



# BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS

## COMMISSIONER DISTRICT 6 ORANGE COUNTY, FLORIDA

### FINAL CONSTRUCTION SKETCHES

TERESA JACOBS, COUNTY MAYOR

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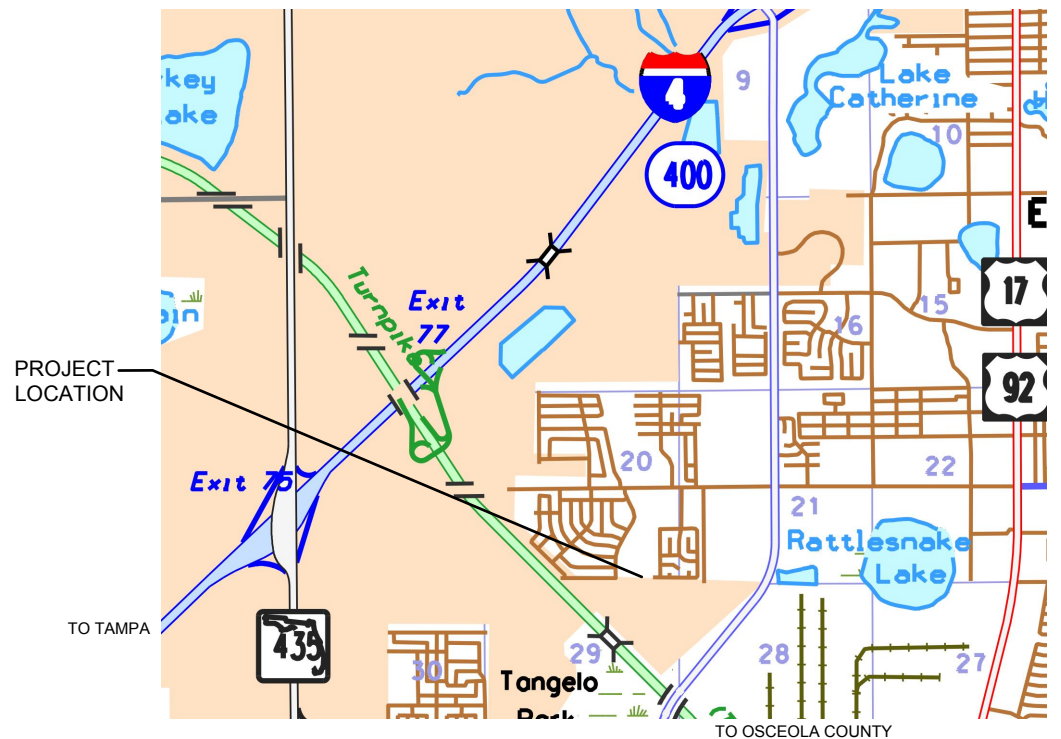
**BOARD OF COUNTY COMMISSIONERS**

SCOTT BOYD	DISTRICT 1
BRYAN NELSON	DISTRICT 2
PETE CLARKE	DISTRICT 3
JENNIFER THOMPSON	DISTRICT 4
TED EDWARDS	DISTRICT 5
VICTORIA SIPLIN	DISTRICT 6

MARK MASSARO, P.E., PUBLIC WORKS DIRECTOR

GOVERNING STANDARDS AND SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION,  
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE  
CONSTRUCTION DATED 2013, AS AMENDED BY  
CONTRACT DOCUMENTS.

NOTE: THE SCALE OF THESE PLANS MAY  
HAVE CHANGED DUE TO REPRODUCTION.



COUNTY BENCHMARK DATA:

A1438001  
FOUND 3" ORANGE COUNTY ALUMINUM DISK ON A CONCRETE CURB INLET ON THE NORTH SIDE OF "T" INTERSECTION OF MACDONOUGH AVENUE AND GLEN BARR AVENUE, 15 FEET ± SOUTH OF THE CENTERLINE OF MACDONOUGH AVENUE, 30 FEET ± WEST OF THE CENTERLINE OF GLEN BARR AVENUE PUBLISHED ELEVATION = 86.215 FEET (NAVD88)

A1438003  
FOUND 3" ORANGE COUNTY ALUMINUM DISK ON A CONCRETE CURB INLET ON THE SOUTH SIDE OF MACDONOUGH AVENUE, 13 FEET ± SOUTH OF THE CENTERLINE OF MACDONOUGH AVENUE, 150 FEET ± WEST OF THE CENTERLINE OF MOVERN COURT, BETWEEN ADDRESS #3998 & #4002 MACDONOUGH AVENUE, PUBLISHED ELEVATION = 86.093 FEET (NAVD88)

LENGTH OF PROJECT		
	LINEAR FT.	MILES
DRAINAGE PIPE	0.00	0.00
BRIDGES	0.00	0.00
NET LENGTH OF PROJ.	0.00	0.00
EXCEPTIONS	0.00	0.00
GROSS LENGTH OF PROJ.	0.00	0.00

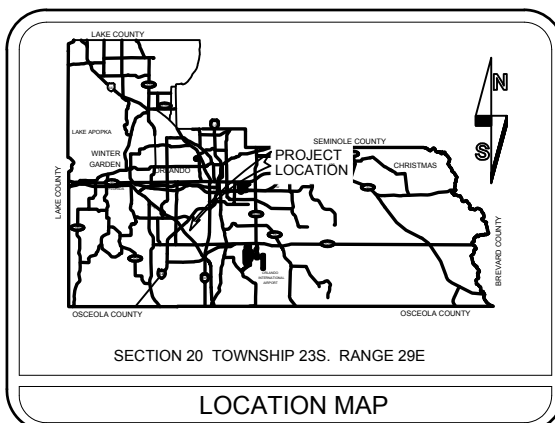
**NOTE**

PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. NEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY HAVE CHANGED SINCE PLANS PREPARATION.

### CERTIFICATION TO PLANS

THIS IS TO CERTIFY THAT THE CONSTRUCTION PLANS AND SPECIFICATIONS AS CONTAINED HEREIN WERE DESIGNED TO APPLICABLE STANDARDS AS SET FORTH IN THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", STATE OF FLORIDA, AS PREPARED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION TALLAHASSEE, FLORIDA. DATED LATEST EDITION.

DATE: \_\_\_\_\_ ENGINEER: \_\_\_\_\_ REG. NO. \_\_\_\_\_  
ENGINEER



**INDEX OF SHEETS**

SHEET	DESCRIPTION
1	KEY SHEET
2	GENERAL NOTES AND SUMMARY OF PAY ITEMS
3	PROJECT LAYOUT
4	SITE LAYOUT
5	SITE SECTIONS
6	SITE SECTIONS
7	MAINTENANCE WALKWAY LAYOUT
8	MAINTENANCE WALKWAY SECTIONS AND DETAILS
9	TRASH RACK FRAME LAYOUT
10	EROSION CONTROL SHEET / SWPPP
11	HAND RAILS DETAIL

**UTILITIES ENCOUNTERED**

POWER: OUC	PHONE: 800-778-9140
PHONE: AT&T	PHONE: 561-315-5528
SEWER: OCU	PHONE: 407-836-6843
CATV: BRIGHT HOUSE	PHONE: 407-532-8549
WATER: OUC	PHONE: 800-778-9140

ROBERT K. RACE, PE  
FL PE #58739

Certificate 4321  
1511 EAST STATE ROAD 434 STE 1005  
WINTER SPRINGS, FL 32708

REVISIONS	DATE	BY

DESIGNED BY: RKR	DATE: 06-17-2016
DRAWN BY:	DATE: 06-17-2016
CHECKED BY: LGM	DATE: 06-17-2016
APPROVED BY:	DATE: 06-17-2016
PROJECT NO: FW2433	

SHEET 1  
OF 11

**SUMMARY OF PAY ITEMS**

Item	Pay Item No.	Description	Units	Quantity Total	
				Plans	Final
1	101-1	Mobilization	LS	1	
2	102-1	Maintenance of Traffic	LS	1	
3	104-14	Prevention, Control and Abatement of Erosion and Water Pollution	LS	1	
4	110-1	Clearing and Grubbing	LS	1	
5	120-9	Excavation, Embankment and Grading	LS	1	
6	570-1-2	Performance Turf (all disturbed areas)	SY	1000	
7	900-1	As-Built Plans	LS	1	
8	900-2	Walkway Platform Structure	SF	113	
9	900-3	Stainless Steel Trash Rack	SF	102	
10	900-4	Steel Trash Rack Frame	LS	1	
11	900-5	Aluminum Hand Rail	LF	65	
12	900-6	Lift Station Sump Grating Support Steel	LS	1	
13	900-7	Aluminum Top Grating Retrofit	LS	1	
14	900-8	Portable Worksite Crane	LS	1	
15	900-9	Indemnification	LS	1	
16	900-10	Building Permit	LS	1	

