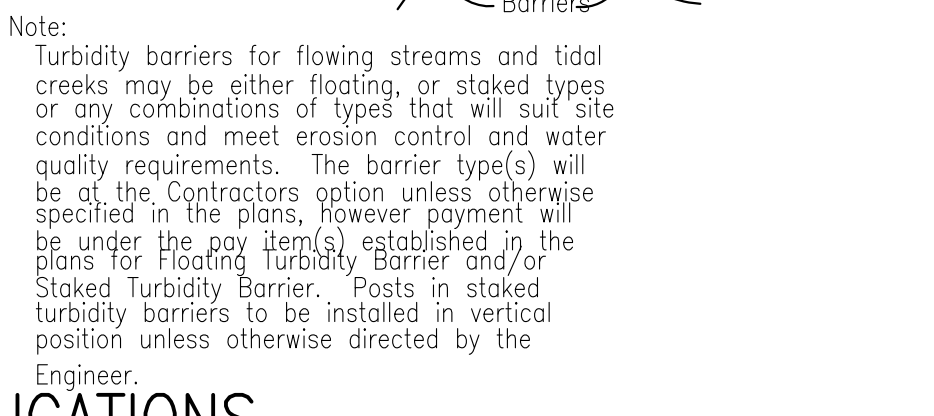


NOTICE: PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES ~ AND ~ SHALL BE AS APPROVED BY THE ENGINEER.

**FLOATING TURBIDITY BARRIERS**

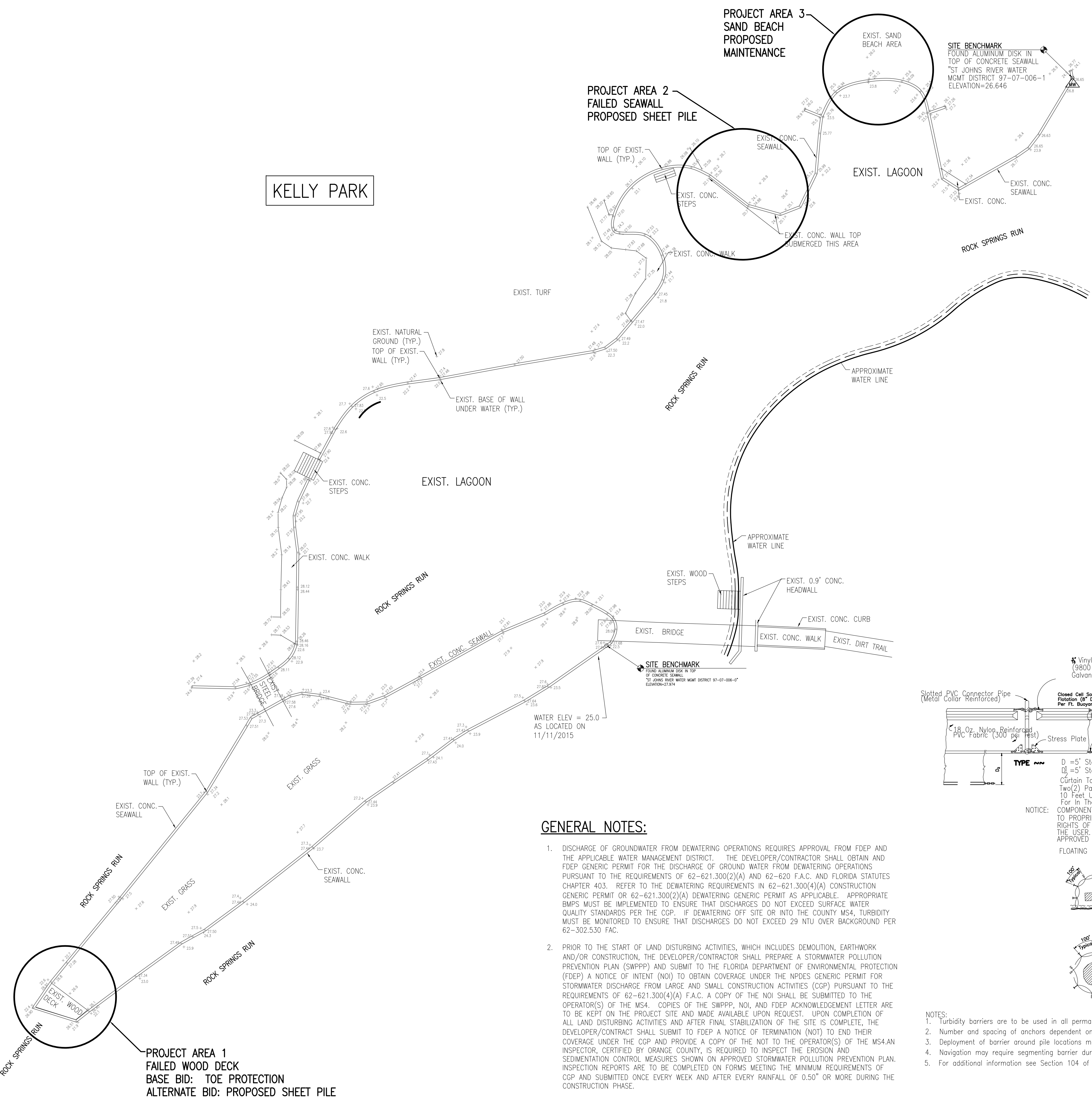


- LEGEND
- Pile Locations
  - ▨ Dredge Or Fill Area
  - Mooring Buoy w/Anchor
  - Anchor
  - Barrier Movement Due To Current Action



- NOTES:
- Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
  - Number and spacing of anchors dependent on current velocities.
  - Deployment of barrier around pile locations may vary to accommodate construction operations.
  - Navigation may require segmenting barrier during construction operations.
  - For additional information see Section 104 of the Standard Specifications.

