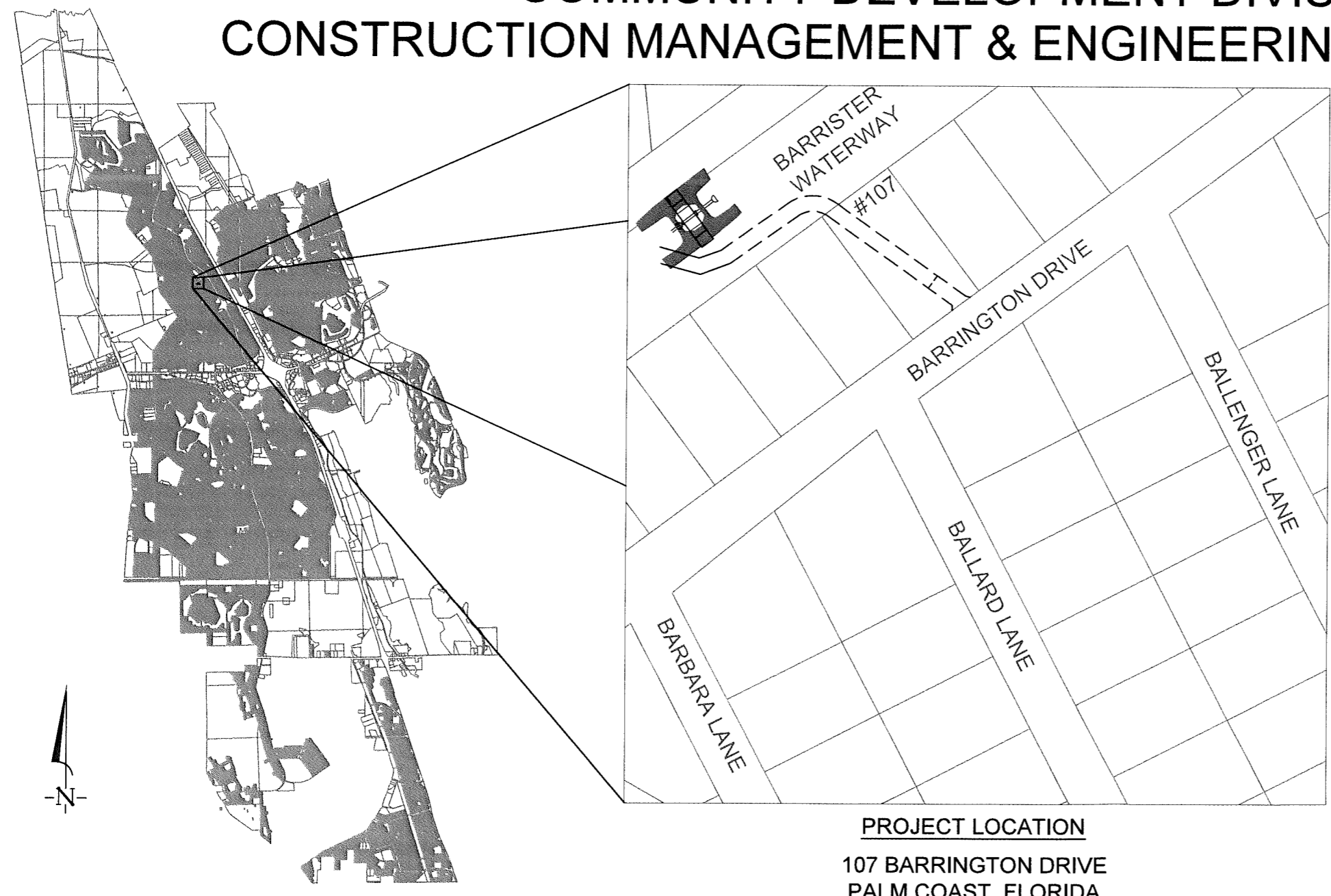


CONSTRUCTION PLANS FOR
BS-2
WEIR REPLACEMENT
 CITY OF PALM COAST
 COMMUNITY DEVELOPMENT DIVISION
 CONSTRUCTION MANAGEMENT & ENGINEERING DEPARTMENT

CITY OFFICIALS
 Mayor: Jon Netts
COUNCIL MEMBERS:
 District No. 1: Vacant
 District No. 2: Heidi Shipley
 District No. 3: Jason DeLorenzo
 District No. 4: Steve Nobile
 City Manager: Jim Landon
 City Engineer: Mike Peel

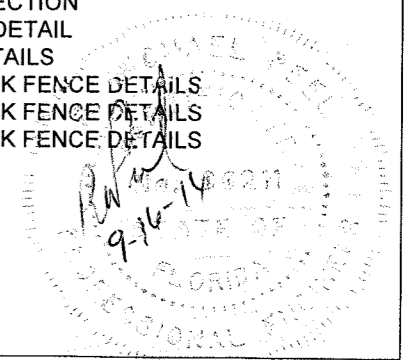


PROJECT LOCATION
 107 BARRINGTON DRIVE
 PALM COAST, FLORIDA



SHEET INDEX

<u>DWG</u>	<u>DESCRIPTION</u>
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C-12	FDOT CHAIN LINK FENCE DETAILS
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STRUCTURAL GENERAL NOTES

GENERAL CONDITIONS

- IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR TO CONFORM TO THOSE SHOWN ON THE ARCHITECTURAL DRAWINGS.
- CONTRACTOR TO SUPPORT, BRACE AND SECURE EXISTING STRUCTURE AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE STRUCTURE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR HAVING VISITED THE SITE AND HAVING FAMILIARIZED HIMSELF WITH ALL EXISTING CONDITIONS. ANY QUESTIONS OR DISCREPANCIES FOUND WITH REGARD TO THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY BEFORE SUBMITTING A PROPOSAL. FIELD MEASURE EXISTING CONDITIONS PRIOR TO FABRICATION OF MATERIALS.

FOUNDATIONS

- EARTHWORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED SOIL TESTING COMPANY TO ASSURE COMPLIANCE WITH REQUIREMENTS OF THE SOILS REPORT AND SPECIFICATIONS.
- ALL FOOTINGS SHALL BE CENTERED UNDER THE COLUMN OR WALL ABOVE UNLESS NOTED OTHERWISE.
- BACKFILL AGAINST A WALL SHALL BE PLACED EVENLY ON BOTH SIDES OF THE WALL UNLESS THE WALL IS FULLY BRACED BY THE CONTRACTOR FOR LATERAL PRESSURE. SUCH BRACING INCLUDING ITS DESIGN IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL AFTER THE FLOOR SLAB OR OTHER STRUCTURAL ELEMENT BRACING THE WALL, HAS BEEN CONSTRUCTED TO THE SATISFACTION OF THE ARCHITECT.

STRUCTURAL STEEL NOTES

- STRUCTURAL STEEL SHALL CONFORM TO THE AISC "SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION.
- WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1.
- BOLTS AND BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS" AS APPROVED BY THE COUNCIL ON RIVETED AND BOLTED JOINTS. USE BEARING TYPE BOLTS WITH THREADS ALLOWED ACROSS THE SHEAR PLANE. ANCHOR BOLTS SHALL CONFORM TO ASTM A-36.
- STRUCTURAL STEEL SHAPES, PLATES, ETC. SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-36, EXCEPT ALL WIDE FLANGE SECTIONS SHALL BE ASTM A992. UNLESS NOTED OTHERWISE, STEEL TUBES SHALL BE 46 KSI STEEL CONFORMING TO ASTM A-500.
- IN GENERAL, IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT ALL SHOP CONNECTIONS BE WELDED OR BOLTED AND ALL FIELD CONNECTIONS BE BOLTED EXCEPT WHERE NOTED OTHERWISE.
- VERIFY THE EXACT LOCATION AND SIZE OF ALL ROOF AND FLOOR OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION OF MATERIALS. SEE TYPICAL DETAIL FOR FRAMING AROUND OPENINGS.
- PROVIDE ONE COAT OF STANDARD SHOP PAINT ON ALL UNSALVANIZED PIECES EXCEPT AT AREAS TO BE FIELD WELDED.
- TOUCH UP FIELD WELDS AND ANY DAMAGED AREAS OF PAINT IN FIELD AFTER WELDING. (USE GALVANIZING PAINT FOR TOUCH UP OF GALVANIZED STEEL).
- ALL WELDS SHALL BE VISUALLY INSPECTED BY AN APPROVED LICENSED TESTING COMPANY. SEE SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.

CAST IN PLACE CONCRETE

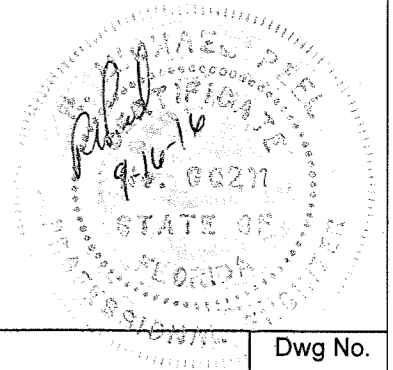
- ALL CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS.
3000 PSI FIBER REINFORCED (OR AS NOTED ON PLANS)
3000 PSI SLAB ON GRADE, FOOTINGS
4000 PSI REMAINING CONCRETE
- ALL CONCRETE SHALL HAVE A SLUMP OF 4" PLUS OR MINUS 1", AND HAVE 2 TO 4% AIR ENTRAINMENT. A MAXIMUM WATER/CEMENT RATIO OF 0.56.
- CONCRETE MIX DESIGN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 301 CHAPTER 3, METHOD 1 OR METHOD 2. SUBMIT BACKUP DATA AS REQUIRED BY CHAPTER 5 SECTION 5.3. OF THE LATEST EDITION OF ACI 318.
- ALL REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO ASTM A-615 GRADE 60.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. W.W.F. SHALL BE LAPPED AT LEAST 8" AND CONTAIN AT LEAST ONE CROSS WIRE WITHIN THE 8". AT GROUND FLOOR SLAB 1 1/2 LBS. OF POLYPROPYLENE FIBROUS REINFORCEMENT PER CU. YD. OF CONCRETE MAY BE USED IN LIEU OF W.W.F. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH "THE BUILDING CODE REQUIREMENTS FOR"
- REINFORCED CONCRETE" ACI 318 LATEST EDITION, AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS," ACI 301. ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING."
- REINFORCED CONCRETE STRUCTURES" ACI 315 LATEST EDITION, UNLESS DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL REVIEW ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF EMBEDDED ITEMS, SLEEVES, SLAB DEPRESSIONS, SLOPES, ETC. REQUIRED BY OTHER TRADES. THESE ITEMS SHALL BE FURNISHED AND INSTALLED PRIOR TO PLACEMENT OF CONCRETE.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, SLEEVES, ANCHOR BOLTS, INSERTS, ETC., AS REQUIRED BY OTHER TRADES BEFORE CONCRETE IS PLACED.
- WHERE BAR LENGTHS ARE GIVEN ON THE DRAWINGS, THE LENGTH OF ANY HOOK, IF REQUIRED, IS NOT INCLUDED. HOOKS SHALL BE PROVIDED AT DISCONTINUOUS ENDS OF ALL TOP BARS OF BEAMS AND AT SLABS EDGES.
- CONTRACTOR SHALL PROVIDE SPACERS, CHAIRS, BOLSTERS, ETC. NECESSARY TO SUPPORT REINFORCING STEEL. SUPPORT ITEMS WHICH BEAR ON EXPOSED CONCRETE SURFACES SHALL HAVE ENDS WHICH ARE PLASTIC TIPPED OR STAINLESS STEEL.
- CONTRACTOR SHALL PROVIDE 3/4 INCH CHAMFER ON ALL EXPOSED CORNERS.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
3" CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.
2" CONCRETE EXPOSED TO EARTH OR WEATHER, #6 THROUGH #18 BARS.
1-1/2" CONCRETE EXPOSED TO EARTH OR WEATHER, #5 BAR AND SMALLER.
1-1/2" CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH FOR THE PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS IN BEAMS AND COLUMNS.
3/4" CONCRETE NOT EXPOSED TO WEATHER NOR IN CONTACT WITH EARTH FOR SLABS, WALLS, AND JOISTS, #11 BAR AND SMALLER. (OR AS NOTED ON PLANS)
- HORIZONTAL WALL AND FOOTING BARS SHALL BE BENT 1'-0" AROUND CORNERS OR CORNER BARS WITH 2'-6" LAP SHALL BE PROVIDED.
- HORIZONTAL KEYWAYS IN CONSTRUCTION JOINTS SHALL BE PROVIDED IN BEAMS, SUPPORTED SLABS, AND WALL FOOTINGS WITH A DEPTH OF 1-1/2" AND HEIGHT EQUAL TO ONE-THIRD OF THE MEMBER'S DEPTH. REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS UNLESS OTHERWISE NOTED ON THE DRAWINGS. CONSTRUCTION JOINTS MAY BE USED ONLY AT LOCATIONS SHOWN ON THE DRAWINGS OR AT OTHER LOCATIONS APPROVED BY THE ARCHITECT.
- MINIMUM LAP SPLICES ON ALL REINFORCING BAR SPLICES SHALL BE 48 BAR DIAMETERS TYP. EXCEPT WHERE OTHERWISE NOTED ON THE DRAWINGS. FOR BEAMS AND ELEVATED SLABS, LAP BOTTOM STEEL AT THE SUPPORT AND TOP STEEL OVER THE MIDSPAN, UNLESS OTHERWISE NOTED.
- TESTING LABORATORY SHALL SUBMIT ONE COPY OF ALL CONCRETE TEST REPORTS DIRECTLY TO THE ENGINEER.