**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE PROJECT SPECIFICATION, THE YEAR 2013 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT), AND SUPPLEMENTS THERETO.
- THE DISPOSAL OF EXCESS EARTHWORK MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVALS OF DISPOSAL SITES SHALL BE OBTAINED FROM ORANGE COUNTY PRIOR TO DISPOSAL. ALL EXCESS MATERIAL IS THE PROPERTY OF THE CONTRACTOR.
- UTILITIES ARE TO BE ADJUSTED BY OTHERS OR AS DIRECTED BY THE ENGINEER.
- ALL (P.R.M.'s) IRONS AND MONUMENTS SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
- ANY U.S.C. AND G.S. MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, ORANGE COUNTY SURVEY SECTION 407-836-7940 AND BOTH SHALL NOTIFY:  
STATE GEODETIC ADVISOR  
3900 COMMONWEALTH BOULEVARD, SUITE 309,  
TALLAHASSEE, FL  
850-245-2606
- PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE COUNTY SURVEYOR, WITHOUT DELAY, BY TELEPHONE 407-836-7940. THE CONTRACTOR SHALL PROVIDE WRITTEN FOLLOW UP CONFIRMATION WITHIN 48 HOURS OF TELEPHONE NOTIFICATION.
- AT PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT TO ORANGE COUNTY HIGHWAY CONSTRUCTION DEPARTMENT A SET OF FIELD NOTES VERIFYING THE BENCHMARK ELEVATIONS AND THE REFERENCE POINT TIES SHOWN ON THE TITLE SHEET AND PROJECT LAYOUT SHEET, AND/OR A SET OF FIELD NOTES FOR ALL ADDITIONAL BENCHMARK AND REFERENCE POINT TIES PROPOSED TO BE USED IN CONSTRUCTING THE PROJECT WITH THEIR LOCATION, DESCRIPTION AND ELEVATION, BASED ON ORANGE COUNTY DATUM. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
- CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS AND SIDE STREETS AT ALL TIMES AND IS TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTED CONSTRUCTION.
- ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION. COST TO BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY DRAINAGE AND MAINTENANCE OF ALL EXISTING RUNOFF DISCHARGES DURING CONSTRUCTION TO AVOID THE TRANSPORT OF SEDIMENT AND ERODIBLE SOILS UNTIL THE WORK HAS BEEN ACCEPTED BY THE COUNTY.
- ALL CONSTRUCTION ACTIVITIES ARE TO OCCUR WITHIN COUNTY RIGHT-OF-WAY OR WITHIN EXISTING COUNTY EASEMENTS..
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND RESTORE ANY GRADES INSIDE OR OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED DURING CONSTRUCTION.
- CONTRACTOR SHALL NOT USE THE EXISTING PUMP STATION PUMPS FOR DEWATERING PURPOSES.
- CONTRACTOR TO ENSURE THAT THE EXISTING PUMP STATION BASIN AND WET WELL ARE THOROUGHLY CLEAN AT ALL TIMES DURING CONSTRUCTION TO ENSURE THAT SOLID OBJECTS (CONSTRUCTION EQUIPMENT, SEDIMENT, VEGETATION, DEBRIS) DO NOT ENTER THE PUMP STATION IMPELLERS DURING NORMAL PUMPING OPERATIONS OF THE FACILITY.
- CONTRACTOR SHALL SOD ALL DISTURBED VEGETATED AREAS.
- CONTRACTOR SHALL OBTAIN AN ORANGE COUNTY BUILDING DEPARTMENT PERMIT. ALL FEES ASSOCIATED WITH THE FILING AND PERMIT SHALL BE PAID FOR BY THE CONTRACTOR AND INCLUDED IN PAY ITEM 900-10.
- PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL CALL SUNSHINE ONE 48 HOURS IN ADVANCE OF PERFORMING ANY UTILITY ADJUSTMENTS OR RELOCATIONS. SUNSHINE ONE PHONE NUMBER IS 1-800-432-4770.
- UTILITIES ARE TO BE ADJUSTED BY OTHERS OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY ALL GAS UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION AS REQUIRED BY CHAPTER 77-153 OF THE FLORIDA STATUTES.
- ANCHORS, FASTENERS, PLATES SHALL BE STAINLESS STEEL.

**PROJECT REFERENCE DOCUMENTS:**

TOPOGRAPHIC SURVEY -BONNIE BROOK PUMP STATION IMPROVEMENTS PROJECT DATED AUGUST 18, 2014 BY GEODATA CONSULTANTS, INC.

**PAY ITEM FOOTNOTES:**

- 104-14 - INCLUDES THE COST TO REMOVE ANY INTERNAL DEBRIS AND SAND/SILT THEREFROM. ALSO INCLUDES THE COST OF SILT FENCE, SYNTHETIC HAY BALES, FLOATING TURBIDITY BARRIER AND SOIL TRACKING PREVENTION DEVICE AS SHOWN IN THE PLANS OR AS DIRECTED BY THE COUNTY.

- 110-1 - INCLUDES REMOVAL OF ALL CONCRETE AND METAL STRUCTURES AS INDICATED IN THE PLANS

- 900-2 - INCLUDES STAIRS, STRUCTURAL STEEL, 1" GALVANIZED GRATING, WELDING, ANCHORING, COATING, ALL GROUTING AND INSTALLATION. INCLUDES NEW LIFT BASE AND ALL MISCELLANEOUS WALKWAY PLATFORM FEATURES NOT INCLUDED IN OTHER PAY ITEMS.

- 900-3 - INCLUDES TWO 3/4" ROUND STIFFENERS PER RACK SEGMENT, PLUS BANDING EACH SEGMENT TOP AND BOTTOM, WELDING, AND INSTALLATION. ALSO INCLUDES ANY DEWATERING OF THE PUMP STATION TO CONSTRUCT THE WALKWAY PLATFORM AND TRASH RACKS. DEWATERING TO BE PERFORMED BY A MOBILE DEWATERING PUMP. CONTRACTOR SHALL NOT USE THE EXISTING PUMP STATION PUMPS FOR DEWATERING PURPOSES.

- 900-4 - INCLUDES C6X13 BEAMS, ANCHOR CLIPS, WELDING, ANCHORING, COATING, AND INSTALLATION.


- 900-5 - INCLUDES MATERIAL, WELDING, RAIL MOUNTS, AND ANCHORING. INCLUDES RELOCATION OF EXISTING HANDRAIL.

- 900-6 - INCLUDES ALL STRUCTURAL STEEL, WELDING, ANCHORING, COATING, AND INSTALLATION.


- 900-7 - INCLUDES REMOVABLE ALUMINUM GRATING WITH BANDING AROUND LIFT BASES AND HANDRAIL BASE.

--900-10 - CONTRACTOR TO OBTAIN ORANGE COUNTY BUILDING PERMIT FOR PROPOSED IMPROVEMENTS. ALL PERMIT FEES TO BE PAID BY CONTRACTOR

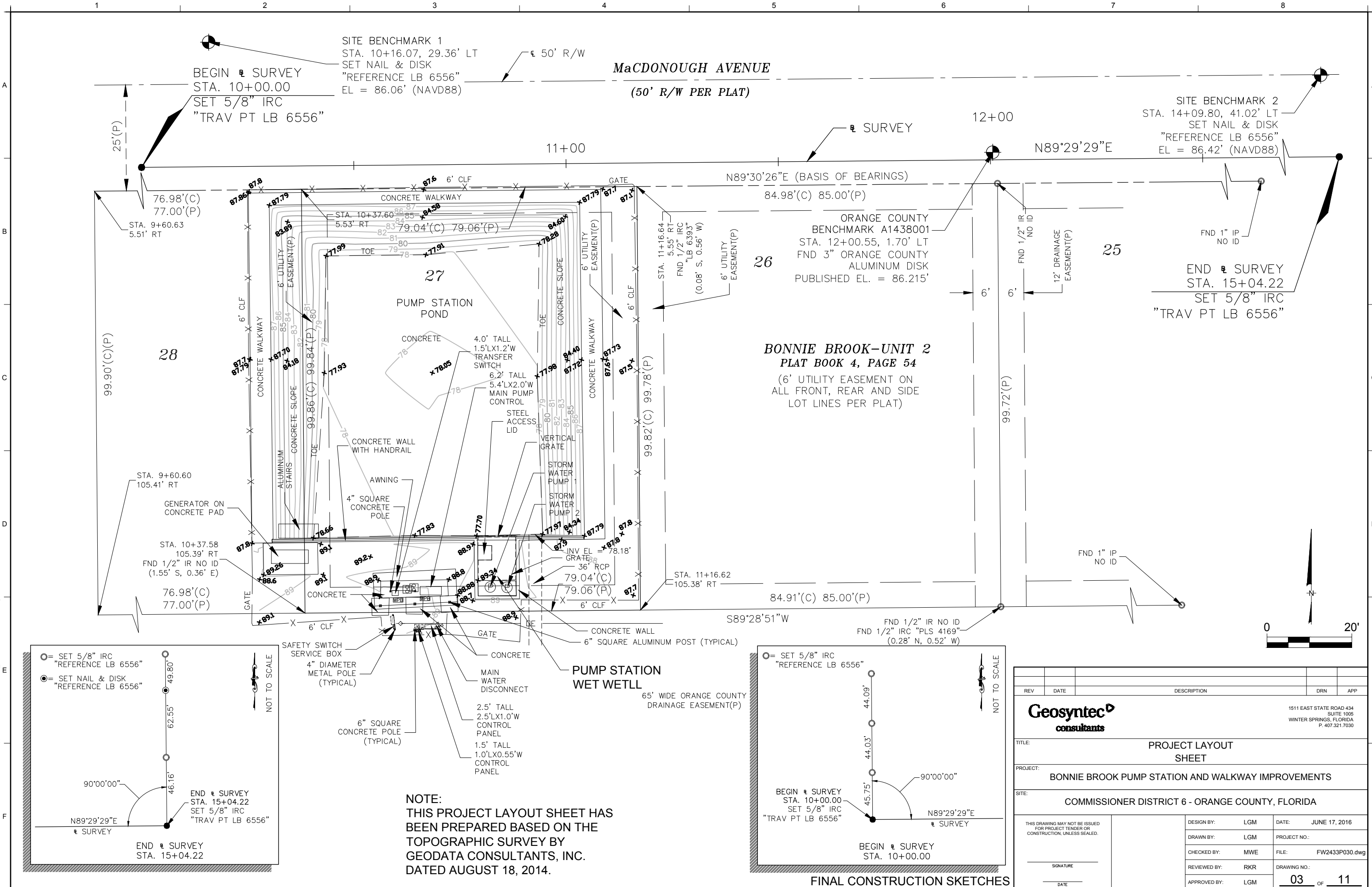
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 DETAIL NUMBER SHEET NUMBER

