LEE COUNTY

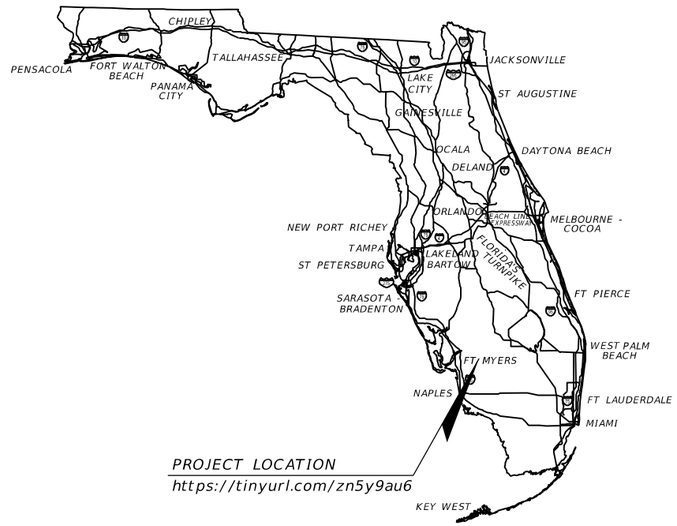
DEPARTMENT OF TRANSPORTATION

RICHMOND AVENUE

PEDESTRIAN BRIDGE REPLACEMENT

LEE COUNTY PROJECT NUMBER: 210248

STRUCTURES PLANS



INDEX OF STRUCTURES PLANS

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B-2	SIGNATURE SHEET
B-3	GENERAL NOTES (1 OF 2)
B-4	GENERAL NOTES (2 OF 2)

RICHMOND AVENUE PEDESTRIAN BRIDGE REPLACEMENT

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B1-2	PLAN AND ELEVATION (2 OF 2)
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B1-4	TYPICAL SECTION
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BP-2	PEDESTRIAN BRIDGE DATA (2 OF 3)
BP-3	PEDESTRIAN BRIDGE DATA (3 OF 3)

STANDARD PLANS FOR BRIDGE CONSTRUCTION
RICHMOND AVENUE PEDESTRIAN BRIDGE REPLACEMENT

INDEX	INDEX TITLE
415-001	BAR BENDING DETAILS (STEEL)
455-001	SQUARE PRESTRESSED CONCRETE PILES - TYPICAL DETAILS & NOTES
455-002	SQUARE PRESTRESSED CONCRETE PILE SPLICES
455-003	SQUARE PRESTRESSED CONCRETE PILES - EDC INSTRUMENTATION
455-018	18" SQUARE PRESTRESSED CONCRETE PILE
515-051	BRIDGE PEDESTRAIN/BICYCLE RAILING (STEEL)

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2024-25 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

Standard Plans for Bridge Construction are included in the Structures Plans Component

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, FY 2024-25 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

STRUCTURES PLANS ENGINEER OF RECORD:

JOHNNY FUNG, P.E.
P.E. LICENSE NUMBER 64669
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637
(813) 978-3100
CONTRACT NO.: 9889
VENDOR NO.: 45-2209743

LEE COUNTY PROJECT MANAGER:

AVELINO CANCEL, P.E.

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
TBD	25	B-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

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USER: jill.lukas 12/3/2024 4:58:39 PM

JOHNNY FUNG
LICENSE
No 64669
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Johnny Fung 2024.12.04 11:20:52 -05'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637
JOHNNY FUNG, P.E. NO. 64669

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

GENERAL SHEETS:

SHEET NO.	SHEET DESCRIPTION
B-1	KEY SHEET
B-2	SIGNATURE SHEET
B-3	GENERAL NOTES (1 OF 2)
B-4	GENERAL NOTES (2 OF 2)

RICHMOND AVENUE PEDESTRIAN BRIDGE REPLACEMENT

SHEET NO.	SHEET DESCRIPTION
B1-1	PLAN AND ELEVATION (1 OF 2)
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B1-9	END BENT DETAILS
B1-10	APPROACH SLABS (1 OF 2)
B1-11	APPROACH SLABS (2 OF 2)
B1-12	REINFORCING BAR LISTS

IVAN F. SOKOLIC
LICENSE
No 64114
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Ivan Sokolic Digitally signed by Ivan Sokolic
Date: 2024.12.04 13:01:06 -05'00'

ON THE DATE ADJACENT TO THE SEAL.

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ARDAMAN AND ASSOCIATES, INC
9970 BAVARIA ROAD
FORT MYERS, FL 33913
IVAN F. SOKOLIC, PE NO. 64114

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

GENERAL SHEETS:

SHEET NO.	SHEET DESCRIPTION
B-2	SIGNATURE SHEET

RICHMOND AVENUE PEDESTRIAN BRIDGE REPLACEMENT

SHEET NO.	SHEET DESCRIPTION
B1-3	REPORT OF CORE BORINGS

ROBERT G. GRAHAM III
LICENSE
No 50208
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Robert G Graham
2024.12.04 11:15:33 -06'00'

ON THE DATE ADJACENT TO THE SEAL.

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6920 PORTOBELLO ROAD, NW
FORT PAYNE, AL 35967
ROBERT G. GRAHAM, III, PE NO. 50208

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

GENERAL SHEETS:

SHEET NO.	SHEET DESCRIPTION
B-2	SIGNATURE SHEET

RICHMOND AVENUE PEDESTRIAN BRIDGE REPLACEMENT

SHEET NO.	SHEET DESCRIPTION
BP-1	PEDESTRIAN BRIDGE DATA (1 OF 3)

STEVEN E. CHELL
LICENSE
No 62883
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Digitally signed by Steven E Chell
Reason: I attest to the accuracy and integrity of this document
Date: 2024.12.04 09:56:29 -06'00'

ON THE DATE ADJACENT TO THE SEAL.

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CONTECH ENGINEERED SOLUTIONS, LLC
8301 STATE HIGHWAY 29 N
ALEXANDRIA, MN 56308
STEVEN E. CHELL, PE NO. 62883

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

GENERAL SHEETS:

SHEET NO.	SHEET DESCRIPTION
B-2	SIGNATURE SHEET

RICHMOND AVENUE PEDESTRIAN BRIDGE REPLACEMENT

SHEET NO.	SHEET DESCRIPTION
BP-2	PEDESTRIAN BRIDGE DATA (2 OF 3)

DOUGLAS B. TIMMONS
LICENSE
No 39259
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Digitally signed by Douglas B. Timmons
Date: 2024.12.04 09:49:45 -05'00'

ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CORNERSTONE ENGINEERING PARTNERSHIP
12924 SW 114 COURT
MIAMI, FL 33176
DOUGLAS B. TIMMONS, PE NO. 39259

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

GENERAL SHEETS:

SHEET NO.	SHEET DESCRIPTION
B-2	SIGNATURE SHEET

RICHMOND AVENUE PEDESTRIAN BRIDGE REPLACEMENT

SHEET NO.	SHEET DESCRIPTION
BP-3	PEDESTRIAN BRIDGE DATA (3 OF 3)

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
LICENSE NUMBER 64669
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

SIGNATURE SHEET

SHEET NO. B-2

DESIGN SPECIFICATIONS:

1. FDOT STRUCTURES MANUAL (JANUARY 2024 EDITION).
2. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (9TH EDITION).
3. AASHTO LRFD GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES, 2ND EDITION WITH 2015 INTERIMS.
4. FDOT DESIGN MANUAL (JANUARY 2024).

GOVERNING STANDARDS AND CONSTRUCTION SPECIFICATIONS:

1. FDOT FY 2024-25 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
2. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FY 2024-25), AS AMENDED BY CONTRACT DOCUMENTS.

VERTICAL DATUM:

1. VERTICAL DATUM IN PLANS IS BASED ON NAVD 88.

ENVIRONMENT:

SUPERSTRUCTURE	SUBSTRUCTURE
	CONCRETE
SLIGHTLY AGGRESSIVE	SLIGHTLY AGGRESSIVE (RESISTIVITY = 11,230-13,230 ohm-cm)

DESIGN METHODOLOGY:

1. LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD USING STRENGTH, SERVICE, EXTREME EVENT AND FATIGUE LIMIT STATES.
2. REDUNDACY FACTOR = 1.20 (TRUSS ONLY).
3. OPERATIONAL AND DUCTILITY IMPORTANCE FACTOR = 1.0.

DESIGN LOADINGS:

1. LIVE LOADS: H5 TRUCK
2. PEDESTRIAN LIVE LOAD: 90 PSF
3. DEAD LOADS:
   REINFORCED CONCRETE: 150 PCF
   STRUCTURAL STEEL: 490 PCF
   BICYCLE RAILING: 30 PLF
4. WIND LOADS: 170 MPH DESIGN SPEED. SEE SECTION 10.3, VOLUME 1 OF THE FDOT STRUCTURES MANUAL FOR WIND LOADS.
5. CONSTRUCTION LOADS:
   IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR SUPPORTING CONSTRUCTION LOADS THAT EXCEED AASHTO H5 OR PEDESTRIAN LOADING.
6. UTILITIES: NO ALLOWANCE FOR BRIDGE SUPPORTED UTILITIES INCLUDED IN DESIGN.
7. TEMPERATURE EFFECTS:

SUPERSTRUCTURE MATERIAL	TEMPERATURE (°F)				COEFFICIENT OF THERMAL EXPANSION (PER °F)
	MEAN	HIGH	LOW	RANGE	
CONCRETE	70	105	35	70	0.0000060
STEEL ONLY	70	120	30	90	0.0000065

PLAN DIMENSIONS:

1. ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET AND INCHES EITHER HORIZONTALLY OR VERTICALLY UNLESS NOTED OTHERWISE.

UTILITIES:

1. FOR PLAN LOCATIONS OF EXISTING UTILITIES, SEE PLAN AND ELEVATION SHEET. LOCATIONS OF UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. FOR DISPOSITION OF UTILITIES, SEE UTILITY ADJUSTMENT SHEETS IN THE ROADWAY PLANS.

SCREEDING DECKS:

1. SCREED THE WALKING SURFACE OF THE BRIDGE DECK AND APPROACH SLABS TO ACHIEVE THE FINISH GRADE ELEVATIONS SHOWN IN THE PLANS. ACCOUNT FOR THEORETICAL DEFLECTIONS DUE TO SELF WEIGHT, CONSTRUCTION LOADS AND TEMPORARY SHORING, ETC. AS REQUIRED.

CONCRETE:

1. PROPERTIES:

CONCRETE CLASS	MINIMUM 28 DAY COMPRESSIVE STRENGTH (PSI)	LOCATION OF CONCRETE IN STRUCTURE
II (BRIDGE DECK)	4500	BRIDGE DECK AND APPROACH SLABS
IV	5500	CAST-IN-PLACE SUBSTRUCTURE
V	6500	PRESTRESSED CONCRETE PILES

2. PROVIDE $\frac{3}{4}$" CHAMFERS ON ALL EXPOSED EDGES, UNLESS NOTED OTHERWISE.
3. CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT THE LOCATIONS INDICATED IN THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE APPROVAL OF THE ENGINEER.

REINFORCING STEEL:

1. REINFORCING STEEL: GRADE 60 CARBON STEEL PER SPECIFICATIONS SECTION 931.
2. ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCING STEEL ARE TO CENTERLINE OF BARS EXCEPT WHERE CLEAR DIMENSION (COVER) IS NOTED TO FACE OF CONCRETE.
3. UNLESS NOTED OTHERWISE, CONCRETE COVER SHALL CONFORM TO THE FOLLOWING:

LOCATION	COVER
CAST-IN-PLACE SUPERSTRUCTURE	2"
CAST-IN-PLACE SUBSTRUCTURE (CAST AGAINST EARTH)	4"
CAST-IN-PLACE SUBSTRUCTURE (FORMED SURFACES)	3"

4. CONCRETE COVER SHOWN IN THE PLANS DOES NOT INCLUDE REINFORCEMENT PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE SPECIFICATIONS SECTION 415 FOR ALLOWABLE REINFORCEMENT PLACEMENT TOLERANCES.

STRUCTURAL STEEL:

1. STEEL ELEMENTS SHALL BE IN ACCORDANCE WITH ASTM A847, AS APPROPRIATE FOR TUBULAR MEMBERS, STRUCTURAL SHAPES, AND PLATES.
2. CHARPY V-NOTCH: ALL STRUCTURAL STEEL TENSION MEMBERS SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION 962 FOR NON-FRACTURE CRITICAL MEMBERS.
3. WELDING:
   A. WELDS REQUIRING NON-DESTRUCTIVE TESTING SHALL BE RADIOGRAPHICALLY INSPECTED, EXCEPT WHERE THE GEOMETRY OF THE REGION OF THE WELD WILL NOT PERMIT SATISFACTORY INFORMATION TO BE SECURED FOR VERIFICATION OF THE WELD QUALITY, WHEN SUCH GEOMETRICAL CONDITIONS EXIST, OTHER INSPECTION PROCEDURES OR COMBINATIONS OR PROCEDURES SUCH AS ULTRASONIC INSPECTION, DYE PENETRANT AND/OR MAGNETIC PARTICLE INSPECTION, SHALL BE USED NON-DESTRUCTIVE TESTING SHALL BE PERFORMED AS REQUIRED BY THE LATEST EDITION OF THE AASHTO/AWS D1.1 STRUCTURAL WELDING CODE.
   B. FIELD WELDING TO ANY STRUCTURAL STEEL SHALL BE FORMALLY SUBMITTED TO THEENGINEER FOR APPROVAL.
   C. THE FOLLOWING MEMBERS ARE CLASSIFIED AS ANCILLARY MEMBERS ARE CLASSIFIED AS ANCILLARY MEMBERS IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO/AWS D1.5 BRIDGE WELDING CODE:
      1. BEARINGS
4. ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH ASTM F1554.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
LICENSE NUMBER 64669
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

GENERAL NOTES (1 OF 2)

SHEET NO. B-3

STEEL TRUSS AND PEDESTRIAN/BICYCLE RAIL GROUNDING:

1. PROVIDE GROUNDING AND LIGHTNING PROTECTION IN ACCORDANCE WITH SECTION 620 OF THE SPECIFICATIONS. PROVIDE GROUND CLAMP AT STEEL TRUSS AND STEEL PEDESTRIAN/BICYCLE RAILING. PULL BOXES SHALL BE LOCATED AT A MINIMUM AT EACH END OF THE BRIDGE. EXOTHERMICALLY WELDING OF GROUNDING CONDUCTOR TO THE TRUSS OR RAILING IS NOT PERMITTED. THE GROUND WIRE SHALL BE PLACED IN A NON-METALLIC CONDUIT FROM THE END OF THE STEEL TRUSS OR RAIL POST TO THE GROUND ROD CONNECTION. FOR CONNECTIONS TO CONCRETE, THE CONDUIT SHALL BE SECURED TO THE STRUCTURE USING ADHESIVE-BONDED ANCHOR BOLT (TYPE HV). SUBMIT SIGNED AND SEALED SHOP DRAWINGS OF THE GROUNDING PROTECTION SYSTEM TO THE ENGINEER FOR REVIEW AND APPROVAL.

FIELD CONNECTIONS:

1. ALL FIELD CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS IN ACCORDANCE WITH ASTM A325 UNLESS OTHERWISE SHOWN. THREADS SHALL BE EXCLUDED FROM THE SHEAR PLANE FOR PLATES THAT ARE ADJACENT TO THE NUT THAT HAVE THICKNESSES OF ¾" OR GREATER. BOLTS HEADS SHALL BE ON THE EXTERIOR/EXPOSED FACE OF GIRDERS.

CAMBER/DEFLECTIONS:

1. MAXIMUM DEFLECTIONS ARE LIMITED TO:
   A. PEDESTRIAN LOAD (VERTICAL) = SPAN/500
   B. LATERAL WIND (HORIZONTAL) = SPAN/500
2. INITIAL CAMBER MUST RESULT IN THE STRUCTURE MATCHING THE PLAN PROFILE GRADE AFTER ALL PERMANENT DEAD LOAD HAS BEEN APPLIED.

PAY ITEM NOTES:

1. PREFABRICATED STEEL TRUSS PEDESTRIAN SPAN WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT OF DECK AREA UNDER PAY ITEM NO. 460-7 PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE, SF. THIS PAY ITEM INCLUDES FURNISHING AND INSTALLING THE PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE SUPERSTRUCTURE INCLUDING STEEL TRUSSES, FLOOR SYSTEM, CONCRETE DECK, BEARING ASSEMBLIES, DECK END JOINTS, BRIDGE RAILING, AND GROUNDING/LIGHTNING PROTECTION. PAYMENT FOR THIS PAY ITEM SHALL BE BASED ON THE PLAN QUANTITY. PORTIONS OF PEDESTRIAN BRIDGE OUTSIDE THE LIMITS OF THE STEEL TRUSS SPAN SHALL BE PAID FOR UNDER INDIVIDUAL PAY ITEMS. THE PLAN QUANTITY WILL BE BASED UPON A 8'-0" CLEAR WALKWAY WIDTH X 110'-0" BRIDGE LENGTH (FACE TO FACE OF END BENTS).