TESTING

- A MINIMUM OF FIVE (5) CYLINDERS AND SLUMP TESTING SHALL BE PROVIDED FOR EACH DELIVERY TRUCK UNLESS OTHERWISE SPECIFIED BY CITY.
- CYLINDER TEST SHALL BE PERFORMED TO CURRENT INDUSTRY STANDARDS.
- TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED TESTING AGENCY.
- ADDITIONAL TESTING, AS REQUIRED, WILL BE AT NO ADDITIONAL COMPENSATION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MITIGATION OF ANY TESTING FAILURES AS DIRECTED BY THE STRUCTURAL ENGINEER. AT NO ADDITIONAL COMPENSATION.

ABBREVIATIONS

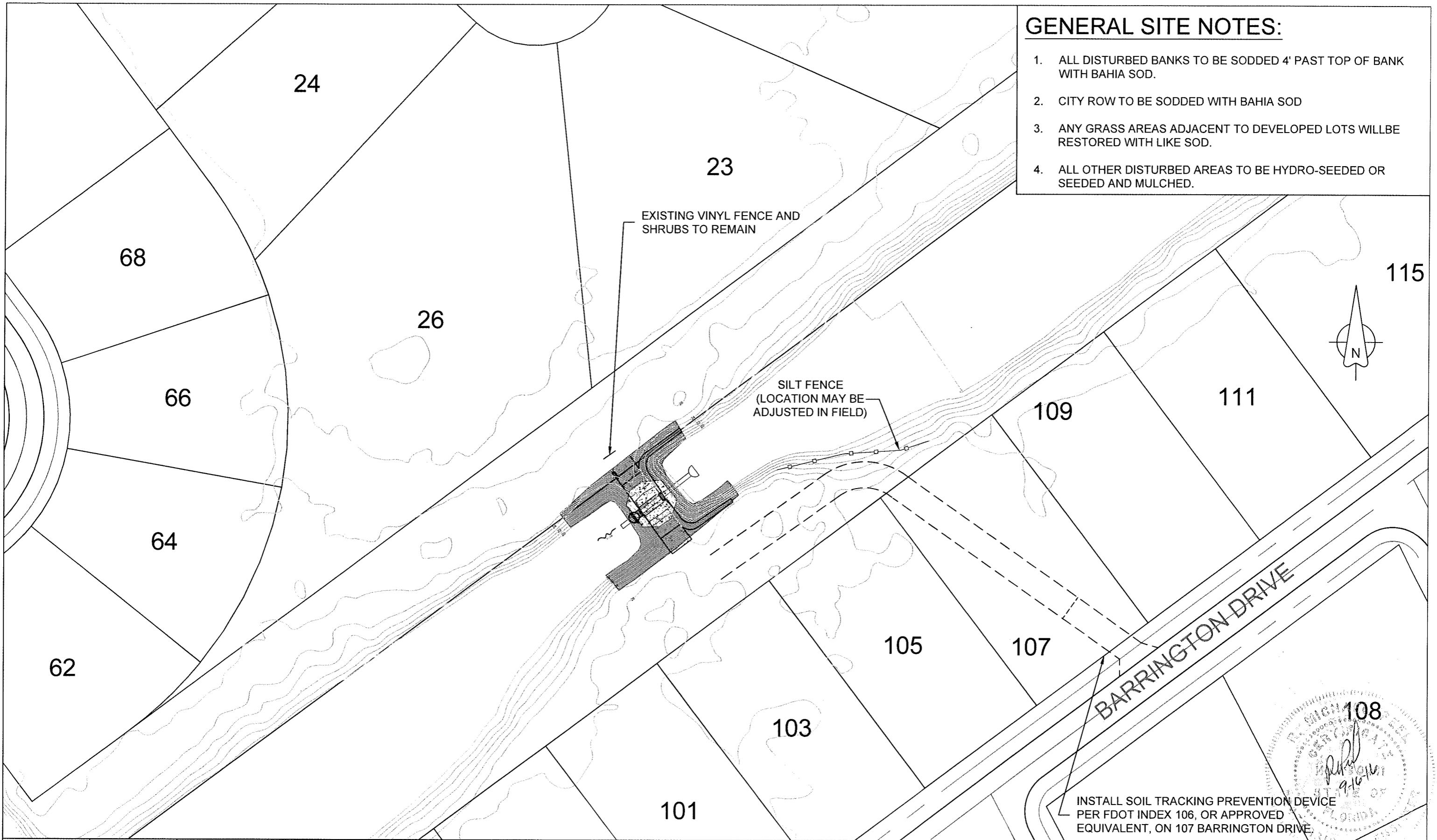
ACMP	ALUMINIZED CORRUGATED METAL PIPE
CMP	CORRUGATED METAL PIPE
DIA.	DIAMETER
EL.	ELEVATION
HWL	HIGH WATER LEVEL
INV.	INVERT
LBS	POUNDS
N.T.S.	NOT TO SCALE
NWL	NORMAL WATER LEVEL
SQ FT	SQUARE FEET
TBD	TO BE DETERMINED
TBM	TEMPORARY BENCHMARK
T.O.B.	TOP OF BERM
TYP	TYPICAL
OE	OVERHEAD ELECTRIC
O.C.	ON CENTER
WM	WATERMAIN



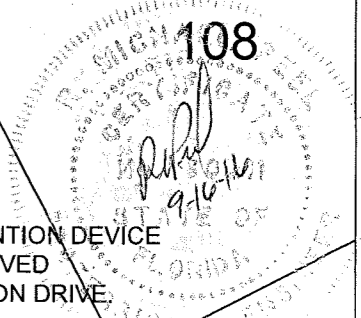
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Dwn. by: SLB/JWH	Date: 10/22/2014	Job no.:								
Chk. by: MCB	Date: 10/22/2014	File: BS-2 Weir.dwg								
App'd by: JCM	Date: 10/22/2014									

GENERAL SITE NOTES:

1. ALL DISTURBED BANKS TO BE SODDED 4' PAST TOP OF BANK WITH BAHIA SOD.
2. CITY ROW TO BE SODDED WITH BAHIA SOD
3. ANY GRASS AREAS ADJACENT TO DEVELOPED LOTS WILL BE RESTORED WITH LIKE SOD.
4. ALL OTHER DISTURBED AREAS TO BE HYDRO-SEEDED OR SEEDED AND MULCHED.



INSTALL SOIL TRACKING PREVENTION DEVICE PER FDOT INDEX 106, OR APPROVED EQUIVALENT, ON 107 BARRINGTON DRIVE.



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Dwn. by: SLB/JWH	Date: 09/08/2016	Job no.:
Chk. by: MCB	Date: 09/08/2016	File: BS-2 Weir.dwg
App'd by: MP	Date: 09/08/2016	

EXISTING SITE & EROSION CONTROL PLAN	Rev. No.	Date	App'd by

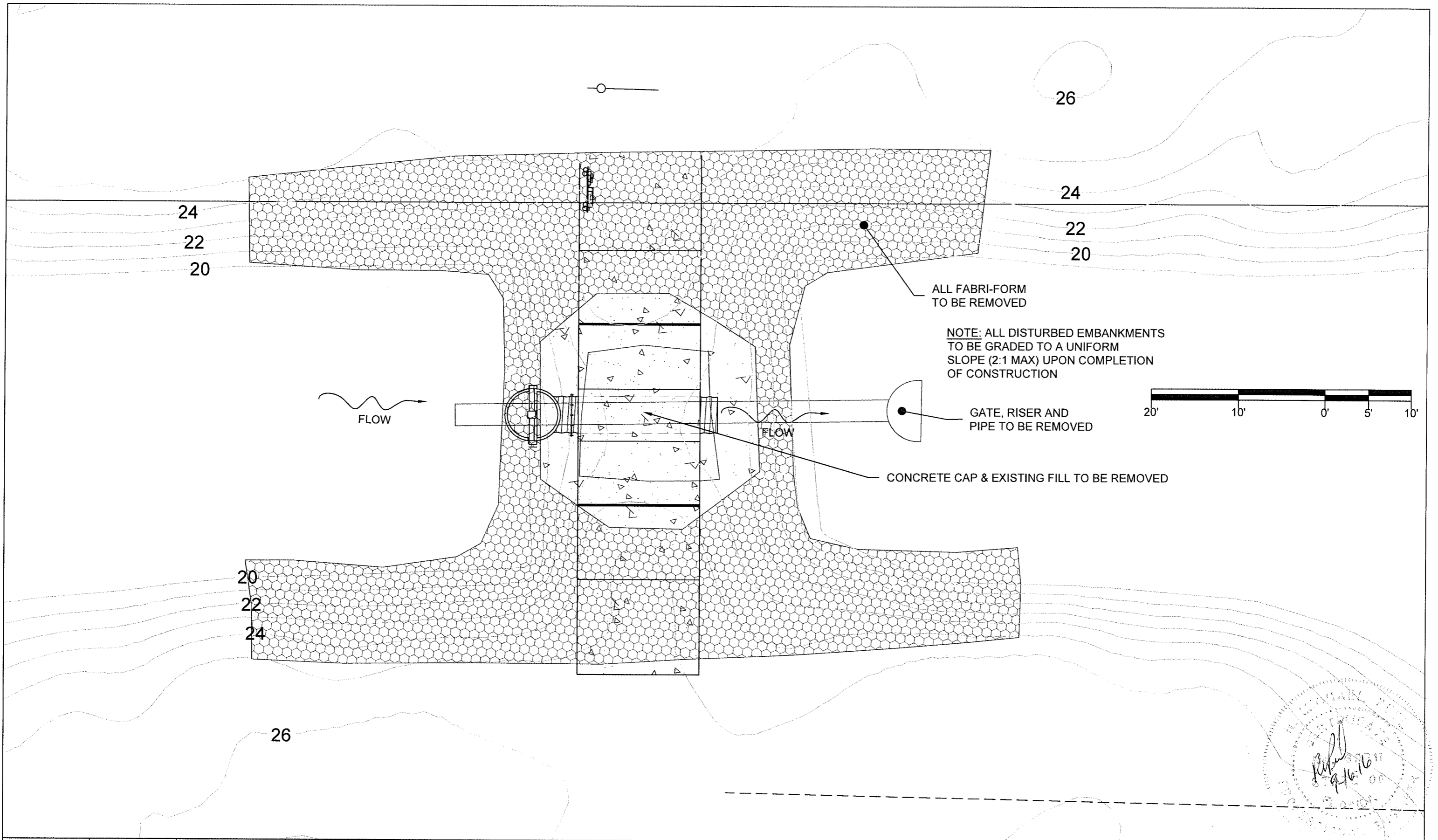
Dwg. Status
CONSTRUCTION DOCUMENTS



CITY OF PALM COAST, FLORIDA
160 Lake Avenue
Palm Coast, Florida 32164

**BS-2
WEIR REPLACEMENT**

Dwg No.
C-3
sheet 3 of 13

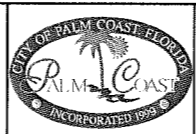


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Chk. by: MCB	Date: 09/08/2016	File: BS-2 Weir.dwg
App'd by: MP	Date: 09/08/2016	