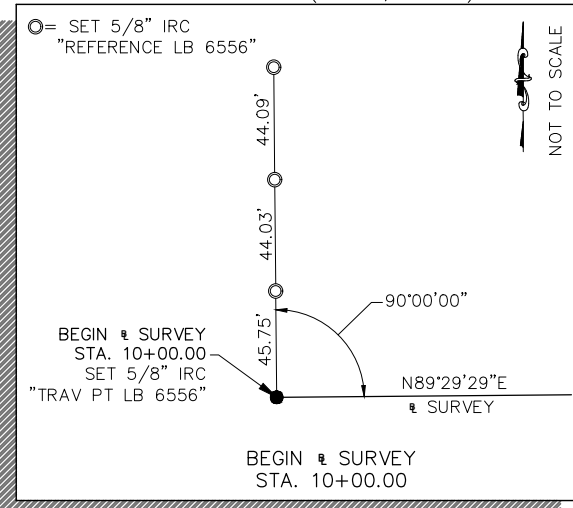
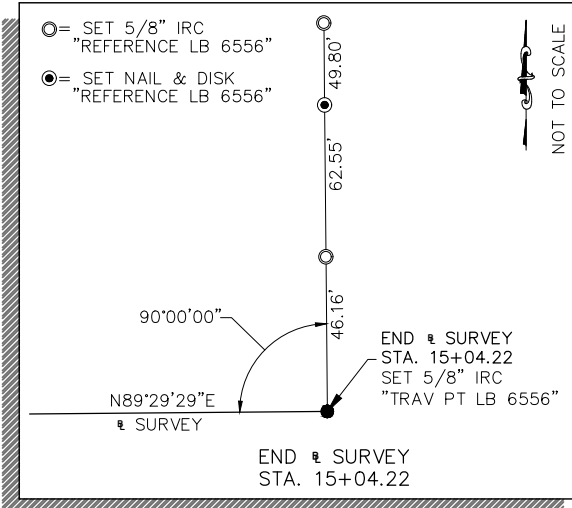
 CROSS SECTION SHEET NUMBER

REV	DATE	DESCRIPTION	DRN	APP	
		1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030			
TITLE: GENERAL NOTES AND SUMMARY OF PAY ITEMS					
PROJECT: BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS					
SITE: COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA					
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: DMB DRAWN BY: WJR CHECKED BY: DMB REVIEWED BY: RKR APPROVED BY: LM	DATE: JUNE 17, 2016 PROJECT NO.: FILE: FW2433P020 DRAWING NO.:	02 OF 11	

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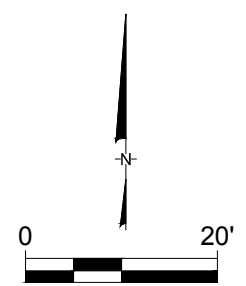


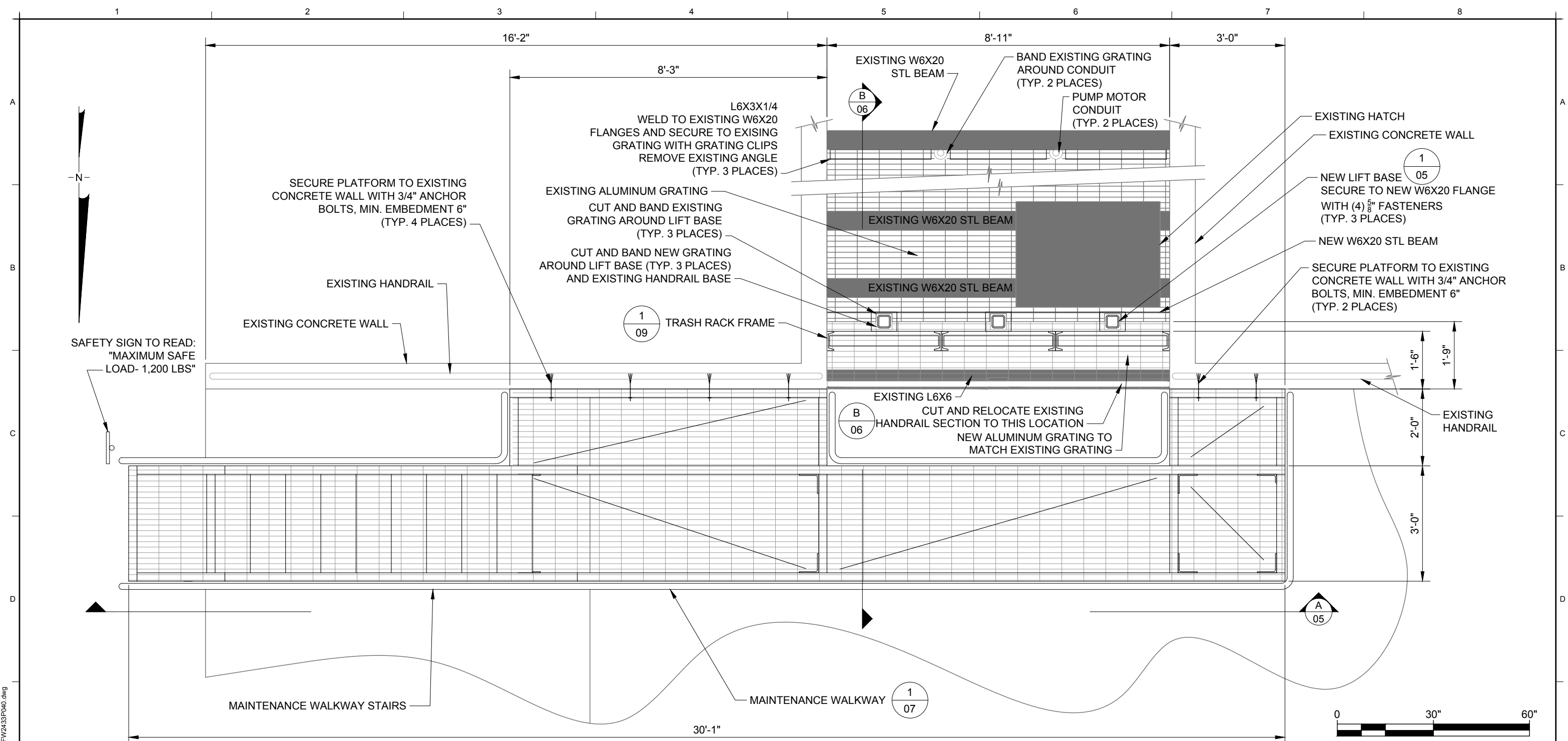
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**NOTE:**  
 THIS PROJECT LAYOUT SHEET HAS  
 BEEN PREPARED BASED ON THE  
 TOPOGRAPHIC SURVEY BY  
 GEODATA CONSULTANTS, INC.  
 DATED AUGUST 18, 2014.

REV	DATE	DESCRIPTION	DRN	APP
1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030				
TITLE:		PROJECT LAYOUT SHEET		
PROJECT:		BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS		
SITE:		COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA		
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY:	LGM	DATE: JUNE 17, 2016
		DRAWN BY:	LGM	PROJECT NO.:
		CHECKED BY:	MWE	FILE: FW2433P030.dwg
		REVIEWED BY:	RKR	DRAWING NO.:
APPROVED BY:		LGM	03 OF 11	