ABBREVIATIONS:

(SEE STANDARD PLANS - FY 2024-25 COVER SHEET FOR ADDITIONAL ABBREVIATIONS)

E	=	EXPANSION BEARING
EJ	=	DECK EXPANSION JOINT
EF	=	EACH FACE
F	=	FIXED BEARING
UNO	=	UNLESS NOTED OTHERWISE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
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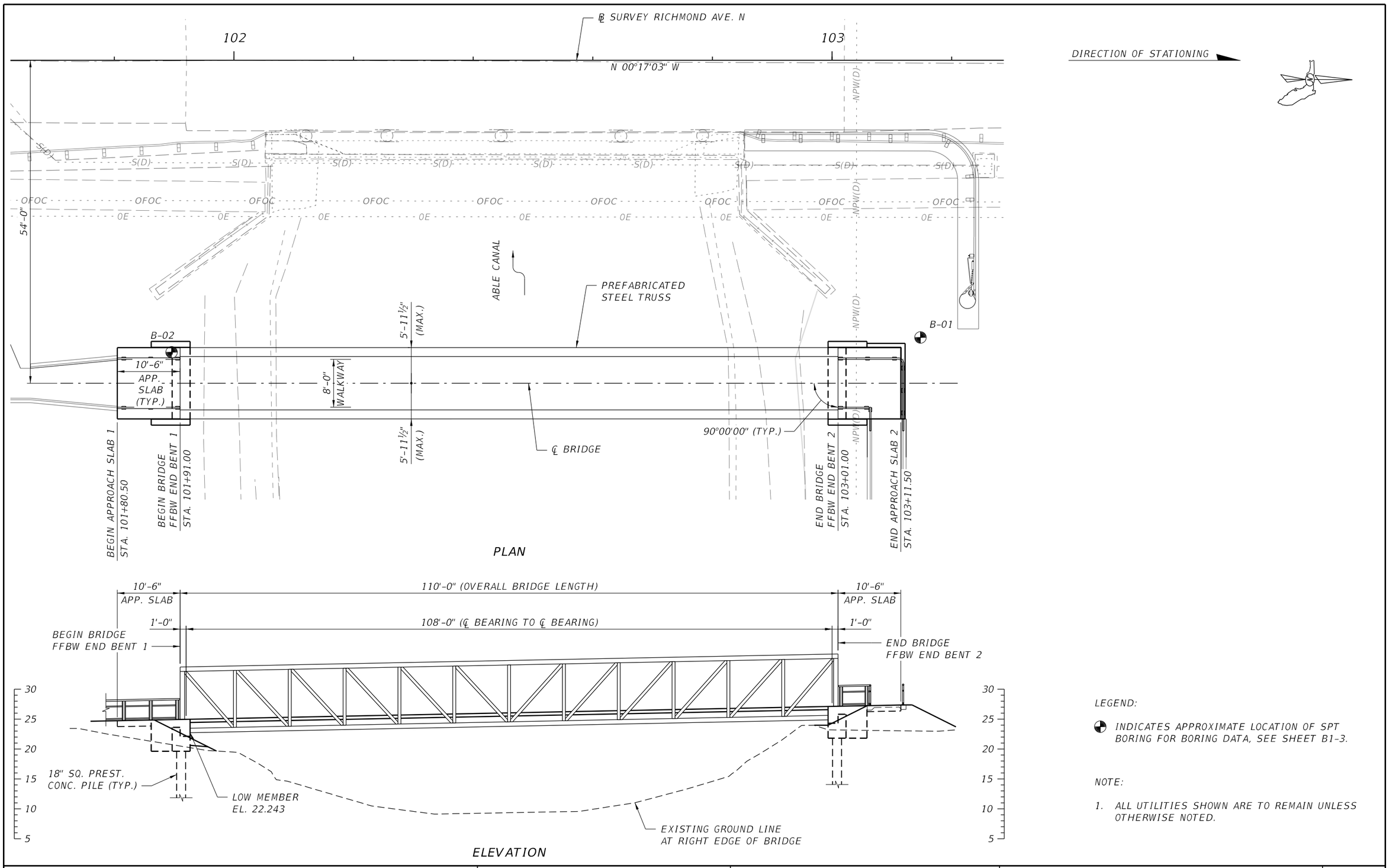
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

GENERAL NOTES (2 OF 2)

SHEET NO. B-4



LEGEND:

INDICATES APPROXIMATE LOCATION OF SPT BORING FOR BORING DATA, SEE SHEET B1-3.

NOTE:

1. ALL UTILITIES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.

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DATE	DESCRIPTION	DATE	DESCRIPTION

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TEMPLE TERRACE, FL 33637

LEE COUNTY
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PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

PLAN AND ELEVATION (1 OF 2)

SHEET NO. B1-1

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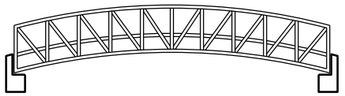
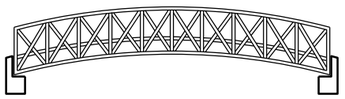
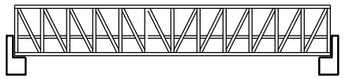
TRUSS 1



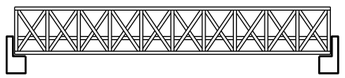
TRUSS 2



TRUSS 3



TRUSS 4

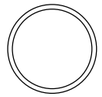


TRUSS 5

TRUSS CONFIGURATIONS

	ALLOWABLE TRUSS CONFIGURATIONS				
	TRUSS 1	TRUSS 2	TRUSS 3	TRUSS 4	TRUSS 5
PERMITTED (Y/N)	Y	N	N	Y	Y

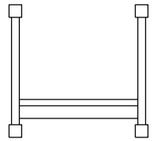
SHAPE 1
(STRUCTURAL TUBE)



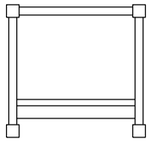
SHAPE 2
(STRUCTURAL PIPE)

TRUSS MEMBER SHAPES

	ALLOWABLE TRUSS MEMBER SHAPES	
	SHAPE 1	SHAPE 2
PERMITTED (Y/N)	Y	Y



SECTION 1
(THROUGH TRUSS)

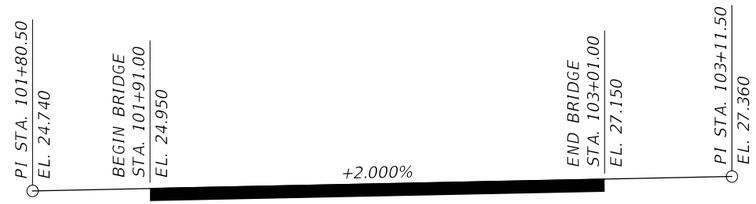


SECTION 2
(BOX TRUSS)

BRIDGE CROSS-SECTIONS

	ALLOWABLE BRIDGE * CROSS-SECTIONS	
	SECTION 1	SECTION 2
PERMITTED (Y/N)	Y	Y

* THROUGH TRUSS BRIDGES ARE ACCEPTABLE ONLY FOR SPANS LESS THAN OR EQUAL TO 150'. FOR SPANS OVER 150' BOX TRUSS BRIDGES ARE REQUIRED.



PROFILE GRADE DATA - ALONG ℄ BRIDGE

NOTES:

1. ELIGIBLE PEDESTRIAN BRIDGE PRODUCERS

   INCLUDED IN THIS PLAN SET ARE PEDESTRIAN BRIDGE DATA SHEETS SUBMITTED BY BRIDGE PRODUCERS ELIGIBLE TO PARTICIPATE IN THIS PROJECT. PRODUCERS WHO FAILED TO SUBMIT A DATA SHEET ARE EXCLUDED FROM PARTICIPATION. NO COST SAVINGS INITIATIVE PROPOSAL SHALL BE ACCEPTED FOR THE TRUSS SUPERSTRUCTURE PORTION OF THE PROJECT. CONTACT INFORMATION FOR THE ELIGIBLE PRODUCERS IS INCLUDED IN THE DATA SHEETS.

2. ALLOWABLE SUPERSTRUCTURE OPTIONS

   ALL ALLOWABLE SUPERSTRUCTURE OPTIONS ARE INDICATED BY A "Y" IN THE TABLES ON THIS SHEET. FOR MULTI-SPAN BRIDGES USE THE SAME TRUSS BRIDGE OPTIONS AND DEPTH OF TRUSS FOR EACH SPAN.

3. SHOP DRAWING SUBMITTAL

   PRIOR TO FABRICATION THE CONTRACTOR'S EOR SHALL SUBMIT SIGNED AND SEALED SUPERSTRUCTURE SHOP DRAWINGS, TECHNICAL SPECIFICATIONS, AND CALCULATIONS TO THE ENGINEER FOR REVIEW AND APPROVAL. THE CONTRACTOR'S EOR WILL NEED TO SUBMIT SIGNED AND SEALED SHOP DRAWINGS FOR THE ANCHOR BOLT DESIGN FOR REVIEW AND APPROVAL.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
LICENSE NUMBER 64669
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

PLAN AND ELEVATION (2 OF 2)

SHEET NO. B1-2

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LEGEND:

- SAND: Sand with ≤ 12% fines
- Silty SAND: Sand with 12% to 50% Silt
- Sandy SILT: Sand/Silt mixture with > 50% Silt
- Sandy CLAY: Clay with > 30% Sand
- CLAY: Fat Clay
- Water Table existing at time of boring
- Soil Boring Location
- -200 Percent Passing the no. 200 Standard Sieve
- MC Natural Moisture Content (%)
- LL Liquid Limit (%)
- PI Plastic Index (%)
- WOH Sampler Advanced By Static Weight of Hammer and Rods Only
- 50/4" Number of Blows for Given Penetration (I.E. 50 Blows for 4 Inches)
- Loss of Drilling Fluid Circulation
- Drilling Fluid Circulation Regained

Numbers to the left of borings indicate SPT values for 12" penetration (unless otherwise noted).

Geographical GPS coordinate locations were determined using a 4 satellite minimum autonomous solution from WAAS enabled hand held GPS unit. The boring profiles shown represent subsurface condition. Strata depth of soil consistency between or outside locations is expressed or implied by this drawing.

Due to the very loose soil encountered within the boring depths in some areas, the contractor shall anticipate the need for the utilization of temporary casing beyond the depths specified in the FDOT Specifications Section 455–15.1.3 to stabilize the excavation during construction.

While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated to be encountered. The boring profiles and related information are based on the driller's logs and visual evaluation of selected samples in the laboratory. The delineation between soil types shown on the profiles is approximate and the description represents our interpretation of subsurface conditions at the designated boring locations on the particular date drilled. No warranty as to the subsurface condition, strata depth or soil consistency between or outside boring locations is expressed or implied by this drawing.

Groundwater data shown on the boring profiles represent groundwater surfaces encountered on the dates shown. Fluctuations in water table levels should be anticipated throughout the year.

GRANULAR MATERIALS		
	Safety Hammer SPT N-Value	Automatic Hammer SPT N-Value
Relative Density	Blows/Foot	Blows/Foot
Very Loose	Less than 4	Less than 3
Loose	4 - 10	3 - 8
Medium Dense	10 - 30	8 - 24
Dense	30 - 50	24 - 40
Very Dense	Greater than 50	Greater than 40

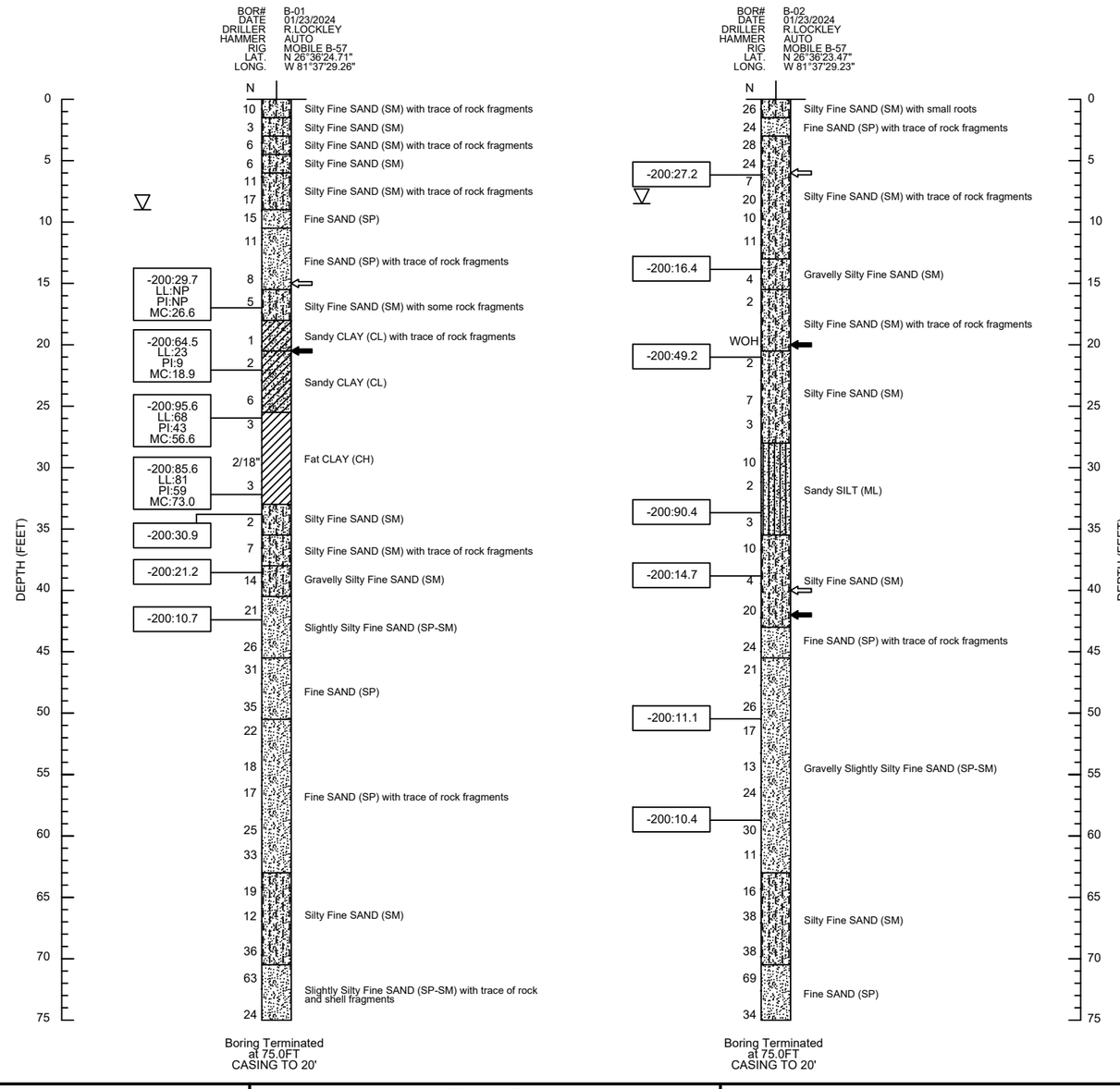
SILTS AND CLAYS		
	Safety Hammer SPT N-Value	Automatic Hammer SPT N-Value
Consistency	Blows/Foot	Blows/Foot
Very Soft	Less than 2	Less than 1
Soft	2 - 4	1 - 3
Firm	4 - 8	3 - 6
Stiff	8 - 15	6 - 12
Very Stiff	15 - 30	12 - 24
Hard	Greater than 30	Greater than 24

SOIL

RESISTIVITY: 11,230-13,230 OHMS-CM
CHLORIDES: BDL
SULFATES: BDL
pH: 7.99-8.13

ENVIRONMENTAL CLASSIFICATION

STEEL: SLIGHTLY AGGRESSIVE
CONCRETE: SLIGHTLY AGGRESSIVE



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

IVAN F. SOKOLIC, P.E.
LICENSE NUMBER 64114
ARDAMAN AND ASSOCIATES, INC.
9970 BAVARIA ROAD
FORT MYERS, FLORIDA 33913

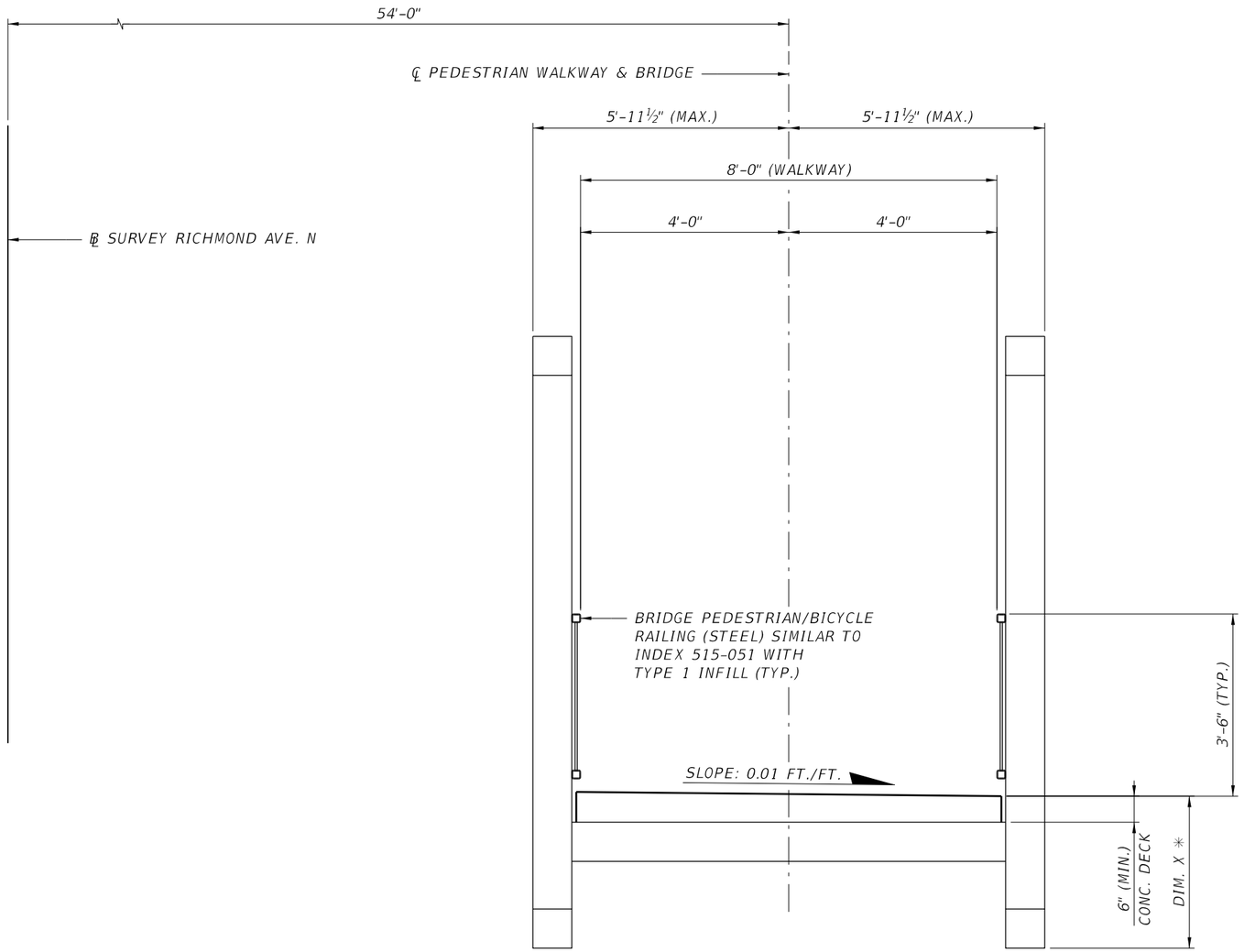
LEE COUNTY
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	PROJECT ID
RICHMOND AVE	LEE	CN210248BAG