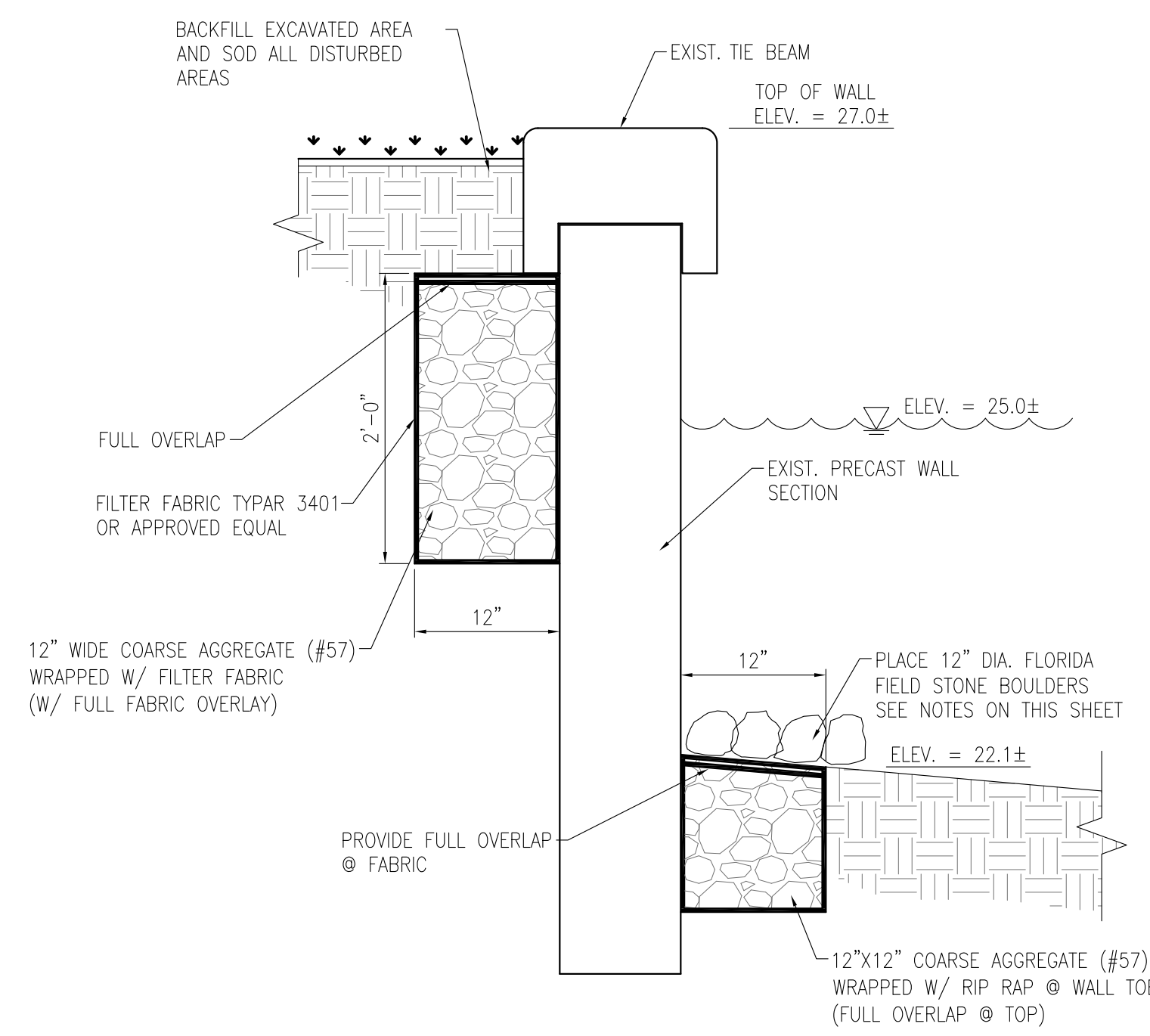
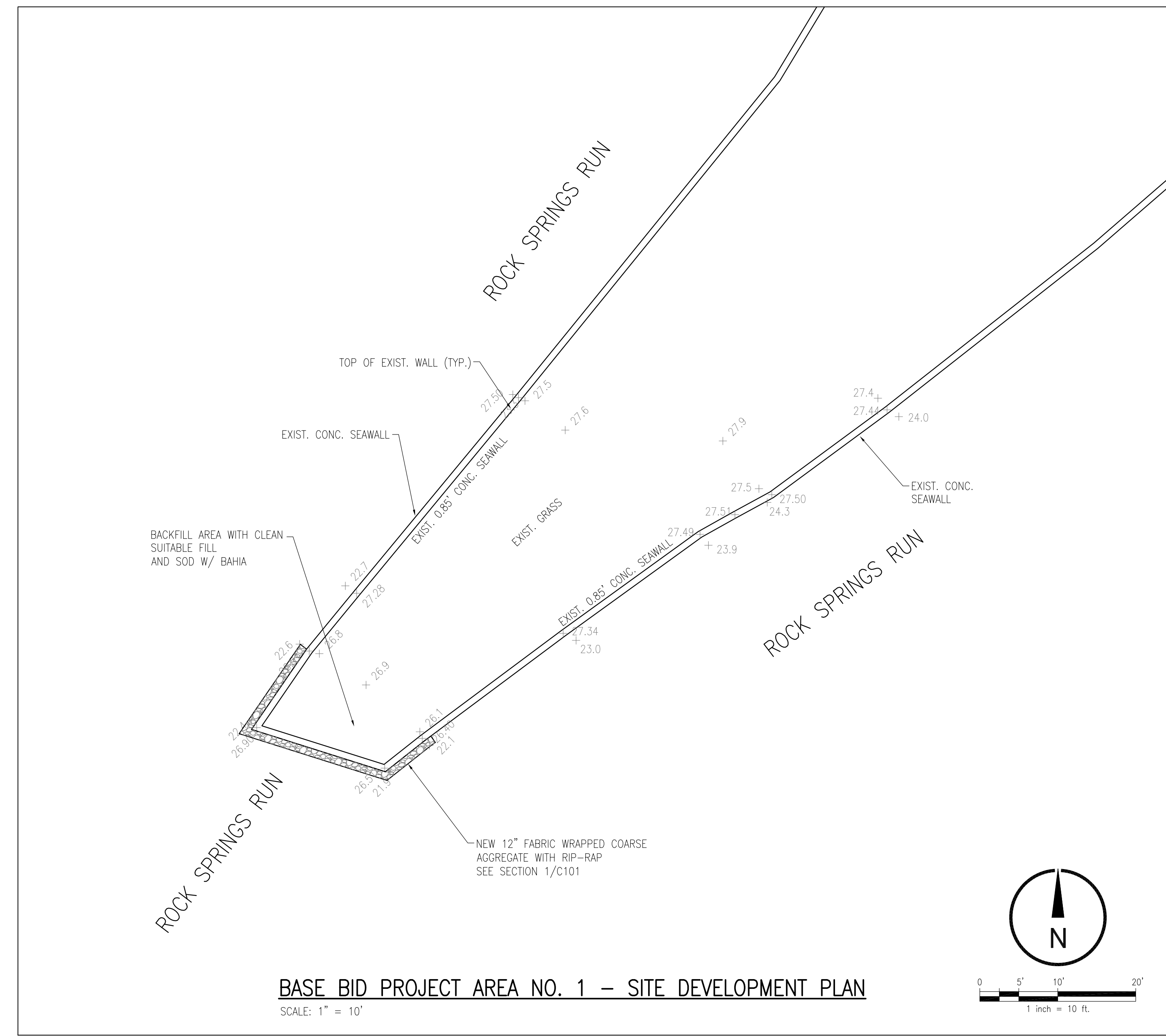
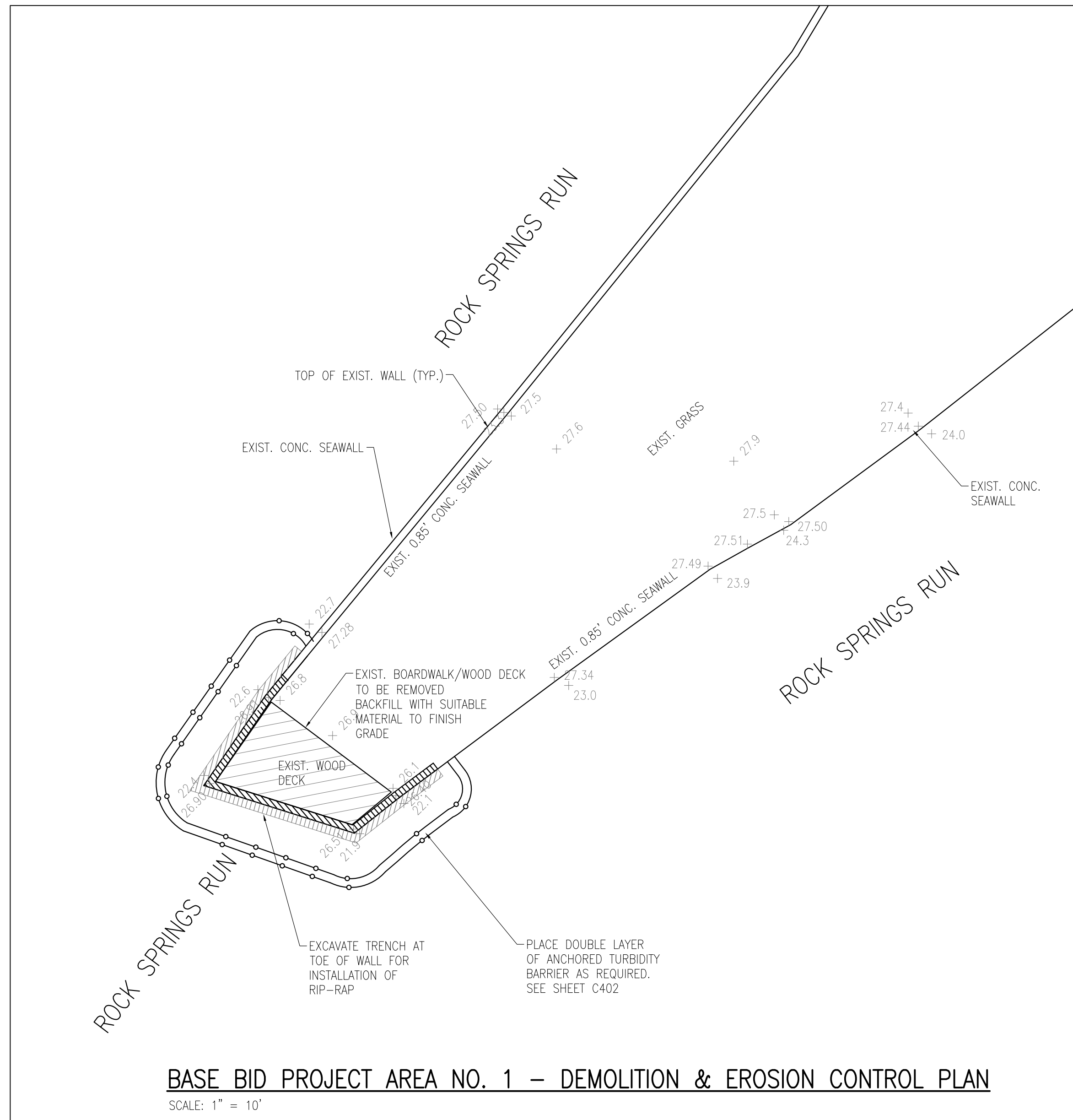
**1 TURBIDITY BARRIER APPLICATIONS**  
 C001 NOT TO SCALE