**EXISTING
CONDITIONS**

Rev. No.	Date	App'd by

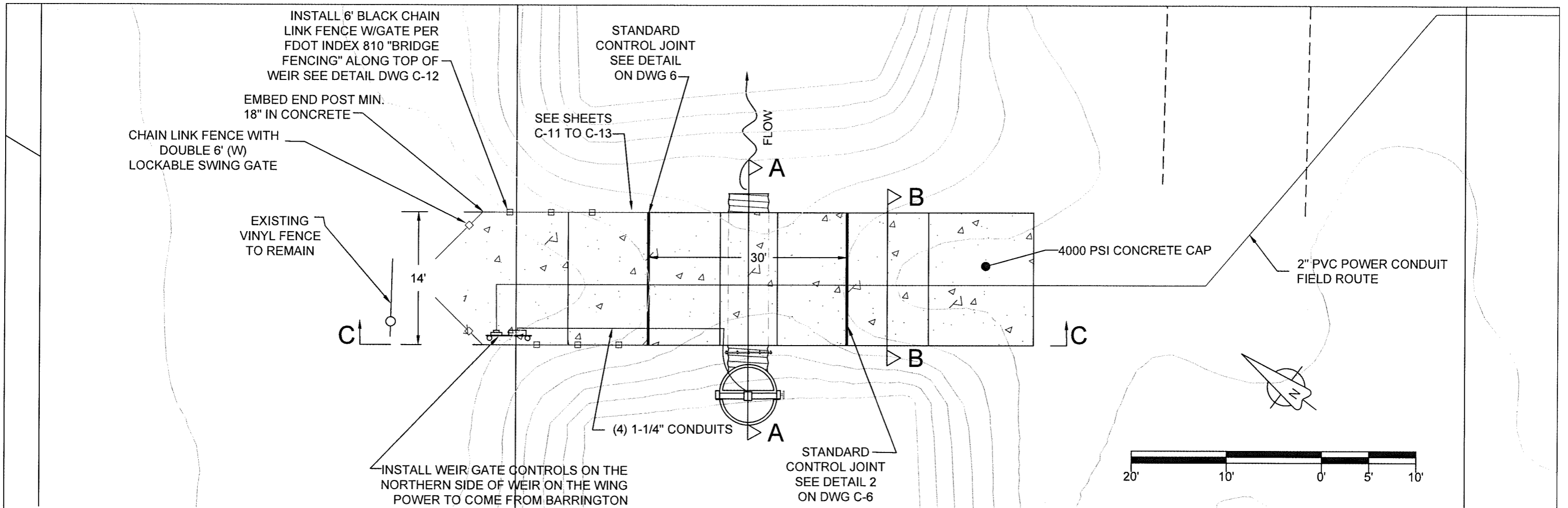
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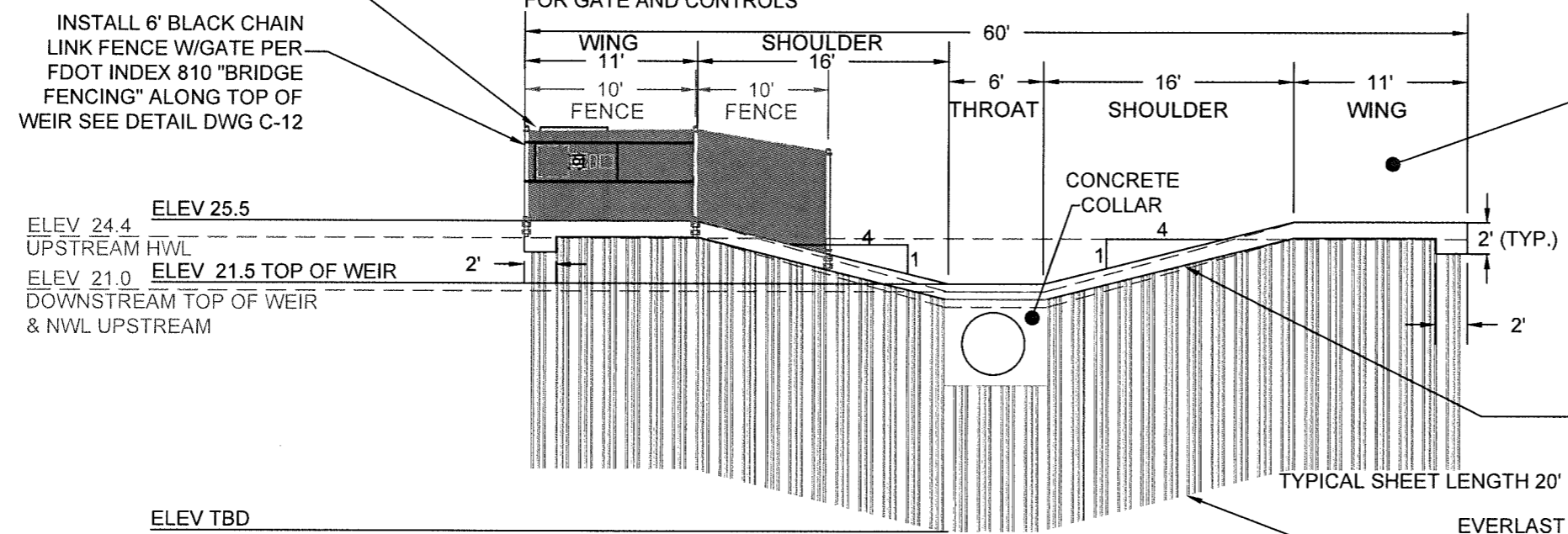
CITY OF PALM COAST, FLORIDA
160 Lake Avenue
Palm Coast, Florida 32164

**BS-2
WEIR REPLACEMENT**

Dwg No.
C-4
sheet 4 of 13




NOTE: ELEVATIONS SHOWN ARE IN NAVD88

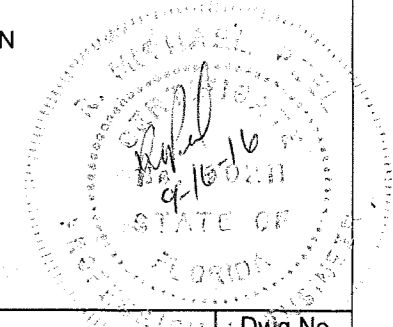


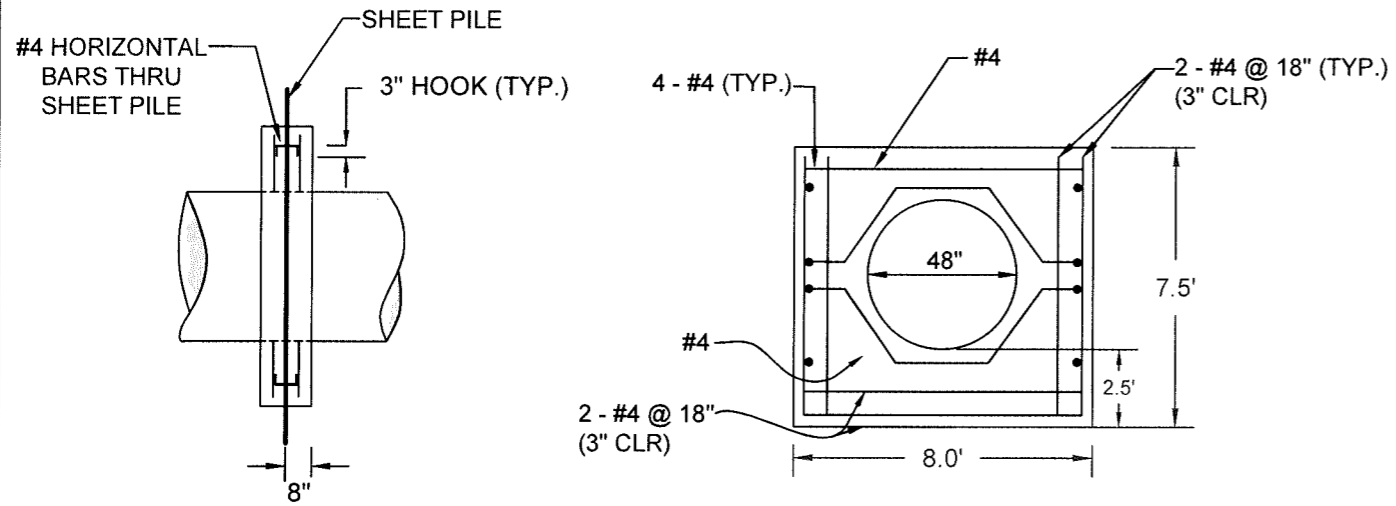
GATE AND FENCE ON THE SOUTH SIDE ARE OMITTED FOR CLARITY. DIMENSIONS AND SPECIFICATIONS ARE THE SAME AS THE NORTH SIDE.

APPROXIMATE 20 - 1/2" X 3 1/2" STAINLESS STEEL EYE BOLTS TO BE INSTALLED UNDER PILE CAP FOR ANCHORING EROSION CONTROL FABRIC. SPACING AND LOCATIONS TO BE DETERMINED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

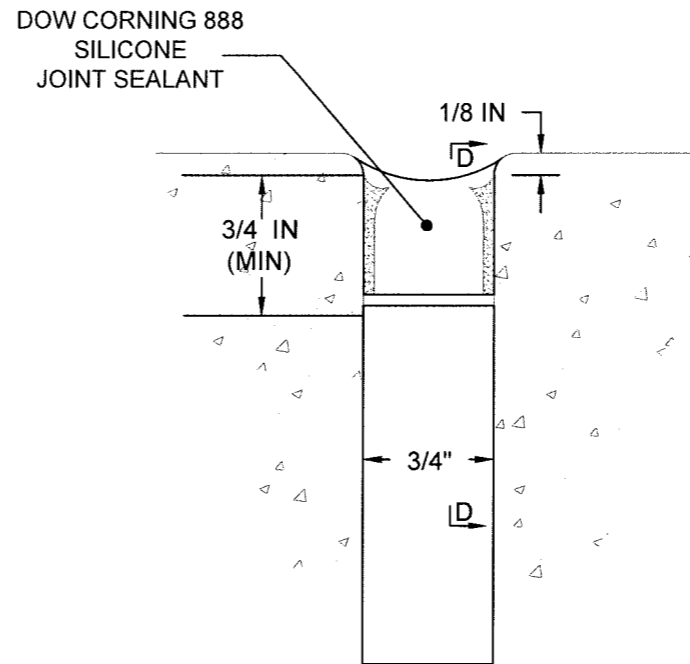
SECTION C-C

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Dwn. by: SLB/JWH	Date: 09/08/2016	Job no.:								
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App'd by: MP	Date: 09/08/2016									