REPORT OF CORE BORINGS

SHEET No. B1-3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



TYPICAL SECTION

* DIM. X IS SET PER TRUSS TYPE & MANUFACTURER

NOTES:

1. MEMBER SIZE AND TRUSS HEIGHT TO BE PER MANUFACTURER'S REQUIREMENTS.
2. ALL TRUSS MEMBERS TO CONSIST OF HSS TUBULAR SHAPES.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

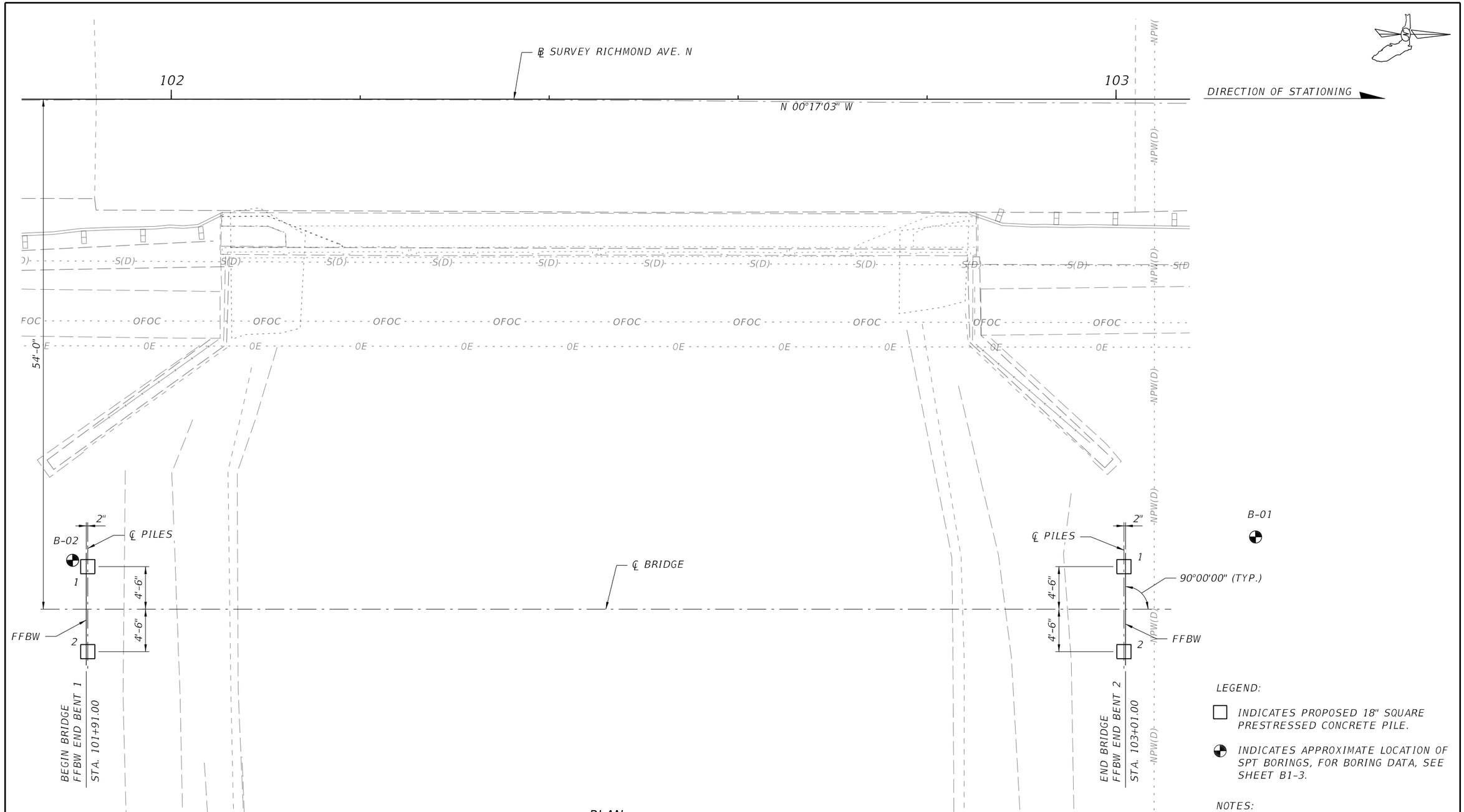
JOHNNY FUNG, P.E.
LICENSE NUMBER 64669
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

TYPICAL SECTION

SHEET NO. B1-4



PLAN

LEGEND:

- INDICATES PROPOSED 18" SQUARE PRESTRESSED CONCRETE PILE.
- INDICATES APPROXIMATE LOCATION OF SPT BORINGS, FOR BORING DATA, SEE SHEET B1-3.

NOTES:

1. FOR PILE DATA TABLE, SEE SHEET B1-6.
2. ALL UTILITIES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
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12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

FOUNDATION LAYOUT

SHEET NO. B1-5

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PILE DATA TABLE															Table Date 01/01/16	
INSTALLATION CRITERIA								DESIGN CRITERIA							PILE CUT-OFF ELEVATIONS	
BENT NUMBER	PILE SIZE (in.)	NOMINAL BEARING RESISTANCE (tons)	NOMINAL UPLIFT RESISTANCE (tons)	MINIMUM TIP ELEVATION (ft.)	PILE ORDER LENGTH (ft.)	REQUIRED JET ELEVATION (ft.)	REQUIRED PREFORM ELEVATION (ft.)	FACTORED DESIGN LOAD (tons)	FACTORED DESIGN UPLIFT LOAD (tons)	DOWN DRAG (tons)	TOTAL SCOUR RESISTANCE (tons)	NET SCOUR RESISTANCE (tons)	100-YEAR SCOUR ELEVATION (ft.)	Ø COMPRESSION	Ø UPLIFT	PILE 1	PILE 2
END BENT 1	18	111	N/A	-8.2	54	N/A	N/A	83	N/A	0	N/A	N/A	N/A	0.75	N/A	20.7	20.7
END BENT 2	18	111	N/A	-8.2	59	N/A	N/A	83	N/A	0	N/A	N/A	N/A	0.75	N/A	22.9	22.9

$$\frac{\text{FACTORED DESIGN LOAD + NET SCOUR RESISTANCE + DOWN DRAG}}{\text{Ø}} \leq \text{NOMINAL BEARING RESISTANCE}$$

UPLIFT RESISTANCE - THE ULTIMATE SIDE FRICTION CAPACITY THAT MUST BE OBTAINED BELOW THE 100 YEAR SCOUR ELEVATION TO RESIST PULLOUT OF THE PILE (SPECIFY ONLY WHEN DESIGN REQUIRES UPLIFT CAPACITY).

TOTAL SCOUR RESISTANCE - AN ESTIMATE OF THE ULTIMATE STATIC SIDE FRICTION RESISTANCE PROVIDED BY THE SCOURABLE SOIL.

NET SCOUR RESISTANCE - AN ESTIMATE OF THE ULTIMATE STATIC SIDE FRICTION RESISTANCE PROVIDED BY THE SOIL FROM THE REQUIRED PREFORMED OR JETTING ELEVATION TO THE SCOUR ELEVATION.

100-YEAR SCOUR ELEVATION - ESTIMATED ELEVATION OF SCOUR DUE TO THE 100 YEAR STORM EVENT.

PILE INSTALLATION NOTES [Notes Date 7-01-13]:

1. VERIFY LOCATION OF ALL UTILITIES PRIOR TO ANY PILE INSTALLATION ACTIVITIES.
2. MINIMUM TIP ELEVATION IS REQUIRED FOR LATERAL STABILITY.
3. WHEN A REQUIRED JETTING ELEVATION IS SHOWN, THE JET SHALL BE LOWERED TO THE ELEVATION AND CONTINUE TO OPERATE AT THIS ELEVATION UNTIL THE PILE DRIVING IS COMPLETED. IF JETTING OR PREFORMING ELEVATIONS DIFFER FROM THOSE SHOWN ON THE TABLE, THE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINATION OF THE REQUIRED DRIVING RESISTANCE.
4. NO JETTING WILL BE ALLOWED WITHOUT THE APPROVAL OF THE ENGINEER.
5. DO NOT ANTICIPATE BEING ALLOWED TO JET PILES BELOW THE 100-YEAR SCOUR ELEVATION OR REQUIRED JET ELEVATION, WHICHEVER IS DEEPER.
6. FOUNDATIONS REQUIRE 100% DYNAMIC TESTING. BEARING RESISTANCE TO BE DETERMINED BY DYNAMIC TESTING ENGINEER (DTE) IN ACCORDANCE WITH SECTION 455-5.11.2 OF THE FDOT SPECIFICATIONS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
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PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

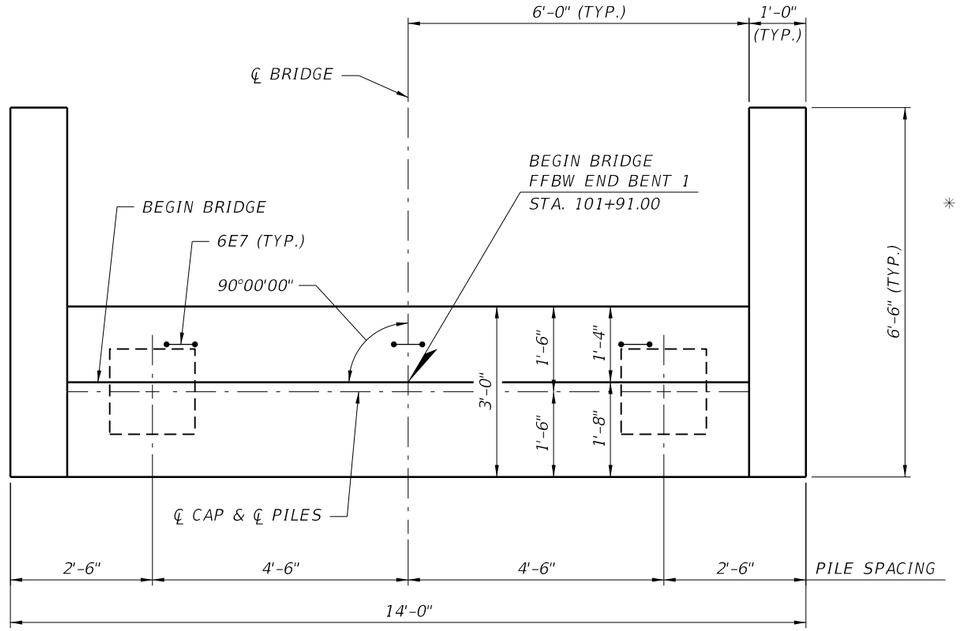
LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

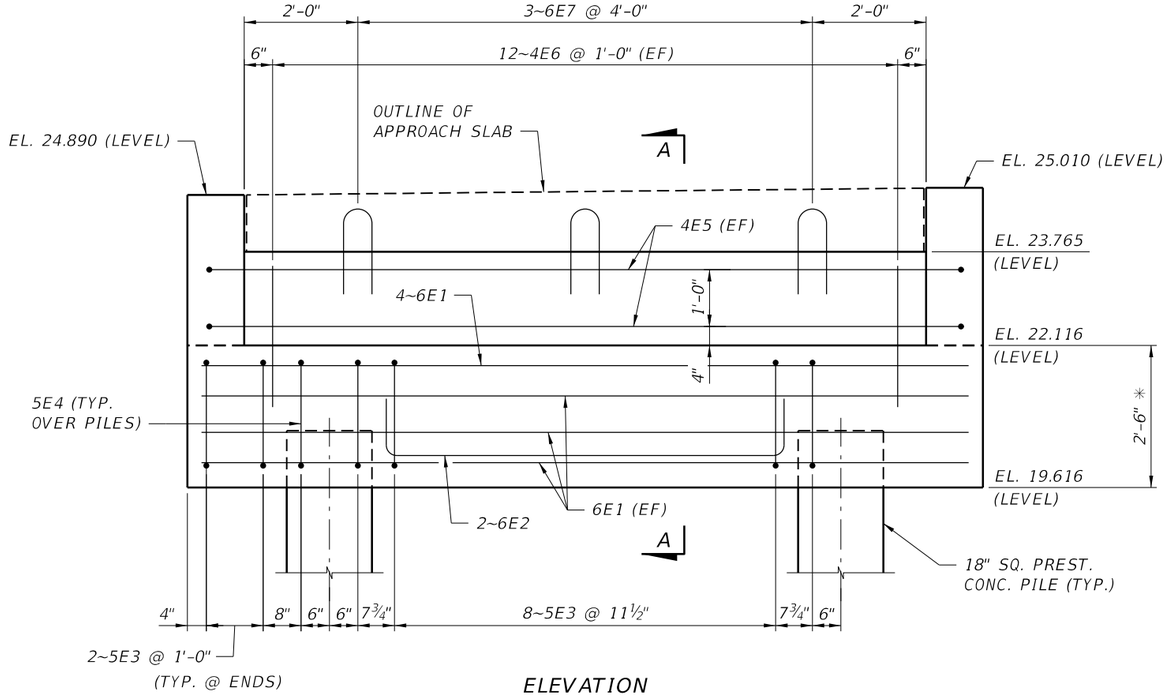
PILE DATA TABLE

SHEET NO. B1-6

DIRECTION OF STATIONING



PLAN



ELEVATION

✳ CAP HEIGHT IS BASED ON AN ANTICIPATED MAXIMUM STRUCTURE DEPTH OF 2'-10" AT THE BEARING LOCATION. IF A SHALLOWER STRUCTURE DEPTH IS UTILIZED IN THE CONTRACTOR'S CHOICE OF PREFABRICATED STEEL TRUSS BRIDGE, THE CAP HEIGHT MAY BE INCREASED OR A PEDESTAL MAY BE INTRODUCED WITH THE APPROVAL OF THE ENGINEER.

NOTES:

1. FOR PILE CUT-OFF ELEVATIONS, SEE SHEET B1-6.
2. FOR SECTION A-A AND WINGWALL DETAILS, SEE SHEET B1-9.
3. FOR REINFORCING BAR LIST, SEE SHEET B1-12.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
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TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

END BENT 1

SHEET NO. B1-7

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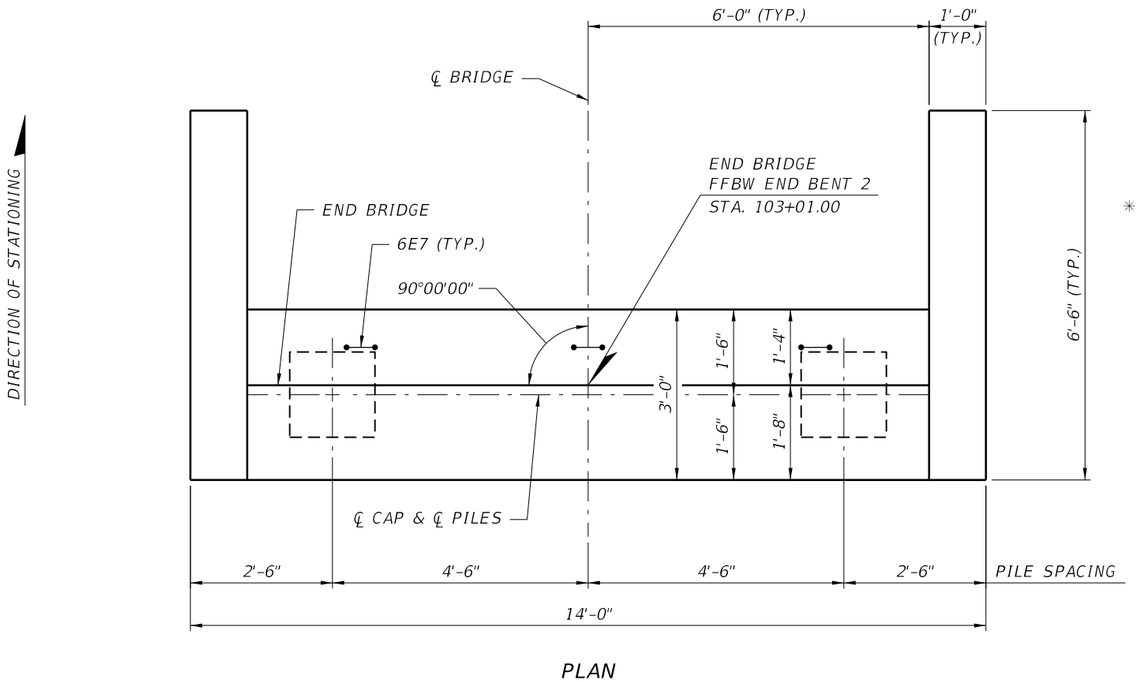
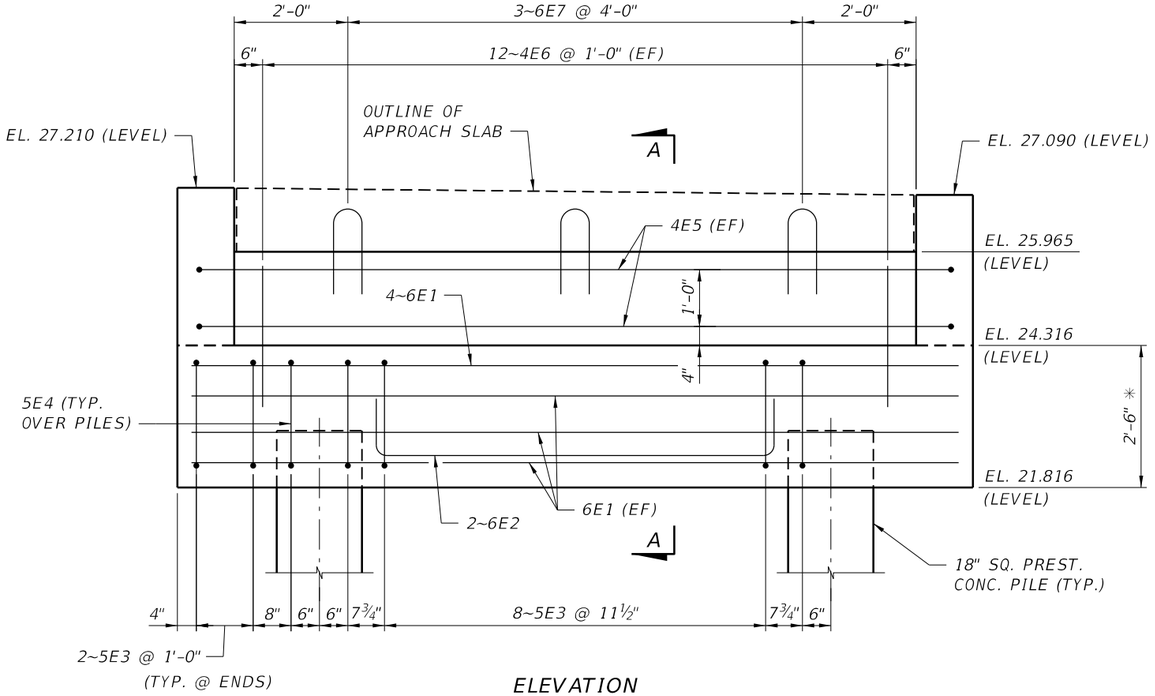


PLAN



ELEVATION

✳ CAP HEIGHT IS BASED ON AN ANTICIPATED MAXIMUM STRUCTURE DEPTH OF 2'-10" AT THE BEARING LOCATION. IF A SHALLOWER STRUCTURE DEPTH IS UTILIZED IN THE CONTRACTOR'S CHOICE OF PREFABRICATED STEEL TRUSS BRIDGE, THE CAP HEIGHT MAY BE INCREASED OR A PEDESTAL MAY BE INTRODUCED WITH THE APPROVAL OF THE ENGINEER.