**GENERAL NOTES:**

- DISCHARGE OF GROUNDWATER FROM DEWATERING OPERATIONS REQUIRES APPROVAL FROM FDEP AND THE APPLICABLE WATER MANAGEMENT DISTRICT. THE DEVELOPER/CONTRACTOR SHALL OBTAIN AND FDEP GENERIC PERMIT FOR THE DISCHARGE OF GROUND WATER FROM DEWATERING OPERATIONS PURSUANT TO THE REQUIREMENTS OF 62-621.300(2)(A) AND 62-620 F.A.C. AND FLORIDA STATUTES CHAPTER 403. REFER TO THE DEWATERING REQUIREMENTS IN 62-621.300(4)(A) CONSTRUCTION GENERIC PERMIT OR 62-621.300(2)(A) DEWATERING GENERIC PERMIT AS APPLICABLE. APPROPRIATE BMP'S MUST BE IMPLEMENTED TO ENSURE THAT DISCHARGES DO NOT EXCEED SURFACE WATER QUALITY STANDARDS PER THE CGP. IF DEWATERING OFF SITE OR INTO THE COUNTY MS4, TURBIDITY MUST BE MONITORED TO ENSURE THAT DISCHARGES DO NOT EXCEED 29 NTU OVER BACKGROUND PER 62-302.530 FAC.
- PRIOR TO THE START OF LAND DISTURBING ACTIVITIES, WHICH INCLUDES DEMOLITION, EARTHWORK AND/OR CONSTRUCTION, THE DEVELOPER/CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) PURSUANT TO THE REQUIREMENTS OF 62-621.300(4)(A) F.A.C. A COPY OF THE NOI SHALL BE SUBMITTED TO THE OPERATOR(S) OF THE MS4. COPIES OF THE SWPPP, NOI, AND FDEP ACKNOWLEDGEMENT LETTER ARE TO BE KEPT ON THE PROJECT SITE AND MADE AVAILABLE UPON REQUEST. UPON COMPLETION OF ALL LAND DISTURBING ACTIVITIES AND AFTER FINAL STABILIZATION OF THE SITE IS COMPLETE, THE DEVELOPER/CONTRACTOR SHALL SUBMIT TO FDEP A NOTICE OF TERMINATION (NOT) TO END THEIR COVERAGE UNDER THE CGP AND PROVIDE A COPY OF THE NOT TO THE OPERATOR(S) OF THE MS4. AN INSPECTOR, CERTIFIED BY ORANGE COUNTY, IS REQUIRED TO INSPECT THE EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON APPROVED STORMWATER POLLUTION PREVENTION PLAN. INSPECTION REPORTS ARE TO BE COMPLETED ON FORMS MEETING THE MINIMUM REQUIREMENTS OF CGP AND SUBMITTED ONCE EVERY WEEK AND AFTER EVERY RAINFALL OF 0.50" OR MORE DURING THE CONSTRUCTION PHASE.

**OVERALL EXIST. SITE PLAN**  
 SCALE: 1" = 20'



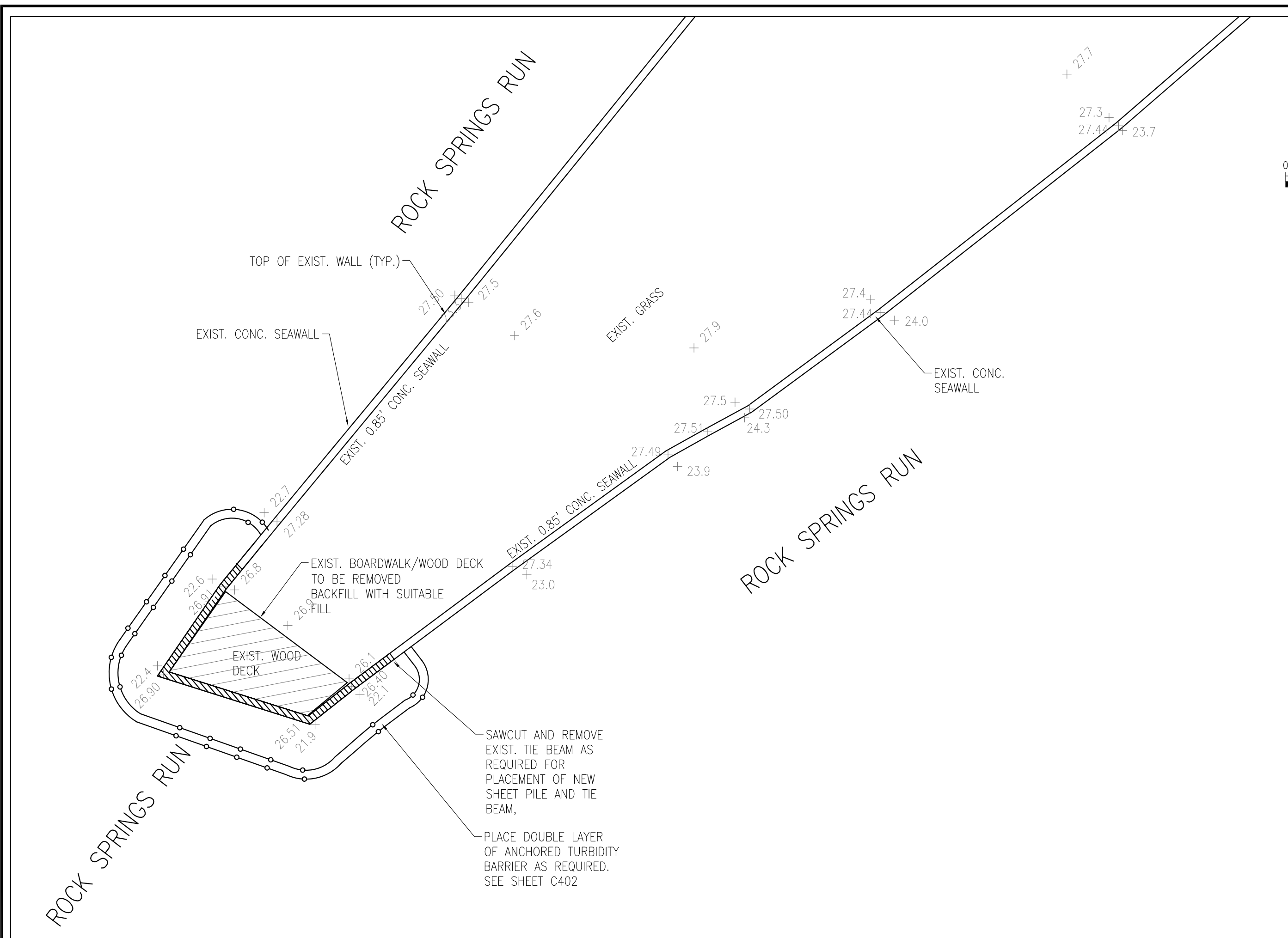
**1** BASE BID AREA NO. 1 REPAIR  
C101 1" = 1'-0"