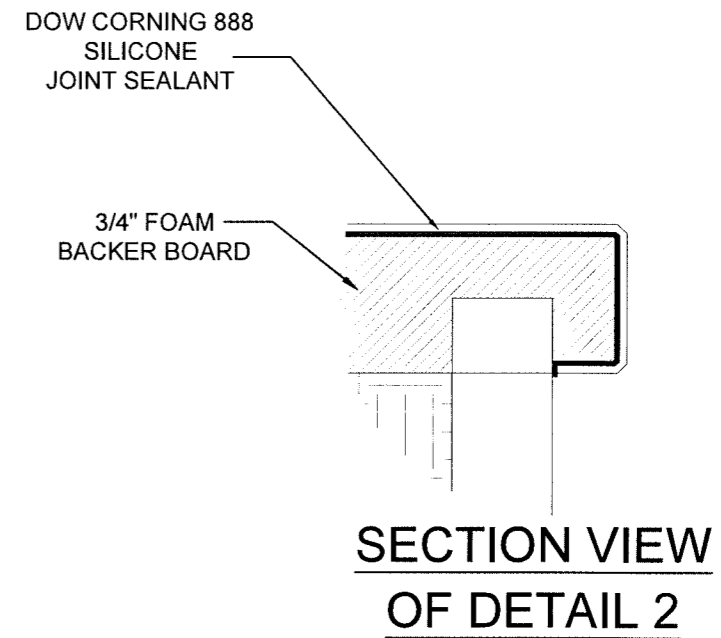




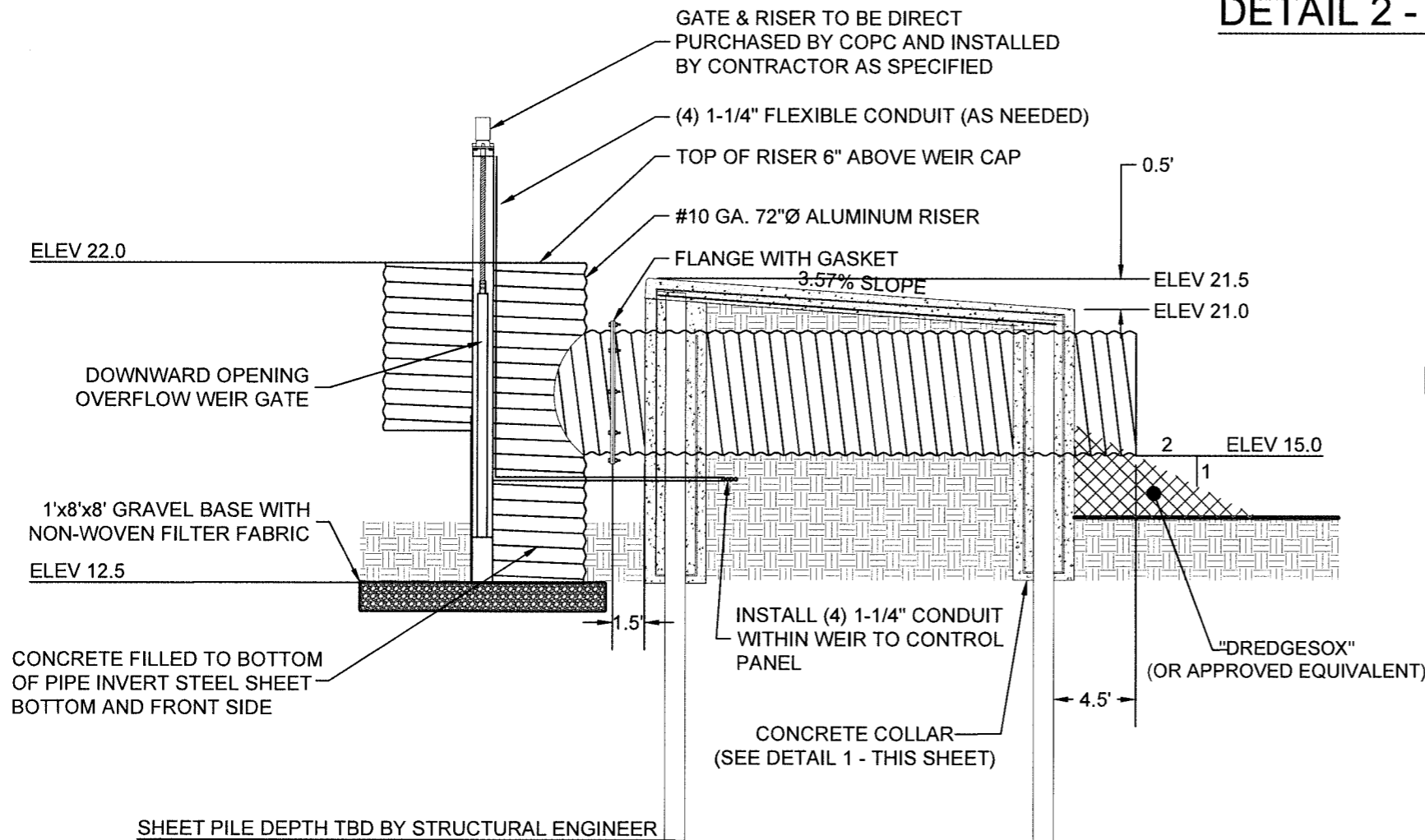
DETAIL 1 - CONCRETE COLLAR
NTS



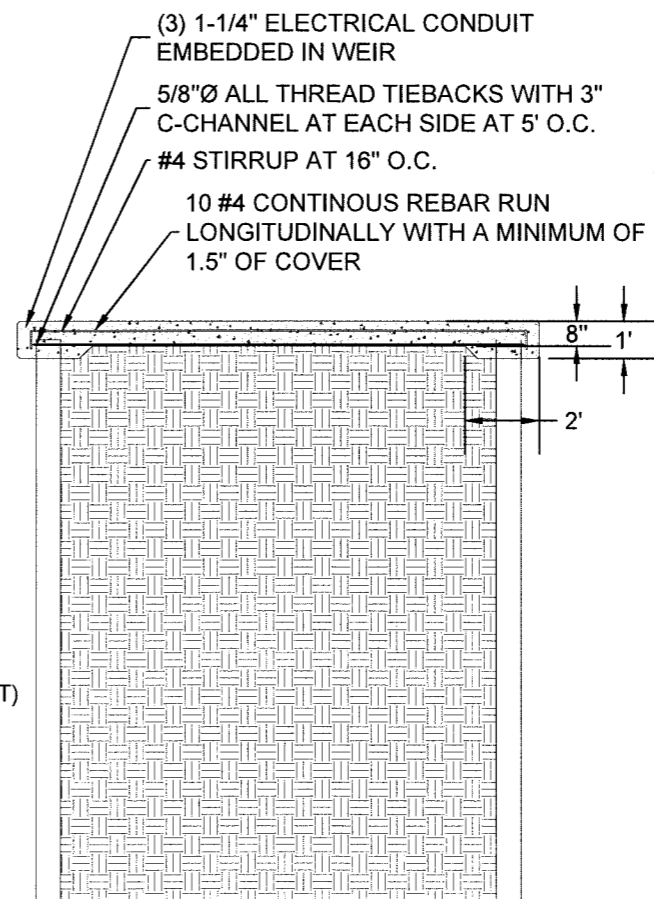
DETAIL 2 - CONTROL JOINT
NTS



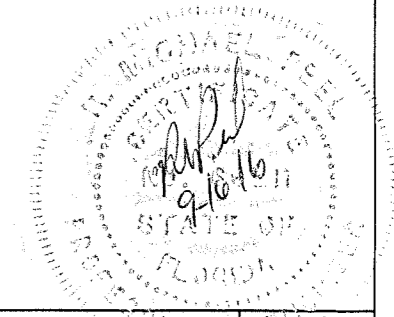
SECTION VIEW OF DETAIL 2



SECTION A-A



SECTION B-B



Des. by: SLB/JWH	Date: 09/08/2016	Scale: 1"= 5'-0"
Dwn. by: SLB/JWH	Date: 09/08/2016	Job no.:
Chk. by: MCB	Date: 09/08/2016	File: BS-2 Weir.dwg
App'd by: MP	Date: 09/08/2016	

CROSS SECTIONS

Rev. No.	Date	App'd by

Dwg. Status

CONSTRUCTION DOCUMENTS



CITY OF PALM COAST, FLORIDA
160 Lake Avenue
Palm Coast, Florida 32164

BS-2
WEIR REPLACEMENT

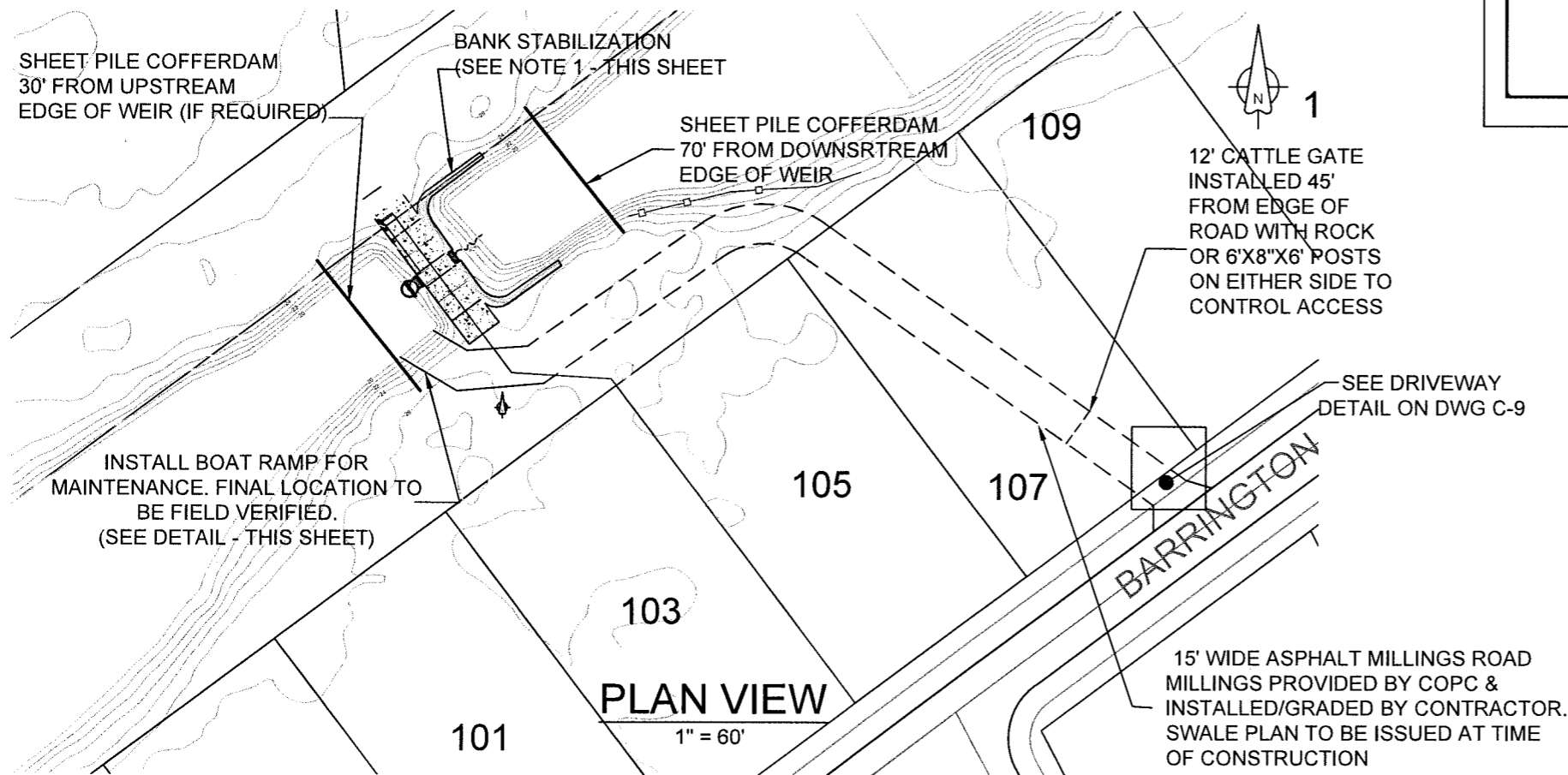
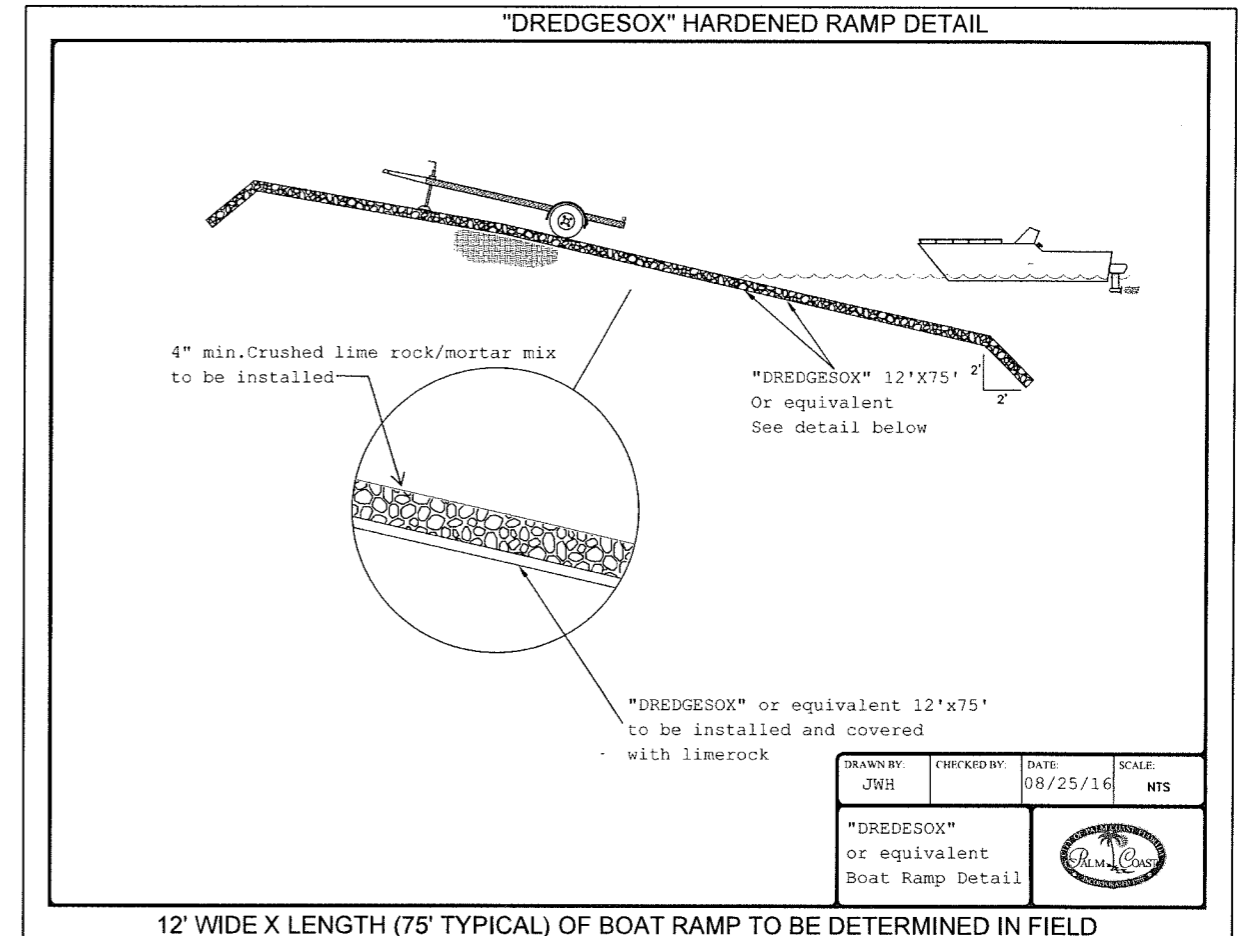
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C-6