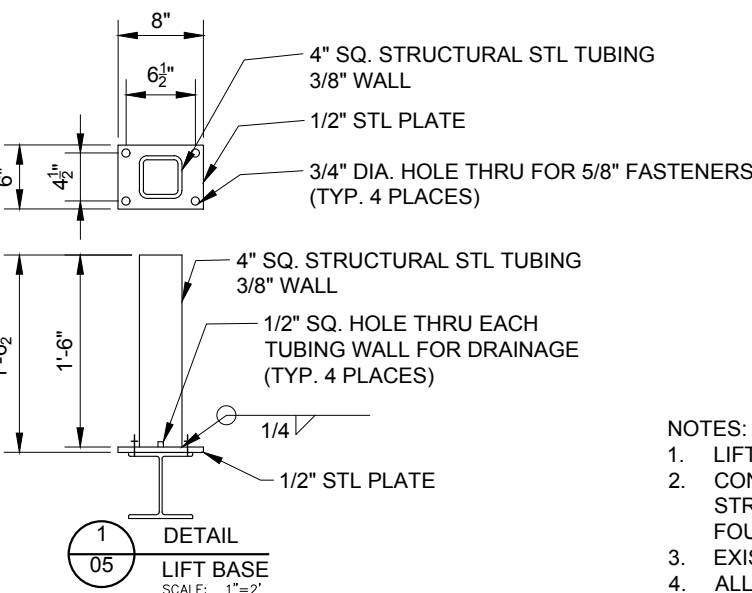
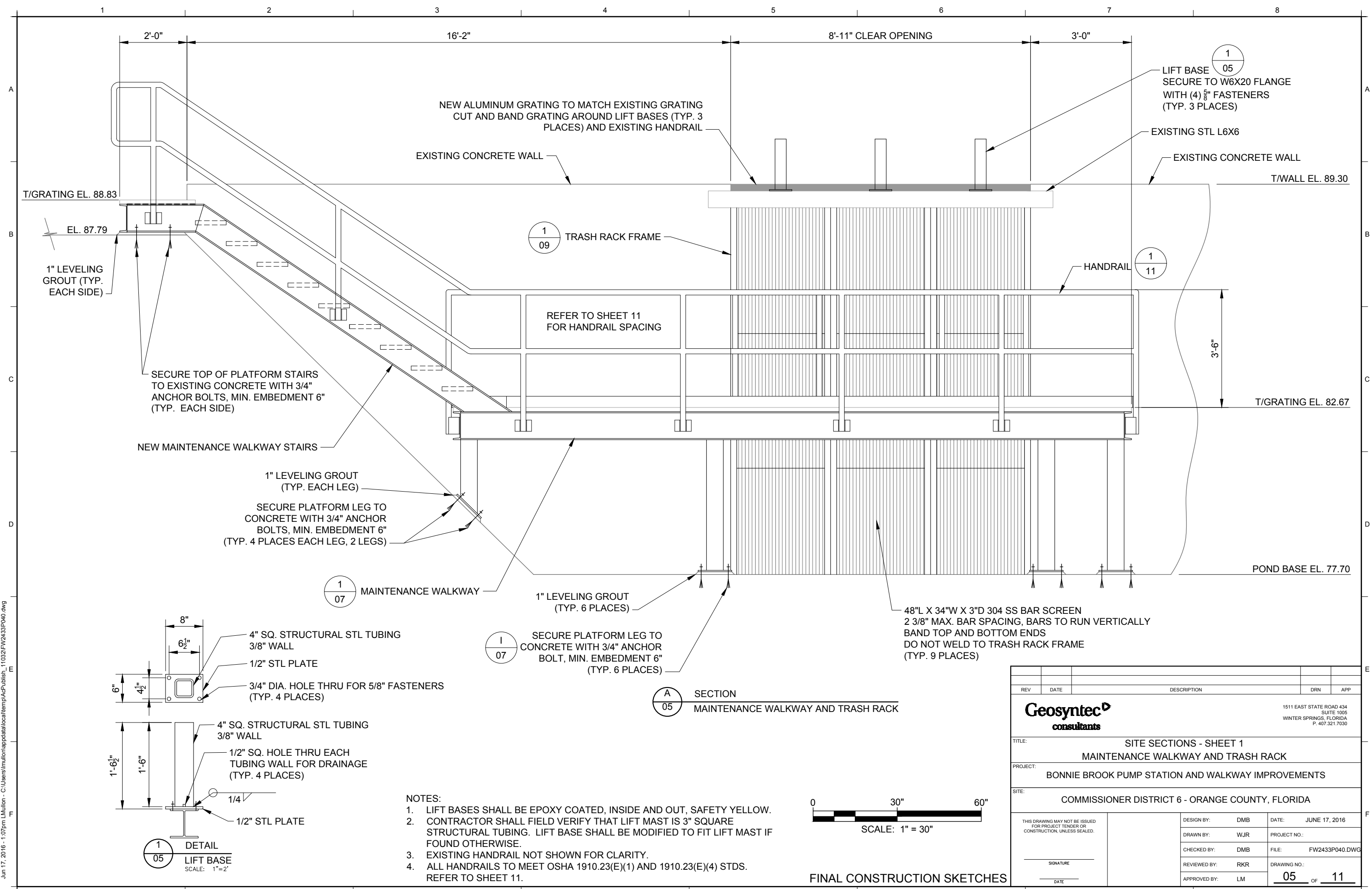
1/04 SITE LAYOUT  
MAINTENANCE WALKWAY AND TRASH RACK

- NOTES:
1. ALL STRUCTURAL ELEMENTS SHALL BE DESIGNED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES AND REQUIREMENTS.
  2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO PERFORM THE WORK NEEDED TO COMPLETE THE PROJECT.
  3. HANDRAIL SUPPLIER TO CERTIFY THAT DESIGN WILL MEET THE MOST STRINGENT APPLICABLE CODES FOR LOADING AND RAIL ARRANGEMENT.
  4. HANDRAIL TO BE PROVIDED ALL AROUND PLATFORM AND ALONG STAIRS.
  5. FIELD VERIFY EXISTING DIMENSIONS AND SIZES WHERE APPLICABLE.
  6. RAILS AND POSTS TO BE SCH 40 1 1/2" DIAMETER.
  7. ALL HANDRAILS SHALL BE PROVIDED WITH A CLEARANCE OF NOT LESS THAN 3" BETWEEN THE HANDRAIL AND ANY OTHER OBJECT.
  8. ALL WELDS GROUND SMOOTH TO A SATIN FINISH.
  9. STANDARD TOE PLATE 4"X 1/4".
  10. ALL EXISTING AND NEW STRUCTURAL STEEL IN SUMP (BEAMS, ANGLES, ETC.) TO BE PRIMED AND COATED WITH COAL TAR EPOXY.
  11. ANCHORS, FASTENERS, PLATES SHALL BE STAINLESS STEEL.

FINAL CONSTRUCTION SKETCHES

REV	DATE	DESCRIPTION	DRN	APP
<b>Geosyntec</b> consultants				
		1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030		
<b>TITLE:</b> SITE LAYOUT MAINTENANCE WALKWAY AND TRASH RACK				
<b>PROJECT:</b> BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS				
<b>SITE:</b> COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: DMB DRAWN BY: WJR CHECKED BY: DMB REVIEWED BY: RKR APPROVED BY: LM	DATE: JUNE 17, 2016 PROJECT NO.: FILE: FW2433P040.DWG DRAWING NO.: 04 OF 11	

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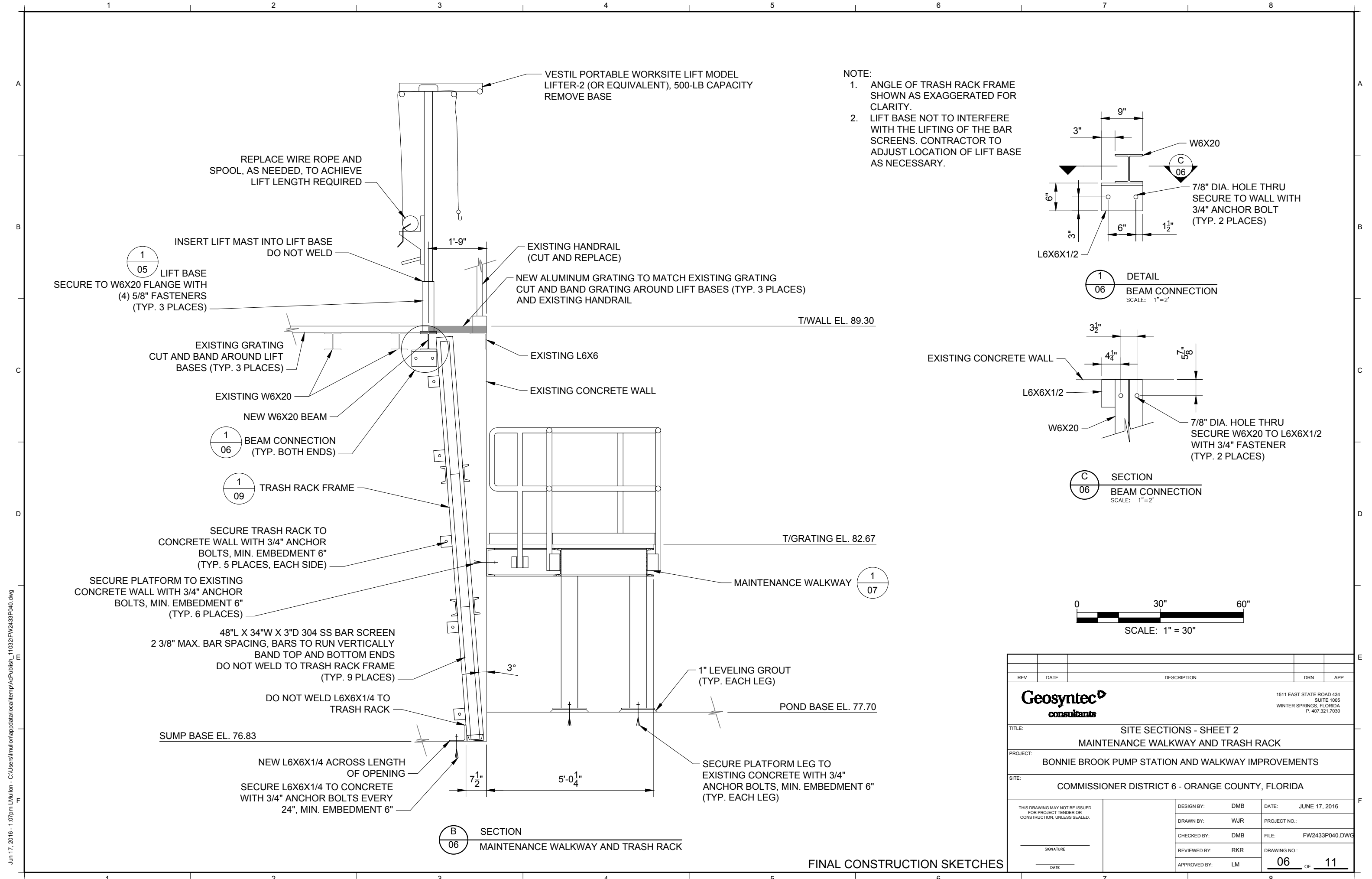
- NOTES:
- LIFT BASES SHALL BE EPOXY COATED, INSIDE AND OUT, SAFETY YELLOW.
  - CONTRACTOR SHALL FIELD VERIFY THAT LIFT MAST IS 3" SQUARE STRUCTURAL TUBING. LIFT BASE SHALL BE MODIFIED TO FIT LIFT MAST IF FOUND OTHERWISE.
  - EXISTING HANDRAIL NOT SHOWN FOR CLARITY.
  - ALL HANDRAILS TO MEET OSHA 1910.23(E)(1) AND 1910.23(E)(4) STDS. REFER TO SHEET 11.