Seal: Majid Kaloghchi P.E. 41046

**BASE BID PROJECT AREA NO. 1  
SEAWALL REPAIR AT KELLY PARK  
OC CAPITAL PROJECTS**

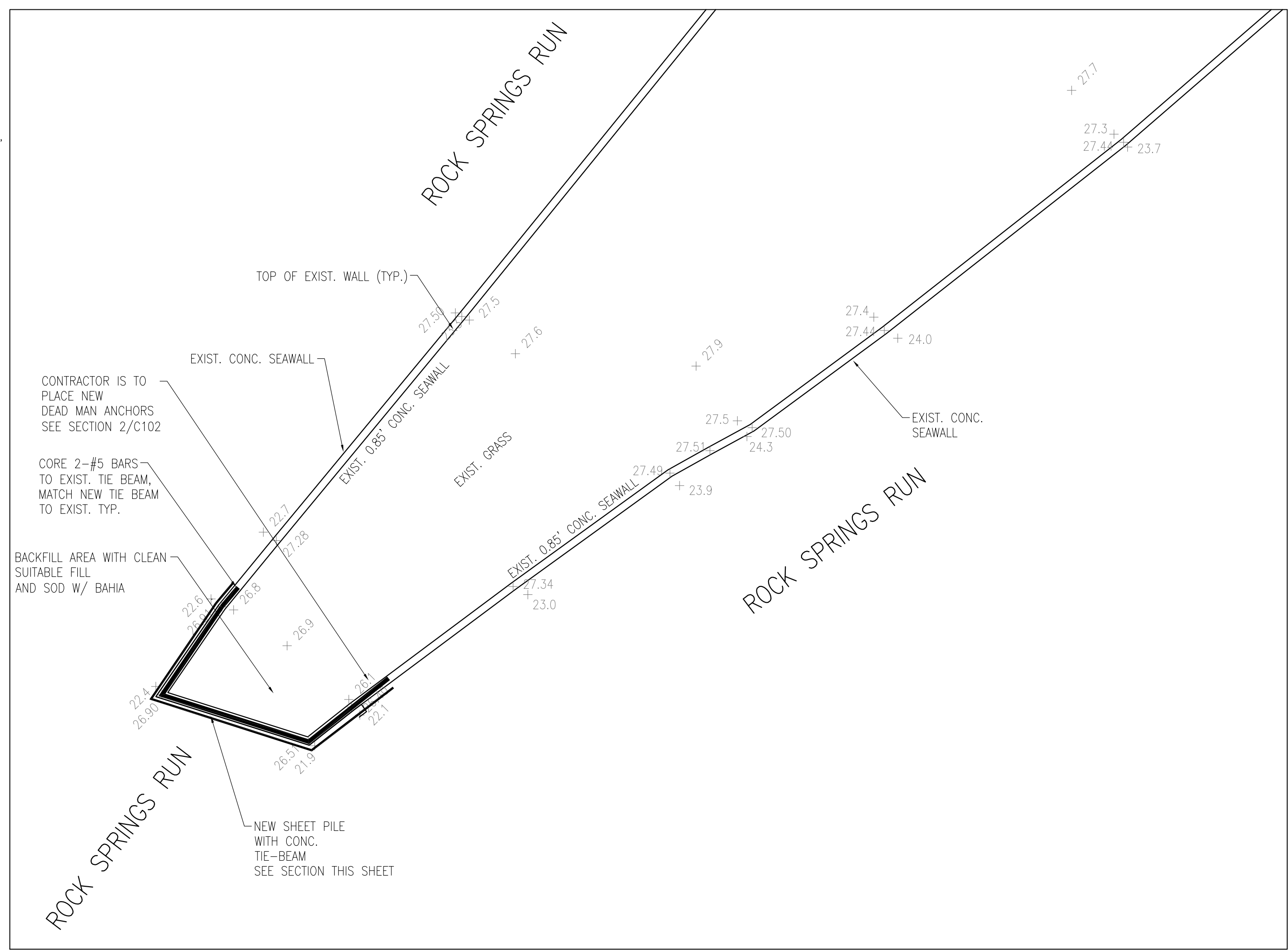
60% SUBMITTAL 2-5-16  
90% SUBMITTAL 9-8-16  
PERMIT AND BID SET 10-7-16

Issue Date and Purpose	
Project Number:	1578
Drawn by:	D. FORSYTH
Checked by:	M. KALAGHCHI
File No.:	C101
L:Border/SK/C/142439	



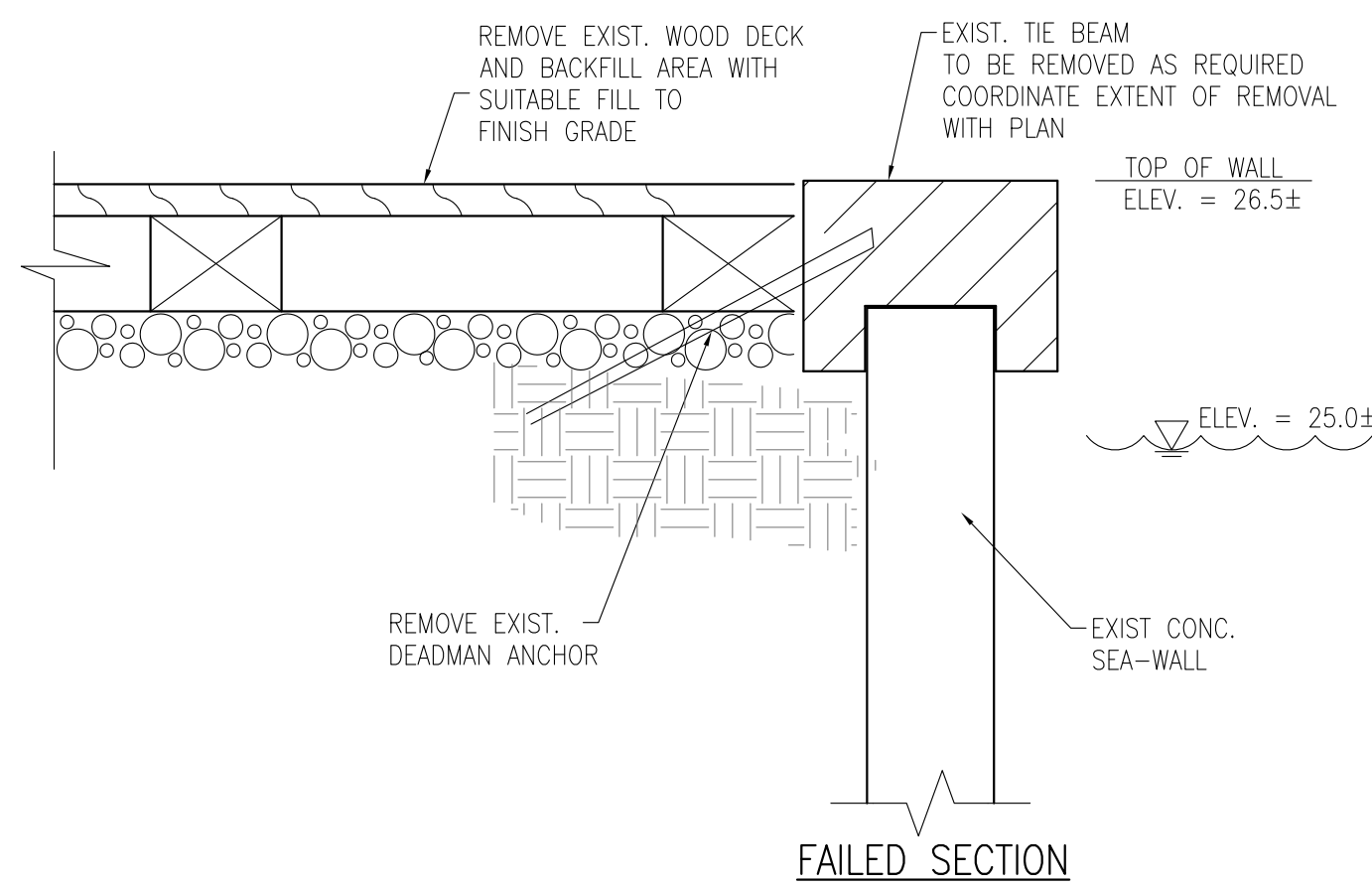
**ADD ALTERNATE PROJECT AREA NO. 1 - DEMOLITION & EROSION CONTROL PLAN**

SCALE: 1" = 10'