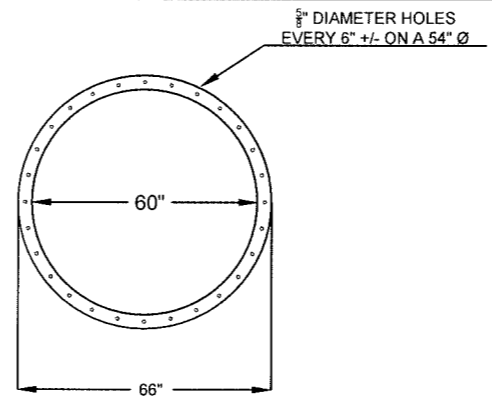
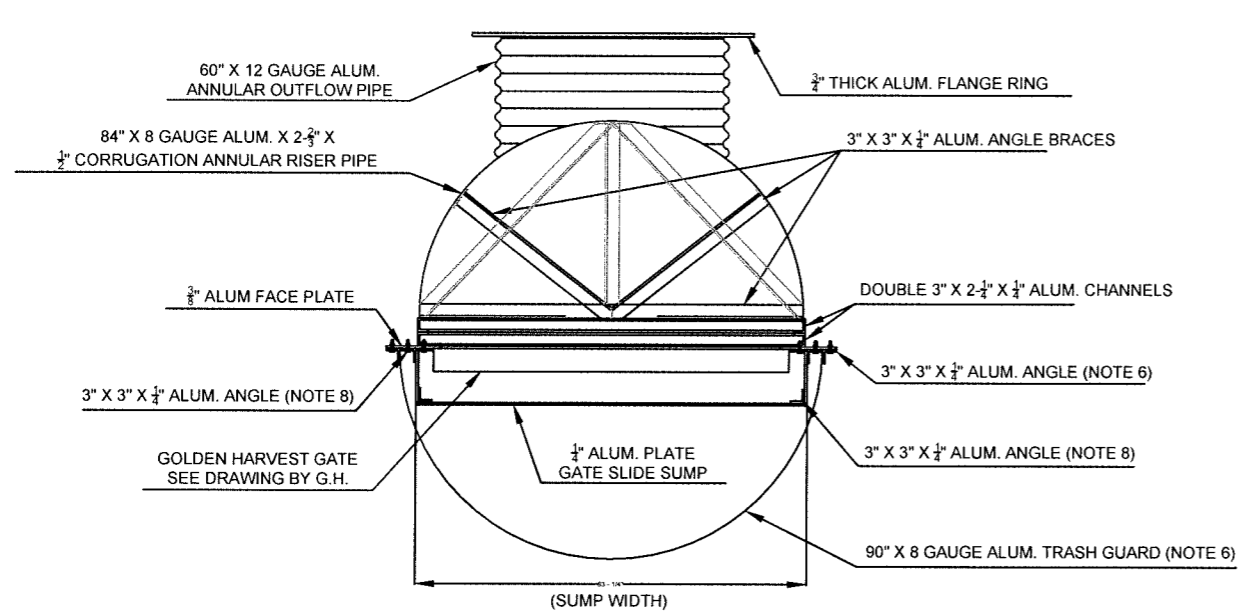
sheet 6 of 13

NOTES

- APPROXIMATELY 50 L.F. OF "DREDESOX", OR APPROVED EQUIVALENT, TO BE INSTALLED ALONG EACH SIDE OF DOWNSTREAM CANAL EMBANKMENT. INSTALLATION SHALL BE FROM ELEV. 24.0 TO ELEV. 15.0. "SHORESUX", OR EQUIVALENT, SHALL ALSO BE INSTALLED ALONG DOWNSTREAM FACE OF WEIR FROM APPROXIMATE BOTTOM OF PILE CAP TO ELEV. 15.0. INSTALLATION SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

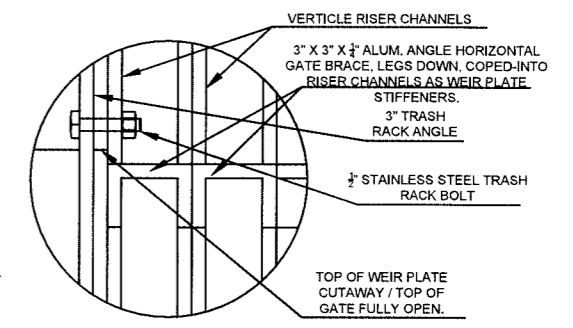


Des. by: SLB/JWH	Date: 09/08/2016	Scale: NONE	BANK STABILIZATION PLAN & DETAIL	Rev. No.	Date	App'd by	Dwg. Status CONSTRUCTION DOCUMENTS		CITY OF PALM COAST, FLORIDA 160 Lake Avenue Palm Coast, Florida 32164	BS-2 WEIR REPLACEMENT	Dwg No. C-7 sheet 7 of 13
Dwn. by: SLB/JWH	Date: 09/08/2016	Job no.:									
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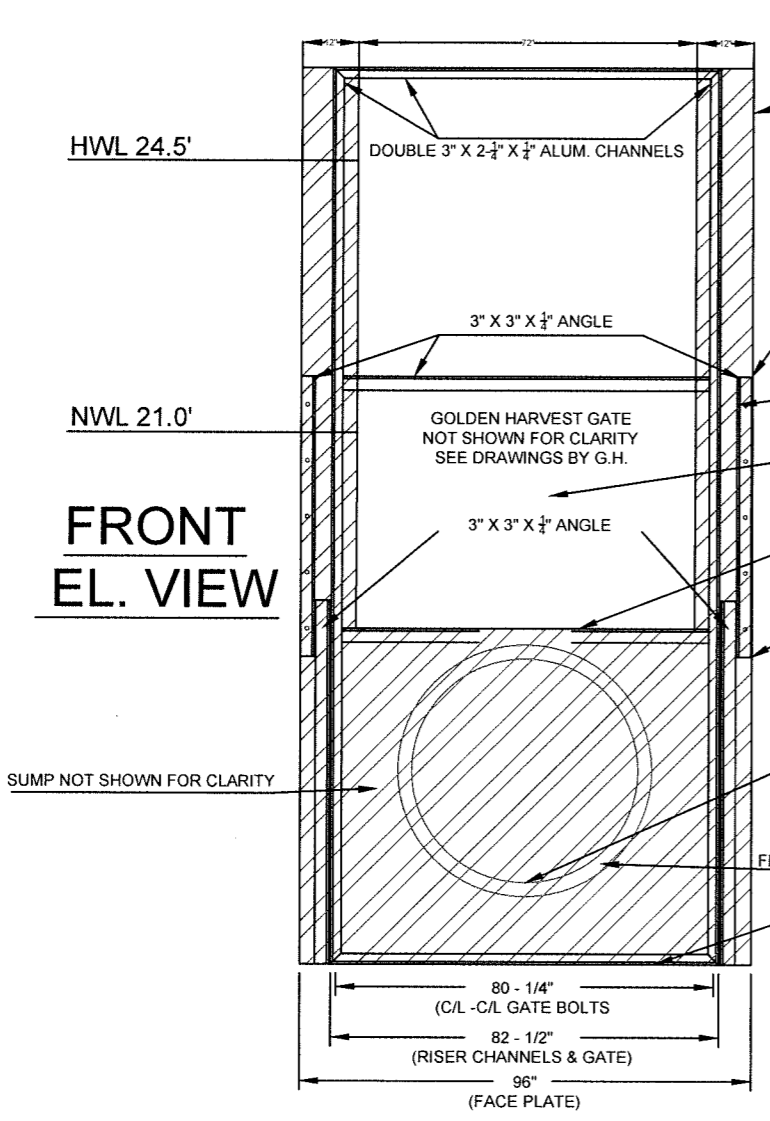


FLANGE OF WELDED TOGETHER SECTIONS OF GRADE 5052 H-32 PLATE
 FLANGE SET BOLTED TOGETHER WITH 1/2" GRADE 304 STAINLESS STEEL BOLT SETS
 GASKET OF 3/8" THICK CLOSED CELL NEOPRENE
DETAIL 1 - FLANGE RING

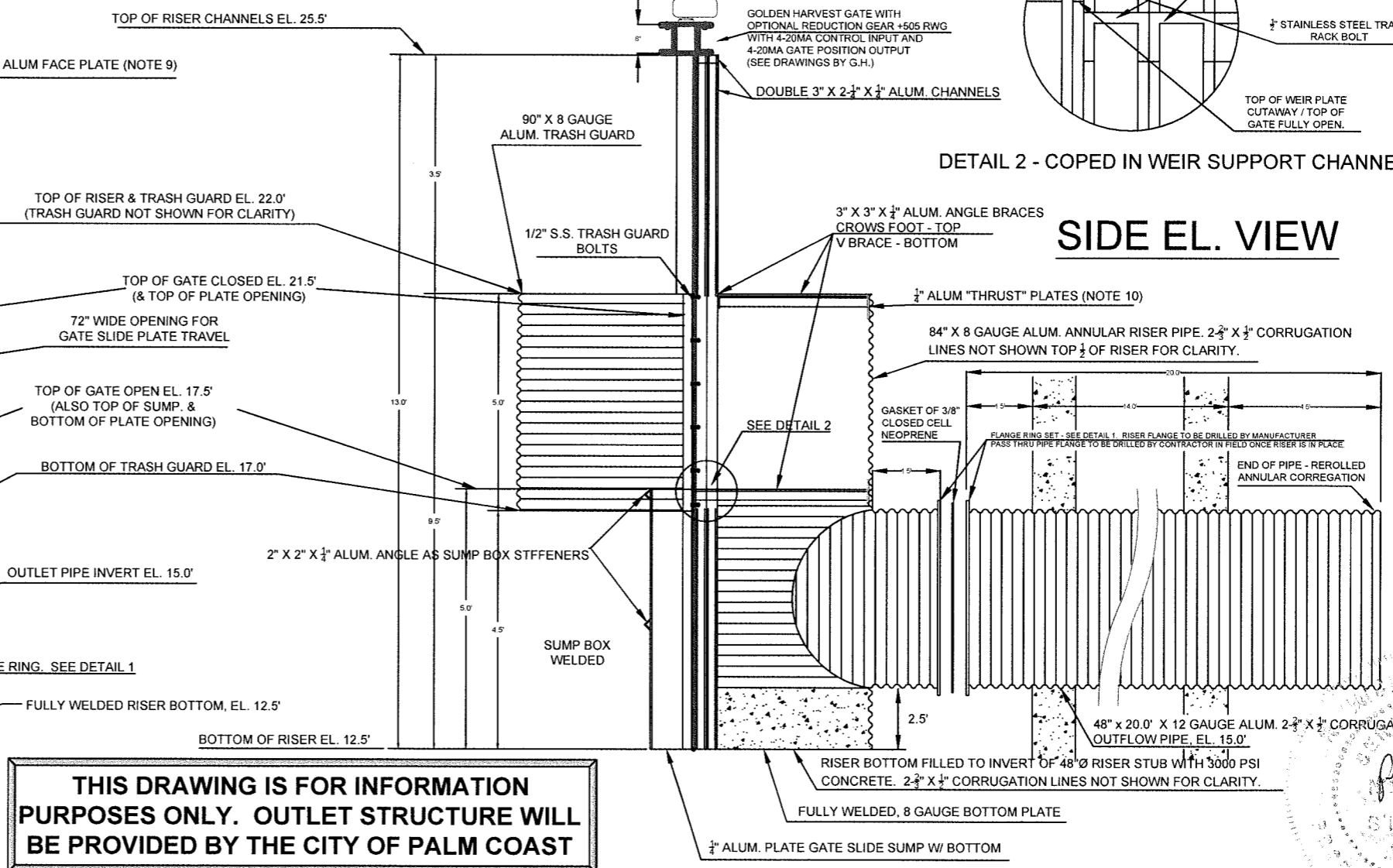
- GENERAL NOTES:
 1) GATE TO BE FITTED TO RISER ONCE GATE ARRIVES. ALLOWING FOR PROPER FITTING OF TRASH RACK AND SLIDE PLATE SUMP.
 2) ALL STRUCTURALS GRADE 6061-T6. FACE PLATE GRADE 5052. RISER & CULVERT GRADE 3034.
 3) ALL WELDS TO BE $\frac{1}{8}$ " OR $\frac{1}{4}$ " \times , EXCEPT AS NOTED
 4) WELD PROCESS MIG W/ 3/64" - 4043 WIRE
 5) STRUCTURALS TO BE WELDED ALL SIDES, UNLESS OTHERWISE NOTED OR IMPRACTICAL
 6) ALUM. ANGLES WELDED TO 90° TRASH RACK @ EACH CORRUGATION. ANGLES BOLTED TO RISER FACE PLATE W/ 1/2" S.S. BOLTS ON 12" C/L +/- TRASH RACK REMOVED FOR GATE INSTALLATION, BY OTHERS.
 7) SUMP BOX ANGLES WELDED TO SUMP BOX, & ANGLES THEN WELDED TO FACE PLATE. FACE PLATE TO SERVE AS BACK OF BOX.
 8) ANGLES WELDED TO PLATES TO KEEP BOX SQUARE SHAPE, SUCH AS WHEN REMOVED FOR MAINTENANCE OR GATE INSTALLATION.
 9) FACE PLATE CONTINUOUSLY WELDED TO RISER CHANNELS, PROVIDING WATER TIGHT SEAL. FACE PLATE SERVES AS THE THE MOUNTING "WALL" FOR THIS STYLE GATE. PLATE DIMENSIONS TO BE ADJUSTED AS NEEDED ONCE CONTECH RECEIVES GATE DRAWING, THEN VERIFYING THE GATE WILL FIT TO OUR STRUCTURE UNOBSTRUCTED
 10) THRUST PLATES WELDED BETWEEN BRACES & RISER COVERS TO SPREAD STRESS FORCES OVER WIDER AREA. PLATES TO BE 5.5" X 5.5" MINIMUM.
 11) WELDING PERFORMED BY STATE OF FLORIDA CERTIFIED WELDER(S)



