Permit N.: 2020-C-490-00004 COUNTY: Saint Lucie County S.R. No.: 716/Port St Lucie

Boulevard

FLORIDA DEPARTMENT OF TRANSPORTATION - DISTRICT FOUR MAINTENANCE MEMORANDUM OF AGREEMENT

THIS AGREEMENT made and entered into this______, by and between the STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, a component agency of the State of Florida, hereinafter called the DEPARTMENT, and City of Port Saint Lucie, a municipal corporation existing under the Laws of Florida, hereinafter called the AGENCY.

WITNESSETH:

WHEREAS, the **DEPARTMENT** has jurisdiction over State Road 716 / Port Saint Lucie Boulevard including the areas described in **Exhibit A (Project Location, Description and Aerial)**; and

WHEREAS, the **DEPARTMENT** intends to lease to the **AGENCY** property adjacent to State Road 716 / Port Saint Lucie Boulevard under the LEASE AGREEMENT dated ______ or signed simultaneously with this **Agreement**; and

WHEREAS, the LEASE requires that the AGENCY enter into this Maintenance Memorandum of Agreement with the DEPARTMENT for improvements to be constructed; and

WHEREAS, the AGENCY intends to install such improvements as described in Exhibit B (Permit Plans) which shall be designed, constructed and maintained by the AGENCY; and

WHEREAS, as part of the continual updating of the State of Florida Highway System, the **DEPARTMENT**, for the purpose of safety, protection of the investment and other reasons, has constructed and does maintain State Road 716/ Port Saint Lucie Boulevard; and

WHEREAS, it is the intent of the AGENCY and the DEPARTMENT that the AGENCY shall maintain the specific elements constructed upon the leased property to include, but not be limited to the boardwalk with appurtenances, lighting, utilities, ADA compliant access (to be designed and constructed by the AGENCY); hereinafter called the IMPROVEMENTS to be installed along State Road 716 / Port Saint Lucie Boulevard, beginning from the North side of SR 716 Mile Post (M.P.) 7.004 to the South side of SR 716, M.P. 7.337 Bridge No. 940140 and 940145, and

WHEREAS, the Project involves the scope of work as described within Exhibit A and Exhibit B, to be designed and constructed by the AGENCY and approved by the DEPARTMENT, which will benefit the AGENCY; and

WHEREAS, the parties hereto mutually recognize the need for entering into an Agreement

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Boulevard

designation and setting forth the responsibilities of each party; and

WHEREAS, the AGENCY by Resolution No. dated _____ attached hereto and by this reference made a part hereof, desires to enter into this Agreement and authorizes its officers to do so:

NOW THEREFORE, for and in consideration of the mutual benefits to flow each to the other, the parties covenant and agree as follows:

1. The recitals set forth above are true and correct and are deemed incorporated herein.

2. INSTALLATION OF FACILITIES

The **AGENCY** shall install and agrees to maintain the **IMPROVEMENTS** as specified in plans and specifications hereinafter referred to as the Project(s) and incorporated herein as **Exhibit B**. The **AGENCY** must obtain a Permit or Construction Agreement with the **DEPARTMENT** prior to beginning any construction on the **DEPARTMENT**'s Property.

- (a) The **AGENCY** shall provide the FDOT Local Operation Center accurate as-built information plans of the boardwalk with appurtenances, lighting, and utilities, so if in the future there is a need for the **DEPARTMENT** to perform work in the area, the system can be accommodated as much as possible. (See paragraph (f) for contact information).
- (b) If it becomes necessary to provide utilities (water/electricity) to the subject area it shall be the AGENCY'S responsibility to obtain a Permit or Construction Agreement for such work through the local Operations Center (see paragraph (f) below) and the AGENCY shall be responsible for all associated fees for the installation and maintenance of these utilities.
- (c) All specialty surfacing shall be installed and maintained in strict accordance with the most current edition of the *Florida Accessibility Code for Building Construction*.
- (d) All activities, including any future maintenance operations performed on State Highway right of way, must be in conformity with the most current edition of the *Manual on Uniform Traffic Control* (MUTCD) and *FDOT Standard Plans*, Index 102-600 Series.
- (e) Project improvements shall not obstruct roadside signs or permitted outdoor advertising signs (see Florida Administrative Code [F.A.C.] Rule Chapter 14-10.)
- (f) The AGENCY shall provide the local FDOT Operation Center located at Treasure Coast Operations, 3601 Oleander Ave. Ft. Pierce, FL 34982- (772) 465-7396, a twenty-four (24) hour telephone number and the name of a responsible person that the DEPARTMENT may contact. The AGENCY shall notify the local maintenance office forty-eight (48) hours prior to the start of the installation of the IMPROVEMENTS.

If there is a need to restrict the normal flow of traffic, it shall be done on non-holiday, weekday off-peak hours. Restricted hours of operation for allowable lane closures will be from 9:00am to 4:00pm, (Monday-Friday), unless otherwise approved by the **DEPARTMENT**.

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Maintenance of Traffic (MOT) shall be picked up by 4:00pm and not start before 9:00 am. For Maintenance of Traffic (lane closures on the state road system occurring during peak hours 7:00-9:00 AM or 4:00 –6:00 PM), lasting over 24 hours and/or at limited access facilities the **AGENCY** must contact Guillermo Canedo. (Guillermo.canedo@dot.state.fl.us) two weeks prior closures.

Guillermo Canedo can be reached at 954-777-4302
Florida Department of Transportation
Public Information Office
3400 West Commercial Blvd.
Fort Lauderdale, Florida 33309

(g) The **AGENCY** shall be responsible to clear all utilities within the leased property improvement before construction commences.

3. ADA COMPLIANCE

The leased property shall be closed to the public during construction. The leased property shall not be open to the public until the ADA compliant access to the Steel Pedestrian Bridge and the Construction Agreement Plans have been approved by the **DEPARTMENT** and constructed in conformity thereto. The **AGENCY** shall indemnify, the **DEPARTMENT** for any and all costs or expenses incurred by the **DEPARTMENT** for the **AGENCY**'s failure to comply with all ADA Laws existing and as may be amended. Costs and expenses shall include the costs to make the facility ADA compliant, Attorney's fees and costs and any judgments.

4. MAINTENANCE OF FACILITIES

- A. The **AGENCY** agrees to maintain the improvements to be installed on the leased property. Maintenance by the **AGENCY** shall include repair, restoration, graffiti removal and general maintenance of all **IMPROVEMENTS** within the leased property.
 - 1) The AGENCY shall be solely responsible for the inspection, maintenance, preservation, and replacement of all IMPROVEMENTS within the limits of construction. All Maintenance or restoration activities shall be performed in accordance with a Maintenance Plan, as approved by the DEPARTMENT, as per the requirements in Exhibit C (Maintenance Plan Requirements).
 - 2) The AGENCY shall be solely responsible for all liability issues and maintenance of IMPROVEMENTS, including but not limited to, metal bridge structure installed, caution signage and cleaning the bridge as often as necessary to avoid slippery conditions.
 - 3) The above-named functions to be performed by the AGENCY may be subject to periodic inspections by the DEPARTMENT at the discretion of the DEPARTMENT. Such inspection findings will be shared with the AGENCY and shall be the basis of all decisions regarding, reworking or AGREEMENT termination. The AGENCY shall not change or deviate from said plans without written approval of the DEPARTMENT.

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4) The AGENCY shall be solely responsible for any damages to surrounding property, real estate, vehicles, pedestrians, attachments to the light poles, or other assets occurring as a result of the access provided by the IMPROVEMENTS and shall repair such damage to the satisfaction of the DEPARTMENT at no expense to the DEPARTMENT

- 5) Lighting assemblies and systems shall be maintained in such a manner as to prolong the life of the lighting fixture and prevent potential safety hazards. Lights may be required to be turned off if they fail to meet requirements of the law or violate the Endangered Species Act and other law.
- B. After the initial installation, the **AGENCY** shall be responsible for maintenance of the Project in accordance with the following Federally and State accepted standards (current editions at the time of execution of this Agreement and any amendments hereafter) and all costs related thereto: (a) FDOT Design Manual (FDM), (b) Florida Green Book, (c) Standard Specifications for Roadway and Bridge Construction, as amended, (d) FDOT Standard Plans, (e) Manual on Uniform Traffic Control Devices (MUTCD) and (f) Florida Department of Transportation Maintenance Rating Program Handbook, as amended.
- C. If it becomes necessary to provide utilities (water/electricity) to these improvements, all costs associated with the utilities and/or accent lighting including, but not limited to the impact and connection fees, and the on-going cost of utility usage for water and electrical, are the maintaining **AGENCY'S** responsibility.
 - 1) The **AGENCY** shall be directly responsible for impact and connection fees

AND

- 2) The **AGENCY** shall become responsible for the above named ongoing utility fees during construction and thereafter.
- E. The **AGENCY** shall have a structural inspection of the **IMPROVEMENTS** performed by a Florida certified bridge inspector or professional engineer licensed in the State of Florida within 30 days of the execution of the agreement and every two (2) years from the date or as required by the Florida Department of Transportation (FDOT) District Structures Maintenance Engineer. The inspection shall comply with qualifying structures requirements of FDOT topic No. 850-010-030 (and as herein after amended). Within thirty (30) days from the date of inspection supply the **DEPARTMENT** with an electronic copy of the Inspection Report signed and sealed by a Florida licensed Professional Engineer.
 - F. Upon receipt of the structural inspection report, the **AGENCY** must take appropriate actions to address noted deficiencies, as necessary to ensure the structural integrity and safety of the Pedestrian Boardwalk. The **AGENCY** shall be responsible for maintenance of the **IMPROVEMENTS** in accordance with the following Federally and State accepted standards (current editions at the time of execution of this Agreement and any amendments hereafter) and all costs related thereto: (a) FDOT Design Manual (FDM), (b) Florida Green Book, (c) Standard Specifications for Roadway and Bridge Construction, as amended, (d) FDOT Standard Plans and (e) Manual on Uniform Traffic Control Devices (MUTCD) and (f) other provisional documents referenced herein.