NOTES:

1. FOR PILE CUT-OFF ELEVATIONS, SEE SHEET B1-6.
2. FOR SECTION A-A AND WINGWALL DETAILS, SEE SHEET B1-9.
3. FOR REINFORCING BAR LIST, SEE SHEET B1-12.

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REVISIONS			
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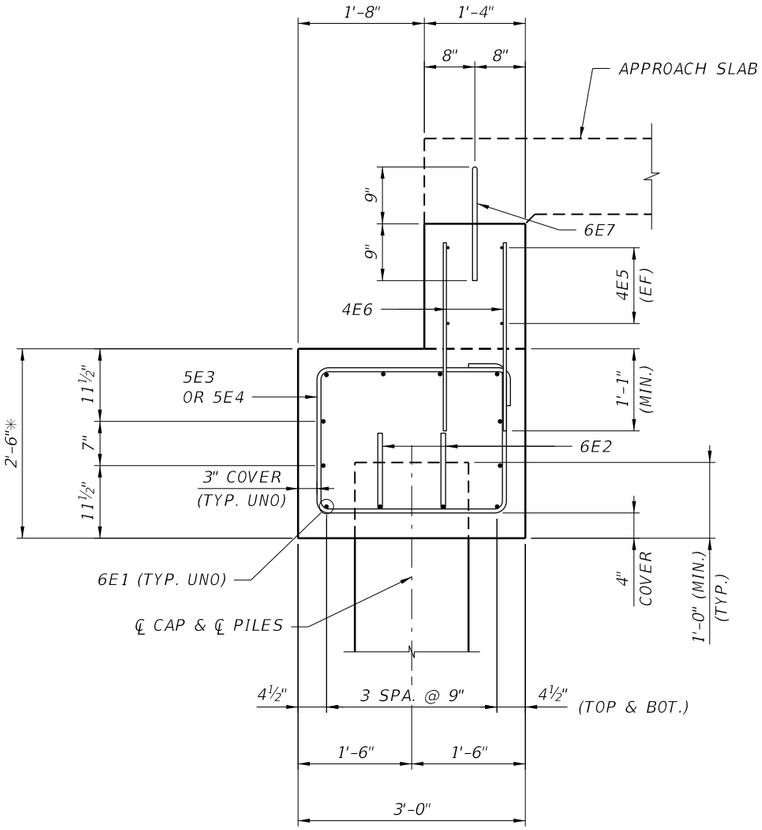
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

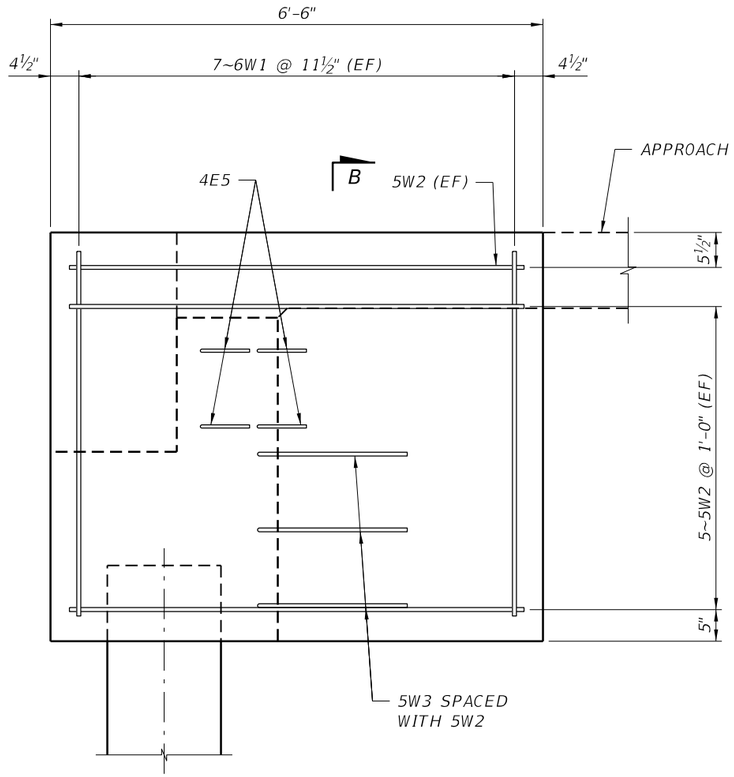
END BENT 2

SHEET NO. B1-8

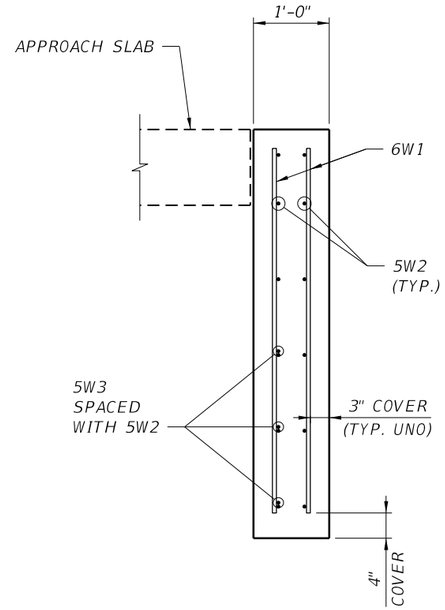


SECTION A-A

* CAP HEIGHT IS BASED ON AN ANTICIPATED MAXIMUM STRUCTURE DEPTH OF 2'-10" AT THE BEARING LOCATION. IF A SHALLOWER STRUCTURE DEPTH IS UTILIZED IN THE CONTRACTOR'S CHOICE OF PREFABRICATED STEEL TRUSS BRIDGE, THE CAP HEIGHT MAY BE INCREASED OR A PEDESTAL MAY BE INTRODUCED WITH THE APPROVAL OF THE ENGINEER.



WINGWALL ELEVATION



SECTION B-B

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
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12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

END BENT DETAILS

SHEET NO. B1-9

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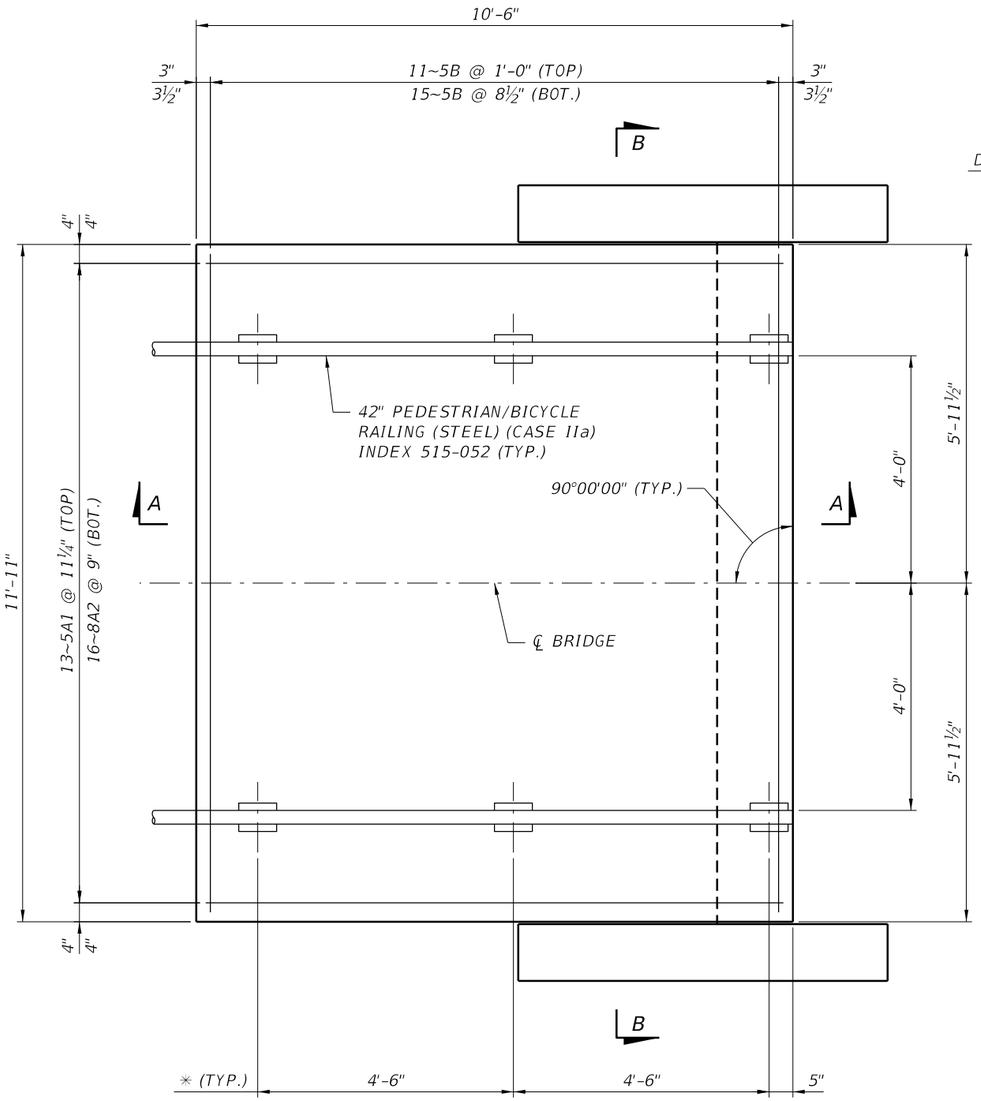
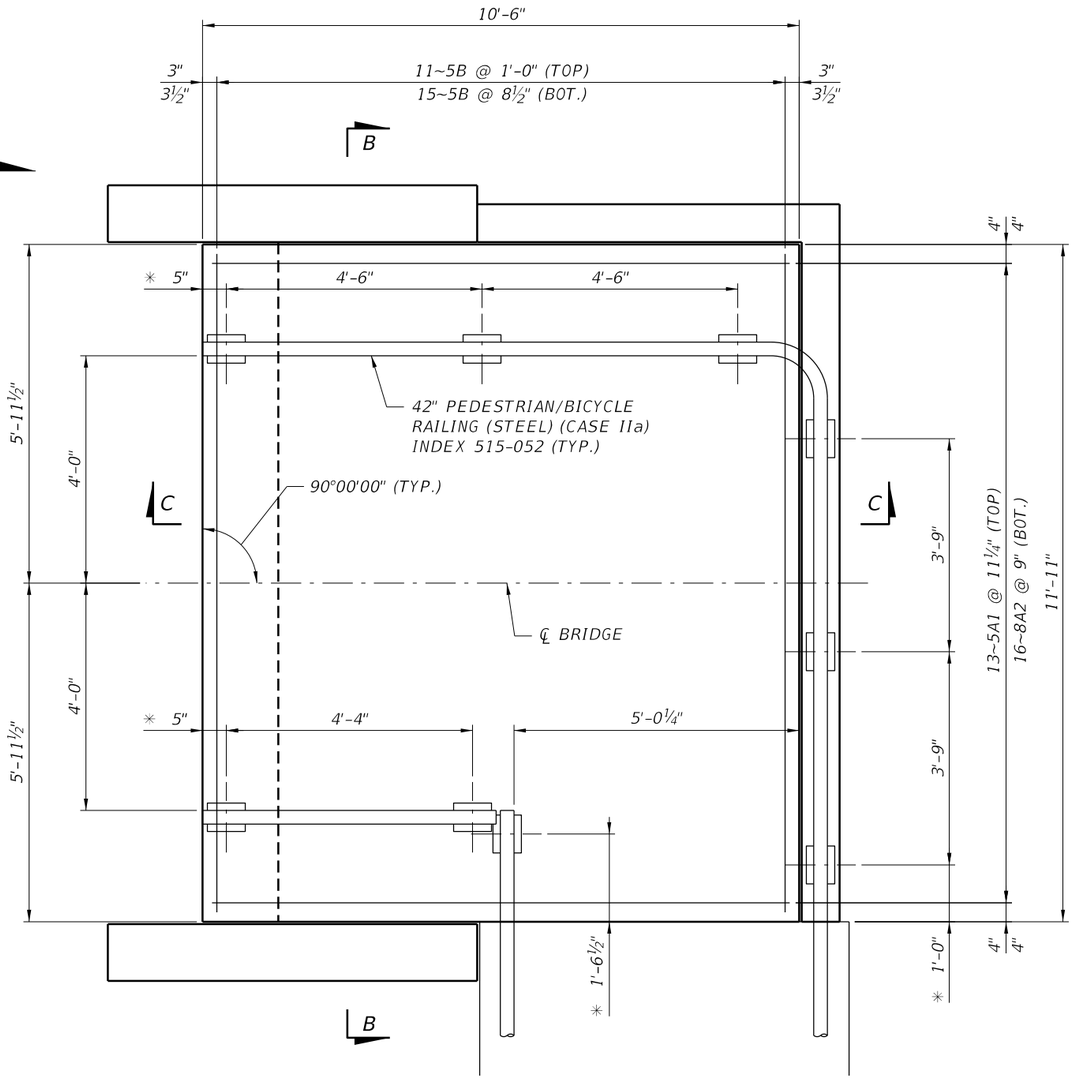


PLAN - APPROACH SLAB 1

DIRECTION OF STATIONING



PLAN - APPROACH SLAB 2

NOTE:

1. FOR SECTIONS A-A, B-B, C-C AND NOTES, SEE SHEET B1-11.

LEGEND:

✳ PEDESTRIAN/BICYCLE RAILING POST SPACING.

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
LICENSE NUMBER 64669
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

APPROACH SLABS (1 OF 2)

SHEET NO. B1-10

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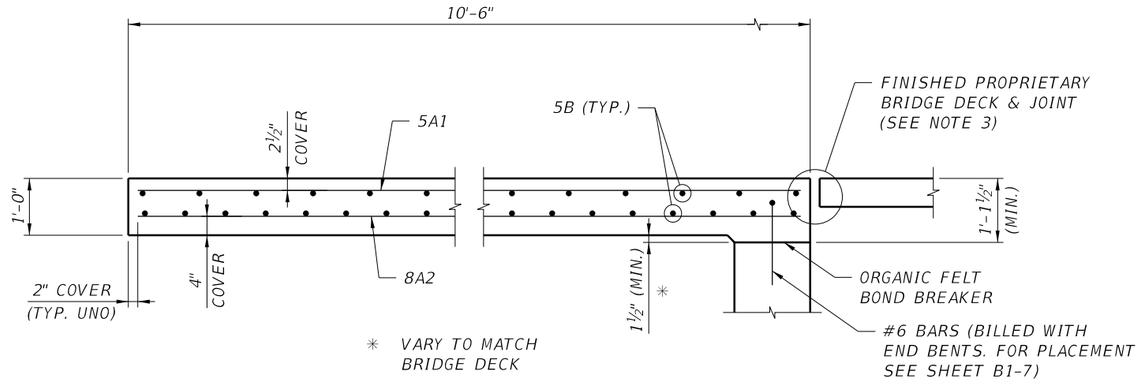
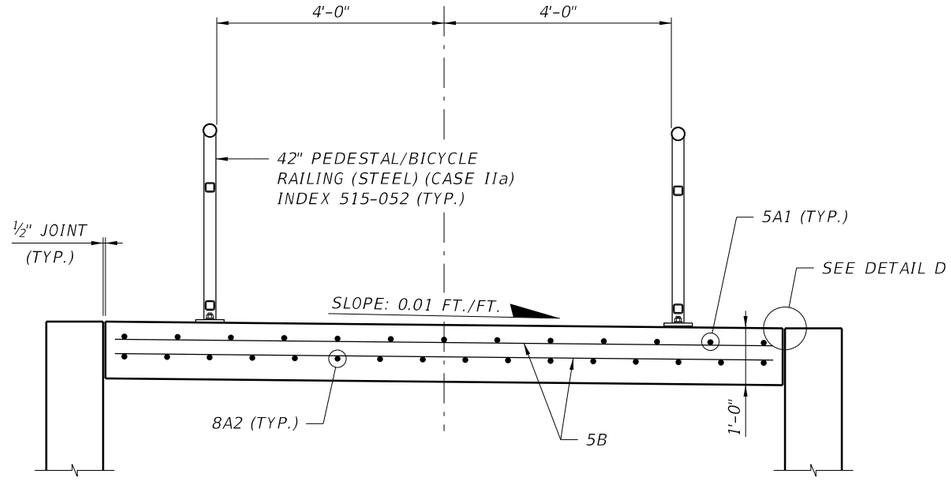
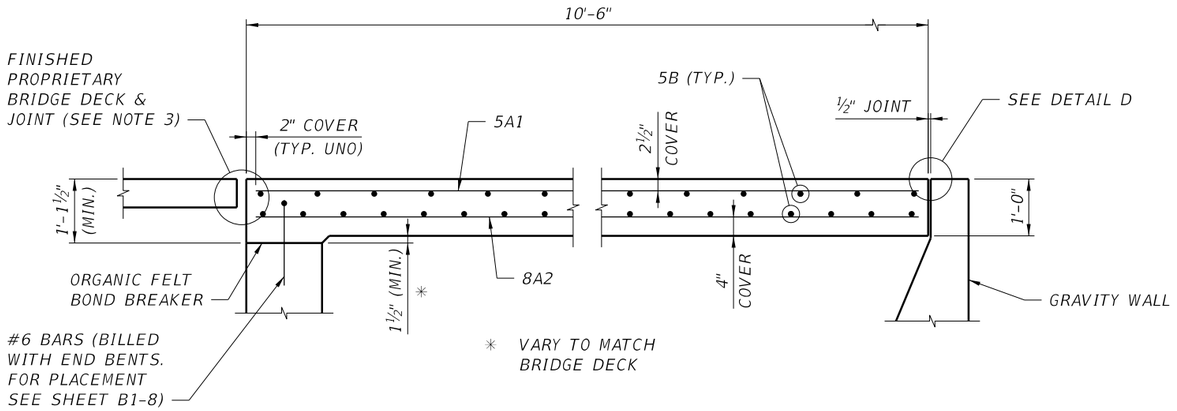