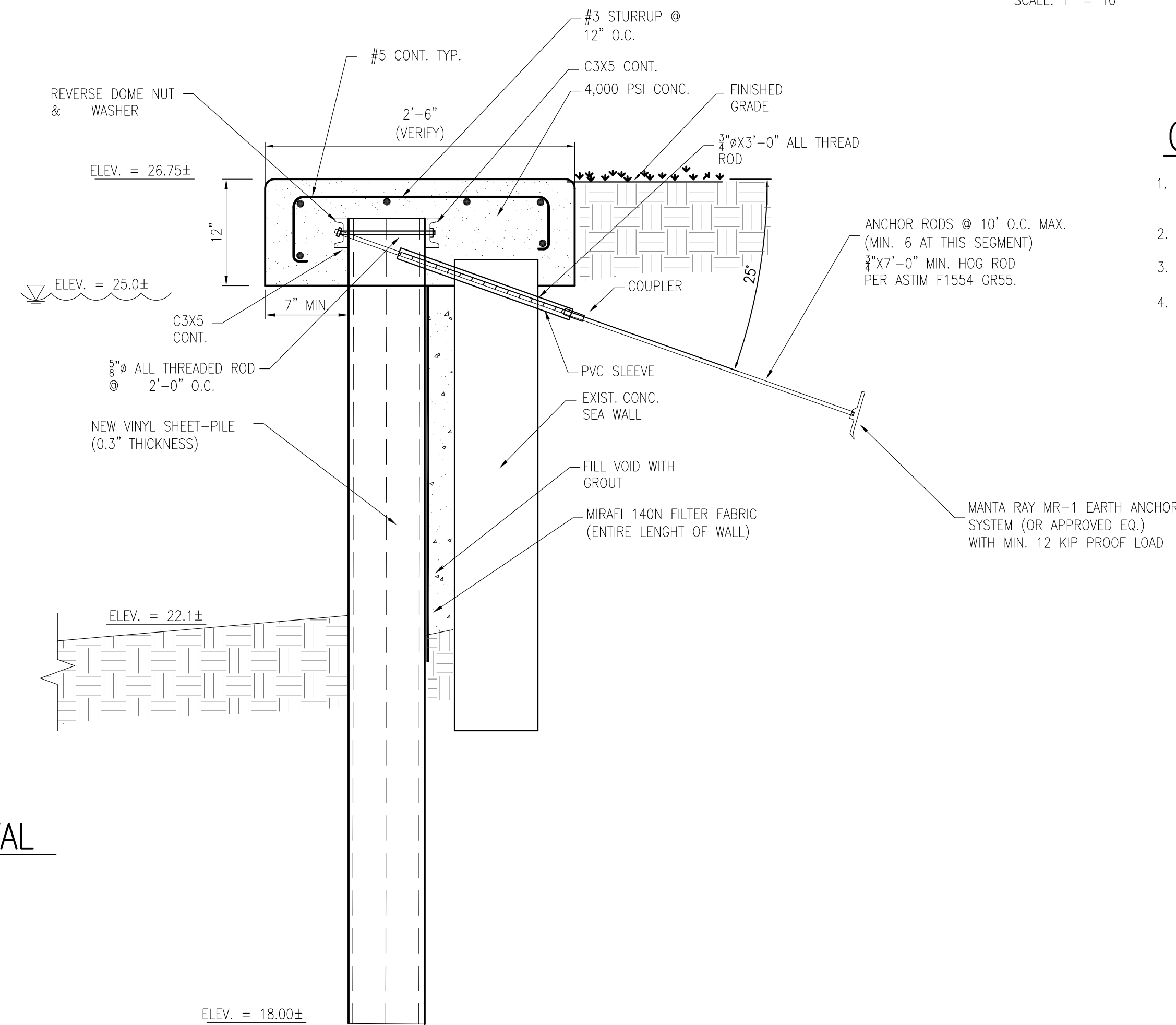
**ADD ALTERNATE PROJECT AREA NO. 1 - SITE DEVELOPMENT PLAN**

SCALE: 1" = 10'



**1 ALTERNATE BID EXIST. WALL REMOVAL**

C102 1" = 1'-0"

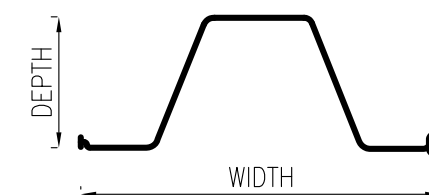


**2 ALT. BID AREA NO. 1 SHEET PILE**

C102

**GENERAL NOTES**

1. THE AREA WHERE PROPOSED SHEET PILE IS TO BE INSTALLED MAY CONTAIN UNDERGROUND ROCK FORMATION. CONTRACTOR IS RESPONSIBLE FOR PRE-DRILLING IF REQUIRED FOR INSTALLATION OF PILING.
2. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF EXISTING DEAD-MAN AS PART OF THE TIE BEAM REMOVAL.
3. WHERE EXISTING TIE BEAM ABUTS NEW TIE BEAM, CORE DRILL EXISTING CONC. FOR INSTALLATION OF 3-5/8" DOWELS. USE EPOXY TO SECURE THE DOWEL.
4. INSTALLATION OF SHEET PILE SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION.



MATERIAL	PVC EXTERIOR GRADE RIGID ONLY
SECTION WIDTH	20 INCHES
SECTION DEPTH	8 INCHES
SECTION THICKNESS	0.3 INCHES
WEIGHT	6.5 LBS/LINEAR FEET
MOMENT OF INERTIA	70.7 IN <sup>4</sup> /FT
SECTION MODULUS	16.1
ULTIMATE MOMENT	8720 FT.-LBS/FT
ALLOWABLE MOMENT	4360 FT. LBS/FT
TENSILE STRENGTH ASTM D638	6500 LBS/IN <sup>2</sup>
FLEXURAL STRENGTH ASTM D790	11,140 PSI
MODULUS OF ELASTICITY ASTM D790	380,000 PSI
NOTCHED IZOD IMPACT ASTM D256	13.75 LBS/IN.
HEAT DEFLECTION TEMPERATURE ASTM D648	158° F

**3 SHEET PILE SPECIFICATIONS**

C101

**ADD ALTERNATE - PROJECT AREA NO. 1**  
**SEAWALL REPAIR AT KELLY PARK**  
**OC CAPITAL PROJECTS**

60% SUBMITTAL 2-5-16  
 90% SUBMITTAL 9-8-16  
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Issue Date and Purpose