DETAIL 2 - COPED IN WEIR SUPPORT CHANNELS

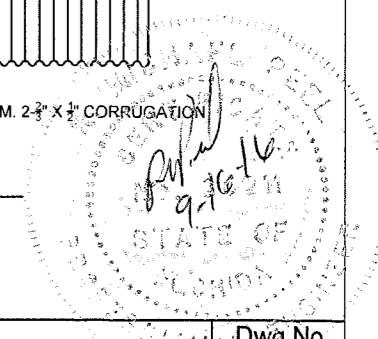



FRONT EL. VIEW



SIDE EL. VIEW

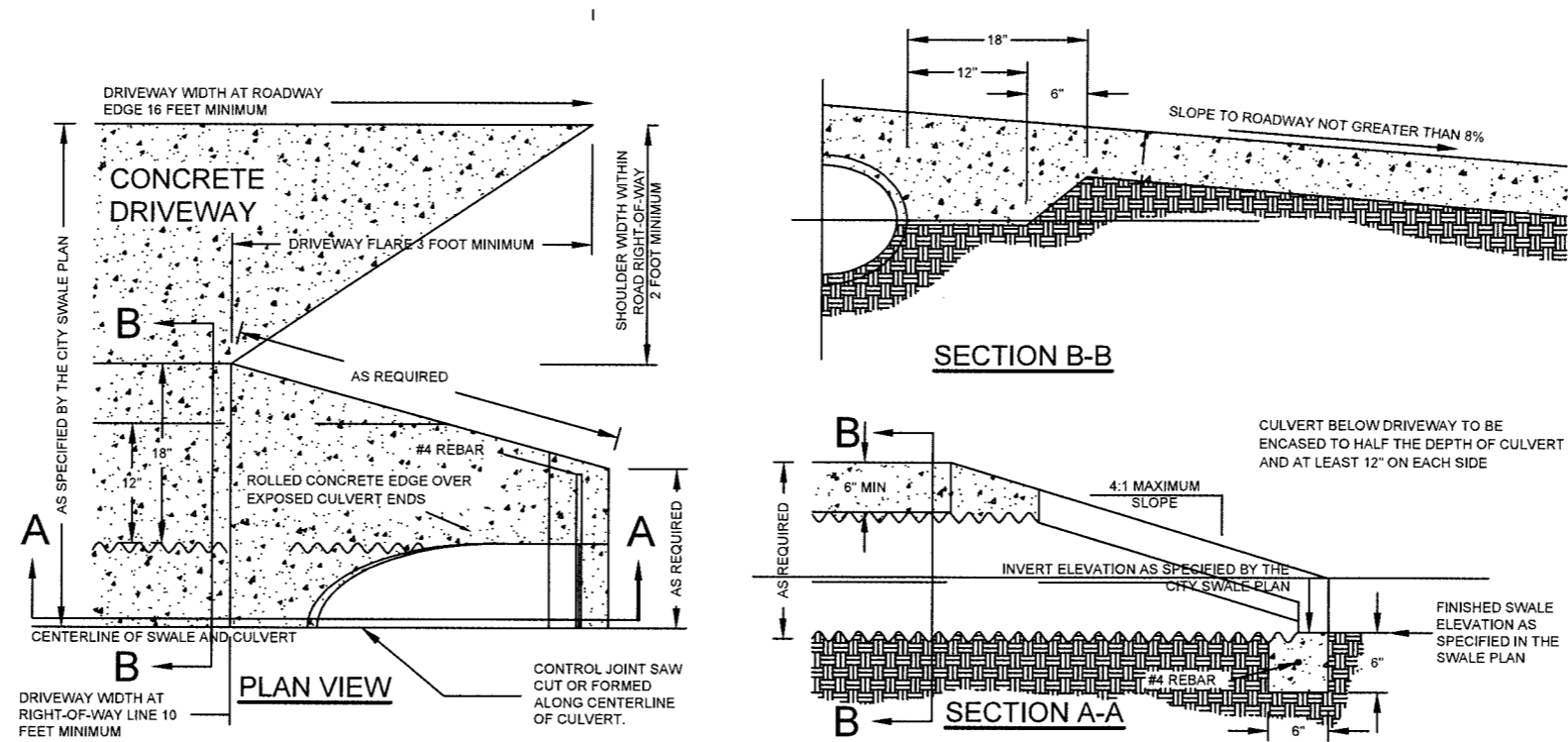
THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. OUTLET STRUCTURE WILL BE PROVIDED BY THE CITY OF PALM COAST



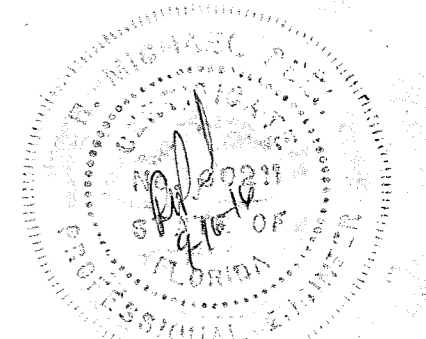
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Dwn. by: SLB/JWH	Date: 09/08/2016	Job no.:								
Chk. by: MCB	Date: 09/08/2016	File: BS-2 Weir.dwg								
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FINAL DRIVEWAY DETAIL

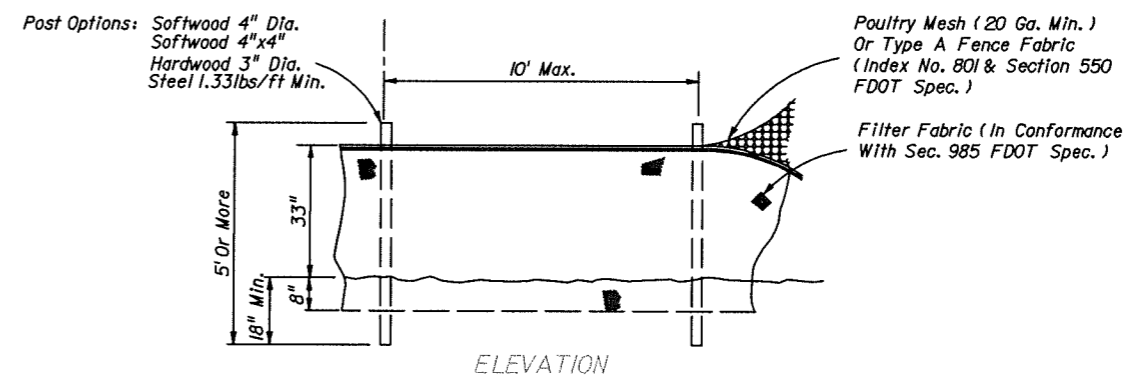
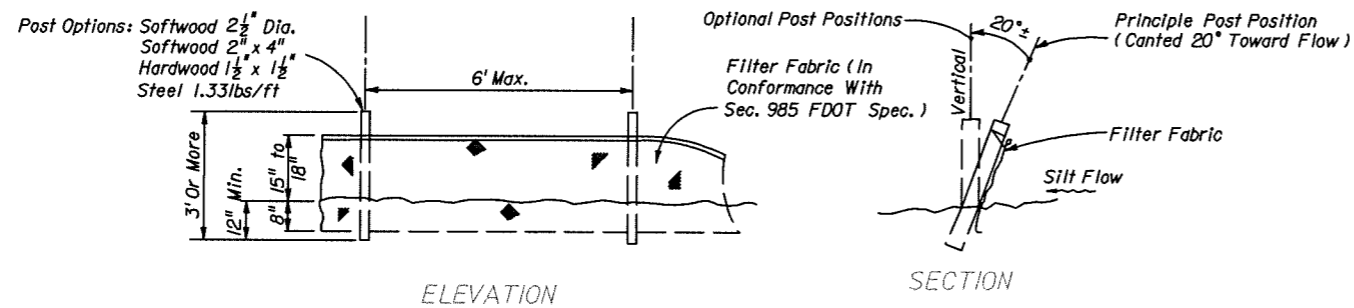
NOTE - END OF THE DRIVEWAY IS
25' FROM THE EDGE OF PAVEMENT