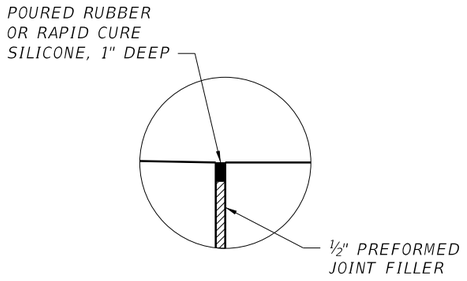
SECTION A-A
(PEDESTRIAN/BICYCLE RAILING NOT SHOWN FOR CLARITY)



SECTION B-B



SECTION C-C
(PEDESTRIAN/BICYCLE RAILING NOT SHOWN FOR CLARITY)



DETAIL D

STEEL PEDESTRIAN/BICYCLE RAILING DATA TABLES

PROJECT REQUIREMENTS — Table Date 01-01-11

STATION TO STATION (LT. OR RT.)	HEIGHT (IN.)	STYLE TYPE	REQUIRED: (YES/NO)		
			BOTTLE GUARD	COLORED COATINGS	INFILL PANEL TO REJECT PASSAGE OF 4" SPHERE (SPECIAL CONDITIONS ONLY)
STA. 101+80.50 TO STA. 101+91.00 (50.00' RT.)	42	TYPE 1	NO	NO	NO
STA. 101+80.50 TO STA. 101+91.00 (58.00' RT.)	42	TYPE 1	NO	NO	NO
STA. 103+01.00 TO STA. 103+11.50 (50.00' RT.)	42	TYPE 1	NO	NO	NO
STA. 103+01.00 TO STA. 103+06.36 (58.00' RT.)	42	TYPE 1	NO	NO	NO
STA. 103+06.36 (58.00' RT. TO 60.00' RT.)	42	TYPE 1	NO	NO	NO

NOTE: WORK THIS DATA TABLE WITH INDEX 515-052. OFFSETS SHOWN IN TABLE ABOVE ARE TO THE INSIDE FACE OF RAILING.

NOTES:

1. SURFACE TREATMENT: APPLY A BROOMED FINISH BETWEEN RAILINGS.
2. AT BEGIN/END BRIDGE, PROVIDE EXPANSION JOINT TO ACCOMODATE BRIDGE MOVEMENT FROM TEMPERATURE VARIATIONS. EXPANSION JOINT TO BE SHIELDED TO PREVENT TRIPPING HAZARD.
3. EXPANSION JOINT DETAILS AND JOINT COVER PLATE SIMILAR TO INDEX 458-110 TO BE PROVIDED BY FABRICATOR.
4. PREPARE THE APPROACH SLAB FOUNDATION IN ACCORDANCE WITH SPECIFICATIONS SECTION 522-4, WHICH IS INCIDENTAL TO THE COST OF THE APPROACH SLAB CONCRETE.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
LICENSE NUMBER 64669
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

APPROACH SLABS (2 OF 2)

SHEET NO. B1-11

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MARK		LENGTH		NO	TYP	STY		B			C			D			E			F			H			J			K			N	ϕ
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION: END BENT 1 OR 2				NO. REQUIRED = 2																													
6	E1	13- 6		10	1			13- 6																									
6	E2	9- 0		2	11			7- 0			1- 0			1- 0																			
5	E3	9-10		12	4	4	4	1-11			2- 6																						
5	E4	6-10		4	5			1-11			2- 6			0- 3			0- 3																
4	E5	15- 4		4	11			13- 4			1- 0			1- 0																			
4	E6	2- 6		24	1			2- 6																									
6	E7	3- 4		3	23			1- 3			0- 3			1- 3																			
6	W1	4- 8		28	1			4- 8																									
5	W2	6- 0		24	1			6- 0																									
5	W3	4- 0		6	10			2- 0			2- 0																						
LOCATION: APPROACH SLAB 1 OR 2				NO. REQUIRED = 2																													
5	A1	10- 2		13	1			10- 2																									
8	A2	10- 2		16	1			10- 2																									
5	B	11- 7		26	1			11- 7																									

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNNY FUNG, P.E.
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12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637

LEE COUNTY
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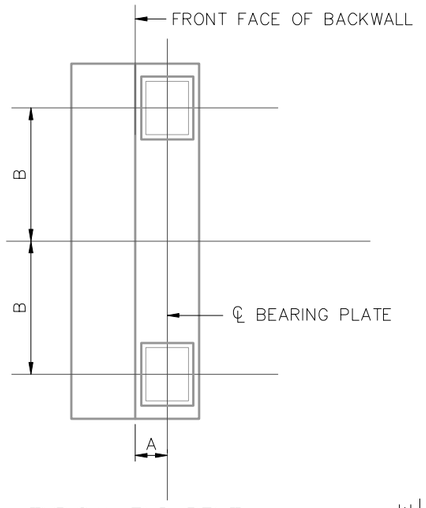
PROJECT	PROJECT NUMBER
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

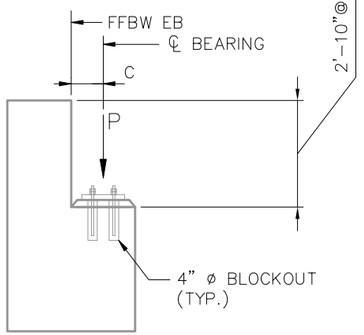
REINFORCING BAR LISTS

SHEET NO.
B1-12



TYPICAL END BENT

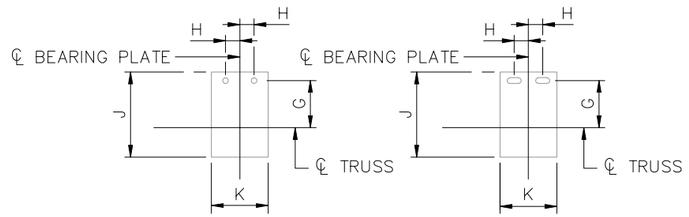
PARTIAL PLAN



TYPICAL END BENT

PARTIAL ELEVATION

BEARING LOCATIONS & BRIDGE SEAT ELEVATIONS			
BENT/ PIER	A (FT.)	B (FT.)	C (FT.)
1	0.5	4.5	0.5
2	0.5	4.5	0.5



BEARING PLATE DETAILS

BRIDGE REACTIONS				
		SPAN 1		
		P (KIP)	T (KIP)	L (KIP)
DEAD LOAD		31.9	——	——
UNIFORM LIVE LOAD		19.8	——	——
VEHICLE LOAD		10.0	——	——
WIND UPLIFT	WINDWARD	−6.6	——	——
	LEEWARD	−2.2	——	——
WIND [3]	TRANSVERSE	——	38.3	——
	VERTICAL ⇓⇑	17.8	——	——
THERMAL		——	——	6.4

BEARING PLATE DIMENSIONS				
SPAN	G (IN.)	H (IN.)	J (IN.)	K (IN.)
1	7.5	3	12.25	10

COMPANY CONTACT INFORMATION	
COMPANY	BAILEY BRIDGES, INC. dba PIONEER BRIDGES
ADDRESS	119 40TH STREET NE FORT PAYNE, AL 35967
CONTACT	DARRYL YATES
PHONE	(256) 845−7575 EXT. 104
E−MAIL	DYATES@PIONEERBRIDGES.COM

TRUSS OPTION 5 (PIONEER "EXPEDITION" STYLE)

1. P − UNFACTORED VERTICAL LOAD EACH BEARING PLATE (4 PER SPAN)
   T − UNFACTORED TRANSVERSE LOAD EACH BENT/PIER (2 PER SPAN)
   L − UNFACTORED LONGITUDINAL LOAD EACH BEARING PLATE (4 PER SPAN)
2. DOWNWARD VERTICAL LOADS ARE POSITIVE (+), UPWARD VERTICAL LOADS ARE NEGATIVE (−).
3. THE HORIZONTAL WIND LOAD ACTING AT THE C.G. OF THE TRUSS CREATES A TRANSVERSE SHEAR AND A VERTICAL COUPLE AT THE TOP OF EACH PIER/ BEARING LOCATION.
4. DESIGN SPECIFICATIONS
   - FDOT STRUCTURES MANUAL, CURRENT EDITION AND SUPPLEMENTS THERETO.
   - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, CURRENT EDITION AND SUPPLEMENTS THERETO.
   - AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, CURRENT EDITION
   - FDOT PLANS PREPARATION MANUAL, CURRENT EDITION.
5. CONSTRUCTION SPECIFICATIONS
   - FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

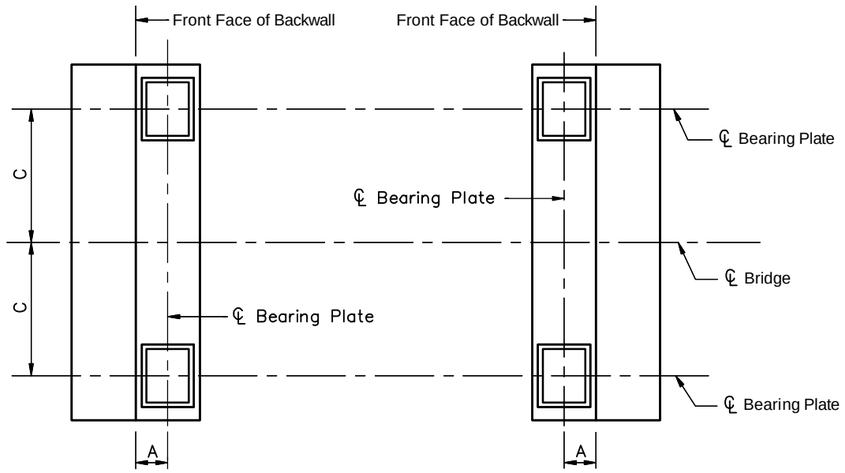
R.G. Graham III, PE
P.E. NO. 50208
(Independent Consultant for Bailey Bridges dba Pioneer Bridges)
6920 Portobello Road NW
Fort Payne, AL 35967

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	FINANCIAL PROJECT ID
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

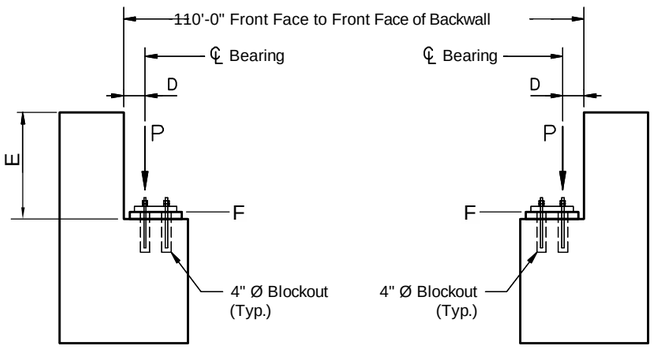
PEDESTRIAN BRIDGE DATA (1 OF 3)

SHEET NO.
BP−1



END BENT #1 END BENT #2

PLAN

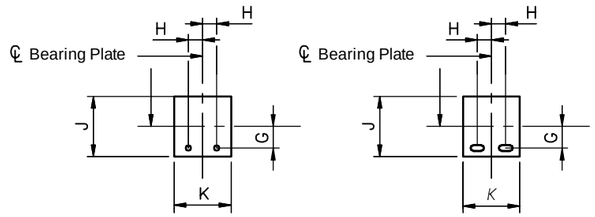


END BENT #1 END BENT #2

ELEVATION

BEARING LOCATIONS & BRIDGE SEAT ELEVATIONS						
BENT/ PIER	A (in.)	B (in.)	C (ft.)	D (in.)	E* (in.)	F (ft.)
1	9.5"	N/A	4'–7"	5"	34"	22.116
~~2~~	9.5"	N/A	4'–7"	5"	34"	24.316

* - INCLUDES APPROACH SLAB @ CL OF SPAN
* - VARIES DUES TO CROSS SLOPE ON BRIDGE STRUCTURE



BEARING PLATE DETAILS

BEARING PLATE DIMENSIONS				
SPAN	G (in.)	H (in.)	J (in.)	K (in.)
1	7	4	16	16
2				
3				
4				

COMPANY CONTACT INFORMATION	
COMPANY	CONTECH BRIDGE SOLUTIONS
ADDRESS	8301 STATE HIGHWAY 29 N ALEXANDRIA MN 56308
CONTACT	STEVE CHELL
PHONE	320–345–9132
E–MAIL	Steve.Chell@conteches.com

BRIDGE REACTIONS				
		SPAN 1		
		P (KIP)	T (KIP)	L (KIP)
DEAD LOAD		31.5		
UNIFORM LIVE LOAD		20.5		
VEHICLE LOAD		5.00		
WIND UPLIFT	WINDWARD	8.3		
	LEEWARD	3.2		
WIND[3]	TRANSVERSE		30.2	
	VERTICAL	12.7		
THERMAL				4.7

1. P - Unfactored Vertical Load each Bearing Plate (4 per Span)
   T - Unfactored Transverse Load each Bent/Pier (2 per Span)
   L - Unfactored Longitudinal Load each Bearing Plate (4 per Span)

2. Downward vertical loads are positive (+), upward vertical loads are negative (-).

3. The horizontal wind load acting at the c.g. of the truss creates a transverse shear and a vertical couple at the top of each pier/ bearing location.

4. Design Specifications
   · FDOT Structures Manual, current Edition and supplements thereto.
   · American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor (LRFD) Bridge Design Specifications, current Edition and supplements thereto.
   · AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, current Edition
   · FDOT Plans Preparation Manual, current Edition.

5. Construction Specifications
   · FDOT Standard Specifications for Road and Bridge Construction current Edition and supplements thereto.

CONTECH
CONTRACT
DRAWING

AISC CERTIFIED FABRICATOR

CONTECH PROJECT 732687

BRIDGE NO. ####

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

STEVEN E. CHELL
P.E. LICENSE NUMBER 62883
CONTECH ENGINEERED SOLUTIONS LLC
8301 STATE HWY 29N
ALEXANDRIA, MN 56308

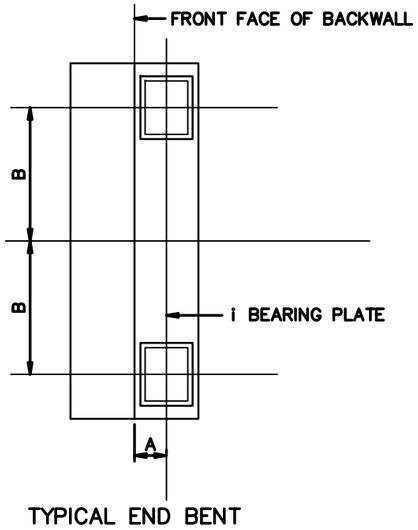
DRAWN BY: SEC 4/4/2024	LEE COUNTY DEPARTMENT OF TRANSPORTATION		
CHECKED BY: SEC			
DESIGNED BY: SEC	ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CHECKED BY: SEC	--	LEE	210248

SHEET TITLE: ***PEDESTRIAN BRIDGE DATA (2 OF 3)***

REF. DWG. №

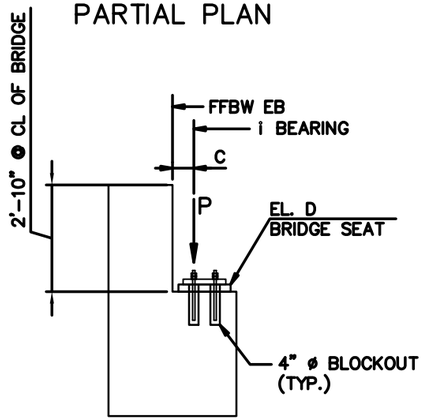
PROJECT NAME: ***LEE COUNTY FL PEDESTRIAN BRIDGE***

SHEET NO. BP-2



TYPICAL END BENT

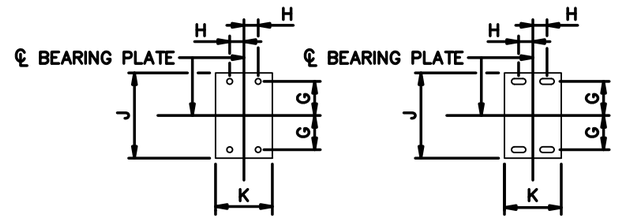
PARTIAL PLAN



TYPICAL END BENT

PARTIAL ELEVATION

BEARING LOCATIONS & BRIDGE SEAT ELEVATIONS				
BENT/ PIER	A (FT.)	B (FT.)	C (FT.)	D (FT.)
1	.83	4.5	.50	22.116
2	.83	4.5	.50	24.316



BEARING PLATE DETAILS

BRIDGE REACTIONS				
		SPAN 1		
		P (KIP)	T (KIP)	L (KIP)
DEAD LOAD		45.15	—	—
UNIFORM LIVE LOAD		30.25	—	—
VEHICLE LOAD			—	—
WIND UPLIFT	WINDWARD	9.08	—	—
	LEEWARD	3.03	—	—
WIND [3]	TRANSVERSE	—	37.89	—
	VERTICAL ??	19.36	—	—
THERMAL		—	—	7.8