FINAL CONSTRUCTION SKETCHES

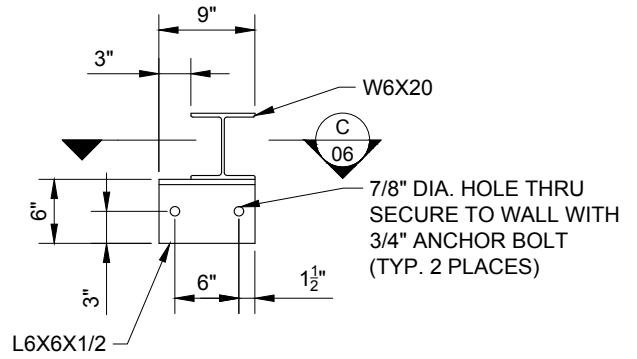
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<b>Geosyntec</b> consultants					
1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030					
<b>TITLE:</b> SITE SECTIONS - SHEET 1 MAINTENANCE WALKWAY AND TRASH RACK					
<b>PROJECT:</b> BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS					
<b>SITE:</b> COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA					
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: DMB DRAWN BY: WJR CHECKED BY: DMB REVIEWED BY: RKR APPROVED BY: LM	DATE: JUNE 17, 2016 PROJECT NO.: FILE: FW2433P040.DWG DRAWING NO.:	<b>05</b> OF <b>11</b>	

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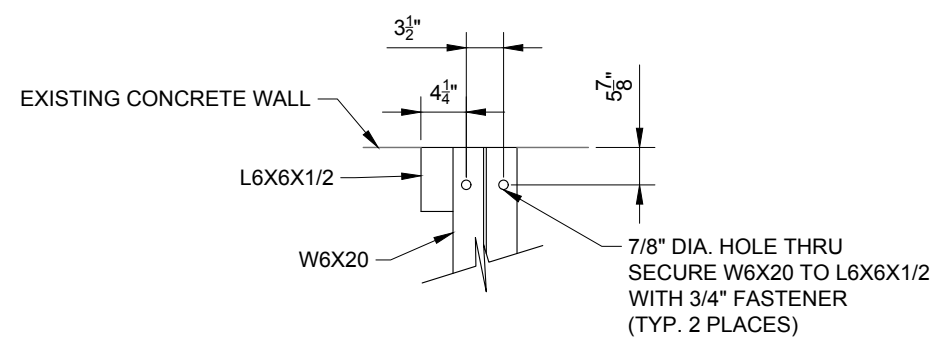


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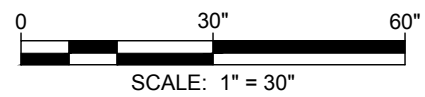
1. ANGLE OF TRASH RACK FRAME SHOWN AS EXAGGERATED FOR CLARITY.
2. LIFT BASE NOT TO INTERFERE WITH THE LIFTING OF THE BAR SCREENS. CONTRACTOR TO ADJUST LOCATION OF LIFT BASE AS NECESSARY.



**1/06** DETAIL  
BEAM CONNECTION  
SCALE: 1"=2'



**C/06** SECTION  
BEAM CONNECTION  
SCALE: 1"=2'



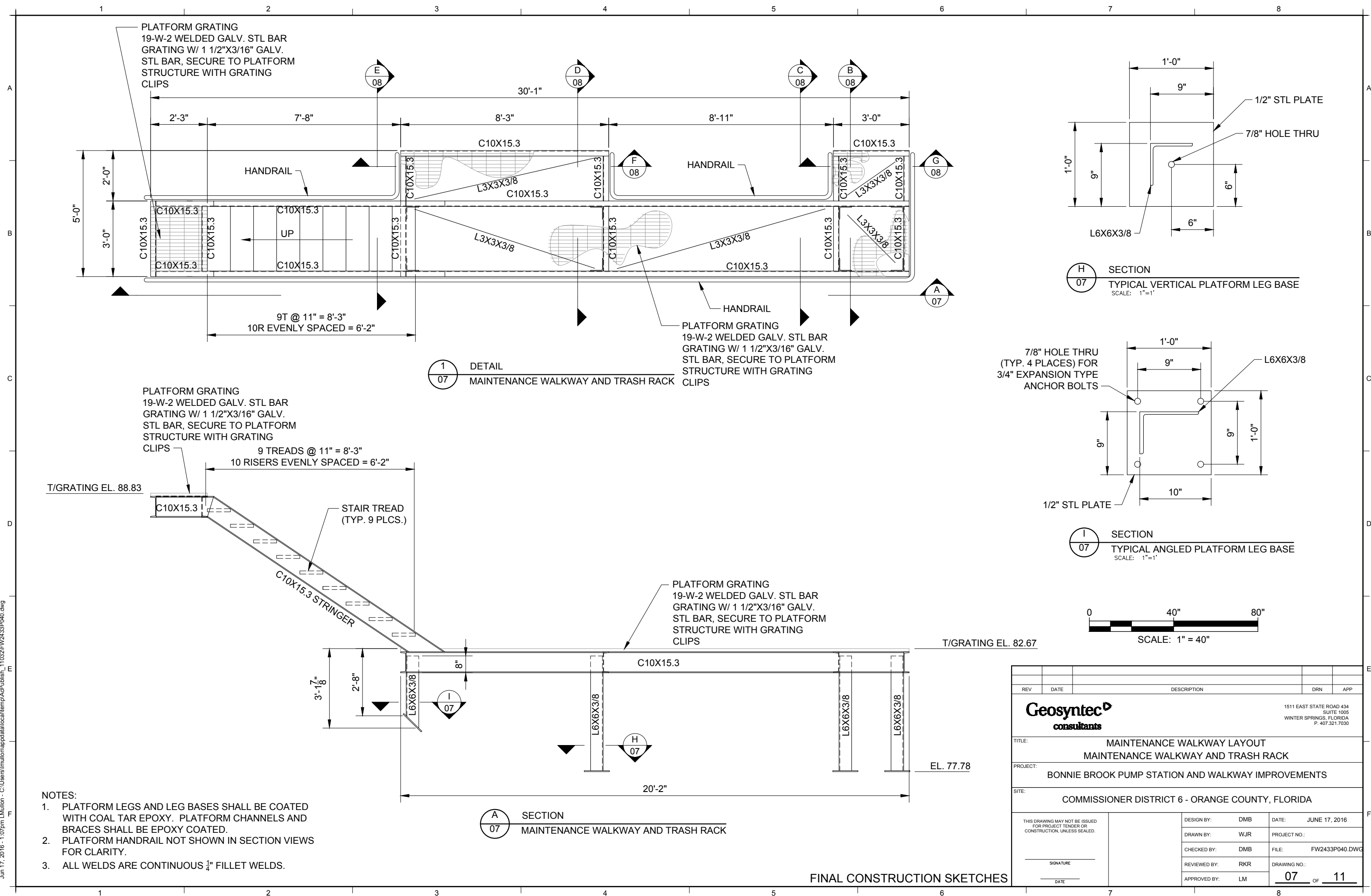
**B/06** SECTION  
MAINTENANCE WALKWAY AND TRASH RACK

FINAL CONSTRUCTION SKETCHES

REV	DATE	DESCRIPTION	DRN	APP	
1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030					
<b>TITLE:</b> SITE SECTIONS - SHEET 2 MAINTENANCE WALKWAY AND TRASH RACK					
<b>PROJECT:</b> BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS					
<b>SITE:</b> COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA					
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		<b>DESIGN BY:</b> DMB <b>DRAWN BY:</b> WJR <b>CHECKED BY:</b> DMB <b>REVIEWED BY:</b> RKR <b>APPROVED BY:</b> LM	<b>DATE:</b> JUNE 17, 2016 <b>PROJECT NO.:</b> <b>FILE:</b> FW2433P040.DWG <b>DRAWING NO.:</b>	<b>06</b> OF <b>11</b>	

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PLATFORM GRATING  
19-W-2 WELDED GALV. STL BAR  
GRATING W/ 1 1/2"X3/16" GALV.  
STL BAR, SECURE TO PLATFORM  
STRUCTURE WITH GRATING  
CLIPS

HANDRAIL

UP

HANDRAIL

HANDRAIL

PLATFORM GRATING  
19-W-2 WELDED GALV. STL BAR  
GRATING W/ 1 1/2"X3/16" GALV.  
STL BAR, SECURE TO PLATFORM  
STRUCTURE WITH GRATING  
CLIPS