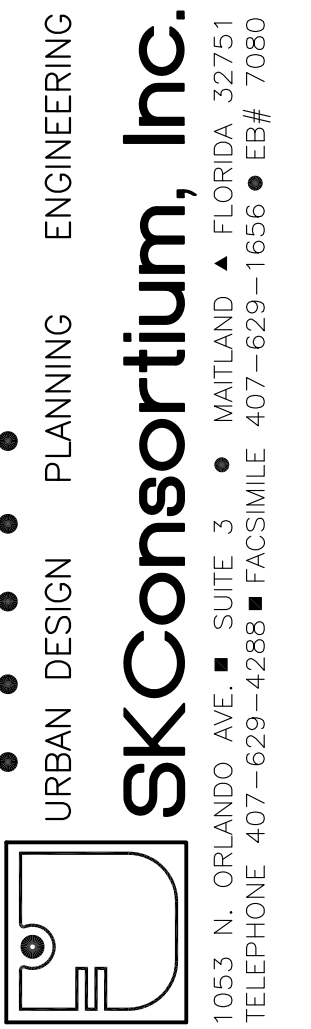
Project Number: **1578**

Drawn by: D. FORSYTH

Checked: M. KALAGHCHI

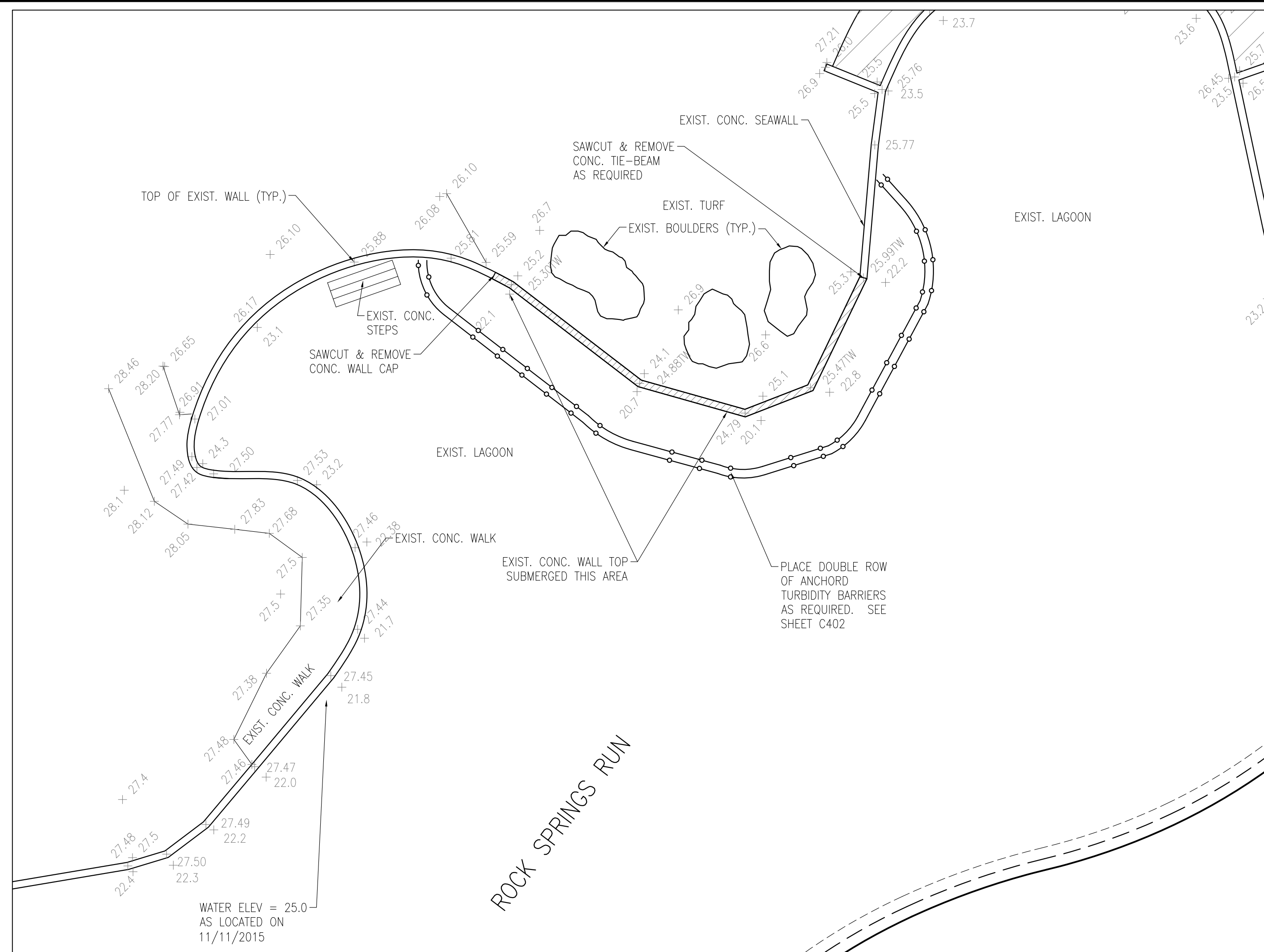
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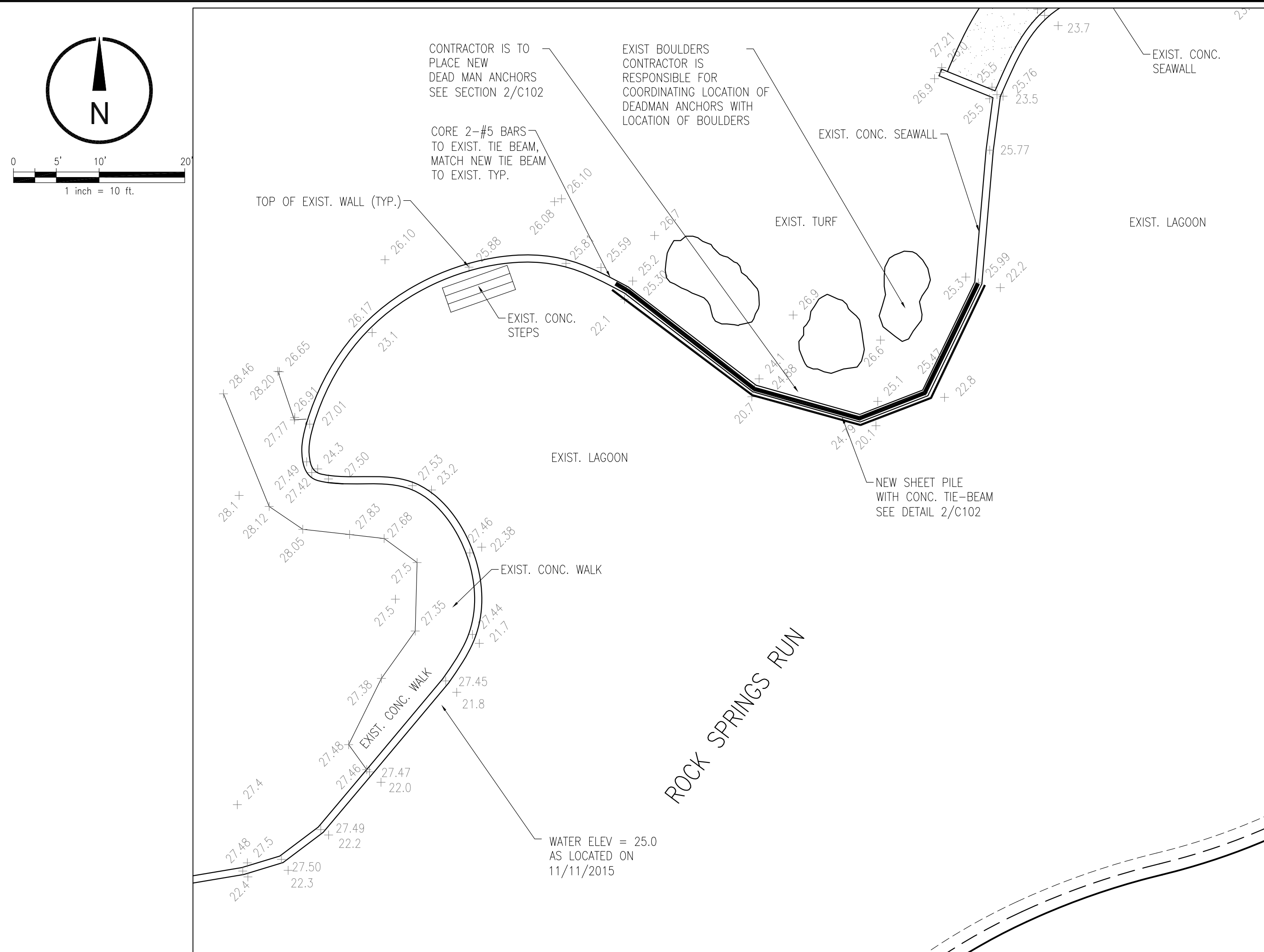
Seal: Majid Kaloghchi P.E. 41046

ORANGE COUNTY, FLORIDA



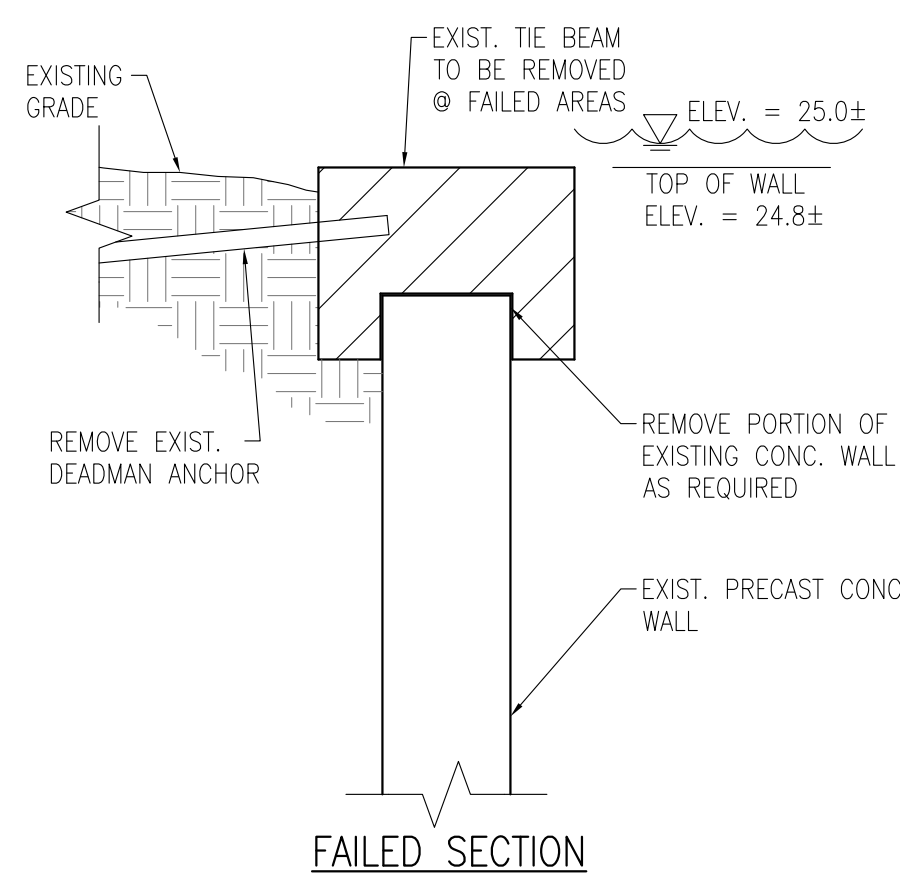
**PROJECT AREA NO. 2 – DEMOLITION & EROSION CONTROL PLAN**

SCALE: 1" = 10'