BEARING PLATE DIMENSIONS				
SPAN	G (IN.)	H (IN.)	J (IN.)	K (IN.)
1	7	4	18	16
2				

COMPANY CONTACT INFORMATION	
COMPANY	JC MACHINE WORKS
ADDRESS	5700 32 COURT MIAMI, FL 33412
CONTACT	JORGE AMADOR
PHONE	305-634-5280
E-MAIL	jorgea@jcmachineshop.com

1. P – UNFACTORED VERTICAL LOAD EACH BEARING PLATE (4 PER SPAN)
   T – UNFACTORED TRANSVERSE LOAD EACH BENT/PIER (2 PER SPAN)
   L – UNFACTORED LONGITUDINAL LOAD EACH BEARING PLATE (4 PER SPAN)
2. DOWNWARD VERTICAL LOADS ARE POSITIVE (+), UPWARD VERTICAL LOADS ARE NEGATIVE (–).
3. THE HORIZONTAL WIND LOAD ACTING AT THE C.G. OF THE TRUSS CREATES A TRANSVERSE SHEAR AND A VERTICAL COUPLE AT THE TOP OF EACH PIER/ BEARING LOCATION.
4. DESIGN SPECIFICATIONS
   · FDOT STRUCTURES MANUAL, CURRENT EDITION AND SUPPLEMENTS THERETO.
   · AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, CURRENT EDITION AND SUPPLEMENTS THERETO.
   · AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, CURRENT EDITION
   · FDOT PLANS PREPARATION MANUAL, CURRENT EDITION.
5. CONSTRUCTION SPECIFICATIONS
   · FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

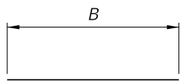
CORNERSTONE ENGINEERING PARTNERSHIP
12924 SW 114 COURT
MIAMI, FL 33176
DOUGLAS B. TIMMONS P.E.39259

LEE COUNTY
DEPARTMENT OF TRANSPORTATION

PROJECT	FINANCIAL PROJECT ID
RICHMOND AVE. PEDESTRIAN BRIDGE REPLACEMENT	210248

PEDESTRIAN BRIDGE DATA (3 OF 3)

SHEET NO. BP-3



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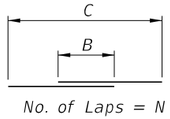

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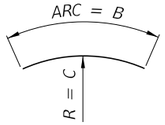

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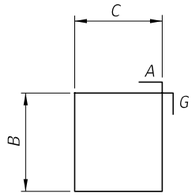

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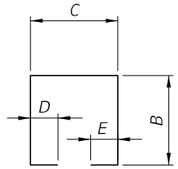
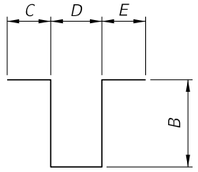
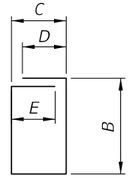


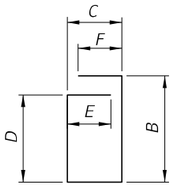
TYPE 5



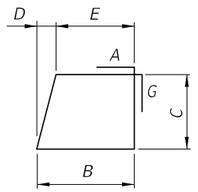
TYPE 6



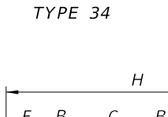
TYPE 7



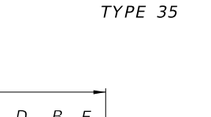
TYPE 8



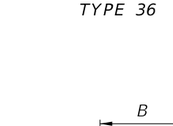
TYPE 9



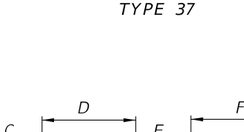
TYPE 10



TYPE 1 1



TYPE 12



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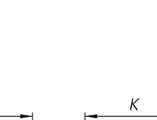
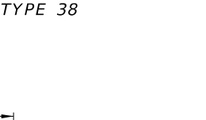
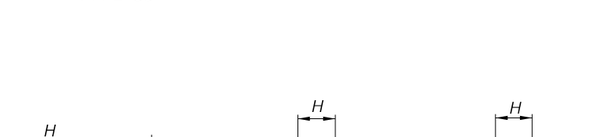


TYPE 14

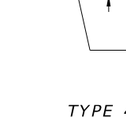


TYPE 15

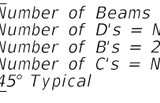


TYPE 16

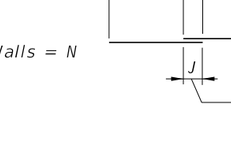
Number of Beams or Walls = N
Number of D's = N-1
Number of B's = 2N-2
Number of C's = N-2
45° Typical



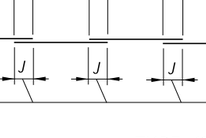
TYPE 17



TYPE 18



TYPE 19



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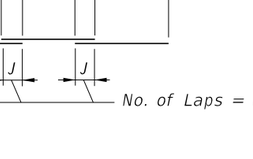
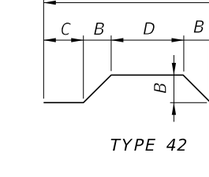
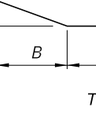


TYPE 21



TYPE 22

TYPE 23



TYPE 24

TYPE 25

TYPE 26

TYPE 27

TYPE 28

TYPE 29

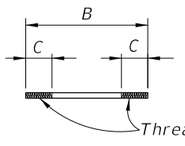
TYPE 30

TYPE 31

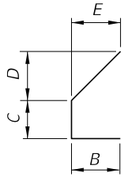
TYPE 32

Style 6 = No Hook

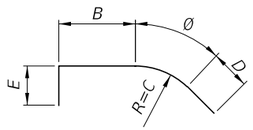
TYPE 33



TYPE 34



TYPE 35



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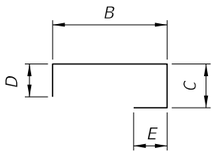
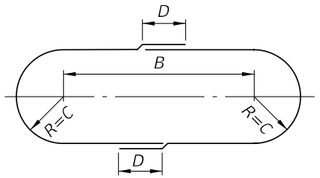
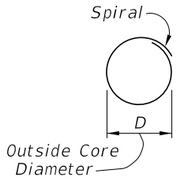


TYPE 37



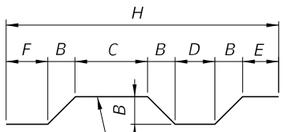
TYPE 38



TYPE 39

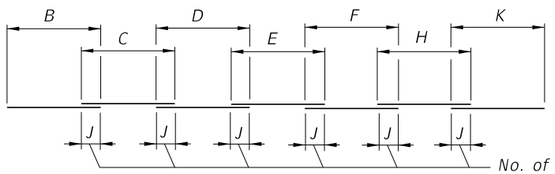
C = Pitch
B = Overall Height
N = Total number of closed turns at Top and Bottom of columns

Splices may be accomplished by lapping 1.5 turns. Cost of Channel Spacers and Splices shall be included in the Contract Unit Price for Reinf. Steel (Substructure)



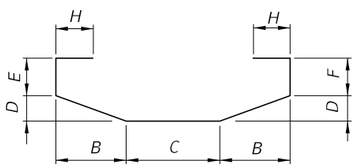
Number of Beams or Walls = N
Number of D's = N-1
Number of B's = 2N-1
Number of C's = N-1
45° Typical

TYPE 40



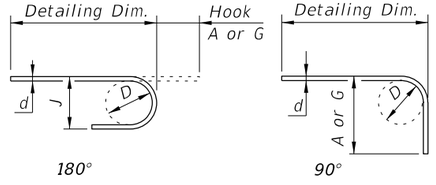
TYPE 41

TYPE 42



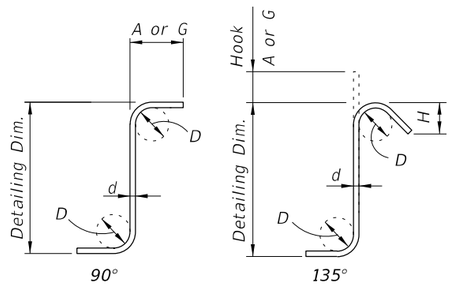
TYPE 43

HOOK DETAILS



180° 90°

BAR SIZE	D	180° HOOKS A OR G	180° HOOKS J	90° HOOKS A OR G
#3	2¼"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3¾"	7"	5"	10"
#6	4½"	8"	6"	1'-0"
#7	5¼"	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"
#9	9½"	1'-3"	11¾"	1'-7"
#10	10¾"	1'-5"	1'-1¼"	1'-10"
#11	12"	1'-7"	1'-2¾"	2'-0"
#14	18¼"	2'-3"	1'-9¾"	2'-7"
#18	24"	3'-0"	2'-4½"	3'-5"
STYLE		1		3



90° 135°

STIRRUPS (TIES SIMILAR)

STIRRUP & TIE HOOK DIMENSIONS

BAR SIZE	D	90° HOOKS A or G	135° HOOKS A or G	135° HOOKS H *
#3	1½"	4"	4"	2½"
#4	2"	4½"	4½"	3"
#5	2½"	6"	5½"	3¾"
#6	4½"	1'-0"	8"	4½"
#7	5¼"	1'-2"	9"	5¼"
#8	6"	1'-4"	10½"	6"
STYLE		4	5	

STYLE 6 = NO HOOK

* Dimension is approximate.

Hook Styles Detailed on this sheet are for Illustration Only.

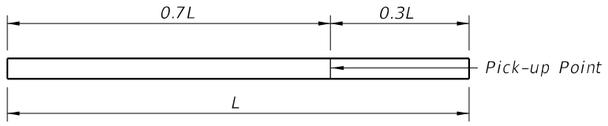
Actual Hook Style for any particular bar will be shown under A or G Heading on REINFORCING BAR LIST sheet(s) in Structures Plans.

All Dimensions are out-to-out.

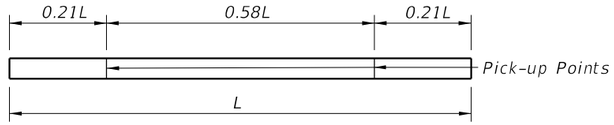
NOTE: For Bar Dimensions See REINFORCING BAR LIST Sheet(s) in Structures Plans.

10/15/2023 11:22:09 AM

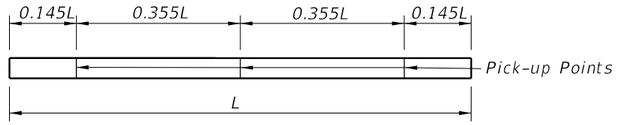
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20			FDOT FY 2024-25 STANDARD PLANS	BAR BENDING DETAILS (STEEL)	415-001	1 of 1



1-POINT PICK-UP

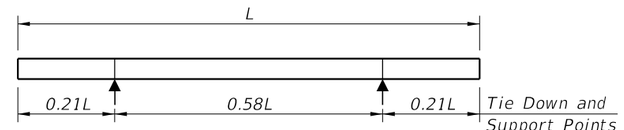


2-POINT PICK-UP

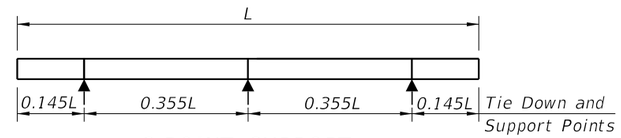


3-POINT PICK-UP

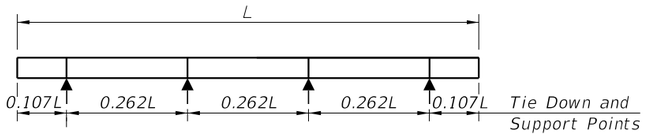
PILE PICK-UP DETAILS



2-POINT SUPPORT



3-POINT SUPPORT



4-POINT SUPPORT

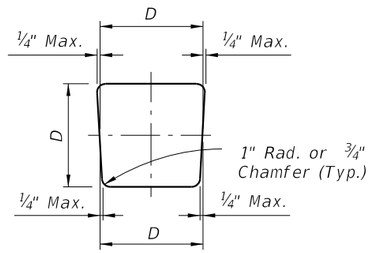
STORAGE AND TRANSPORTATION SUPPORT DETAILS

PRESTRESSED CONCRETE PILE NOTES:

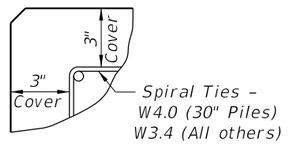
1. Work this Index with the Square Prestressed Concrete Pile Splices (Index 455-002), the Prestressed Concrete Pile Standards (Index 455-012 thru 455-030), the High Moment Capacity Square Prestressed Concrete Pile (Index 455-031) and the Pile Data Table in the Structures Plans.
2. Concrete:
   - A. Piles: Class V, except use Class VI for High Moment Capacity Pile (Index 455-031).
   - B. High Capacity Splice Collar: Class V.
   - C. See "GENERAL NOTES" in the Structures Plans for locations where the use of Highly Reactive Pozzolans is required.
3. Concrete strength at time of prestress transfer:
   - A. Piles: 4,000 psi minimum.
   - B. High Moment Capacity Piles: 6,500 psi minimum.
4. Carbon-Steel Reinforcing:
   - A. Bars: Meet the requirements of Specification Section 415.
   - B. Prestressing Strands: Meet the requirements of Specification Section 933.
   - C. Protect all strands permanently exposed to the environment and not embedded under final conditions in accordance with Specification Section 450.
5. Spiral Ties:
   - A. Tie each wrap of the spiral strand to a minimum of two corner strands.
   - B. One full turn required for spiral splices.
6. Pile Splices: Fill dowel holes and form the joint between pile sections with a Type AB Epoxy Compound in accordance with Specification Section 926. Use an Epoxy Bonding Compound or an Epoxy Mortar as recommended by the Manufacturer.

TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS

	D = Square Pile Size (inches)					Required Storage and Transportation Detail	Pick-Up Detail
	12	14	18	24	30		
Maximum Pile Length (Feet)	48	52	59	68	87	2, 3, or 4 point	1 Point
	69	75	85	98	124	2, 3, or 4 point	2 Point
	99	107	121	140	178	3 or 4 point	3 Point



TYPICAL PILE SHAPE FOR MOLD FORMS



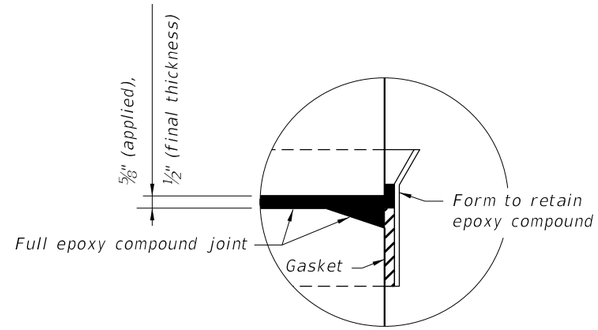
DETAIL SHOWING TYPICAL COVER

10/15/2023 11:45:13 AM

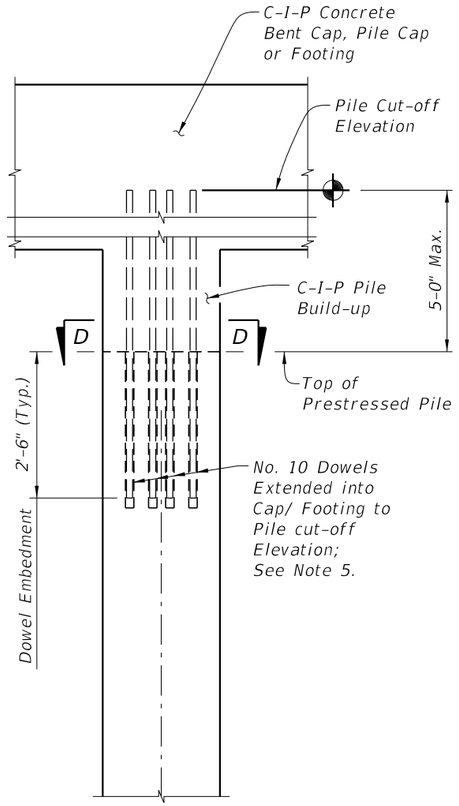
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	SQUARE PRESTRESSED CONCRETE PILES - TYPICAL DETAILS & NOTES	INDEX	SHEET
11/01/22						455-001	1 of 1

NOTES:

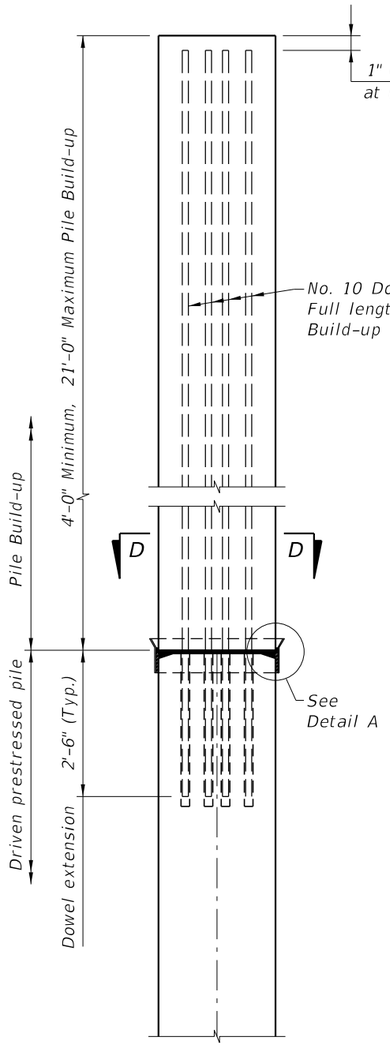
1. For Sections D–D, E–E, & F–F see Index 455–012 thru 455–030 for applicable concrete pile size and Pile Splice Reinforcement Details.
2. Prestressing strands, spiral ties and/or reinforcement are not shown for clarity.
3. When pile splices are necessary due to shipping and handling limitations, use the "Drivable Planned Prestressed Precast Splice Detail" or Mechanical Pile Splices on the Approved Products List (APL).
4. When preformed dowel holes are used, continue the 1" spiral tie pitch to 4'–0" below the head of the pile, See Index 455–018, 455–020 & 455–024. For preformed holes; use either removable preforming material or stay–in–place corrugated galvanized steel ducts meeting ASTM Specification A653, Coating Designation G90, 26 gauge. Use 2" diameter ducts with a minimum corrugation (rib) height of 0.12 in. fabricated with either welded or interlocked seams. Galvanizing of welded seams is not required.
5. For tension piles where top of Prestressed Pile is less than 3 feet below Pile Cut–off Elevation, extend No. 10 Dowels into cap beyond Pile Cut–off Elevation to achieve development as approved by the Engineer.