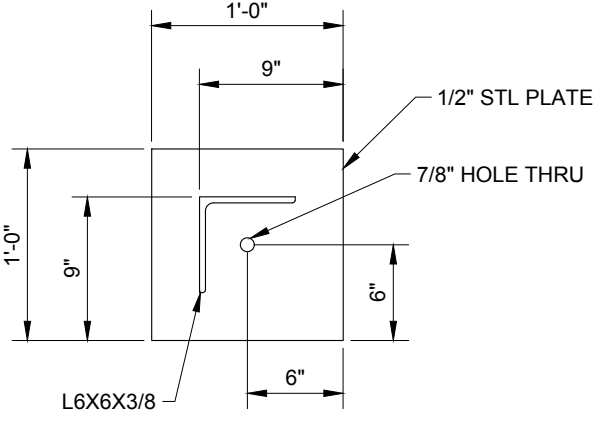
PLATFORM GRATING  
19-W-2 WELDED GALV. STL BAR  
GRATING W/ 1 1/2"X3/16" GALV.  
STL BAR, SECURE TO PLATFORM  
STRUCTURE WITH GRATING  
CLIPS

9 TREADS @ 11" = 8'-3"  
10 RISERS EVENLY SPACED = 6'-2"

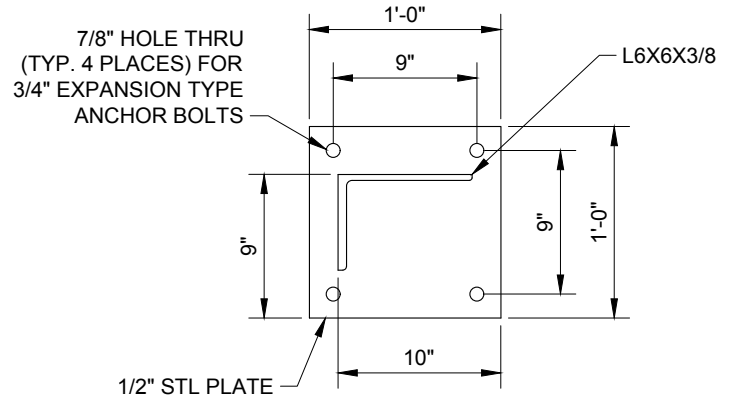
STAIR TREAD  
(TYP. 9 PLCS.)

C10X15.3 STRINGER

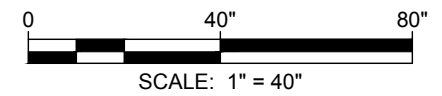
PLATFORM GRATING  
19-W-2 WELDED GALV. STL BAR  
GRATING W/ 1 1/2"X3/16" GALV.  
STL BAR, SECURE TO PLATFORM  
STRUCTURE WITH GRATING  
CLIPS



H SECTION  
07 TYPICAL VERTICAL PLATFORM LEG BASE  
SCALE: 1"=1"



I SECTION  
07 TYPICAL ANGLED PLATFORM LEG BASE  
SCALE: 1"=1"



1 DETAIL  
07 MAINTENANCE WALKWAY AND TRASH RACK

A SECTION  
07 MAINTENANCE WALKWAY AND TRASH RACK

T/GRATING EL. 88.83

T/GRATING EL. 82.67

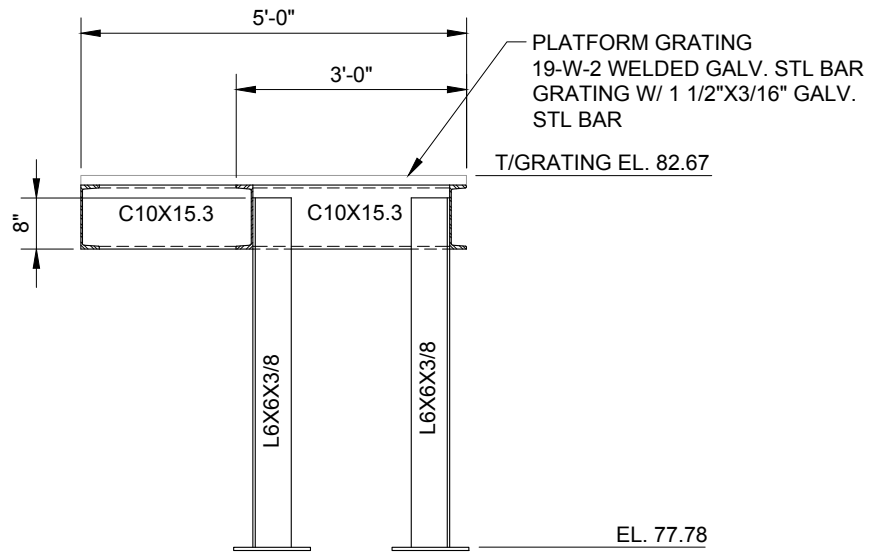
EL. 77.78

- NOTES:
1. PLATFORM LEGS AND LEG BASES SHALL BE COATED WITH COAL TAR EPOXY. PLATFORM CHANNELS AND BRACES SHALL BE EPOXY COATED.
  2. PLATFORM HANDRAIL NOT SHOWN IN SECTION VIEWS FOR CLARITY.
  3. ALL WELDS ARE CONTINUOUS 1/4" FILLET WELDS.

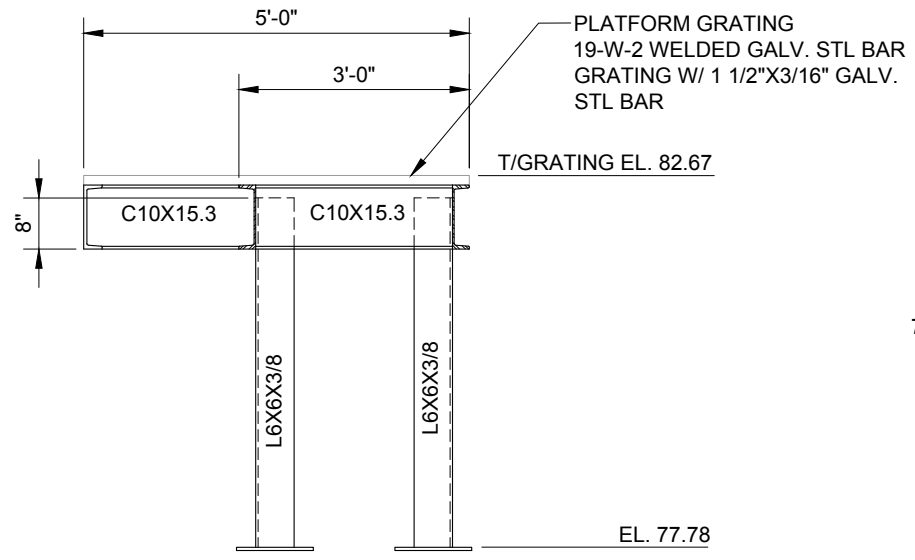
FINAL CONSTRUCTION SKETCHES

REV	DATE	DESCRIPTION	DRN	APP
<b>Geosyntec</b> consultants				
1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030				
TITLE: MAINTENANCE WALKWAY LAYOUT MAINTENANCE WALKWAY AND TRASH RACK				
PROJECT: BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS				
SITE: COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: DMB	DATE: JUNE 17, 2016	
SIGNATURE		DRAWN BY: WJR	PROJECT NO.:	
DATE		CHECKED BY: DMB	FILE: FW2433P040.DWG	
		REVIEWED BY: RKR	DRAWING NO.:	
		APPROVED BY: LM	07	11

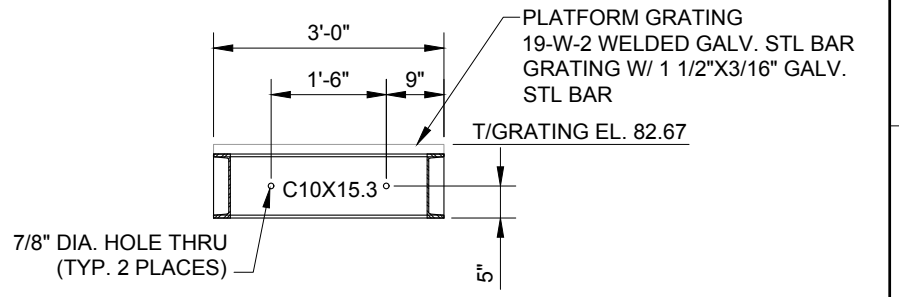
Jun 17, 2016 - 1:07pm LMullon - C:\Users\lmullon\appdata\local\temp\AcPublish\_11032FW2433P040.dwg