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G. The **AGENCY** shall be responsible for the removal, temporary storage and reinstallation of the portion of the **IMPROVEMENTS** identified as Bridge 2 in Exhibit B as requested by the Florida Department of Transportation (FDOT) District Structures Maintenance Engineer.

- H. The **AGENCY** shall be responsible to obtaining and complying with all permits within the leased property.
- I. The **AGENCY** shall be responsible for the cleaning and access control on the **IMPROVEMENTS.**
- II. Any work impacting traffic flow on State Road 716 / Port Saint Lucie Blvd, must be coordinated with the **DEPARTMENT**. Lane closures must be submitted for approval in accordance with **DEPARTMENT** procedures and policies and will meet the goals established in the **DEPARTMENT**'s Open Roads Policy.

5. NOTICE OF MAINTENANCE DEFICIENCIES

- A. If, at any time while the terms of this AGREEMENT are in effect, it shall come to the attention of the DEPARTMENT that the AGENCY's responsibility as established herein or a part thereof is not being properly accomplished pursuant to the terms of this AGREEMENT, the DEPARTMENT may issue a written notice, that a deficiency or deficiencies exist(s), by sending a certified letter to the AGENCY, in care of the CITY OF PORT ST LUCIE, to place the AGENCY on notice regarding its maintenance deficiencies. Thereafter, the AGENCY shall have a period of sixty (60) days within which to correct the citied deficiency or deficiencies. If said deficiencies are not corrected within the time period, the DEPARTMENT may, at its option, proceed under one or more or a combination of the following items:
 - The **DEPARTMENT** may repair any item or a number of items. Corrective actions will be performed with the **DEPARTMENT** and/or its independent contractor's materials, equipment and personnel. The actual cost for such work will be charged to the **AGENCY**.
 - 2) The DEPARTMENT may remove or replace any item or number of items with the standard DEPARTMENT item. Corrective actions will be performed with the DEPARTMENT and/or its independent contractor's materials, equipment and personnel. The actual cost for such work will be charged to the AGENCY.
 - If there is no standard equivalent item or if in the **DEPARTMENT**'s discretion the item is not necessary for the operations of the roadway, the **DEPARTMENT** may remove the item in its entirety and restore the area to a condition acceptable to the **DEPARTMENT**. Corrective actions will be performed with the **DEPARTMENT** and/or its independent contractor's materials, equipment and personnel. The actual cost for such work will be charged to the **AGENCY**.
 - 4) At the discretion of the **DEPARTMENT**, terminate the Agreement in accordance with Paragraph 7 of this Agreement and remove, by the **DEPARTMENT** or its Contractor's personnel, all of the improvements installed under this Agreement and charge the **AGENCY** the reasonable cost of such removal.

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6. FUTURE DEPARTMENT IMPROVEMENTS

It is understood between the parties hereto that the improvements covered by this Agreement may be removed, relocated or adjusted at any time in the future as determined to be necessary by the **DEPARTMENT** in order that the adjacent state road be widened, altered or otherwise changed to meet with future criteria or planning of the **DEPARTMENT**.

7. AGREEMENT TERMINATION

This Agreement may be terminated under any one (1) of the following conditions:

- By the **DEPARTMENT**, if the **AGENCY** fails to perform its duties under this Agreement, following ten (10) days written notice. The **AGENCY** shall reimburse the **DEPARTMENT** for any expenditures for the installation of said improvements and the cost to remove and or replace said improvement with the standard improvement or remove in its entirety.
- 2) By the **DEPARTMENT**, for refusal by the **AGENCY** to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the **AGENCY** in conjunction with this Agreement.
- 3) By the **DEPARTMENT** with a six (6) month written notice.
- 4) By the **AGENCY** after removal of the **IMPROVEMENTS** and restoration of the area. The removal of said **IMPROVEMENTS** will require a permit from the **DEPARTMENT**.

8. AGREEMENT TERM

The term of this Agreement commences upon execution by all parties. The term of this Agreement shall remain in effect for the entirety of the LEASE and shall automatically be extended upon renewal of the LEASE.

9. LIABILITY AND INSURANCE REQUIREMENTS

A. With respect to any of the AGENCY'S agents, consultants, sub-consultants, contractors, and/or sub-contractors, such party in any contract for the improvements shall agree to indemnify, defend, save and hold harmless the DEPARTMENT from all claims, demands, liabilities, and suits of any nature arising out of, because of or due to any intentional and/or negligent act or occurrence, omission or commission of such agents, consultants, sub consultants, contractors and/or subcontractors. The AGENCY shall provide to the DEPARTMENT written evidence of the foregoing upon the request of the DEPARTMENT. It is specifically understood and agreed that this indemnification clause does not cover or indemnify the DEPARTMENT for its own negligence. Nothing herein or any documents executed pursuant to the terms of this Agreement shall be construed as a waiver or attempted waiver by AGENCY of its sovereign immunity in tort under the Constitution and law of the State of Florida.

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B. In the event that **AGENCY** contracts with a third party to provide the services set forth herein, any contract with such third party shall include the following provisions:

- 1) AGENCY'S contractor shall at all times during the term of this Agreement keep and maintain in full force and effect, at contractor's sole cost and expense, Comprehensive General Liability with minimum limits of \$1,000,000.00 per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability and Worker's Compensation insurance with minimum limits of \$500,000.00 per Liability. Coverage must be afforded on a form no more restrictive that the latest edition of the Comprehensive General Liability and Worker's Compensation policy without restrictive endorsements, as filed by the Insurance Services Office and shall name the DEPARTMENT as an additional insured.
- 2) AGENCY'S contractor shall furnish AGENCY with Certificates of Insurance of Endorsements evidencing the insurance coverages specified herein prior to the beginning performance of work under this Agreement.
- 3) Coverage is not to cease and is to remain in full force and effect (subject to cancellation notice) until all performance required of AGENCY'S contractor is completed. All policies must be endorsed to provide the DEPARTMENT with at least thirty (30) days' notice of cancellation and or/or restriction. If any of the insurance coverages will expire prior to the completion of work, copies of renewal policies shall be furnished at least (30) days prior to the date of expiration.

10. E-VERIFY REQUIREMENTS The **AGENCY** shall

- Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the AGENCY for the work performed under this AGREEMENT; and
- 2) Expressly require any contractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.
- 11. This writing embodies the entire Agreement and understanding between the parties hereto and there are no other Agreements and understanding, oral or written, with reference to the subject matter hereof that are not merged herein and superseded hereby except the **LEASE** between the **DEPARTMENT** and the **AGENCY** which shall be signed simultaneously with this agreement, as to all other improvements not specifically mentioned in this Agreement.
- 12. The **DEPARTMENT**, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The **DEPARTMENT** shall require a statement from the Comptroller of the **DEPARTMENT** that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one (1) year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the

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DEPARTMENT which are for an amount in excess of TWENTY FIVE THOUSAND DOLLARS (\$25,000.00) and which have a term for a period of more than one year.

13. ASSIGNMENT

This Agreement may not be assigned or transferred by the **AGENCY** in whole or part without the consent of the **DEPARTMENT**.

14. LAWS GOVERNING

This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. In the event of a conflict between any portion of the contract and Florida law, the laws of Florida shall prevail. The **AGENCY** agrees to waive forum and venue and the **DEPARTMENT** shall determine the forum and venue in which any dispute under this Agreement is decided.

15. NOTICES

Any and all notices given or required under this Agreement shall be in writing and either personally delivered with receipt acknowledgement or sent by certified mail, return receipt requested. All notices shall be sent to the following addresses.

If to the **DEPARTMENT**:

State of Florida Department of Transportation Attention: District Maintenance Engineer 3400 West Commercial Blvd Ft. Lauderdale, FL 33309-3421

If to the AGENCY:

City of Port Saint Lucie Attention: City Manager 121 Port St. Lucie Boulevard Port Saint Lucie, FL 34984

16. LIST OF EXHIBITS:

Exhibit A: Project Location, Description and Aerial

Exhibit B: Permit Plans

Exhibit C: Maintenance Plan Requirements

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IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first above written.

Date:
Date:
Date:

JAMES STOKES, ATTORNEY

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IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first above written.

DEPARTMENT:		
		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
Operations		Paul A. Lampley, P.E., Director of
		Date:
		Legal Review:
	Sign:	
	Oigii	Dawn Raduano, District General Counsel
		Date:

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EXHIBIT A

PROJECT LOCATION, DESCRIPTION AND AERIAL

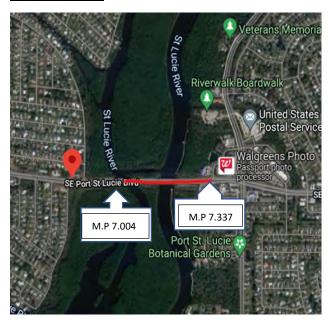
Location:

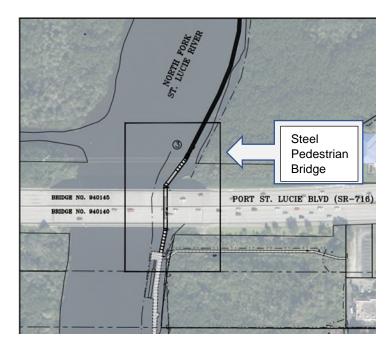
The **IMPROVEMENTS** associated with this **AGREEMENT** are located within Saint Lucie County, Florida along State Road 716, Section 94120, M.P. 7.004 to 7.337 under Bridge No. 940140 & 940145.