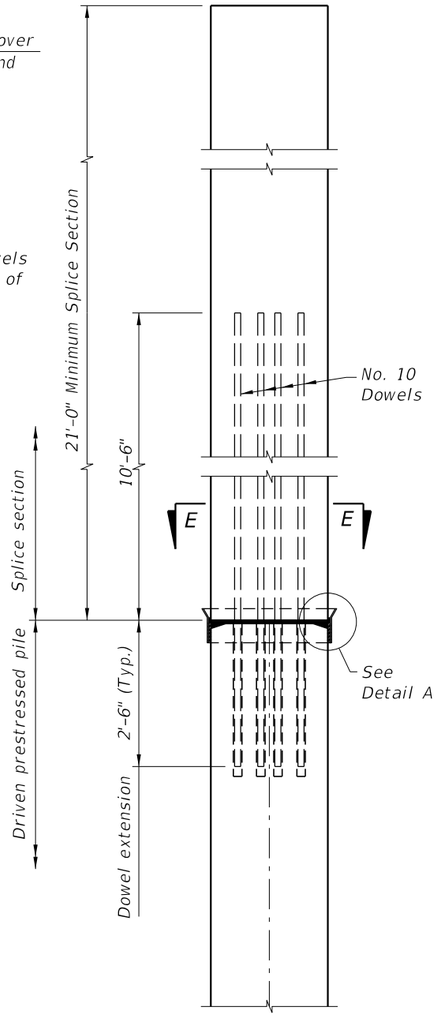
DETAIL A



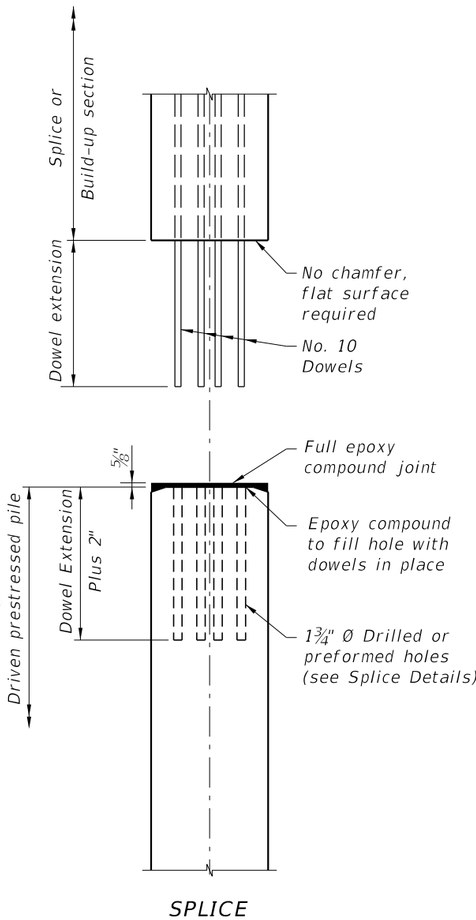
UNPLANNED
REINFORCED C-I-P
PILE BUILD-UP DETAIL



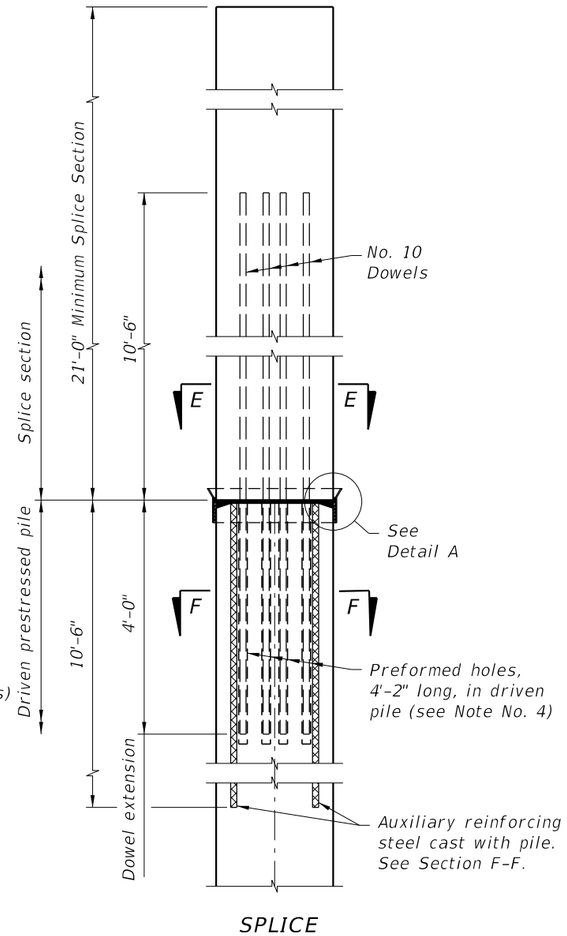
NON-DRIVABLE UNPLANNED
REINFORCED PRECAST
PILE BUILD-UP DETAIL



DRIVABLE UNPLANNED
PRESTRESSED PRECAST
PILE SPLICE DETAIL



SPLICE
BEFORE BONDING

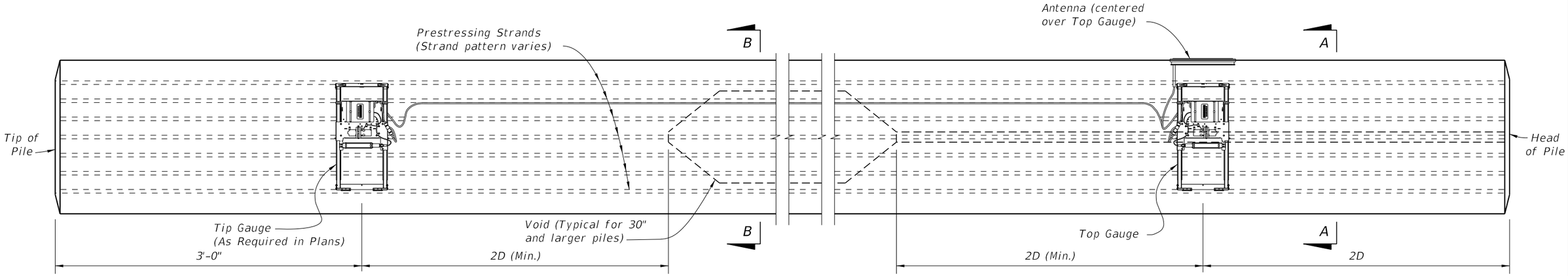


SPLICE
AFTER BONDING

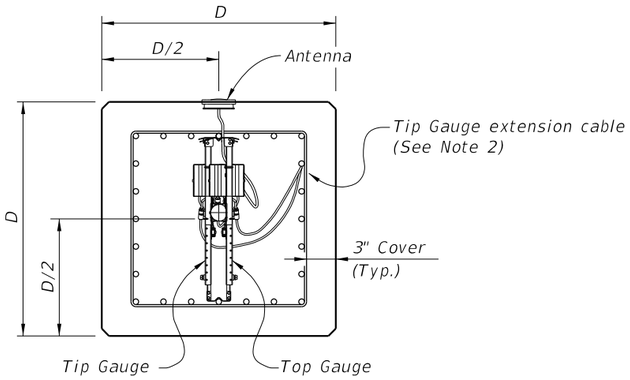
DRIVABLE PLANNED
PRESTRESSED PRECAST
PILE SPLICE DETAIL

10/14/2023 12:01:19 PM

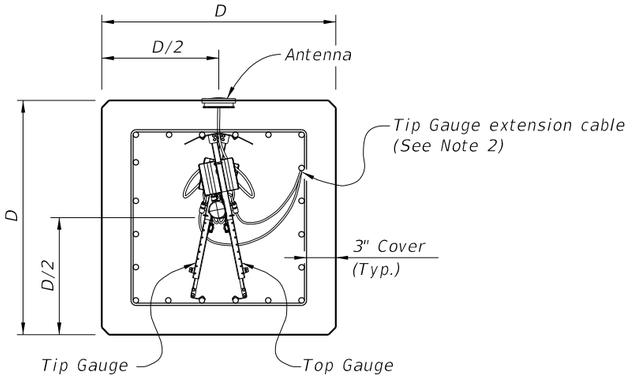
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2024-25 STANDARD PLANS	SQUARE PRESTRESSED CONCRETE PILE SPLICES	455-002	1 of 1



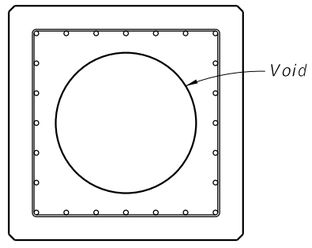
ELEVATION



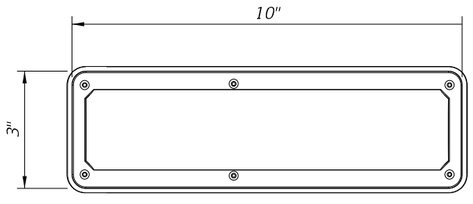
SECTION A-A
(Strand Pattern with odd number of strands per face)



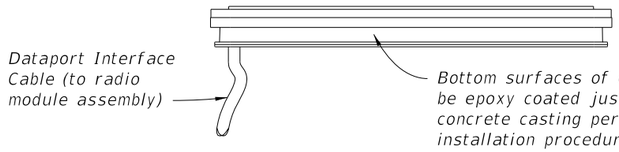
SECTION A-A
(Strand Pattern with even number of strands per face)



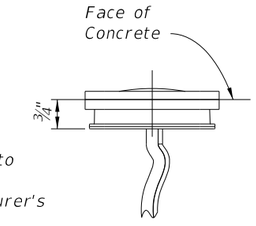
SECTION B-B
(Showing Voided Pile, Solid Pile Similar)



ANTENNA TOP VIEW



ANTENNA SIDE VIEW



ANTENNA END VIEW

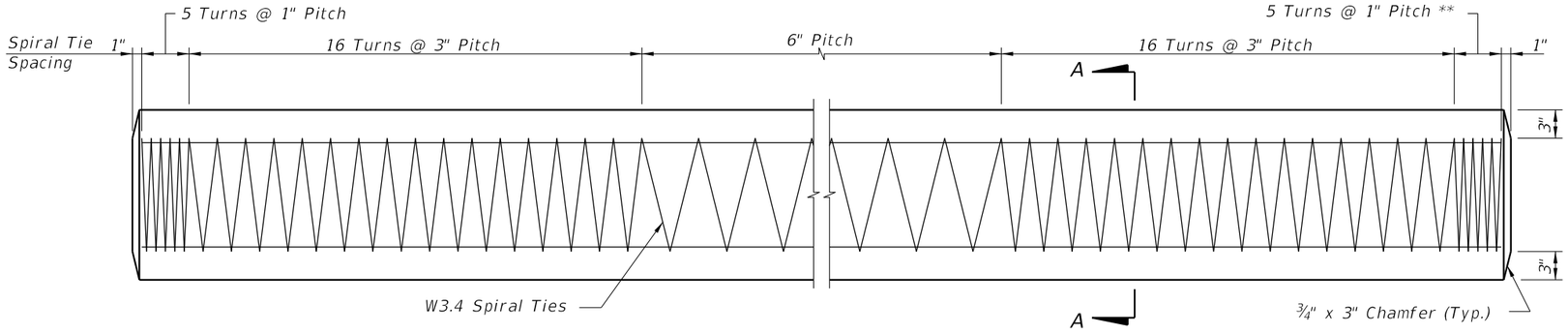
NOTES:

1. For piles 18" and larger installed for bridge foundations, provide EDC Instrumentation in accordance with Specification Section 455.

2. Attach Tip Gauge extension cable to the underside of the strand shown in Section A–A. Secure cable to strand with nylon wire ties spaced a maximum of 6ft. along cable.

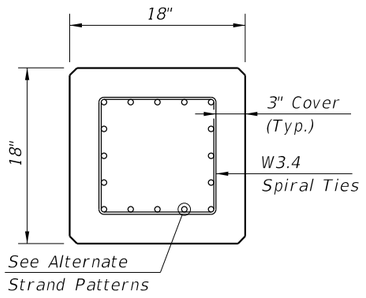
10/15/2023 11:46:08 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	SQUARE PRESTRESSED CONCRETE PILES - EDC INSTRUMENTATION	INDEX	SHEET
11/01/20						455-003	1 of 1



ELEVATION

** See Note 4 on Index 455-002

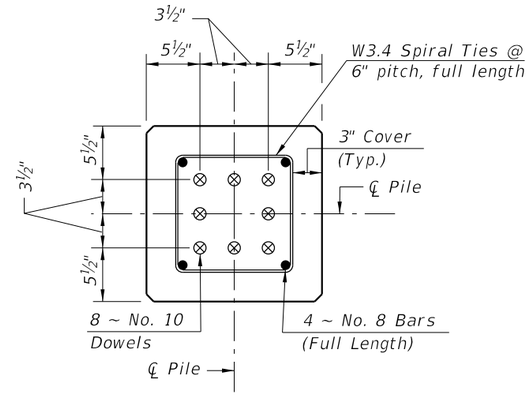


SECTION A-A

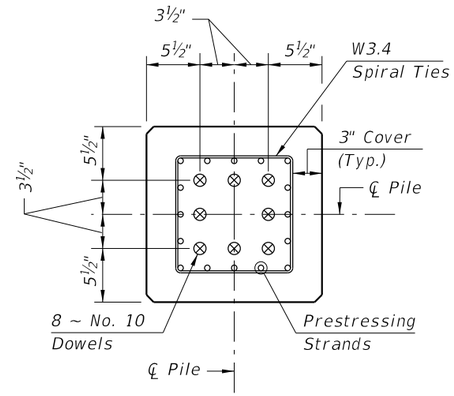
ALTERNATE STRAND PATTERNS

12 ~ 0.6" Ø, Grade 270 LRS, at 35 kips
12 ~ ½" Ø (Special), Grade 270 LRS, at 34 kips
16 ~ ½" Ø, Grade 270 LRS, at 26 kips
20 ~ 7/16" Ø, Grade 270 LRS, at 21 kips
24 ~ ⅜" Ø, Grade 270 LRS, at 17 kips

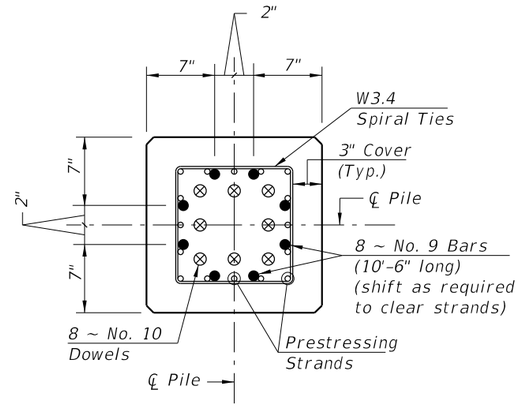
NOTES:
1. Work this Index with Index 455-001 – Typical Details and Notes for Square Prestressed Concrete Piles and Index 455-002 – Square Prestressed Concrete Pile Splices.
2. Any of the given Alternate Strand Patterns may be utilized. The strands shall be located as follows:
   Place one strand at each corner and place the remaining strands equally spaced between the corner strands.
   The total strand pattern shall be concentric with the nominal concrete section of the pile.