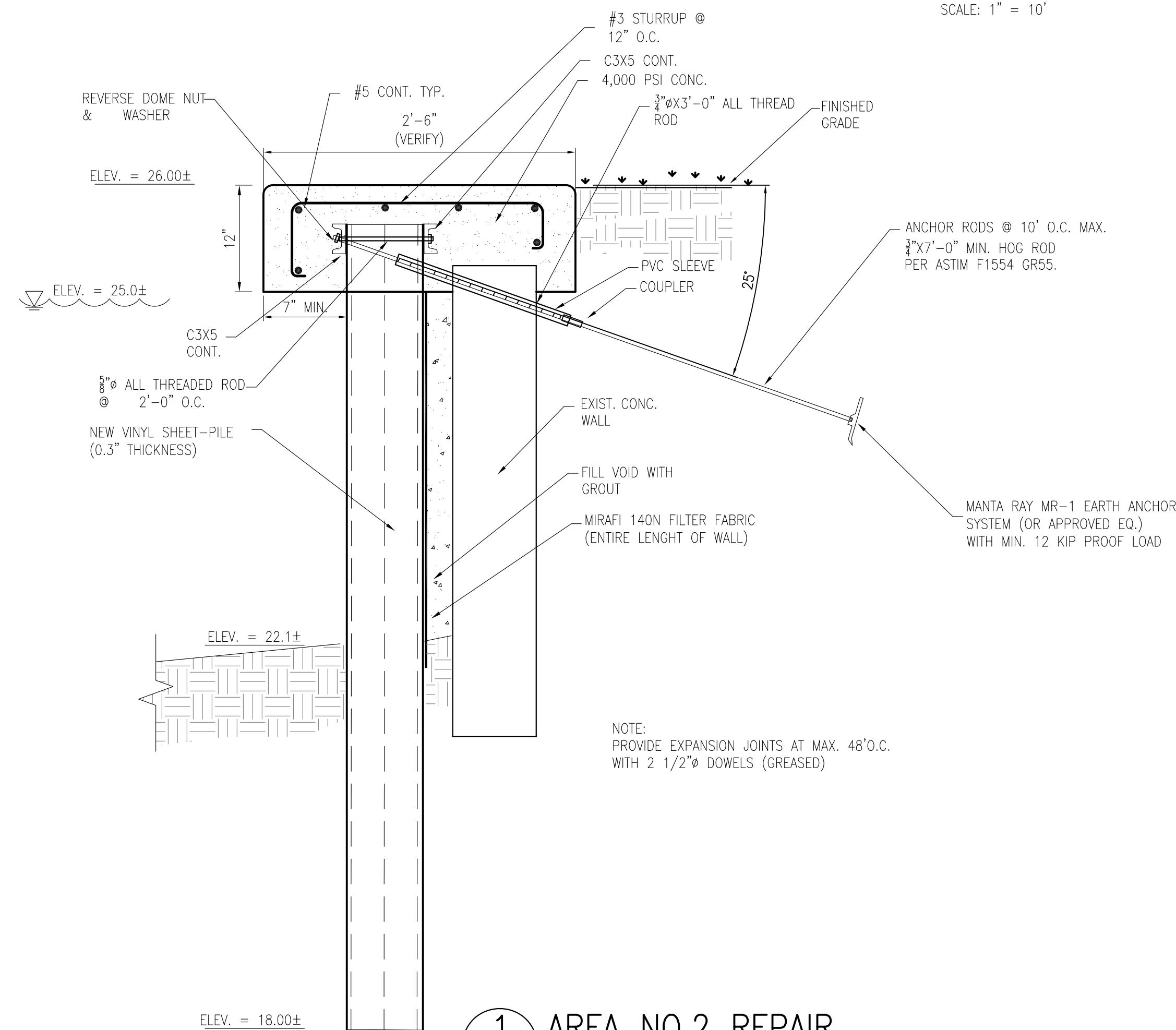
**PROJECT AREA NO. 2 – SITE DEVELOPMENT PLAN**

SCALE: 1" = 10'



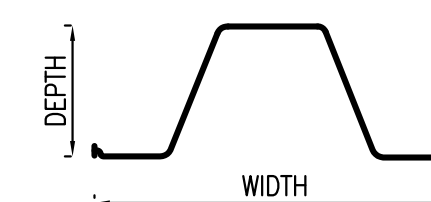
**1 EXIST. WALL REMOVAL**

C103 1" = 1'-0"