Description:

Construction of 114 LF of Steel Pedestrian Bridge to be placed under SR 716 Bridge No. 940140 and 940145. The pedestrian bridge shall span from the north side to the south side of SR 716 to complete a connection of the City's Riverwalk Boardwalk project

Project Aerial





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Boulevard

EXHIBIT B

PERMIT PLANS

Permit Plans prepared Culpepper & Terpening, Inc. and American Consulting Engineers of Florida, LLC and dated September 30, 2020, as approved by the **DEPARTMENT.**

Sheets Included:

PDF Page Number	Plan Sheet	Sheet(s) Description
13	1	KEY SHEET
14	2	LOCATION MAP
15	3	PLAN SHEET
16	4	PROFILE SHEET
17-18	5 THRU 6	SWPPP DETAILS
19	7	SPECIFICATIONS
20	, В-1	STRUCTURE PLANS
21	B-2	GENERAL NOTES
22	B-3	BENTS 1 AND 2
23	B-4	SUPERSTUCTURE DETAILS
24	B-5	BEARING DETAILS
25	B1-1	PLAN AND ELEVATION
26	B1-2	TYPICAL SECTION THRU BRIDGE 1-2
27	B1-3	TYPICAL SECTION THRU BRIDGE 2-2
28	B1-4	DEFLECTION DIAGRAM
29	B1-5	STEEL GIRDER FRAMING PLAN & ELEVATION
30	B1-6	STEEL GIRDER DETAILS
31	B2-1	PLAN AND ELEVATION
32	B2-2	TYPICAL SECTION THRU BRIDGE
33	B2-3	DEFLECTION DIAGRAM
34	B2-4	STEEL GIRDER FRAMING PLAN & ELEVATION
35	B2-5	STEEL GIRDER DETAILS
36	5-1	GENERAL NOTES
37	5-2	ALUMINUM PEDESTRIAN/BICYCLE PICKET RAILING
38-39	5-3 THRU 5-4	10'0" BOARDWALK
40	5-5	END BOARDWALK DETAILS

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CITY OF PORT ST. LUCIE, FLORIDA ENGINEERING DEPARTMENT

CONTRACT PLANS

RIVERWALK SOUTH- BOARDWALK UNDER PORT ST. LUCIE BOULEVARD

COMPONENTS OF CONTRACT PLANS SET

* BOARDWALK & PEDESTRIAN BRIDGES CONSTRUCTION PLANS

INDEX OF PLANS

SHEET NO. SHEET DESCRIPTION

COVER SHEET LOCATION MAP PLAN SHEET PROFILE SHEET SWPP DETAILS 5-6 **SPECIFICATIONS** B1 TO 5 BRIDGE GENERAL DETAILS

B1-1 TO 6 BRIDGE 1 DETAILS B2-1 TO 5 BRIDGE 2 DETAILS S1 TO 5 BOARDWALK DETAILS

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED MARCH 2020. AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2020.
AS AMENDED BY CONTRACT DOCUMENTS.

For Design Standards Modifications click on "Design Standards" at the following web site: http://www.dot.state.fl.us/rddesign/

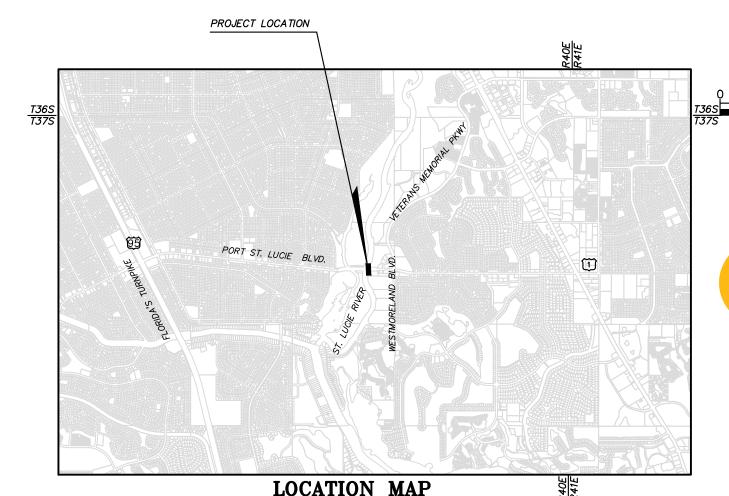
CITY COUNCIL:

Gregory J. Oravec MayorStephanie Morgan District 1 John Carvelli District 2 SHANNON M. MARTIN District 3 Jolien Caraballo District 4

Russ Blackburn - City Manager

Robert Sweeney, P.E. - Public Works Director

REVISIONS



145 LF BRIDGES 0.027 NET LENGTH OF PROJ. 297 LF 0.056 **EXCEPTIONS**

KEY SHEET REVISIONS						
DATE	BY	DESCRIPTION				

SCALE: 1" = 5000'

BOARDWALK PLANS ENGINEER OF RECORD: SHEET 1-7 P.E. NO. :

STATE OF

38723

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY;

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE

C&T JOB NO.: 16-031.005

PERMIT PLAN SET SEPTEMBER 30, 2020

LOCATION OF PROJECT

CONSTRUCTION SHOP DRAWINGS TO BE SUBMITTED TO:

STEFAN K. MATTHES, PE CULPEPPER & TERPENING, INC. 2980 SOUTH 25TH STREET FORT PIERCE, FLORIDA 34981

CULPEPPER &

2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981 PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com STATE OF FLORIDA BOARD OF PROFESSIONAL

ENGINEERS AUTHORIZATION NO. 4286

ON THE DATE ADJACENT TO THE SEAL

VERIFIED ON ANY ELECTRONIC COPIES.

NOTE: THE SCALE OF THESE PLANS MAY

STEFAN K. MATTHES, PE

2020.09.30

HAVE CHANGED DUE TO REPRODUCTION.