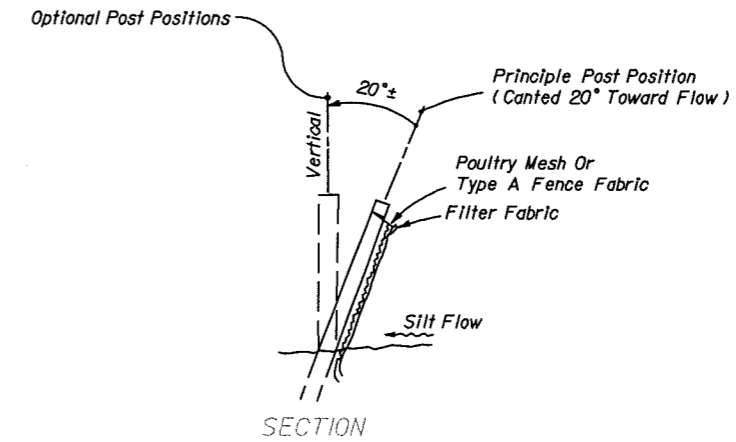
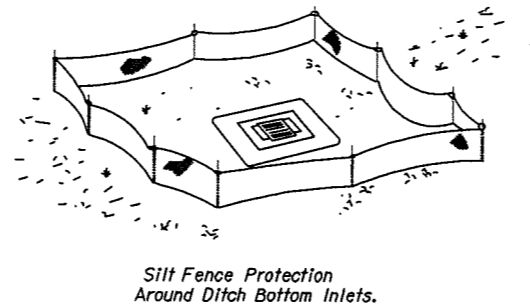
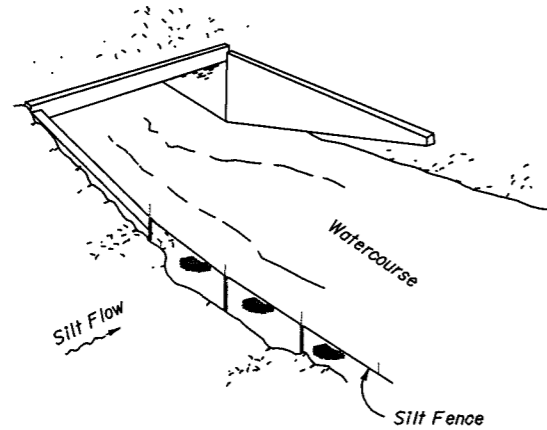
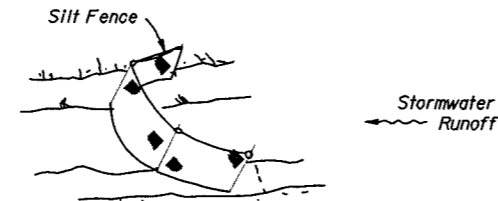
1. DRIVEWAY WIDTH IS TO BE A MINIMUM OF 16 FEET WIDE AT THE ROADWAY EDGE.
2. DRIVEWAY WIDTH IS TO BE A MINIMUM OF 10 FEET WIDE FROM THE RIGHT-OF-WAY LINE TO THE FLARE AND THE RIGHT-OF-WAY LINE IS 10 FEET FROM THE ROADWAY EDGE.
3. DRIVEWAY SLOPES ARE NOT TO EXCEED 8%.
4. CUL-DE-SAC OR FLAG LOT DRIVEWAYS WILL HAVE THE MINIMUM WIDTH AT THE ROADWAY EDGE AND PLACEMENT OF THE CULVERT MODIFIED TO BEST SUIT THE ACTUAL CONDITIONS.
5. THE CULVERT IS TO BE A HELICAL CORRUGATED METAL PIPE WITH MITERED ENDS. THE SIZE OF THE PIPE WILL BE 17"X13" OR A 15" EQUIVALENT. SUBSTITUTES REQUIRE PRIOR CITY APPROVAL.
6. THE USE OF PRE-CAST MITERED END SECTIONS IS PROHIBITED.
7. PIPE PROTECTION RAILS MAY BE REQUIRED AT THE CITIES DISCRETION.
8. THICKNESS OF THE DRIVEWAY IN THE RIGHT OF WAY IS TO BE A MINIMUM 6" OF 3,000 PSI CONCRETE REINFORCED WITH WWF 6x6-W1.4XW1.4 MESH OR FIBERGLASS REINFORCED CONCRETE (FRC).
9. FINISH GRADE TO MATCH DRIVEWAY AND MITERED END SECTION.
10. THE BUILDER IS RESPONSIBLE FOR THE VERTICAL AND HORIZONTAL ALIGNMENT OF THE CULVERT IN THE RIGHT-OF-WAY.
11. IF THERE ARE ANY QUESTIONS, PLEASE CALL MICHAEL BRENNAN IN THE STORMWATER DEPARTMENT AT (386) 986-4721 FOR ADVICE.



Des. by: JWH	Date: 09/08/2016	Scale: NONE	CULVERT PIPE DETAIL	Rev. No.	Date	App'd by	Dwg. Status CONSTRUCTION DOCUMENTS	 CITY OF PALM COAST, FLORIDA 160 Lake Avenue Palm Coast, Florida 32164	BS-2 WEIR REPLACEMENT	Dwg No. C-9 sheet 9 of 13
Dwn. by: JWH	Date: 09/08/2016	Job no.:								
Chk. by: MCB	Date: 09/08/2016	File: BS-S weir.dwg								
App'd by: MP	Date: 09/08/2016									



TYPE III SILT FENCE

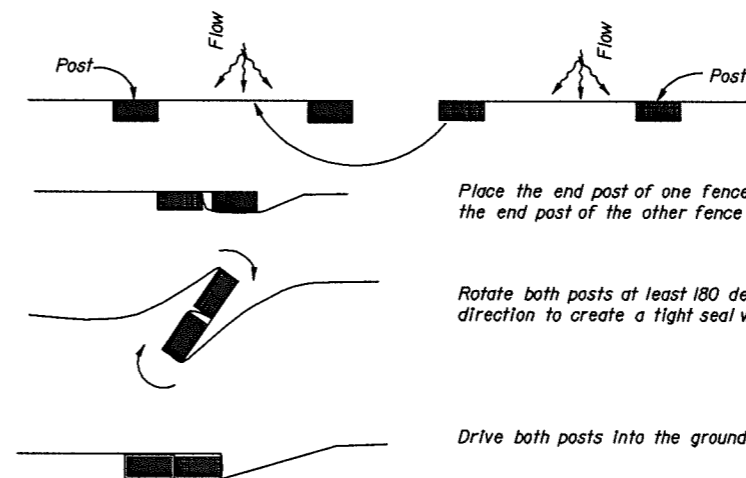


TYPE IV SILT FENCE

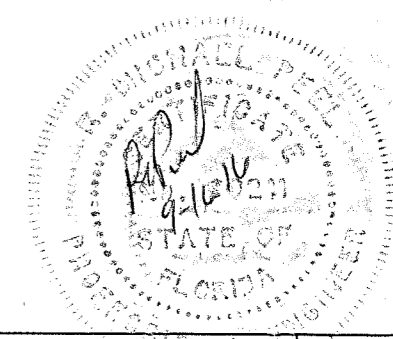
SILT FENCE APPLICATIONS


NOTES FOR SILT FENCES

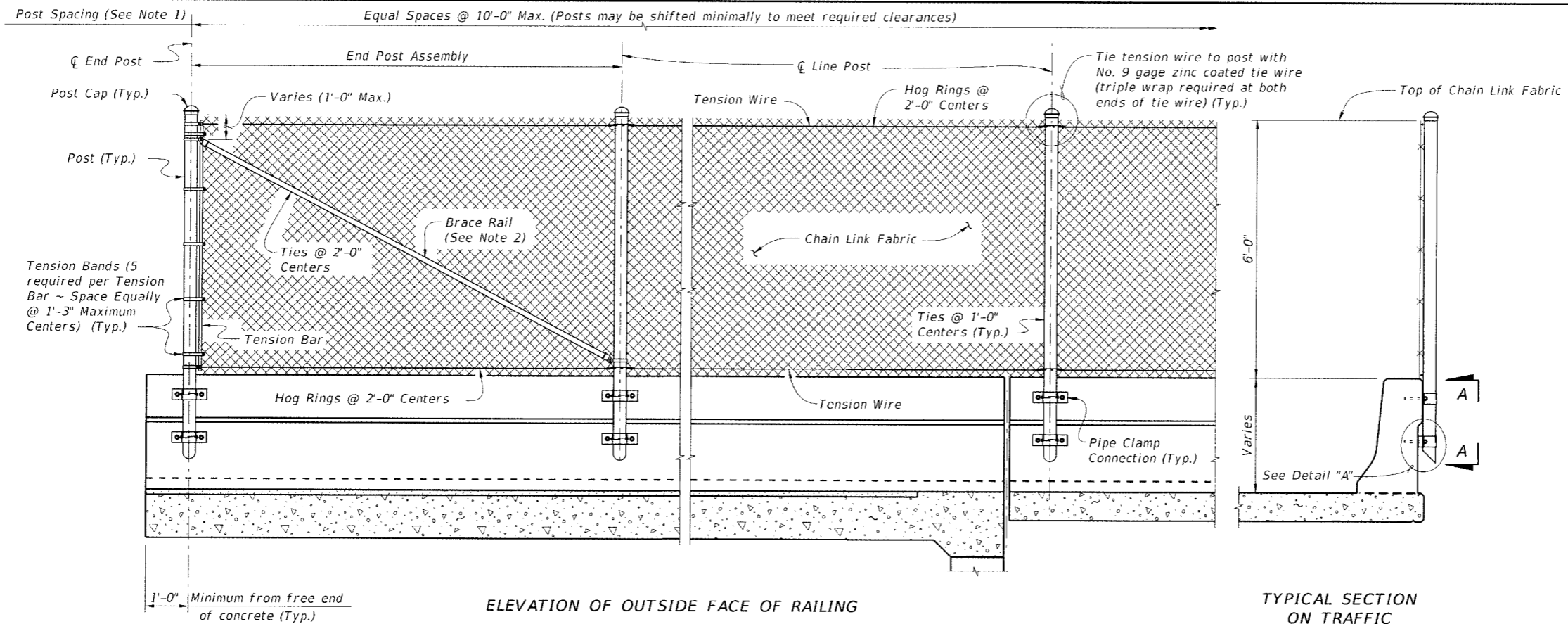
1. Type III Silt Fence to be used at most locations. Where used in ditches, the spacing for Type III Silt fence shall be in accordance with Chart I, Sheet I.
2. Type IV Silt Fence to be used where large sediment loads are anticipated. Suggested use is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travel lanes or off the right of way.
3. Do not construct silt fences across permanent flowing watercourses. Silt fences are to be at upland locations and turbidity barriers used at permanent bodies of water.
4. Where used as slope protection, Silt Fence is to be constructed on 0% longitudinal grade to avoid channelizing runoff along the length of the fence.
5. Silt Fence to be paid for under the contract unit price for Staked Silt Fence, (LF).



PLAN VIEW
JOINING TWO SILT FENCES



Des. by: SLB	Date: 10/22/2014	Scale: NONE	SILT FENCE DETAILS	Rev. No.	Date	App'd by	Dwg. Status CONSTRUCTION DOCUMENTS	 CITY OF PALM COAST, FLORIDA 160 Lake Avenue Palm Coast, Florida 32164	BS-2 WEIR REPLACEMENT	Dwg No. C-10 sheet 10 of 13
Dwn. by: SLB	Date: 10/22/2014	Job no.:								
Chk. by: MCB	Date: 10/22/2014	File: BS-2 Weir.dwg								
App'd by: JCM	Date: 10/22/2014									



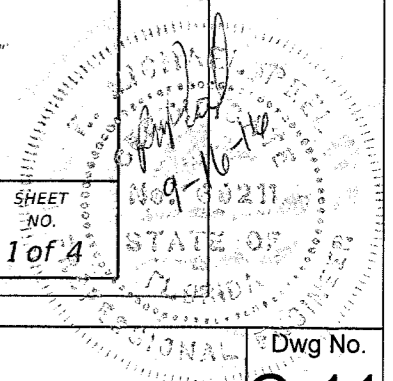
NOTES:

- BRACE RAILS ARE TO BE PROVIDED AT CORNER POST. FDOT DRAWING PROVIDED FOR FENCE MATERIAL REQUIREMENT AND DIMENSIONS. SEE MODIFIED SECTION A-A, SHEET C-12 FOR FENCE POST CONNECTION DETAILS. FENCE POST LOCATED AT NORTH END OF WEIR SHALL BE EMBEDDED IN CONCRETE CAP A MINIMUM OF 18 INCHES.

CROSS REFERENCE:
 For Table of Fence Components, Table of Post Attachment Components, View A-A and Detail "A" see Sheet No. 2.
 For Pull Post Assembly Detail for Traffic Railing Barriers see Sheet No. 3.
 For Pull Post Assembly Detail for Concrete Parapets and Detail "B" see Sheet No. 4.