**1 AREA NO.2 REPAIR**

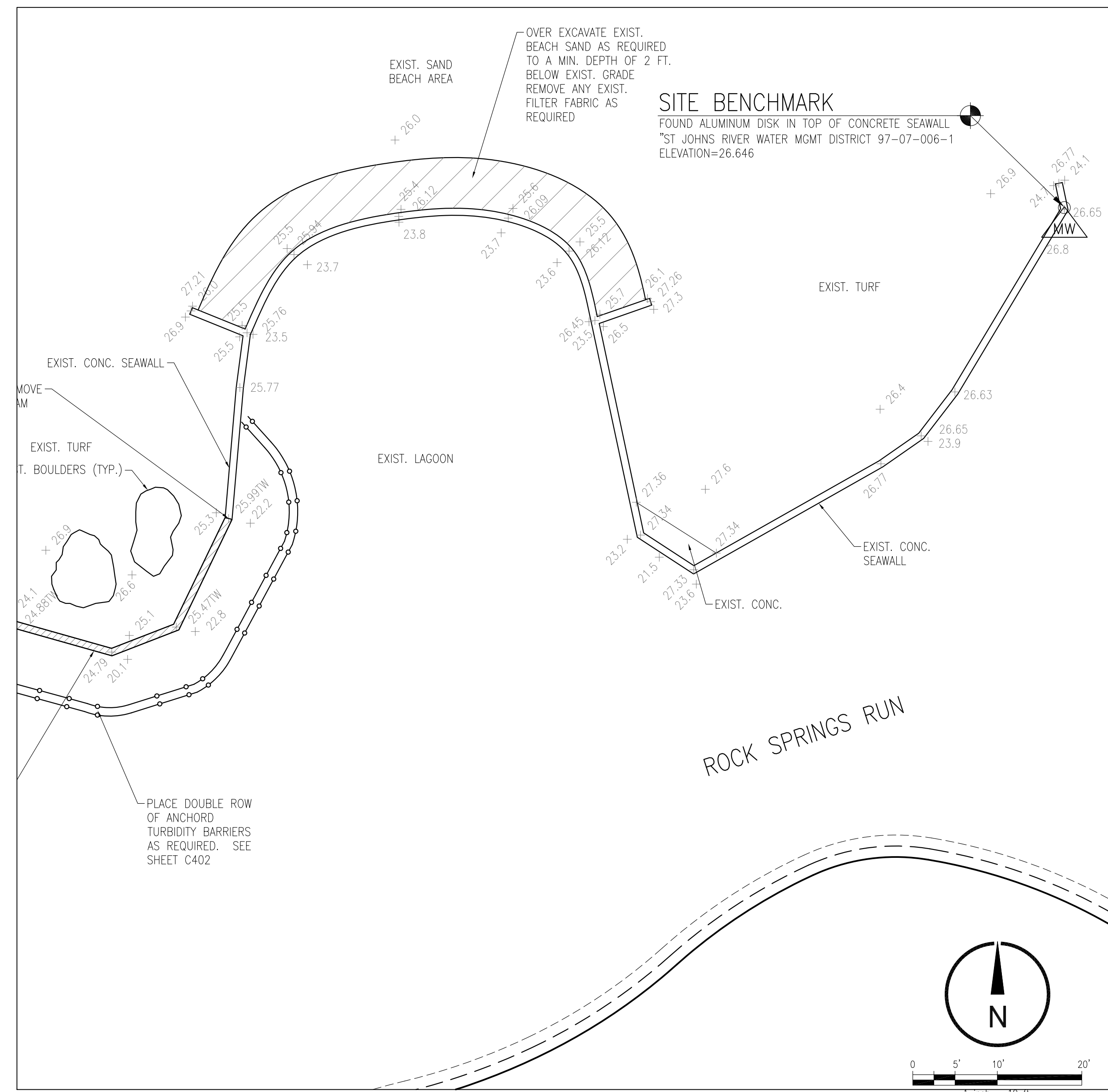
C103



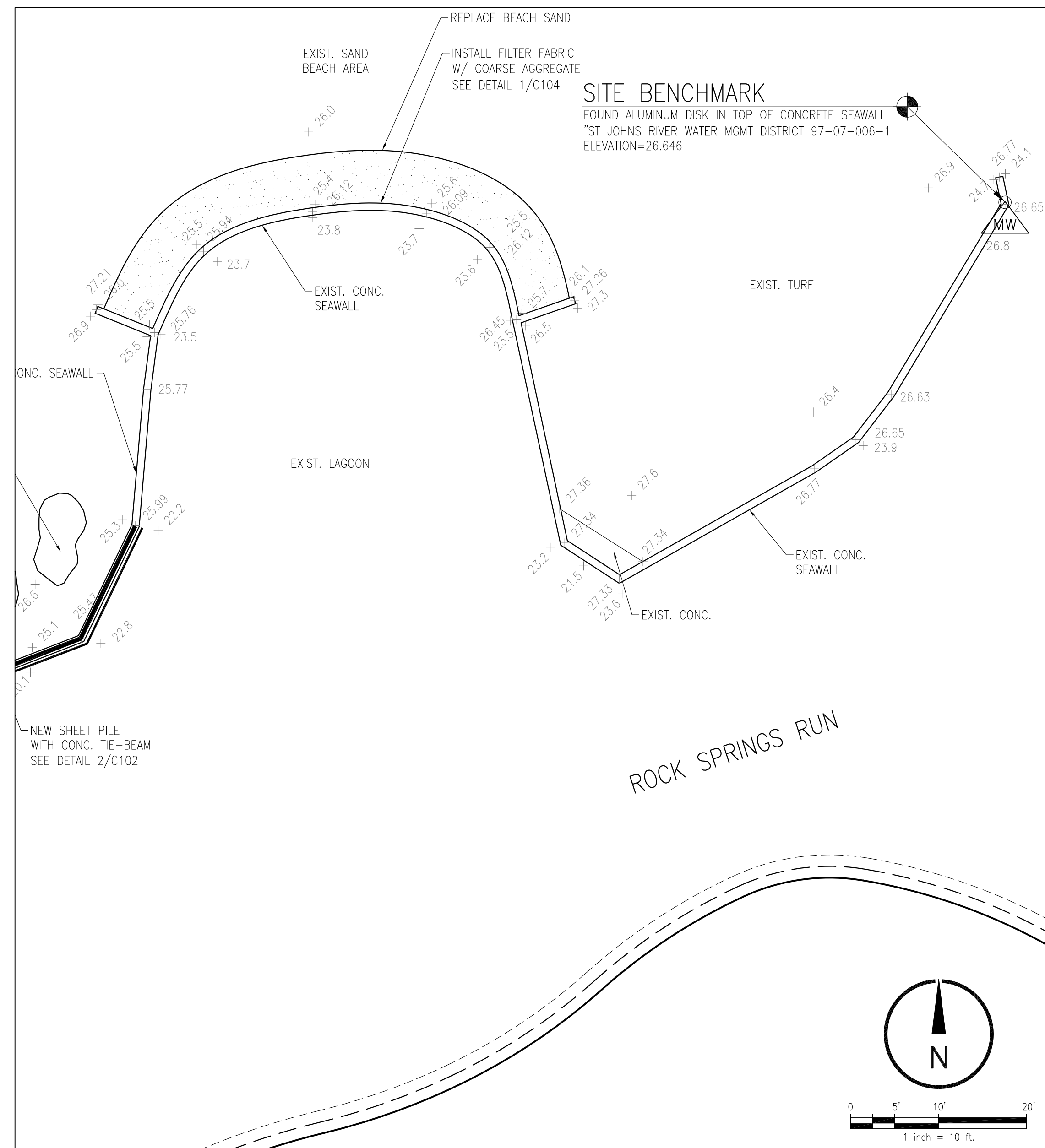
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**GENERAL NOTES**

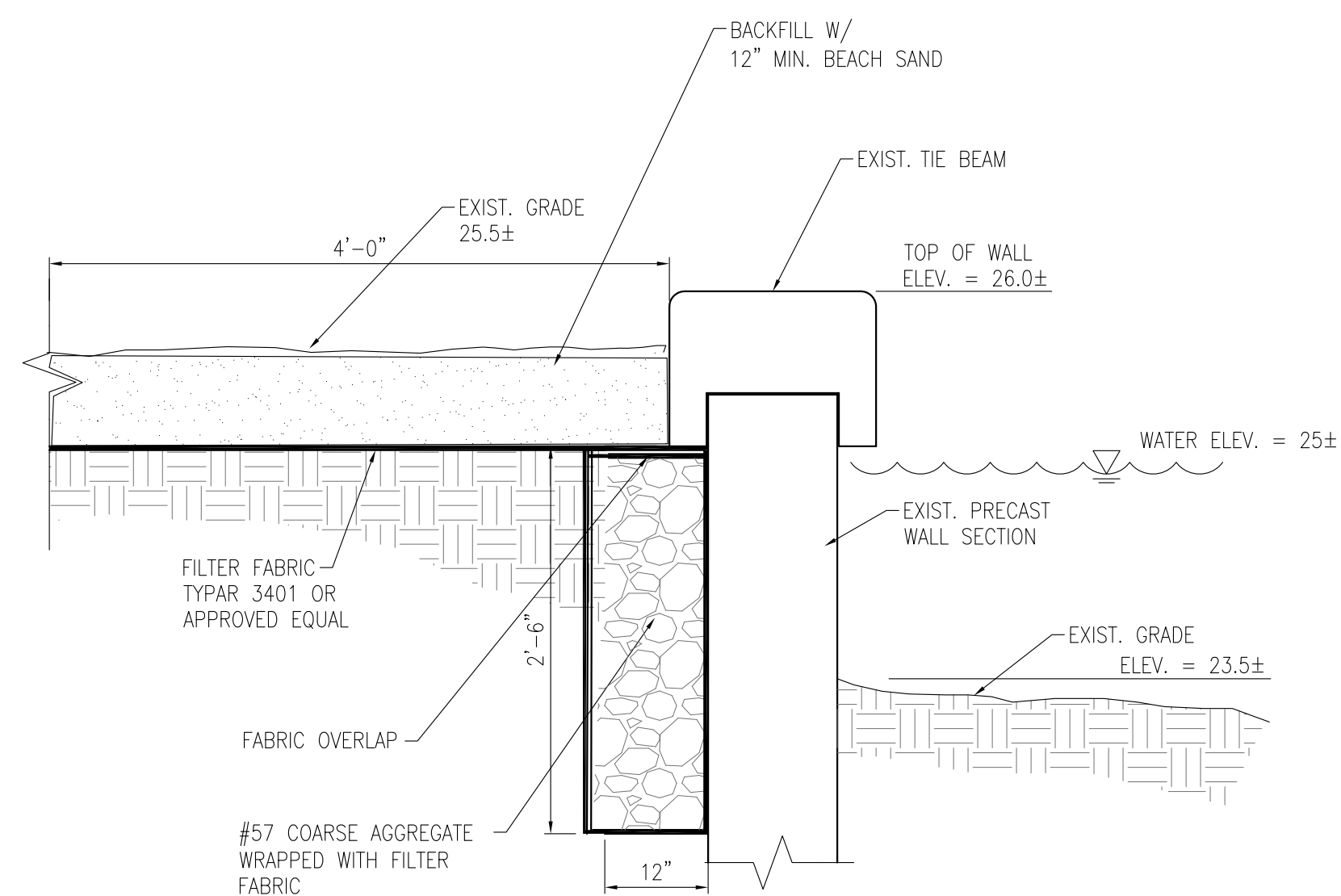
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**PROJECT AREA NO. 3 - DEMOLITION & EROSION CONTROL PLAN**  
SCALE: 1" = 10'



**PROJECT AREA NO. 3 - SITE DEVELOPMENT PLAN**  
SCALE: 1" = 10'



**1 AREA NO. 3 REPAIR**  
C104 1" = 1'-0"

Seal: Majid Kaloghchi P.E. 41046

**PROJECT AREA NO. 3**  
**SEAWALL REPAIR AT KELLY PARK**  
**OC CAPITAL PROJECTS**

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