FISCAL YEAR	SHEET NO.
20	1

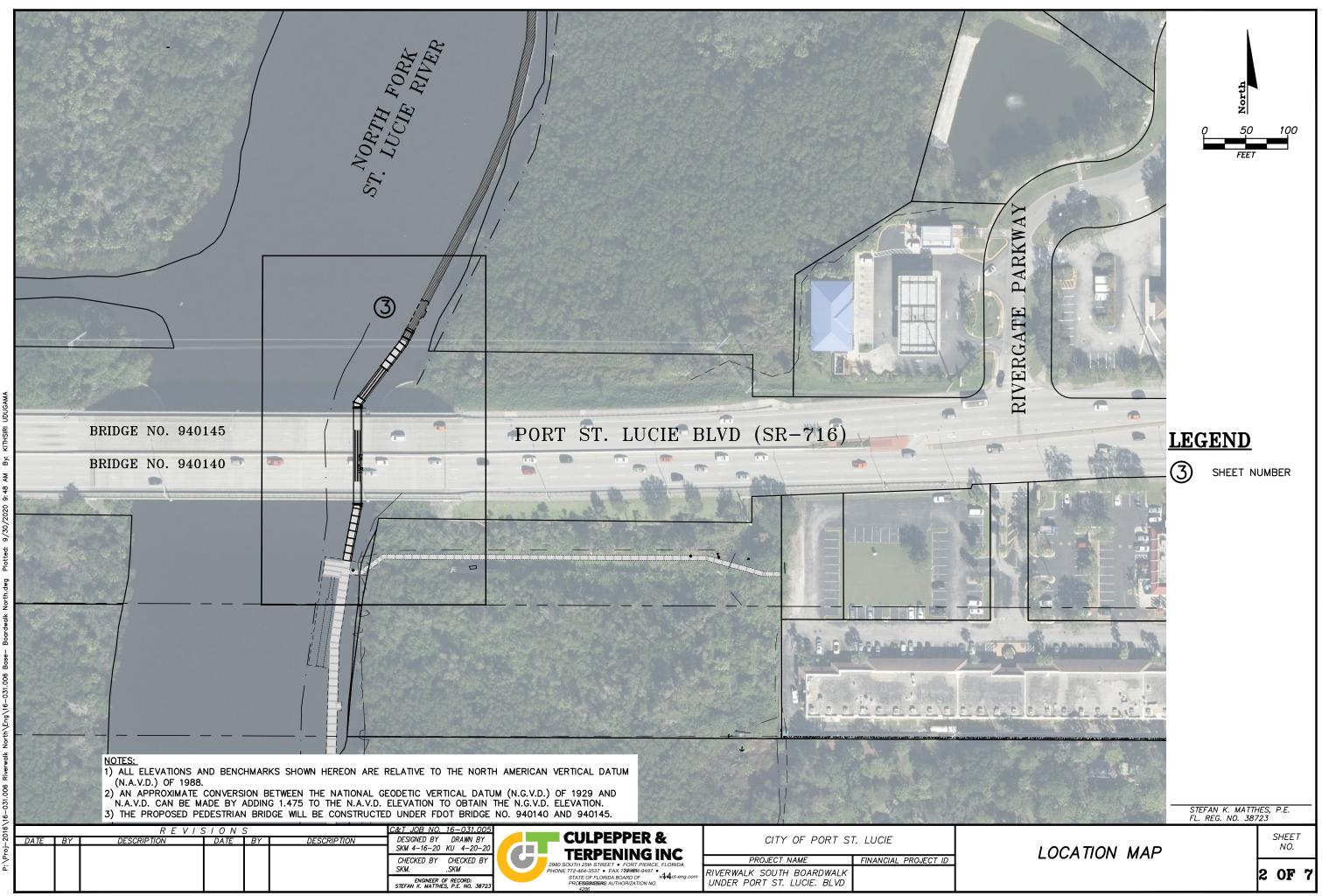
PORT ST. LUCIE

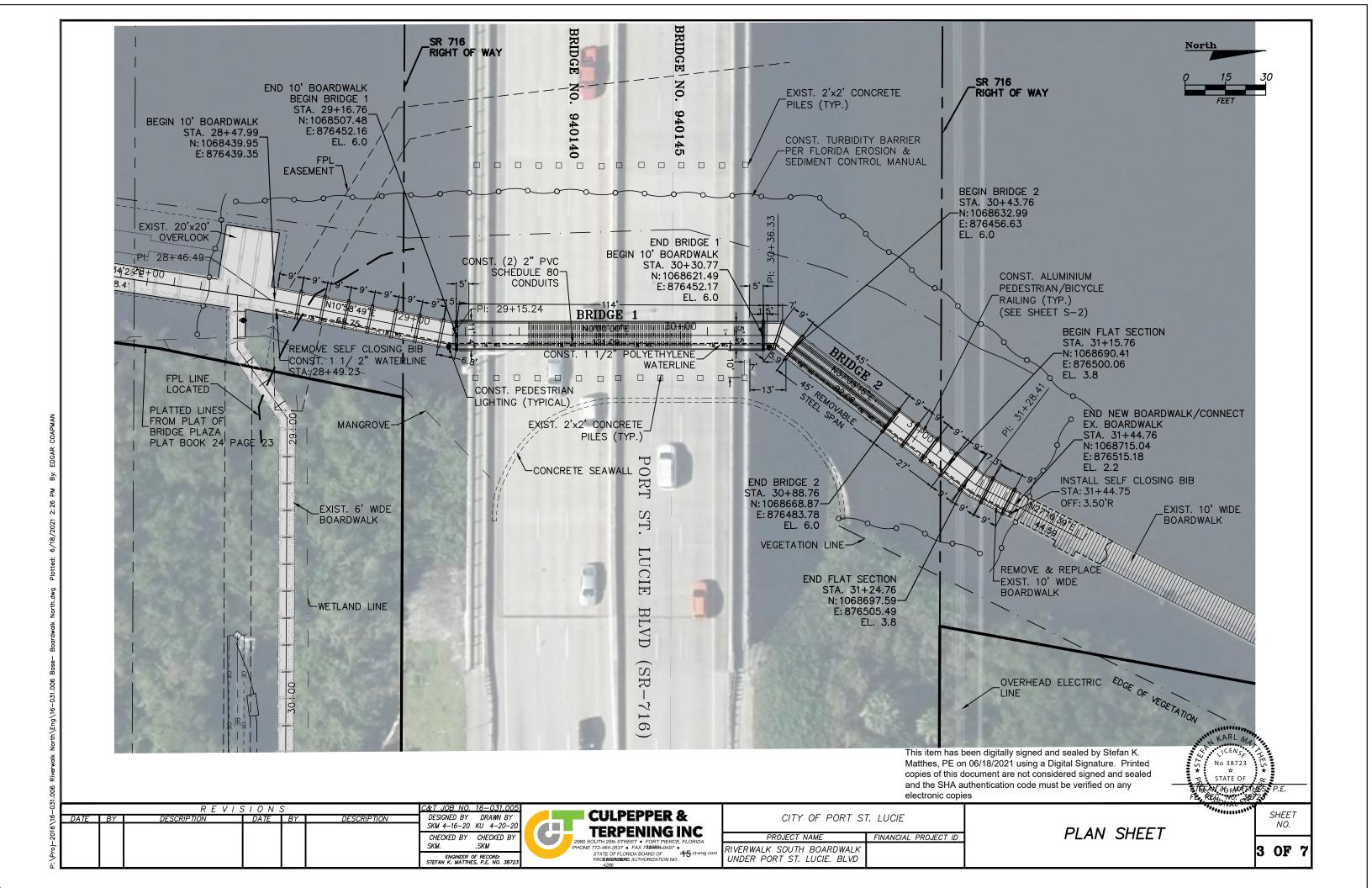
LAUDERDALE

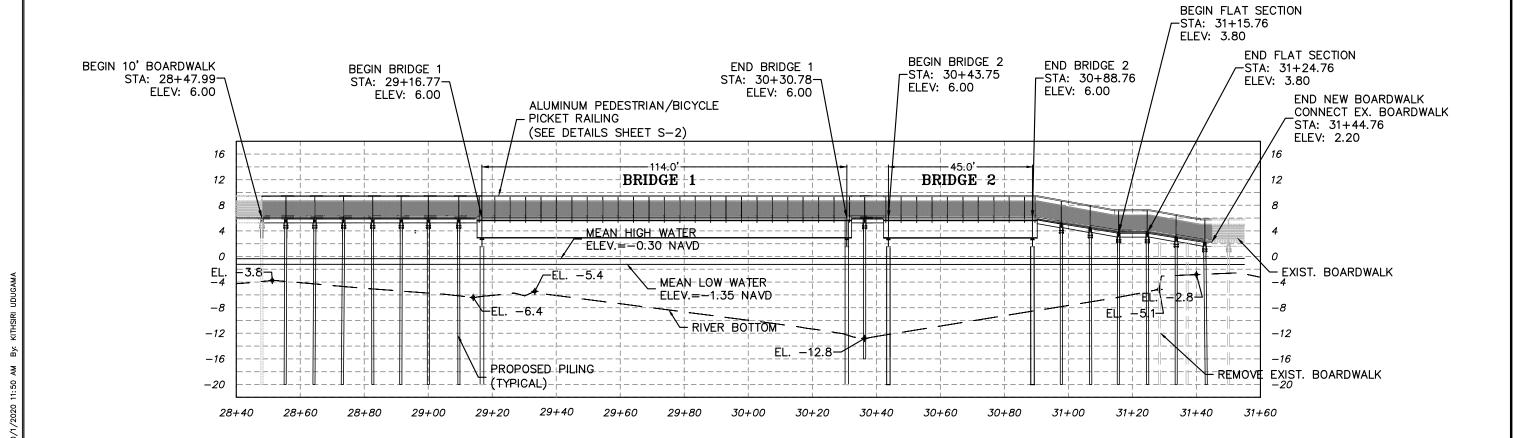
SECTION 10 TOWNSHIP, 37 SOUTH, RANGE 40 EAST LENGTH OF PROJECT LIN. FT. **MILES** BOARDWALK 152 LF 0.029 0.056 GROSS LENGTH OF PRO

> PROJECT MANAGER: BRAD KEEN

> > 13







NOTE: PILES TO BE DRIVEN IN ACCORDANCE WITH THE GEOTECHNICAL REPORT

> STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

7			C&I JOB NO.					
9	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DESIGNED BY	DRAWN BY
é							SKM 4-16-20	KU 4-20-20
22							CHECKED BY	CHECKED BY
卢							SKM.	.SKM
١							ENGINEER C	
• •							SIEFAN K. MATTHE	S, P.E. NO. 38723



	CITY OF PORT S	T. LUCIE
	PROJECT NAME	FINANCIAL PROJECT ID
m	RIVERWALK SOUTH BOARDWALK UNDER PORT ST. LUCIE. BLVD	

PROFILE SHEET

SHEET NO.

Project Name and location information:	Riverwalk Boardwalk & Westmoreland Park, Section 10,
	Township 37 South, Range 40 East, Port St. Lucie,
	Florida
Describe the nature of the construction activity:	Riverwalk South Boardwalk under Port St. Lucie Blvd
Describe the intended sequence of major soil	• 0-2 days, site prep and stabilized construction
disturbing activities:	entrance;
	• 3-6 days, install perimeter sediment and
	erosion controls;
	• 7-60 days, install stormwater retention basin
	• 7-10 days, clearing/grubbing over all areas
	• 11-90 days, site grading;
	• 90-150 days, install storm sewer and utilities
	• 150-180 days, stabilize site.
Total area of the site:	0.7 ACRES
Total area of the site to be disturbed:	0.7 ACRES
Existing data describing the soil or quality of any	N/A
stormwater discharge from the site:	
Estimate the drainage area size for each discharge points	0.7 ACRES
Latitude and longitude of each discharge point and	1. LAT : 27 deg 16' 11" N LON: 80 deg 19' 08" W
identify the receiving water or North Fork of St. Lucie	Discharges toNorth Fork of the St. Lucie River
River for each discharge point:	
Give a detailed description of all controls, Best Manage	ment Practices (BMPs) and measures that will be

Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented.

NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or

Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP (2007) and any subsequent amendments.

• All installation shall be commenced as depicted on the attached site map and installation "typicals" sheet.

Describe all temporary and permanent stabilization practices. N/A

• Temporary seeding shall be rye grass or other appropriate ground covers depending upon

Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet

protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.

• A floating turbidity barrier to be installed around the proposed boardwalk.

Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres. N/A

No temporary sedimentation basins are proposed. The detention basins (prior to being connected to a discharge structure) may be used as a temporary sediment basin if needed.

Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.

Waste disposal, this may include construction	All construction materials and debris will be
debris, chemicals, litter, and sanitary wastes:	placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials wil be buried on site.
Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down.
The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	N/A
The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Other:	Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of polluted runoff. A small-vegetated berm shall be placed around the washdown area.

Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.

Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent:

- Maintenance shall be performed on the rock entrance when any void spaces are full of sediment.
- Maintain all other areas of the site with proper controls as necessary.
- Floating Turbidity Barriers will be inspected weekly and replaced or adjusted as needed.

Inspections: Describe the inspection and inspection documentation procedures, as required by Part V.D.4. of the permit. Inspections must occur at least once a week and within 24 hours of the end of a storm event that is 0.50 inches or greater (see attached form).

Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days or within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.

Identify and describe all sources of non-stormwater discharges as allowed in Part IV.A.3. of the permit. Flows from fire fighting activities do not have to be listed or described.