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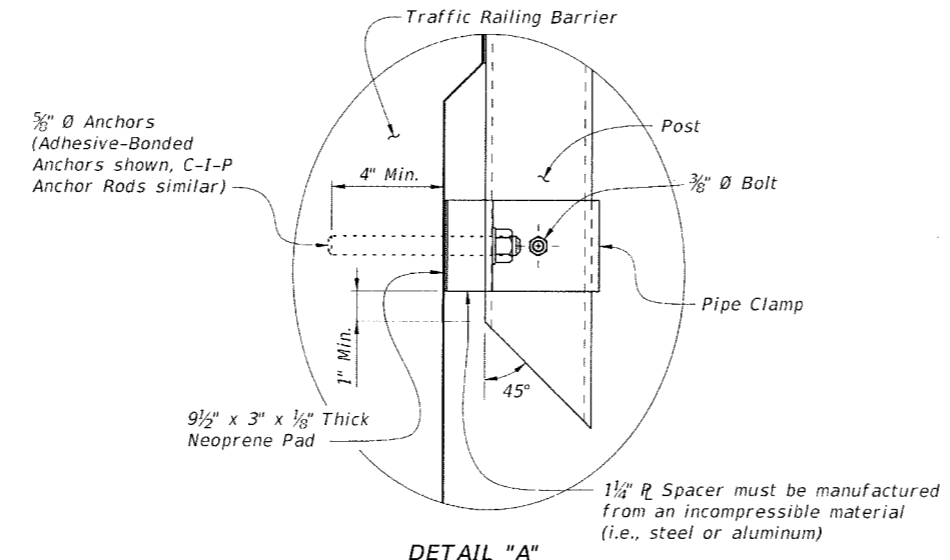
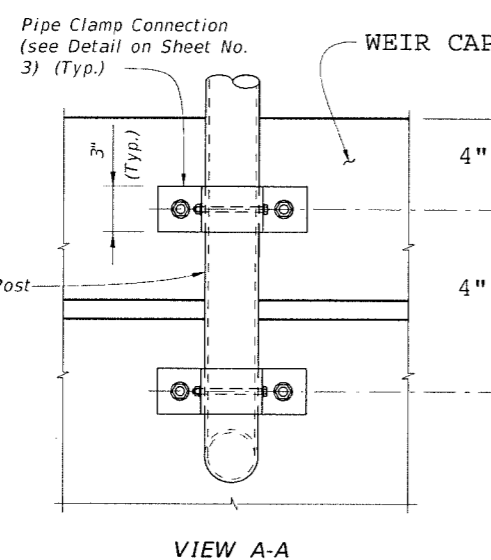
LAST REVISION 01/01/12	DESCRIPTION:	FDOT 2016 DESIGN STANDARDS	BRIDGE FENCING (VERTICAL)	INDEX NO. 810	SHEET NO. 1 of 4
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Des. by: JWH	Date: 09/08/2016	Scale: NONE	FDOT CHAIN LINK FENCE DETAILS	Rev. No.	Date	App'd by	Dwg. Status CONSTRUCTION DOCUMENTS	CITY OF PALM COAST, FLORIDA 160 Lake Avenue Palm Coast, Florida 32164	BS-2 WEIR REPLACEMENT	Dwg. No. C-11 sheet 11 of 13
Dwn. by: JWH	Date: 09/08/2016	Job no.:								
Chk. by: MCB	Date: 09/08/2016	File: BS-2 weir.dwg								
App'd by: MP	Date: 09/08/2016									

TABLE OF CHAIN LINK FENCE COMPONENTS			
COMPONENT		ASTM DESIGNATION	COMPONENT INFORMATION
Traffic Railing Barriers and Concrete Parapets	Posts	F 1083	Galvanized Steel Pipe - 3" NPS, Schedule 40 (3.500" Outside Diameter, 0.216" Wall Thickness)
	Chain Link Fabric (2" mesh with twisted top and knuckled bottom selvage)	A 392	Zinc Coated Steel - No. 9 gage (coated wire diameter), Class 2 Coating
		A 491	Aluminum Coated Steel - No. 9 gage (coated wire diameter)
		F 668	Polyvinyl Chloride (PVC) Coated Steel - No. 9 gage Zinc Coated Wire (metallic-coated core wire diameter) - Specify the color of the polymer coating in the General Notes
	Tie Wires	F 626	Zinc Coated Steel Wire - No. 9 gage
	Brace Bands	F 626	No. 12 Gage (Min. thickness) x 3/4" (Min. width) Steel Bands (Beveled or Heavy)
	Tension Bars	F 626	3/16" (Min. thickness) x 3/4" (Min. width) x 5'-10" (Min. height) Steel Bars
	Tension Bands	F 626	No. 14 Gage (Min. thickness) x 3/4" (Min. width) Steel Bands
Miscellaneous Fence Components	F 626	Zinc Coated Steel - (includes post or loop caps, horizontal and brace rail ends, combination rail ends, boulevard clamps and all other miscellaneous fittings & hardware)	
Concrete Parapets	Horizontal Rails	F 1083	Galvanized Steel Pipe - 2 1/2" NPS, Schedule 40 (2.875" Outside Diameter, 0.203" Wall Thickness)
	Expansion Rails	F 1083	Galvanized Steel Pipe - 2" NPS, Schedule 40 (2.375" Outside Diameter, 0.154" Wall Thickness)
	Bolts	A 307	1/4" Ø x 4 1/4" Hex Head Bolts for Expansion Rail Connections
	Nuts	A 563	Hex Nuts for Expansion Rail Connections
	Washers	F 436	Flat Washers for Expansion Rail Connections
Traffic Railing Barriers	Tension Wire	A 824 & A 817	Type II (Zinc Coated Steel Wire) - No. 7 gage, Class 4 Coating Type I (Aluminum Coated Steel Wire) - No. 7 gage
	Hog Rings	F 626	Zinc Coated Steel Wire - No. 12 gage
	Brace Rails	F 1083	Galvanized Steel Pipe - 1 1/4" NPS, Schedule 40 (1.660" Outside Diameter, 0.140" Wall Thickness)

TABLE OF POST ATTACHMENT COMPONENTS			
COMPONENT		ASTM DESIGNATION	COMPONENT INFORMATION
Pipe Clamps		A 36 or A 709 Grade 36	1/4" Steel R
Base Plates		A 36 or A 709 Grade 36	3/4" Steel R
Shim Plates		A 36 or A 709 Grade 36 or B 209 Alloy 6061-T6 or B 221 Alloy 6063-T5	Plate thicknesses as required; Holes in shim plates will be 3/4" Ø
Spacers		-	1 1/4" R for all materials
Pipe Clamp Connection	Adhesive Anchor Rods	F 1554 Grade 36	Fully threaded Headless Anchor Rods - 5/8" Ø x 6" (no spacer) or 5/8" Ø x 7 1/4" (with spacer)
	C-I-P Anchor Rods	F 1554 Grade 36	Hex Head Anchor Rods - 5/8" Ø x 6" (no spacer) or 5/8" Ø x 7 1/4" (with spacer)
Base Plate Connection	Adhesive Anchor Rods	F 1554 Grade 36	Fully threaded Headless Anchor Rods - 7/8" Ø x 14 1/2"
	C-I-P Anchor Rods	F 1554 Grade 36	Hex Head Anchor Rods - 7/8" Ø x 14 1/2"
Bolts		A 307	3/8" Ø x 4 3/4" Hex Head Bolts for Pipe Clamp Connections to Posts
Nuts		A 563	Hex Nuts for Pipe Clamp and Base Plate Connections
Washers		F 436	Flat Washers for Pipe Clamp and Base Plate Connections
Neoprene Pads		-	In accordance with Specification Section 932



POST ATTACHMENT NOTES

ANCHOR RODS, NUTS AND WASHERS:
After the nuts have been tightened, distort the Anchor Rod threads to prevent removal of the nuts. Coat distorted threads and exposed trimmed ends of anchors with a galvanizing compound in accordance with Specification Section 562.

COATINGS:
Hot-dip galvanize all Nuts, Washers, Bolts, C-I-P Anchor Rods, Adhesive Anchors and Fence Framework (Posts, Internal Sleeves, Shim Plates, Base Plates, Pipe Clamps and Spacers) in accordance with Specification Section 962. Hot-dip galvanize Fence Framework after fabrication.

ADHESIVE-BONDED ANCHORS AND DOWELS:
Adhesive Bonding Material Systems for Anchors and Dowels will comply with Specification Section 937 and be installed in accordance with Specification Section 416. Cutting of reinforcing steel is permitted for drilled hole installation.

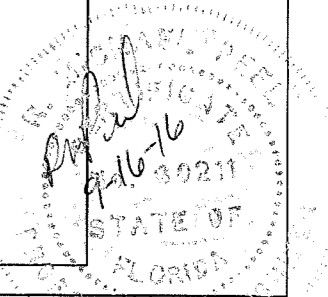
WELDING:
All welding will be in accordance with the American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition). Weld metal will be E60XX or E70XX. Nondestructive testing of welds is not required.

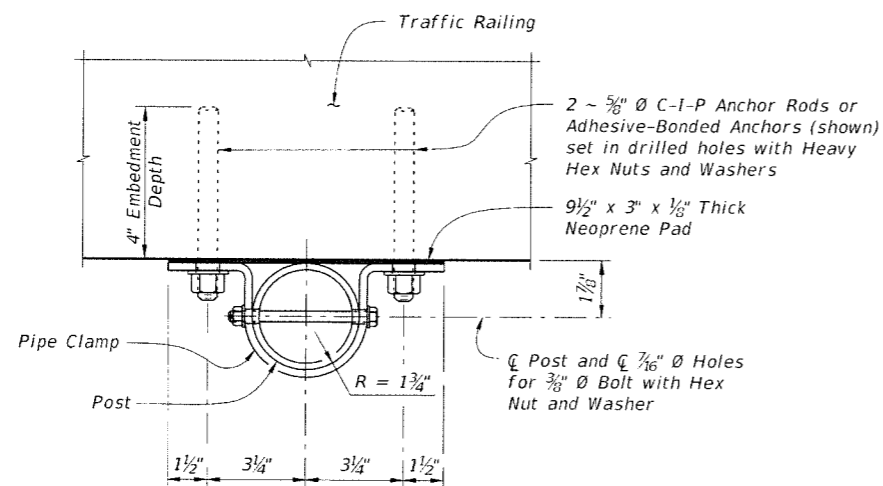
CROSS REFERENCE:
For location of View A-A and Detail "A" see Sheet No. 1.

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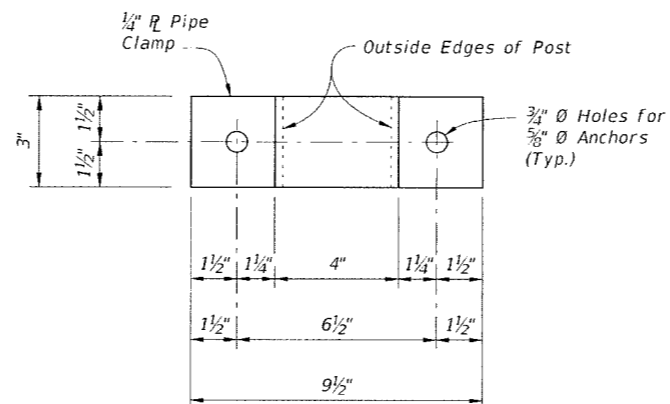
LAST REVISION 07/01/15	DESCRIPTION:	FDOT 2016 DESIGN STANDARDS	BRIDGE FENCING (VERTICAL)	INDEX NO. 810	SHEET NO. 2 of 4
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Des. by: JWH	Date: 09/08/2016	Scale: NONE	FDOT CHAIN LINK FENCE DETAILS	Rev. No.	Date	App'd by	Dwg. Status CONSTRUCTION DOCUMENTS	CITY OF PALM COAST, FLORIDA 160 Lake Avenue Palm Coast, Florida 32164	BS-2 WEIR REPLACEMENT	Dwg. No. C-12 sheet 12 of 13
Dwn. by: JWH	Date: 09/08/2016	Job no.:								
Chk. by: MCB	Date: 09/08/2016	File: BS-2 weir.dwg								
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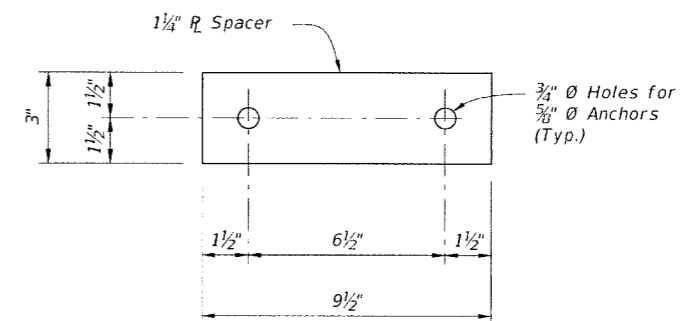




PIPE CLAMP CONNECTION DETAIL
(Connection without spacer shown,
Connection with spacer similar)



PIPE CLAMP DETAIL



SPACER DETAIL

(Must be manufactured from
an incompressible material
(i.e., steel or aluminum))

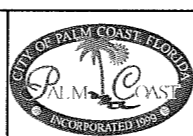
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LAST REVISION 01/01/11	DESCRIPTION:	FDOT 2016 DESIGN STANDARDS	BRIDGE FENCING (VERTICAL)	INDEX NO. 810	SHEET NO. 3 of 4
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Des. by: JWH	Date: 09/08/2016	Scale: NONE
Dwn. by: JWH	Date: 09/08/2016	Job no.:
Chk. by: MCB	Date: 09/08/2016	File: BS-2 weir.dwg
App'd by: MP	Date: 09/08/2016	

FDOT CHAIN LINK FENCE DETAILS	Rev. No.	Date	App'd by

Dwg. Status
CONSTRUCTION DOCUMENTS



CITY OF PALM COAST, FLORIDA
160 Lake Avenue
Palm Coast, Florida 32164

BS-2 WEIR REPLACEMENT

Dwg No.
C-13
sheet 13 of 13