SECTION D-D
(See Non-Drivable Unforeseen Reinforced Precast Splice Detail)



SECTION E-E
(See Drivable Prestressed Precast Splice Detail)

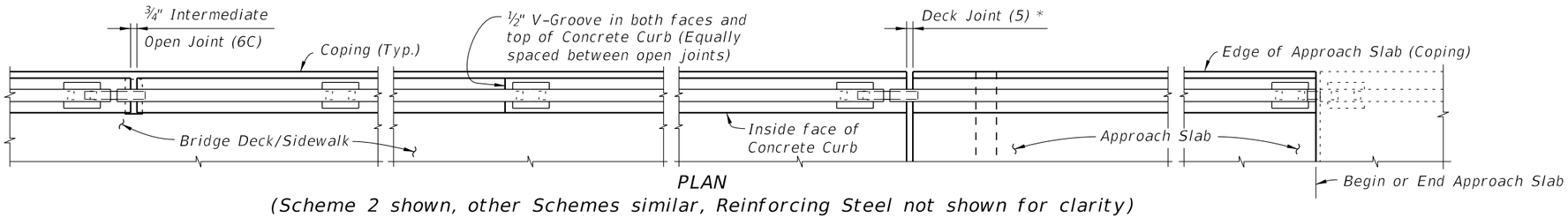


SECTION F-F
(See Drivable Preplanned Splice Detail)

PILE SPLICE REINFORCEMENT DETAILS

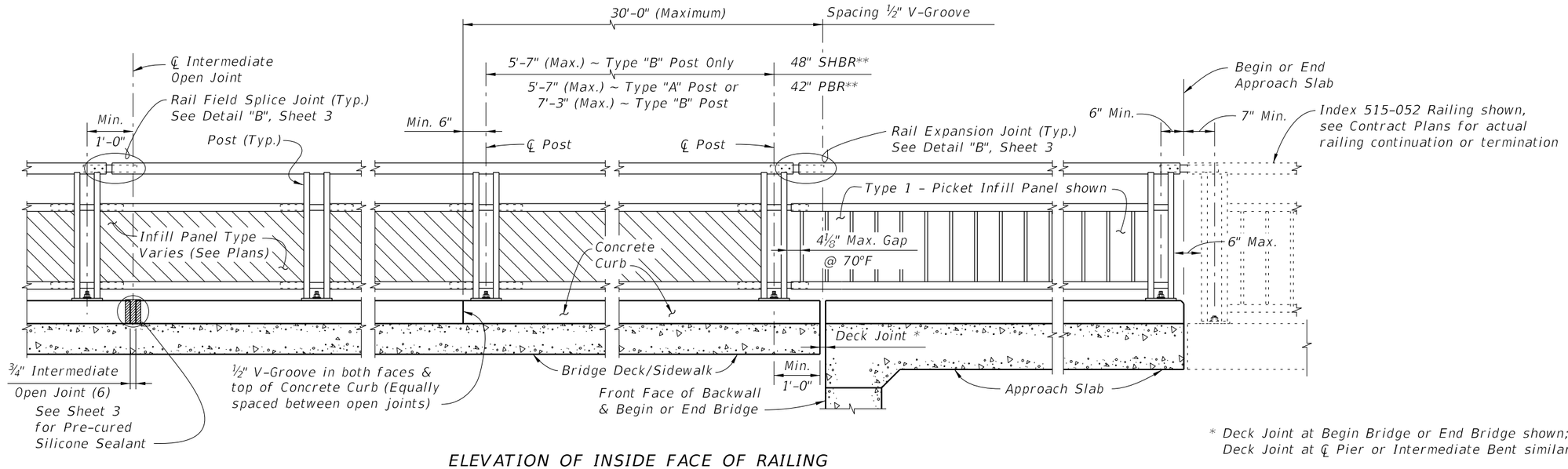
10/15/2023 11:47:27 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	18" SQUARE PRESTRESSED CONCRETE PILE	INDEX	SHEET
01/01/12						455-018	1 of 1



PLAN

(Scheme 2 shown, other Schemes similar, Reinforcing Steel not shown for clarity)



ELEVATION OF INSIDE FACE OF RAILING

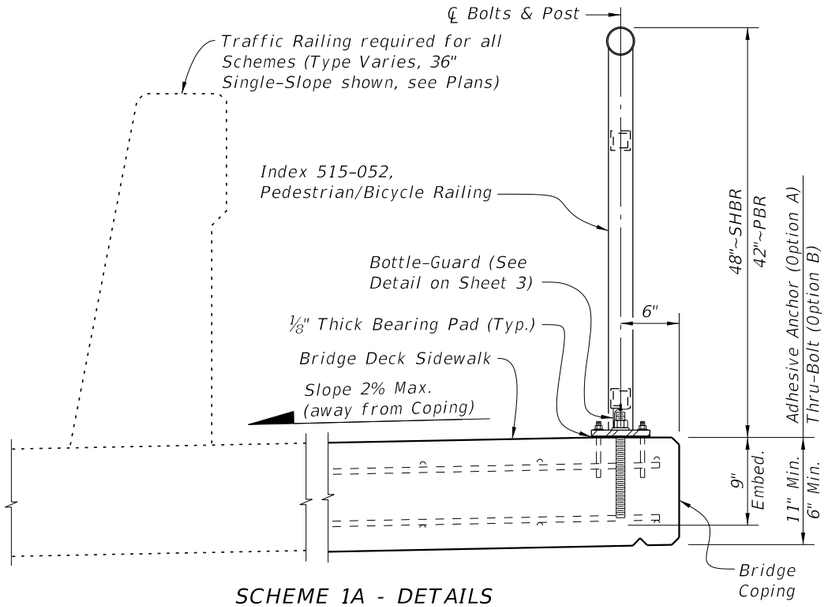
(Scheme 2 shown with Post "A", other Schemes similar, Reinforcing Steel not shown for clarity)

* Deck Joint at Begin Bridge or End Bridge shown;
Deck Joint at ℄ Pier or Intermediate Bent similar.

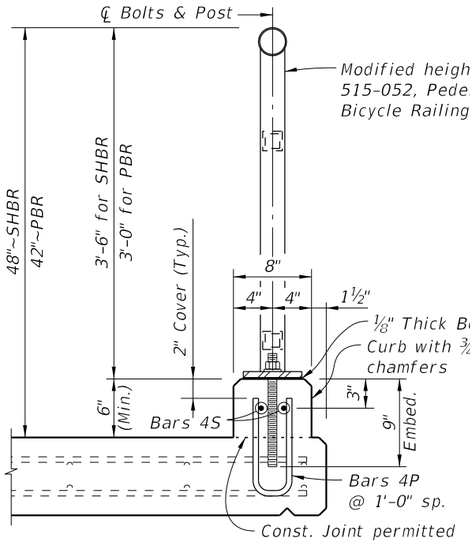
** SHBR~Special Height Bicycle Rail
PBR~Pedestrian/Bicycle Rail

NOTES:

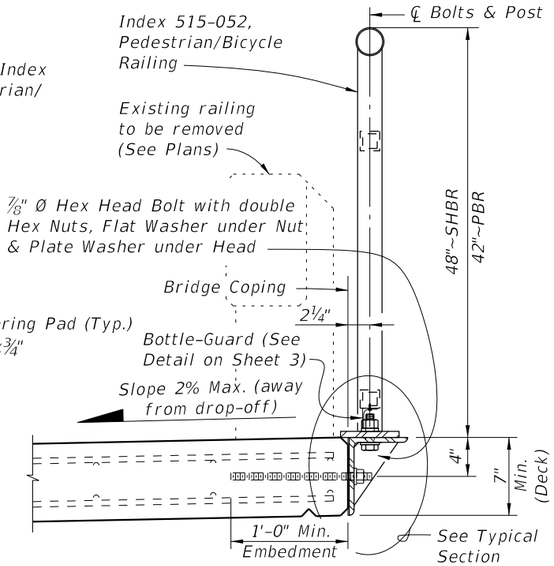
1. Shop Drawings are required.
2. Work this Index with Index 515-052 Bicycle/Pedestrian Railing Details (Steel) and Specification Section 515. Refer to the SPI for Design Criteria and Limits of Use.
3. Materials:
   - A. Steel: Galvanized after fabrication
     - a. Fasteners: Hex Head Bolt ASTM A307, Hex Nuts ASTM A563, Washers ASTM F436
     - b. Support Bracket (Scheme 3) L-shape and Stiffener Plate: ASTM A36
     - c. Bottle-guard (Schemes 1 & 3) L-shape: ASTM A36
   - B. Concrete: Same as bridge deck
   - C. Pre-cured Silicone Sealant: Specification Section 932
   - D. Bearing Pads: Provide ⅛" Plain, Fabric Reinforced or Fabric Laminated bearing pads that meet the requirements of Specification Section 932 for Ancillary Structures.
4. See Structures Plans, Superstructure Sheets for bridge information including concrete type, deck expansion joint locations and orientations, and thermal movement.
5. Railings:
   - A. For thermal movement greater than 4" (up to a maximum of 5"), clear opening between adjacent pickets, or panels at Rail Expansion Joints above Deck Joints must be reduced to 3½".
   - B. For treatment of railings on skewed bridges see Index 521-427.
6. Curbs:
   - A. Match open curb joints at Deck Expansion Joint locations to the deck joint dimension.
   - B. Construct Concrete Curb (Scheme 2) vertical with the top surface finished level transversely. See Concrete Curb Details Sheet 3.
   - C. Provide ¾" Intermediate open joints in curbs coinciding with the ¾" joints in the traffic railing.
7. Payment: Support bracket (Scheme 3) is incidental to the cost of railing. Curb concrete and reinforcing steel (Scheme 2) are included in the bridge deck quantities.



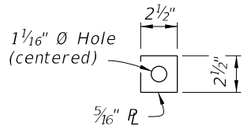
SCHEME 1A - DETAILS
(Adhesive Anchor Option shown)



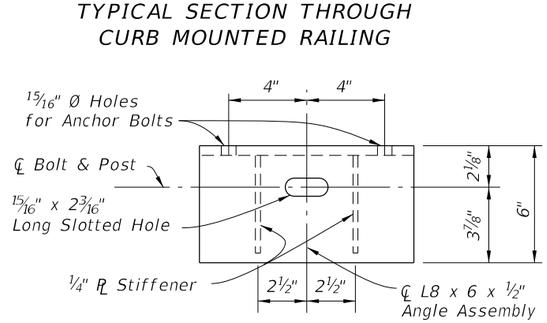
SCHEME 2 -
TYPICAL SECTION THROUGH
CURB MOUNTED RAILING



SCHEME 3 -
TYPICAL SECTION THROUGH
SIDE MOUNTED RAILING (RETROFIT)



THRU-BOLT PLATE
WASHER DETAIL



PLAN VIEW

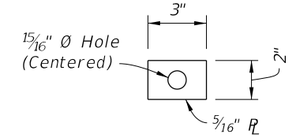
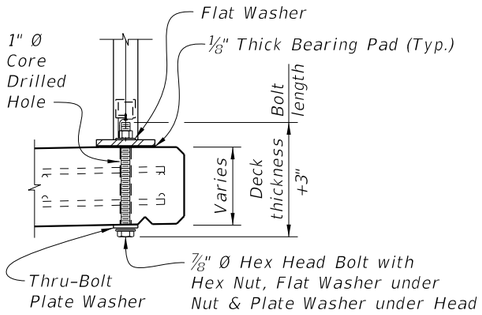
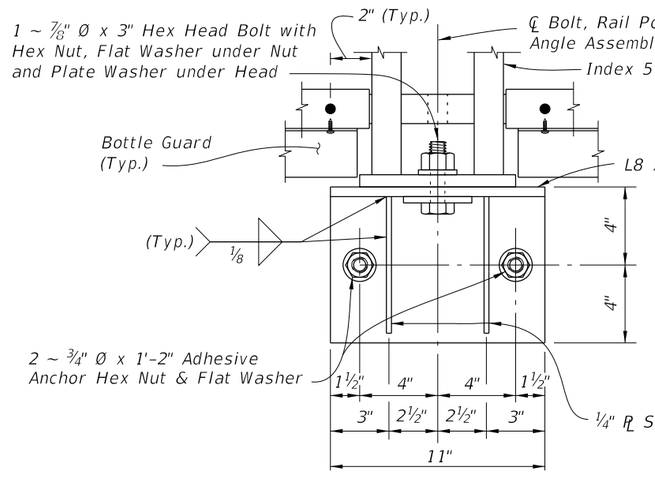


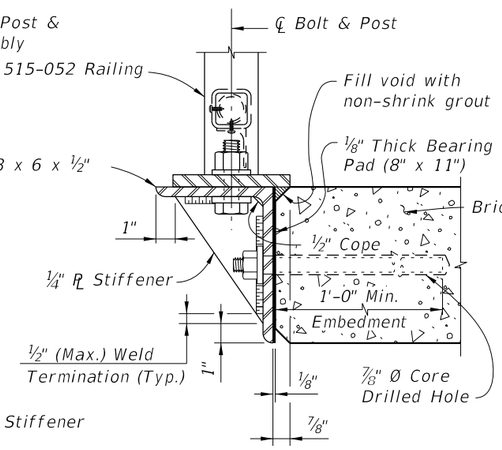
PLATE WASHER DETAIL



SCHEME 1B - DETAILS
(Thru-Bolt Option)



ELEVATION VIEW



TYPICAL SECTION

SCHEME 1 - TYPICAL SECTION THROUGH DECK MOUNTED RAILING

SCHEME 3 - SIDE-MOUNTED SUPPORT BRACKET DETAILS

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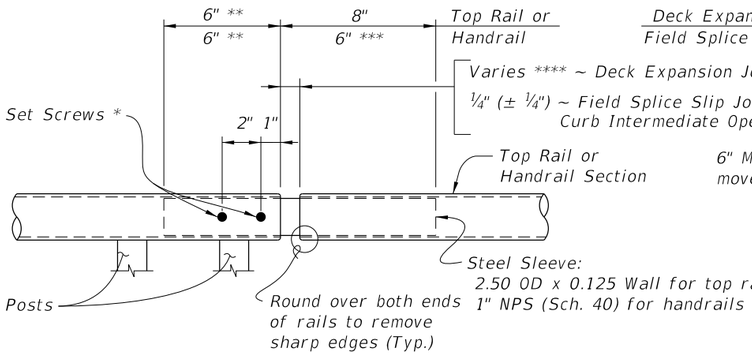
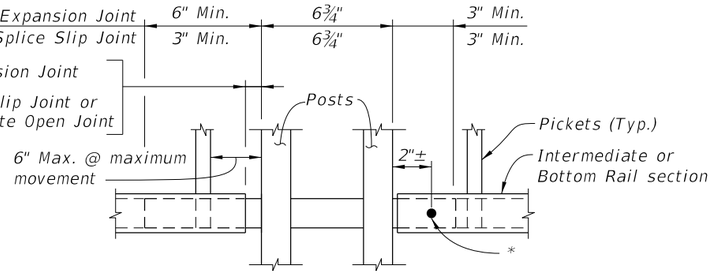
11/01/17			FDOT FY 2024-25 STANDARD PLANS	BRIDGE PEDESTRIAN/BICYCLE RAILING (STEEL)	INDEX 515-051	SHEET 2 of 3



ROUND RAILS - TOP RAIL OR HANDRAIL



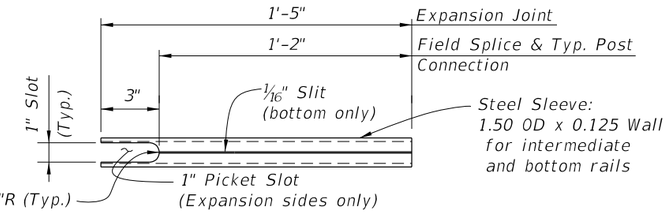
SQUARE RAILS - INTERMEDIATE OR BOTTOM RAIL

* ¼" Ø x ¾" Pan Head Stainless Steel (Type 316 or 18-8 Alloy) Set Screws along outside face of railing. Set screws must be set flush against the rail surface. A ¾" Ø plug weld may be substituted for the two set screws at expansion joints.

** Embedded length may be 4" for plug welded connection.

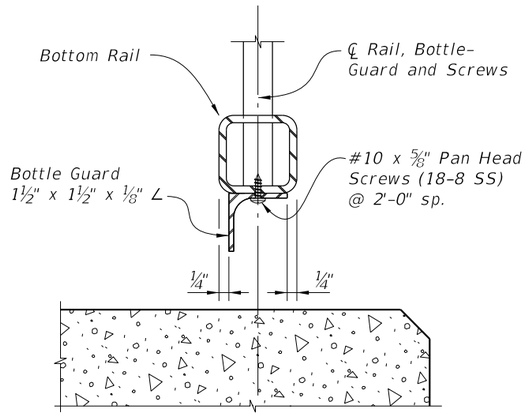
*** Increase handrail sleeve embedment to 8" for Expansion Joint openings greater than 2".

**** Expansion Joint opening shall match the clear opening in the deck joint but not greater than 3".



INTERMEDIATE OR BOTTOM RAIL - STEEL SLEEVE DETAIL (Bottom Side Shown)

DETAIL "B" EXPANSION JOINT (FIELD SPLICE SIMILAR)



TYPICAL SECTION THROUGH BOTTOM RAIL
(Post Not Shown for Clarity)

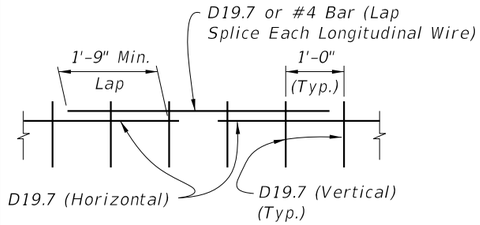
SCHEME 1 - BOTTLE GUARD DETAIL

CROSS REFERENCE:

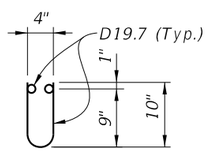
See Sheet 1 for Bridge Railing Notes.

ALTERNATE REINFORCING (WWR) DETAILS

NOTE: Place wire panels to minimize the end overhang. End Overhangs greater than 4¾" are not permitted.



SPLICE DETAIL
(Between WWR Sections)

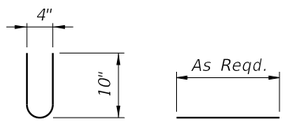


WWR SECTION DETAIL

CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

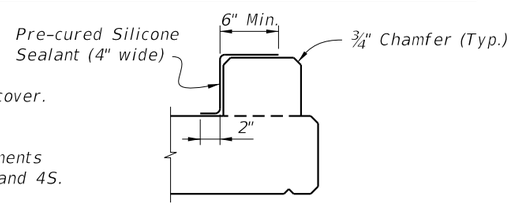
MARK	SIZE	LENGTH
P	4	2'-0"
S	4	As Reqd.



BAR 4P BAR 4S

CURB REINFORCING STEEL NOTES:

1. All bar dimensions in the bending diagrams are out to out.
2. The reinforcement for the curb on a retaining wall shall be the same as detailed for an 8" deck.
3. All reinforcing steel at the open joints shall have a 2" minimum cover.
4. Bars 4S may be continuous or spliced at the construction joints. Bar splices for Bars 4S shall be a minimum of 1'-8".
5. Deformed Welded Wire Reinforcement (WWR) meeting the requirements of Specification Section 931 may be used in lieu of all Bars 4P and 4S.



DETAIL "A" - SECTION
AT INTERMEDIATE OPEN JOINT

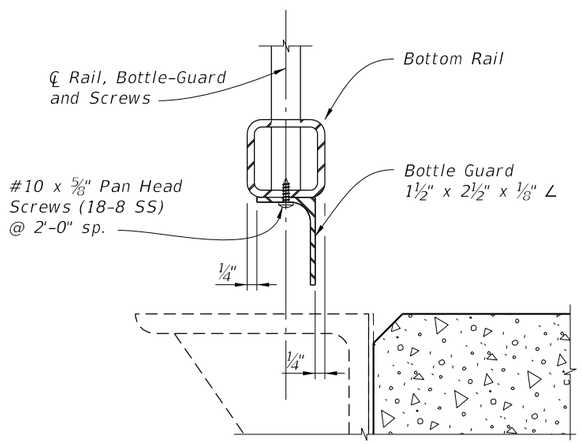
INTERMEDIATE JOINT SEAL NOTE:

At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant. Apply sealant prior to any Class V finish coating and remove all curing compound and loose material from the surface prior to application of bonding agent.

ESTIMATED CONCRETE CURB QUANTITIES (SCHEME 2)

ITEM	UNIT	QUANTITY
Concrete	CY/LF	0.0124
Reinforcing Steel	LB/LF	4.01

SCHEME 2 - CONCRETE CURB DETAILS



TYPICAL SECTION THROUGH BOTTOM RAIL
(Post Not Shown for Clarity)

SCHEME 3 - BOTTLE GUARD DETAIL

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