It is expected that the following non-stormwater discharges may occur from the site during construction period: $\mathrm{N/A}$

All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:

"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder."

> STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

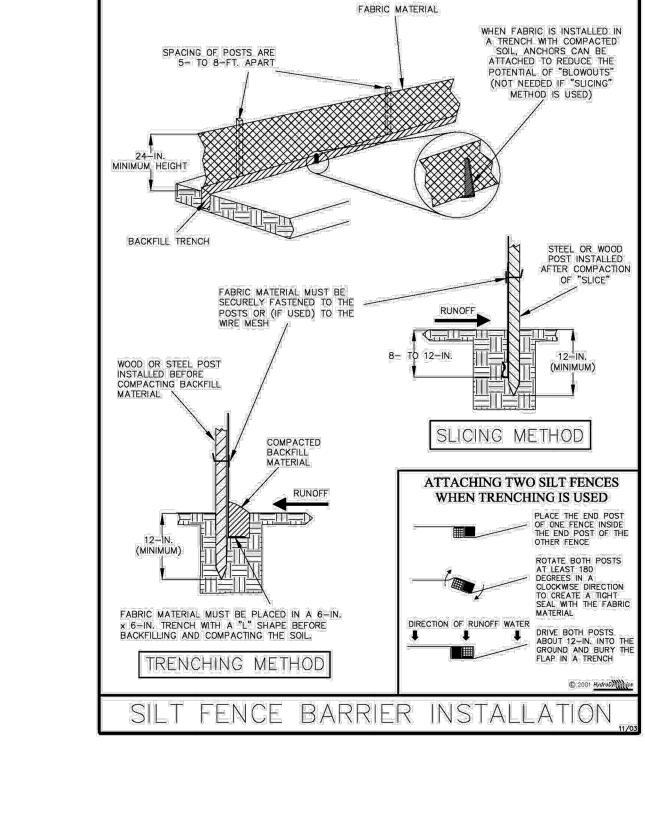
		REVIS	S I O N .	S		C&T JOB NO.	16-031.005
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DESIGNED BY	DRAWN BY KU 4-20-20
						CHECKED BY SKM.	CHECKED BY .SKM
							OF RECORD:

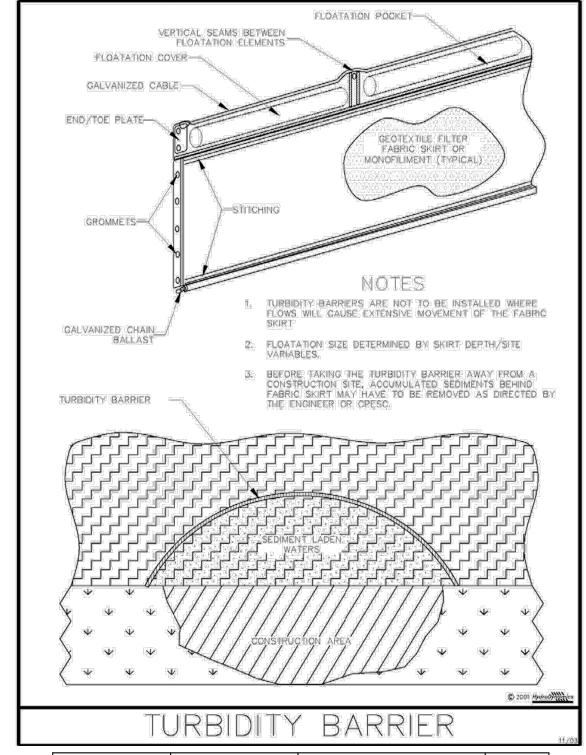


	CITY OF PORT 5	i. LUCIE
	PROJECT NAME	FINANCIAL PROJECT ID
n	RIVERWALK SOUTH BOARDWALK	

OUTY OF DODT OF LUCK

SHEET NO.





Name	Title	Copany Name, Address and Phone Number	Date

STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

REVISIONS

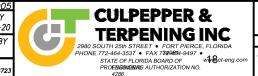
C&T JOB NO. 16-031.005

DATE BY DESCRIPTION DATE BY DESCRIPTION

DESIGNED BY DRAWN BY SKM 4-16-20 KU 4-20-20

CHECKED BY CHECKED BY SKM.

ENGINEER OF RECORD:
STEFAN K. MATTHES, P.E. NO. 38723



	CITY OF PORT S	T. LUCIE
	PROJECT NAME	FINANCIAL PROJECT ID
om	RIVERWALK SOUTH BOARDWALK UNDER PORT ST. LUCIE. BLVD	

SWPPP DETAILS

SHEET NO.

3. POTABLE WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEM

Materials, construction methods, required tests, testing methods and construction tolerances for the wastewater collection and transmission system shall meet the requirements of the current AWWA Specifications, FDEP, and PSLUSD.

- The Contractor and/or construction surveyor shall verify the elevation of the benchmark shown on construction plans. Verify all elevations of existing pavement, stubouts, and structures <u>before</u> starting construction and notify the Engineer if any discrepancy in elevations exist.
- 2. The Contractor is herein advised that "asbuilt drawings" will be performed on the project which will reflect the elevation and location of all structures and improvements on the project.

 These "asbuilt drawings" will be utilized by the Engineer to determine conformance of the project to required tolerances as set forth by permitting and/or approving public agencies.

 Tolerances established by these agencies must be met in order for the project to be accepted for final certification and approval. As Builts shall be in accordance with the Port St. Lucie Utilities Systems Department Standards.
- 3. All construction shall be in accordance with the City of Port St. Lucie Utility Systems Department's Technical Specifications and Construction Standards, latest revision, and with all applicable Florida Department of Environmental Protection Rules and Regulations.
- 4. No field changes or deviations from design are to be made without prior written approval of the Engineer of Record and Port St. Lucie Utilities Systems Department.
- 5. The contractor shall coordinate service grades and location with the Engineer.
- 6. All materials, construction methods, testing and disinfection shall conform to the requirements of the City of Port St. Lucie Utility Systems Department and AWWA current standards.
- 7. PVC Water Main: The Dimension Ration (DR) and Pressure Rating shall be C900, DR-18 (Pressure 6 class 235) for 4" to 12" pipe and C 905, DR-18 (Pressure rating 235) for 14" to 24" pipe. Minimum cover shall be 36 inches, unless otherwise noted. Water mains shall be blue in color.
- 8. Ductile Iron Fittings: Ductile iron fittings shall be used on all PVC C900 & C905 mains. Fittings shall conform to AWWA/ANSI C153/A21.53.06 with a minimum pressure rating of 350 psi. Fittings shall be coated as specified under c.(1) (d) Coating & Linings for DIP. Fittings shall be restrained with restrained joints as per the detail.
- Gate Valve with Box: Valves 2" and larger shall be gray or ductile iron body, conforming to AWWA C509 or C515, with mechanical joints or flanged ends, and shall be equipped with a 2" square gray or ductile iron wrench nut. Valves shall be rated for 250—psi working pressure.
- 10. Water/Sewer lines shall be laid on undisturbed ground, compacted to 98% of maximum density in accordance with AASHTO T-180. Backfill shall be compacted to 98% of maximum density in accordance with AASHTO T-180. The contractor shall submit certified density tests on each 12" lift.

11. The contractor shall contact the Engineer of Record, the appropriate governmental jurisdictional agency and all utility companies at least 48 hours prior to commencement of construction for coordination of any utilities. The contractor shall schedule a pre—construction meeting with the Engineer, Port St. Lucie Utilities Systems Department and the City of Port St. Lucie Engineering Department a minimum of ten (10) working days prior to starting construction.

STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

R E V I S I O N S

DATE BY DESCRIPTION DATE BY DESCRIPTION

DESIGNED BY DRAWN BY SKM 4-16-20 KU 4-20-20

CHECKED BY CHECKED BY SKM.

SKM.

STEFAN K. MATTHES, P.E. NO. 38723



CITY OF PORT ST. LUCIE

PROJECT NAME FINANCIAL PROJECT ID

RIVERWALK SOUTH BOARDWALK
UNDER PORT ST. LUCIE. BLVD

SPECIFICATIONS

SHEET NO.

INDEX OF STRUCTURE PLANS

SHEET NO. GENERAL	SHEET DESCRIPTION
B-1 B-2 B-3 B-4 B-5	KEY SHEET GENERAL NOTES BENTS 1 AND 2 SUPERSTRUCTURE DETAILS BEARING DETAILS
BRIDGE 1	
B1-1 B1-2 B1-3 B1-4 B1-5 B1-6	PLAN AND ELEVATION TYPICAL SECTION THROUGH BRIDGE (1 OF 2) TYPICAL SECTION THROUGH BRIDGE (2 OF 2) DEFLECTION DIAGRAM STEEL GIRDER FRAMING PLAN AND ELEVATIO STEEL GIRDER DETAILS
BRIDGE 2	
B2-1	PLAN AND ELEVATION
B2-2 B2-3	TYPICAL SECTION THROUGH BRIDGE DEFLECTION DIAGRAM
B2-4 B2-5	STEEL GIRDER FRAMING PLAN AND ELEVATIO STEEL GIRDER DETAILS

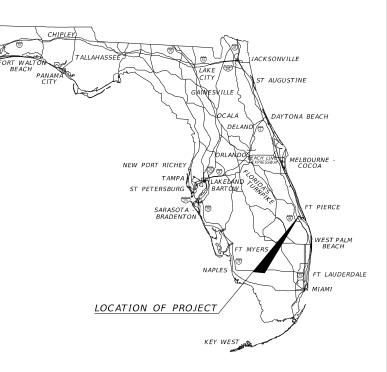
CITY OF PORT ST. LUCIE

CONTRACT PLANS

ST. LUCIE COUNTY

RIVERWALK AND WESTMORELAND PARK





STRUCTURE PLANS ENGINEER OF RECORD:

RICHARD A. HUNTER, P.E.
P.E. NO. 50601

AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
2818 CYPRESS RIDGE BLVD, SUITE 200

WESLEY CHAPEL, FLORIDA 33544

PHONE: (813) 435-2600

CONTRACT NO. C9P99

VENDOR NO. F043682340-001

CERTIFICATE OF AUTHORIZATION NO. 9302

SHEET NO.