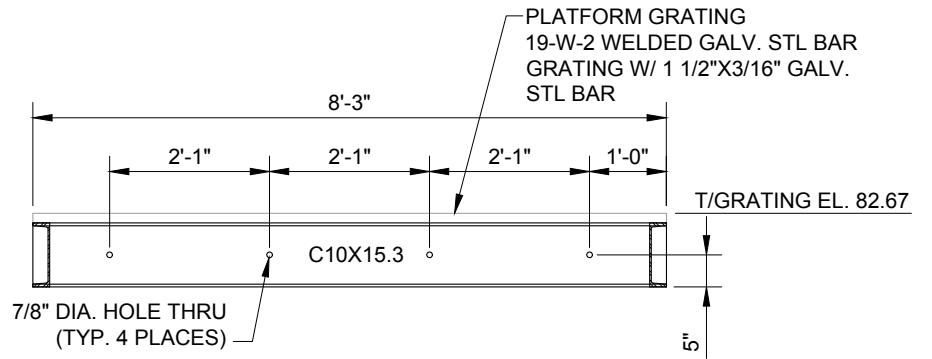
**B** SECTION  
08 MAINTENANCE WALKWAY AND TRASH RACK



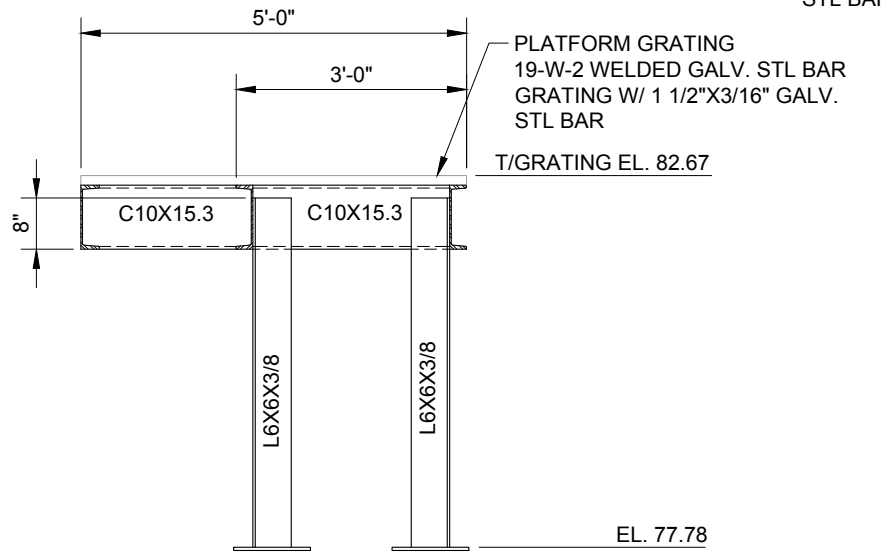
**C** SECTION  
08 MAINTENANCE WALKWAY AND TRASH RACK



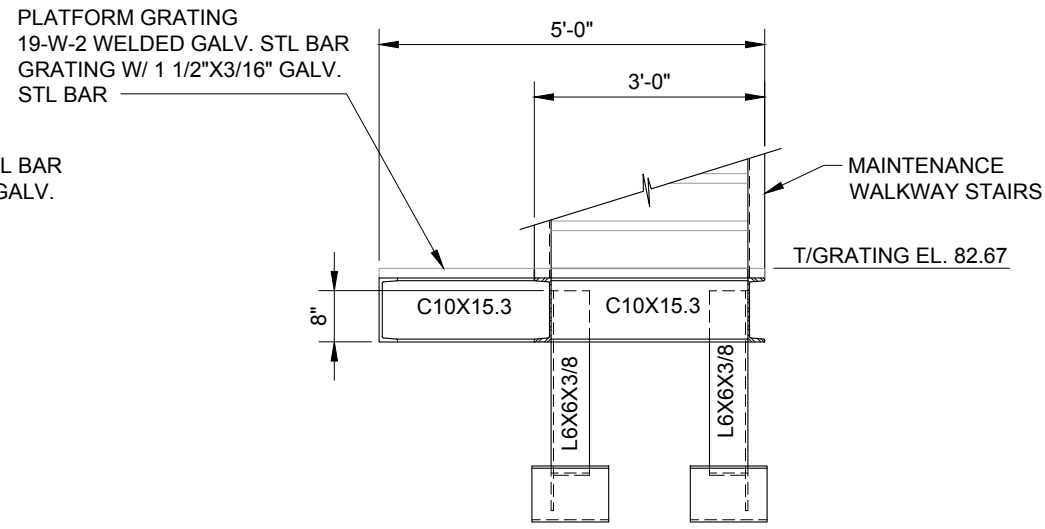
**G** SECTION  
08 MAINTENANCE WALKWAY WALL ANCHORING



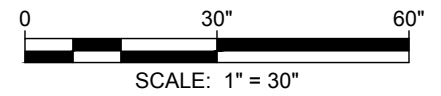
**F** SECTION  
08 MAINTENANCE WALKWAY WALL ANCHORING



**D** SECTION  
08 MAINTENANCE WALKWAY AND TRASH RACK



**E** SECTION  
08 MAINTENANCE WALKWAY AND TRASH RACK

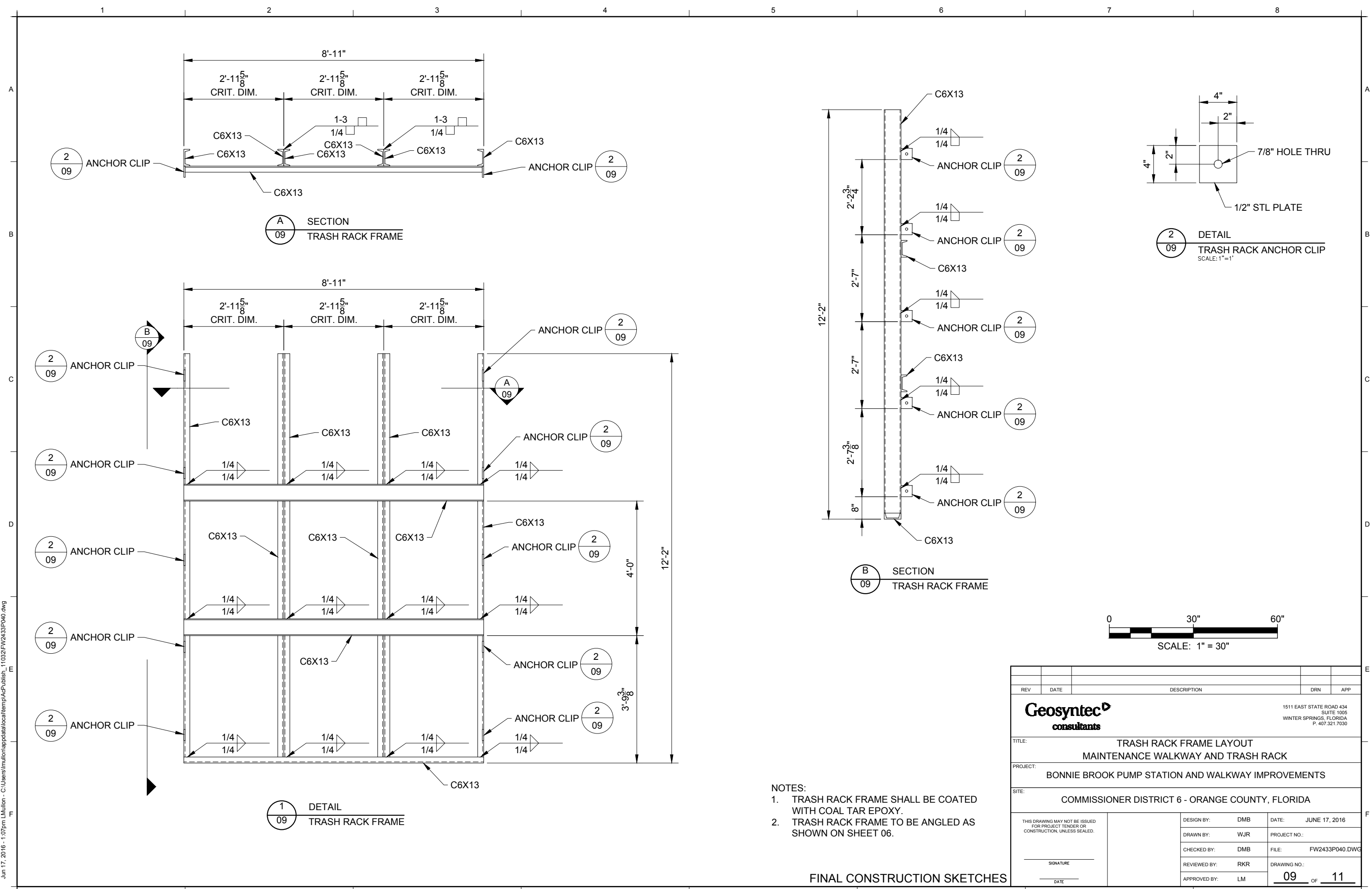


- NOTES:
1. PLATFORM LEGS AND LEG BASES SHALL BE COATED WITH COAL TAR EPOXY. REMAINING PLATFORM STRUCTURAL STEEL SHALL BE EPOXY COATED.
  2. PLATFORM HANDRAIL NOT SHOWN IN SECTION VIEWS FOR CLARITY.