B-1

DESIGN SPECIFICATIONS

FDOT Structures Manual dated January 2019.

AASHTO LRFD Bridge Design Specifications, 8th Edition.

AASHTO LRFD Guide Specification for the Design of Pedestrian Bridges, 2nd Edition.

FDOT Design Manual dated January 2020.

GOVERNING STANDARDS AND CONSTRUCTION SPECIFICATIONS

FDOT 2019-2020 Design Standard Plans.

FDOT January 2020 Standard Specifications for Road and Bridge Construction

VERTICAL DATUM

Elevations are based on the North American Vertical Datum (NAVD) of 1988.

ENVIRONMENT

Assumed Extremely Aggressive for both superstructure and substructure. Note that the piles have been design with an assumed sacrificial thickness of 0.30".

DESIGN LOADING

Pedestrian LL: 90 psf

Rail and Post LL: 200 lb + 50 plf

Timber DL: 34.3 pcf

Structural Plastic DL: 65 pcf

Structural Steel DL: 490 pcf

Utility Load: 10 plf on each exterior beam

PLAN DIMENSIONS

- 1. All dimensions in these plans are measured in feet either horizontally or vertically unless otherwise noted.
- 2. All dimensions are given for a mean temperature of 70°F.

STRUCTURAL STEEL

All structural steel, stiffeners, diaphragms, plates and other ancillary items, shall be in accordance with ASTM A709. Grade 50.

CHARPY V-NOTCH

All members subjected to tensile stresses identified as main load-carrying members shall be tested in accordance with Specifications Section 962.

STEEL FABRICATION

Shop assemblies are required in accordance with Section 460 of the Specifications.

CONNECTION

1. Use bolts or screws, as shown, for assembly. Screws shall be countersunk and installed in holes drilled with a countersunk drill bit. Nails may only be used for pre-assembly. All stainless steel connection elements specified in this set of plans shall conform to ASTM F593C or F593D. Use the following material specifications unless noted otherwise:

Bolts: ASTM F3125, Grade A325, Type 1 Nuts: ASTM A563, Grade DH Heavy-Hex

Washers: ASTM F436, Type 1

Nails and Screws: ASTM F593C or F593D stainless steel

- 2. A countersunk stainless steel bolt shall be used for the $\frac{1}{2}$ " \oslash Connection Bolt connecting the Timber Stringers to the steel girder top flanges. A standard stainless steel bolt may be used in leiu of a countersunk bolt provided that a $1\frac{1}{4}$ " \oslash x $\frac{3}{6}$ " deep hole is cored in the top of the stringer where the bolt will be placed such that the bolt head may fully embed into the stringer.
- 3. Bolt holes may be drilled either in the shop or in the field. If they are drilled in the field, steel near the drilled holes shall be touched-up and repaired per Section 560-10 of the Specifications.
- 4. Bolts connecting the Intermediate Aluminum Railing Post to the WT 10.5×31 section and anchor bolts connecting the sole plate to the bent cap shall not be pretensioned.

COATING

Apply an inorganic zinc primer followed by a Type M coal tar epoxy coating to all surfaces of all steel components in accordance with sections 560 and 926 of the FDOT Specifications. The aluminum components of the handrail are not to be coated. Nuts and bolts are to be coated after final tightening of the nuts.

LUMBER

- 1. Lumber sizes shown are nominal sizes. Lumber shall be furnished in sizes meeting the requirements of the American Softwood Lumber Standard, PS20-94. Lumber grade shall be No. 1, in accordance with Standard Specification 952. The decking shall be Structural Plastic (SP). Structural Plastic shall be Fiberglass Fiber Reinforced Composite Lumber (FFRCL) in accordance with FDOT Standard Specification 973.
- 2. All lumber (timber) shall be treated in accordance with FDOT Standard Specification 955-2.2 for wood products on pedestrial bridges.
- 3. The color of the Structural Plastic shall be Color No. 30227 in accordance with Federal Color Standard 595B.

PILES

Pile installation data is provided in the table below:

							PILE C	DATA TAB	LE							
		I	NSTALLATI	ON CRITE	RIA					Ĺ	DESIGN CRI	ITERIA				PILE CUT-OFF ELEVATIONS
BENT NUMBER	PILE SIZE (in.)	NOMINAL BEARING RESISTANCE (tons)	NOMINAL UPLIFT RESISTANCE (tons)	MINIMUM EMBEDMENT DEPTH (ft.)	TEST PILE 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	ALL PILES
Bridge 1 All Bents	HP14x89	60	N/A	35	50	N/A	N/A	39	N/A	N/A	N/A	N/A	N/A	0.65	N/A	1.53
Bridge 2 All Bents	HP14x89	19	N/A	30	45	N/A	N/A	12	N/A	N/A	N/A	N/A	N/A	0.65	N/A	2.62

 $\frac{\textit{Factored Design Load} + \textit{Net Scour Resistance} + \textit{Down Drag}}{\textit{pa}} \leq \textit{Nominal Bearing Resistance}$

PILE INSTALLATION NOTES:

Contractor to verify location of all utilities prior to any pile installation activities.

Minimum Embedment Depth is required for Lateral Stability at all locations and shall meet the requirements of section 455 of the FDOT Specifications.

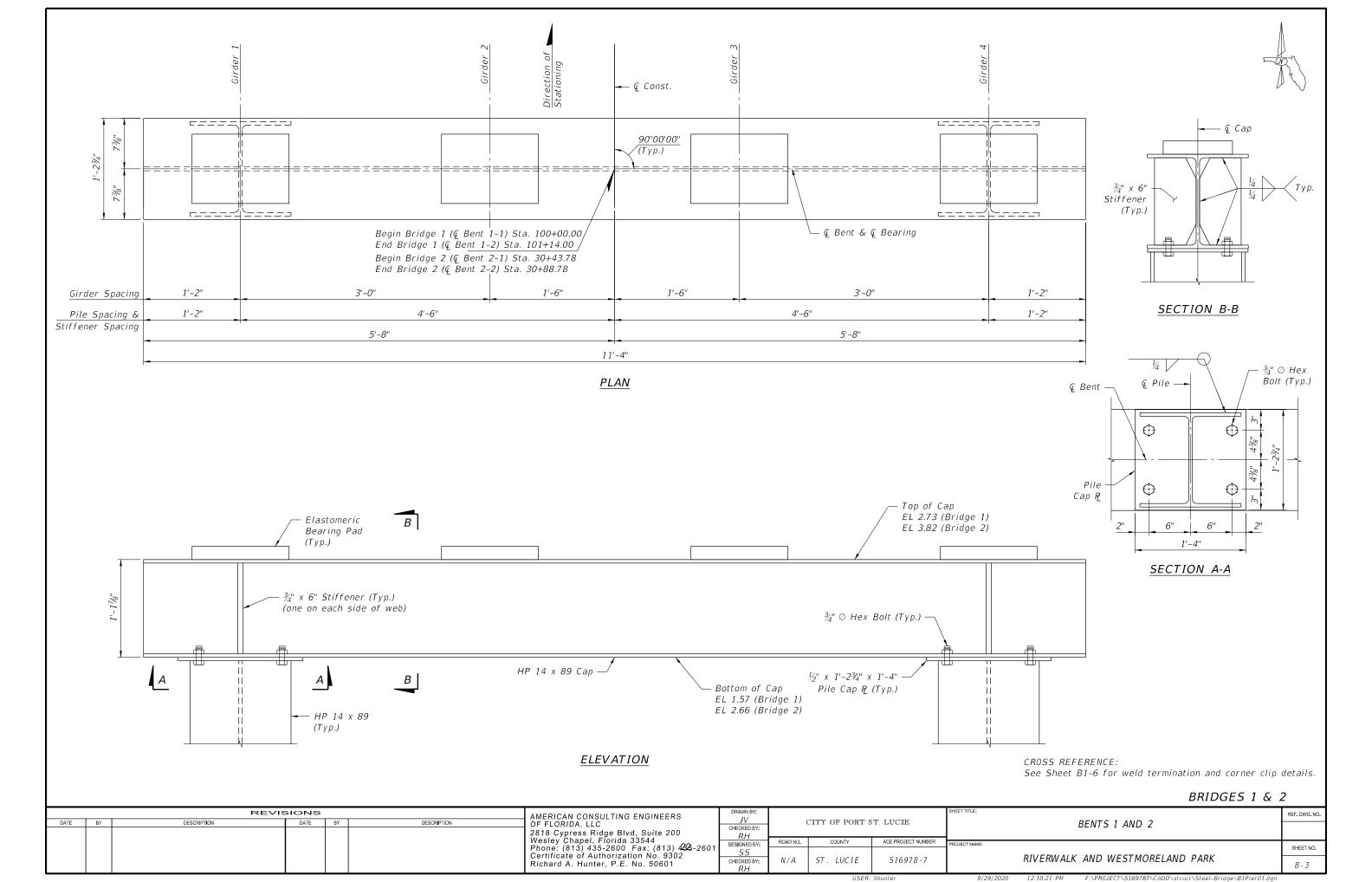
A minimum of 1 test pile must be installed at each bent.

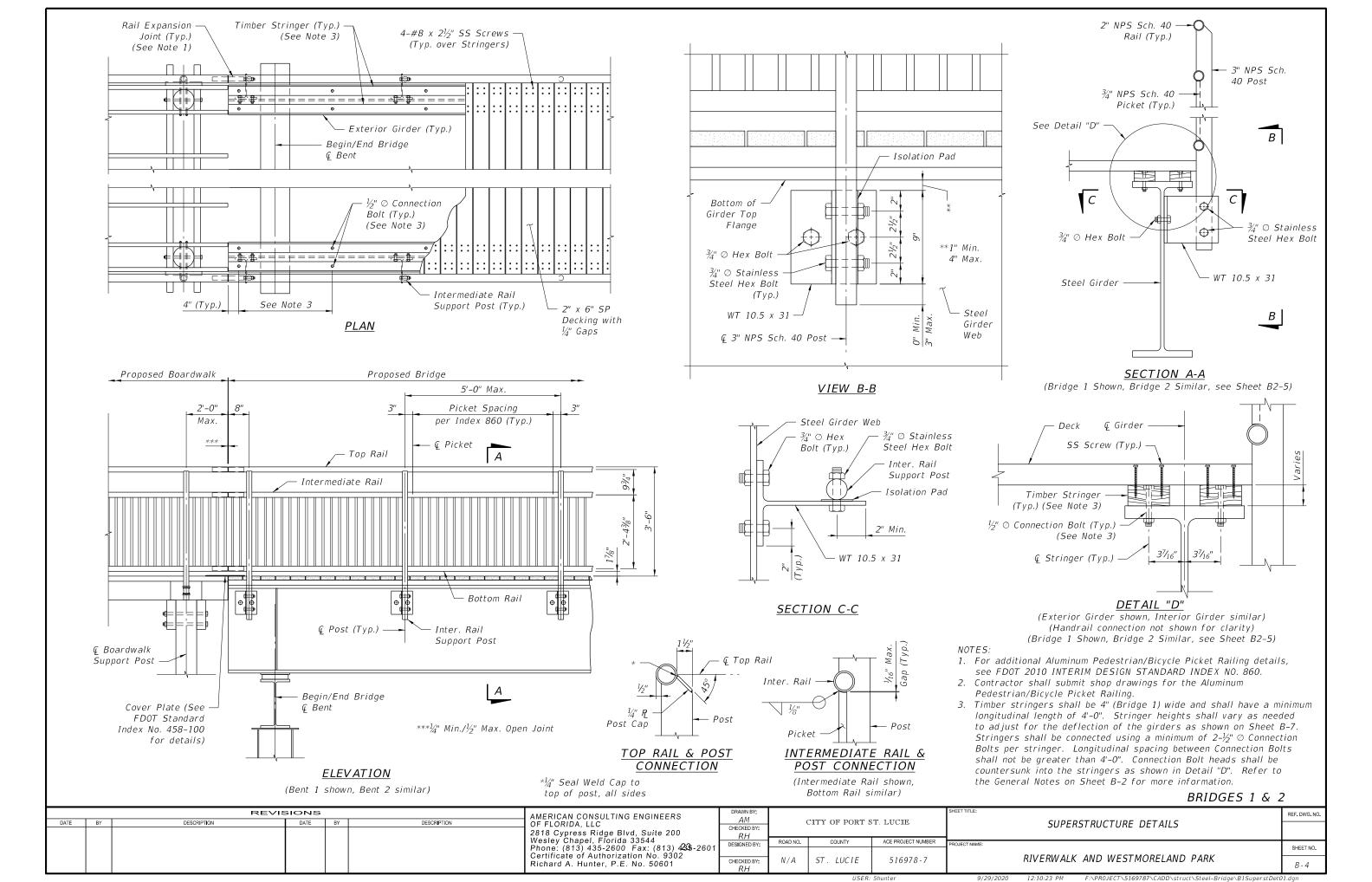
Pile heads shall be cut-off at a constant elevation so that the bottom of the bent cap lies flush against the pile cap plates after they are attached to each pile head.

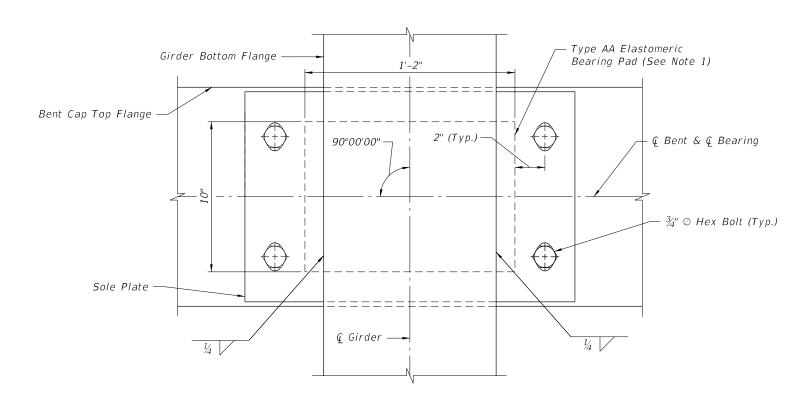
No jetting will be allowed without the approval of the Engineer.

BRIDGES 1 & 2

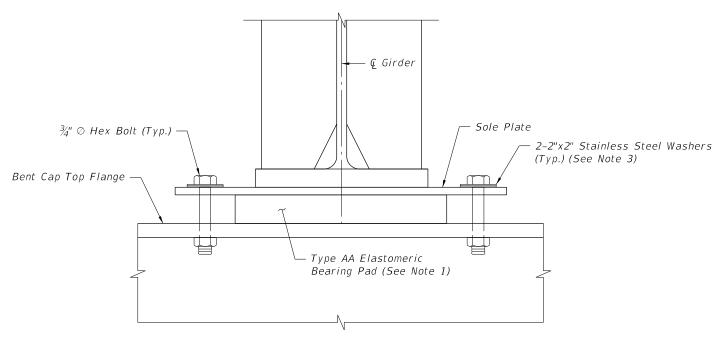
	REVI	SIONS	;		AMERICAN CONSULTING ENGINEERS	DRAWN BY:				SHEET TITLE:		REF. DWG. NO.
DATE BY	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC	JV / AM CHECKED BY:	-	CITY OF PORT S	T. LUCIE		GENERAL NOTES	
					2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544	RH	ROAD NO.	COUNTY	ACE PROJECT NUMBER			
					Phone: (813) 435-2600 Fax: (813) 426-2601 Certificate of Authorization No. 9302	DESIGNED BY:	ROAD NO.	COUNTY	AGE PROJECT NOMBER	PROJECT NAME:		SHEET NO.
					Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7		RIVERWALK AND WESTMORELAND PARK	B - 2