FINAL CONSTRUCTION SKETCHES

REV	DATE	DESCRIPTION	DRN	APP
1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030				
TITLE: MAINTENANCE WALKWAY SECTIONS AND DETAILS MAINTENANCE WALKWAY AND TRASH RACK				
PROJECT: BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS				
SITE: COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: DMB	DATE: JUNE 17, 2016	
SIGNATURE		DRAWN BY: WJR	PROJECT NO.:	
DATE		CHECKED BY: DMB	FILE: FW2433P040.DWG	
		REVIEWED BY: RKR	DRAWING NO.:	
		APPROVED BY: LM	08	11

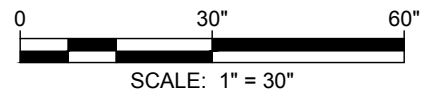




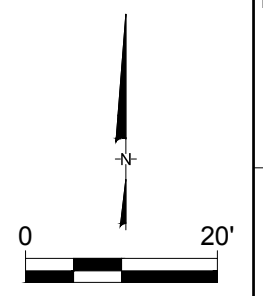
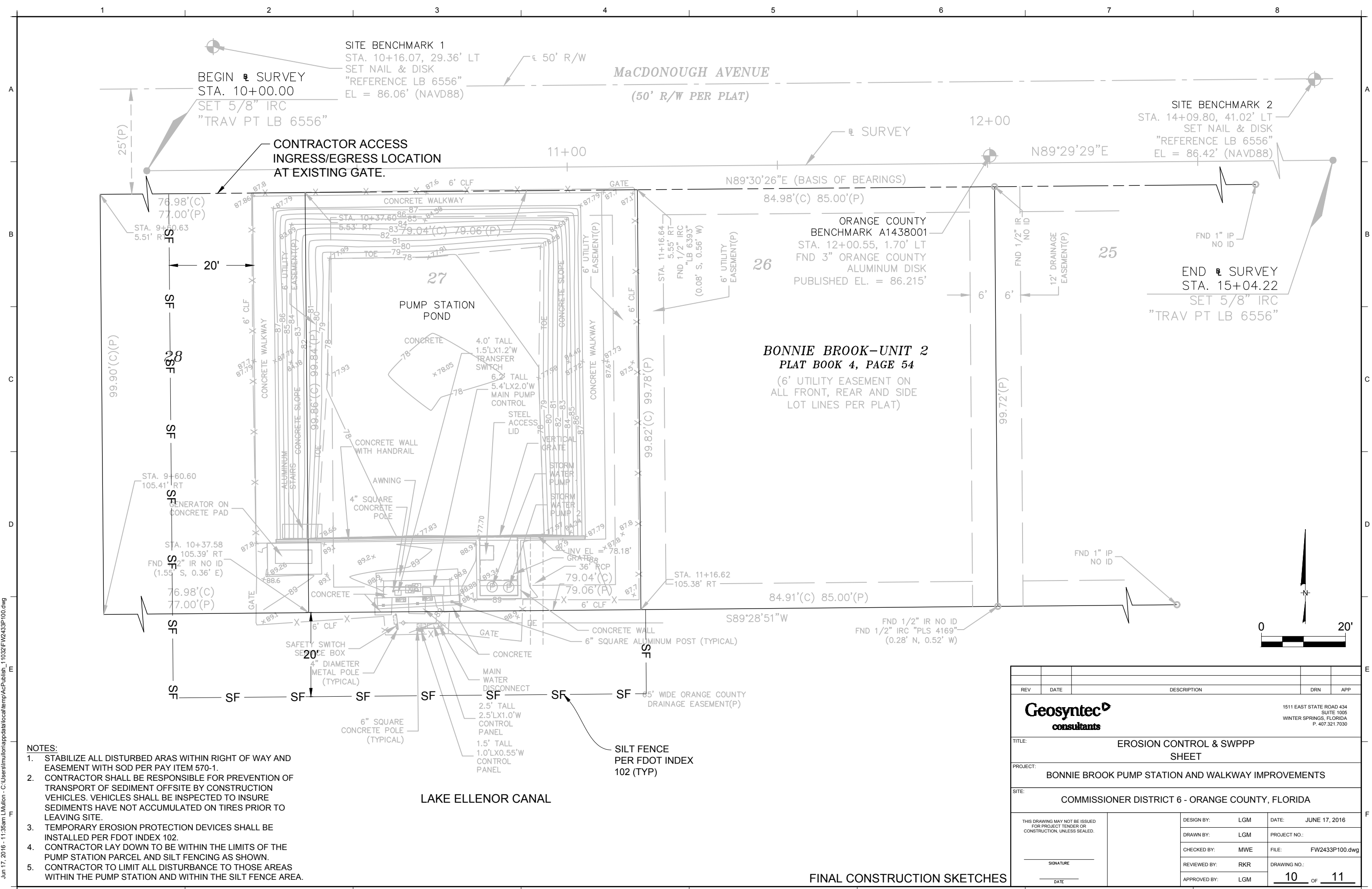
Jun 17, 2016 - 1:07pm LMullon - C:\Users\lmullon\appdata\local\temp\AcPublish\_11032\FW2433P040.dwg

- NOTES:
1. TRASH RACK FRAME SHALL BE COATED WITH COAL TAR EPOXY.
  2. TRASH RACK FRAME TO BE ANGLED AS SHOWN ON SHEET 06.

FINAL CONSTRUCTION SKETCHES



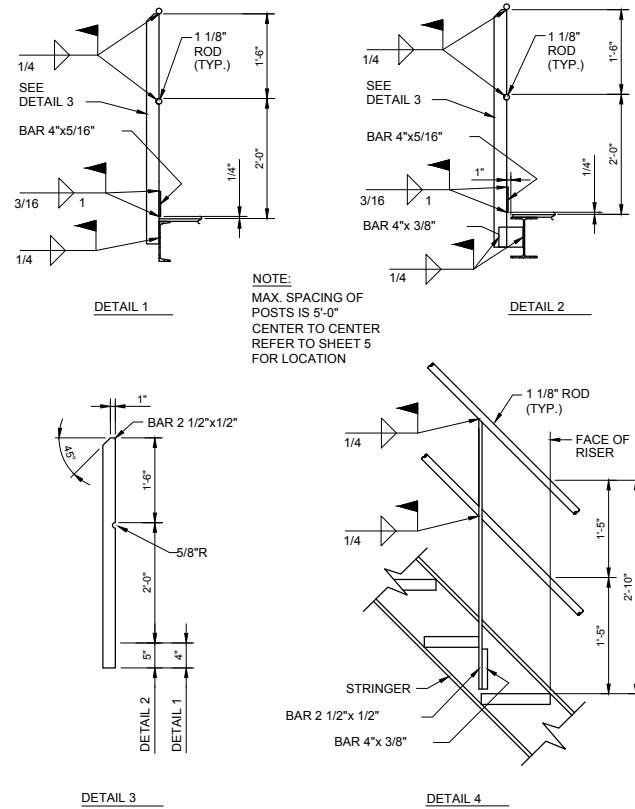
REV	DATE	DESCRIPTION	DRN	APP
<small>1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030</small>				
<b>TITLE: TRASH RACK FRAME LAYOUT MAINTENANCE WALKWAY AND TRASH RACK</b>				
<b>PROJECT: BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS</b>				
<b>SITE: COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA</b>				
<small>THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.</small>		<small>DESIGN BY: DMB</small> <small>DRAWN BY: WJR</small> <small>CHECKED BY: DMB</small> <small>REVIEWED BY: RKR</small> <small>APPROVED BY: LM</small>	<small>DATE: JUNE 17, 2016</small> <small>PROJECT NO.:</small> <small>FILE: FW2433P040.DWG</small> <small>DRAWING NO.:</small>	<small>09</small> OF <small>11</small>
SIGNATURE _____ DATE _____				



REV	DATE	DESCRIPTION	DRN	APP	
<b>Geosyntec</b> consultants					
1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030					
TITLE: EROSION CONTROL & SWPPP SHEET					
PROJECT: BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS					
SITE: COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA					
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: LGM DRAWN BY: LGM CHECKED BY: MWE REVIEWED BY: RKR APPROVED BY: LGM	DATE: JUNE 17, 2016 PROJECT NO.: FILE: FW2433P100.dwg DRAWING NO.: 10 OF 11		

FINAL CONSTRUCTION SKETCHES

Jun 17, 2016 - 11:35am LMillon - C:\Users\lmillon\appdata\local\temp\AcP\ublioh\_11032\FW2433P100.dwg



NOTE:  
MAX. SPACING OF  
POSTS IS 5'-0"  
CENTER TO CENTER  
REFER TO SHEET 5  
FOR LOCATION

1  
11  
DETAIL  
HANDRAIL DETAILS

Referenced OSHA Specifications:

1910.23(E)(1)

A standard railing shall consist of top rail, intermediate rail, and posts, and shall have a vertical height of 42 inches nominal from upper surface of top rail to floor, platform, runway, or ramp level. The top rail shall be smooth-surfaced throughout the length of the railing. The intermediate rail shall be approximately halfway between the top rail and the floor, platform, runway, or ramp. The ends of the rails shall not overhang the terminal posts except where such overhang does not constitute a projection hazard.

1910.23(e)(4)

A standard toeboard shall be 4 inches nominal in vertical height from its top edge to the level of the floor, platform, runway, or ramp. It shall be securely fastened in place and with not more than 1/4-inch clearance above floor level. It may be made of any substantial material either solid or with openings not over 1 inch in greatest dimension.

Where material is piled to such height that a standard toeboard does not provide protection, paneling from floor to intermediate rail, or to top rail shall be provided.

FINAL CONSTRUCTION SKETCHES

REV	DATE	DESCRIPTION	DRN	APP
		1511 EAST STATE ROAD 434 SUITE 1005 WINTER SPRINGS, FLORIDA P. 407.321.7030		
<p><b>Geosyntec</b> consultants</p>				
<p>TITLE: <b>HANDRAIL DETAILS</b></p>				
<p>PROJECT: <b>BONNIE BROOK PUMP STATION AND WALKWAY IMPROVEMENTS</b></p>				
<p>SITE: <b>COMMISSIONER DISTRICT 6 - ORANGE COUNTY, FLORIDA</b></p>				
<p>THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.</p>		<p>DESIGN BY: DMB</p> <p>DRAWN BY: WJR</p> <p>CHECKED BY: DMB</p> <p>REVIEWED BY: RKR</p> <p>APPROVED BY: LM</p>	<p>DATE: JUNE 17, 2016</p> <p>PROJECT NO.:</p> <p>FILE: FW2433P040.DWG</p> <p>DRAWING NO.:</p>	<p>11 OF 11</p>