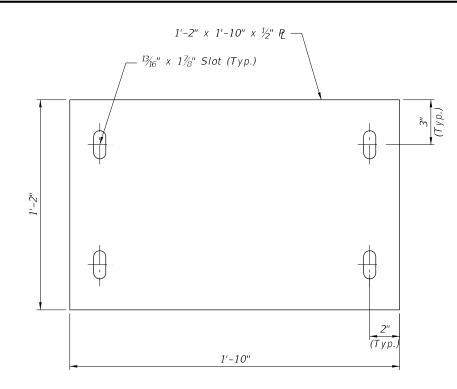




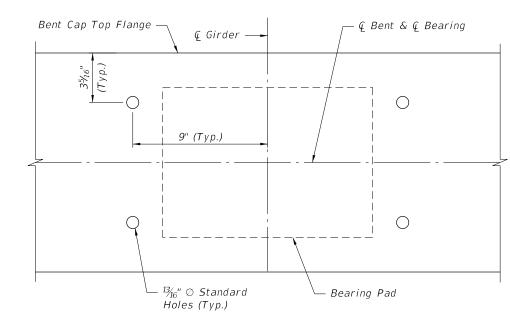
BEARING AND SOLE PLATE PLAN



BEARING AND SOLE PLATE ELEVATION



SOLE PLATE DETAIL



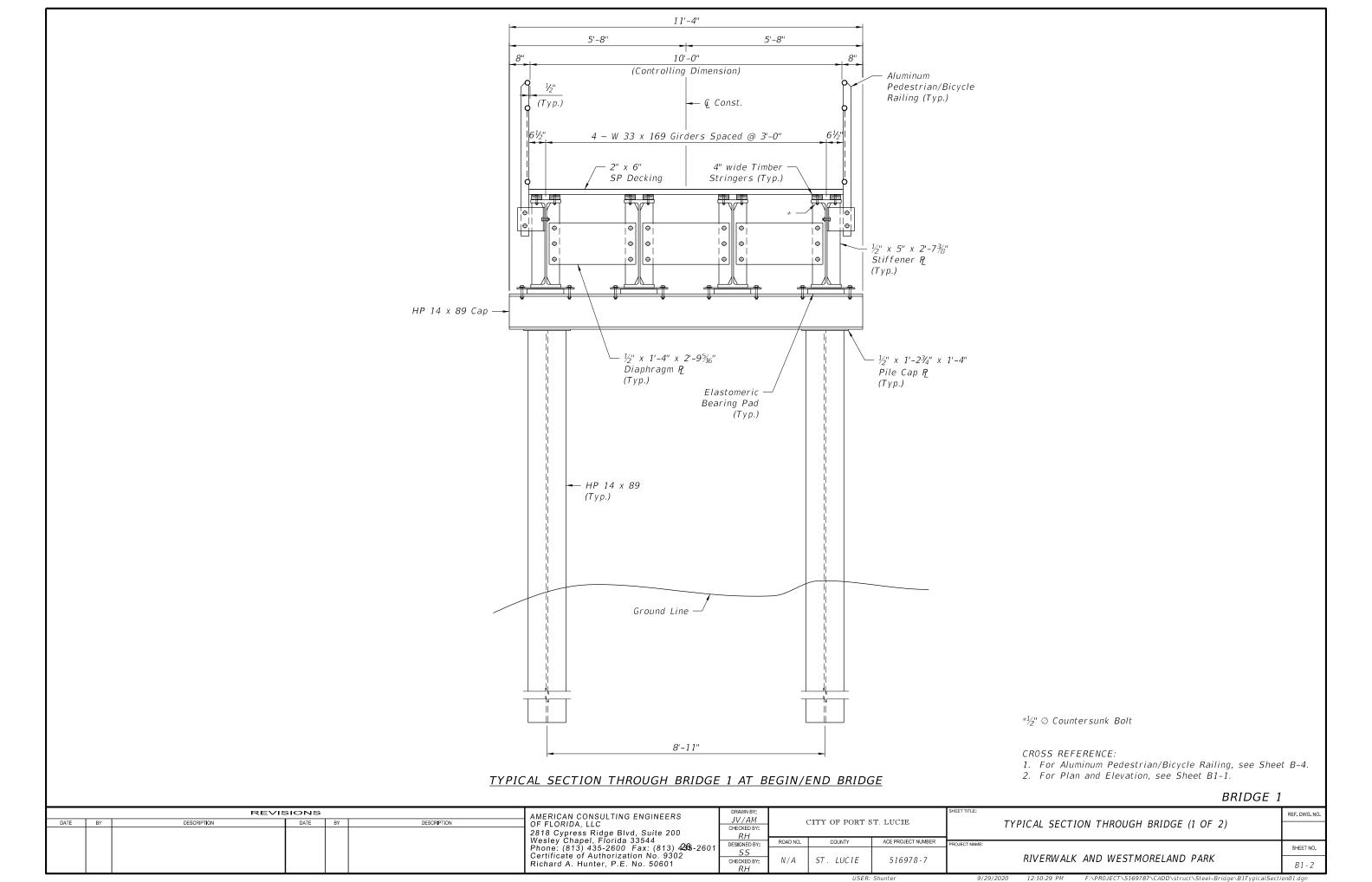
BENT CAP DETAIL BELOW BEARING

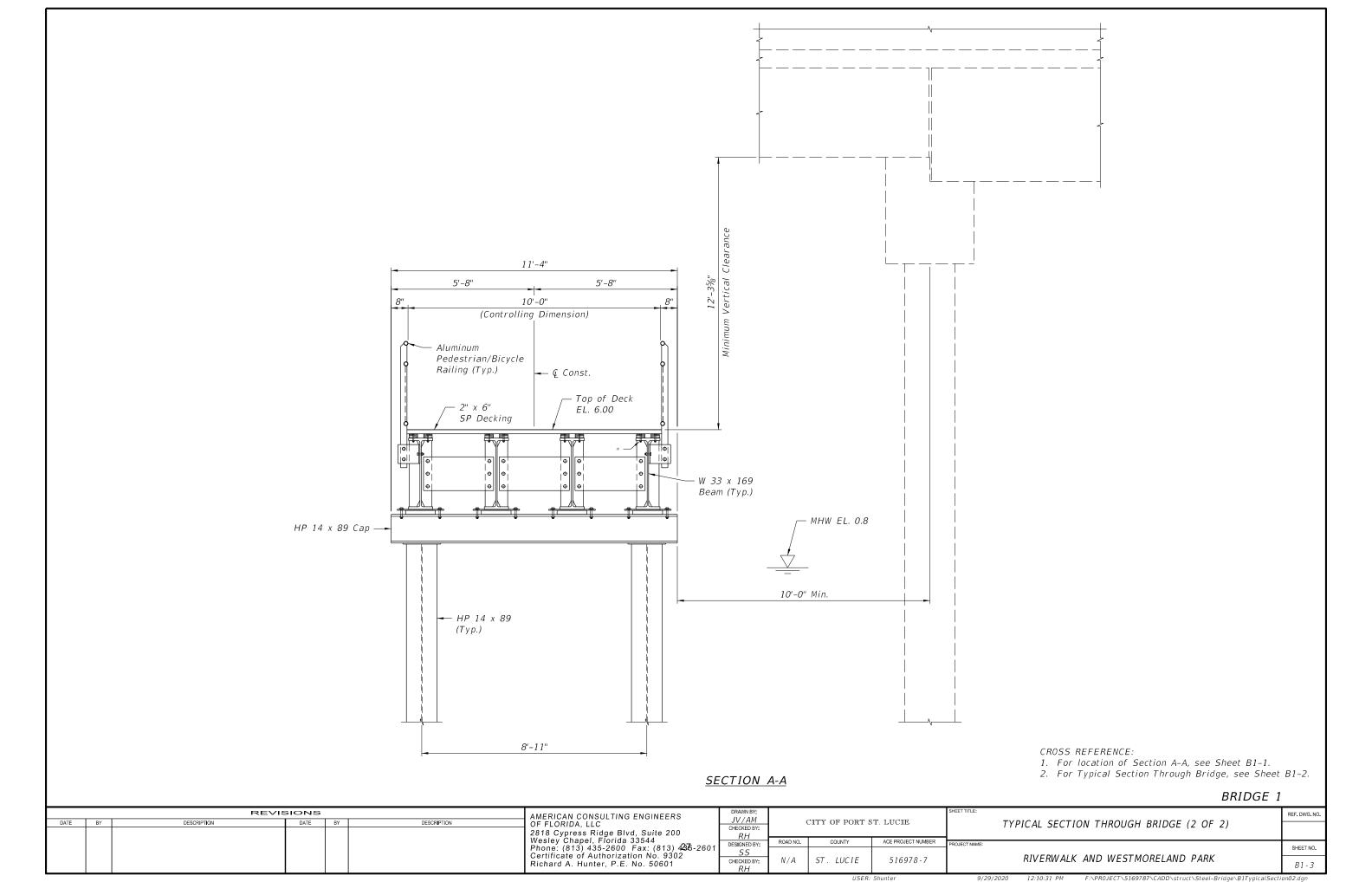
NOTES:

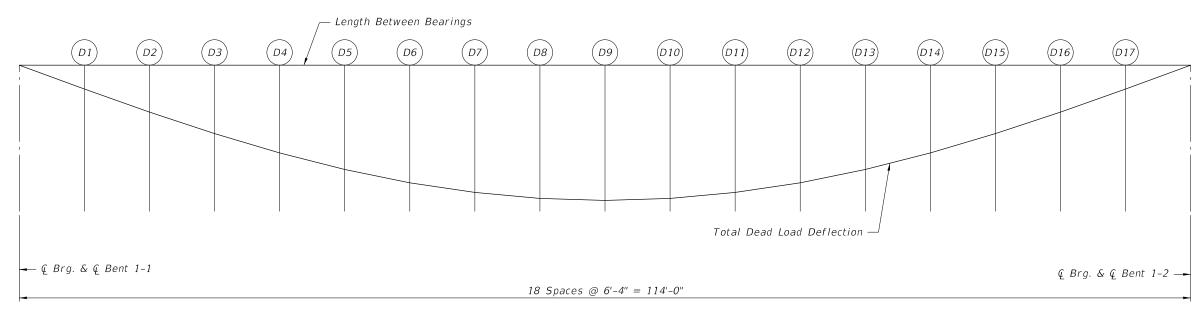
- Refer to FDOT Standard Index No. 400-510 for further details regarding Type AA bearing pads.
 Hex Bolts shall be centered in the slots at 70°F during installation. Adjust 0.045" per 10°F difference from 70°F.
- 3. Use two square 2" x 2" Stainless Steel Washers between $\frac{3}{4}$ " Hex Bolt & Sole Plate. Tack weld top washer to head of bolt and tack weld bottom washer to sole plate.

BRIDGES 1 & 2

		REVI	SIONS			AMERICAN CONSULTING ENGINEERS	DRAWN BY:				Sheet ITILE:	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC	CHECKED BY:		CITY OF PORT S	ST. LUCIE	BEARING DETAILS	
						2818 Cypress Ridge Blvd, Suite 200	RH				_	
						Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 4245-2601	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:	SHEET NO.
						Certificate of Authorization No. 9302	55			546070 7	RIVERWALK AND WESTMORELAND PARK	SHEET NO.
						Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7	TIVENWALK AND WEST MORELAND PARK	B - 5







BENT 1-1

BENT 1-2

STEEL GIRDER DEFLECTION DUE TO DEAD LOAD

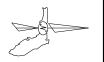
(Along & Girders)

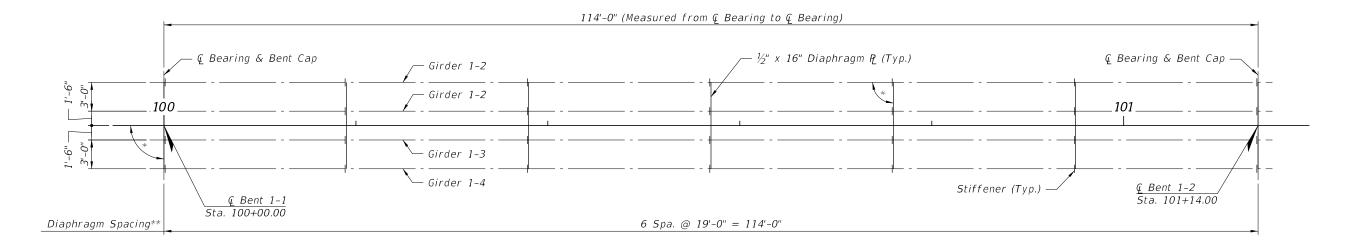
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\											SPAN 1									
GIRDE	DEFLECTION DATA	Q Bent 1-1	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	Q Bent 1-2
	Steel DL	0.000	0.445	0.875	1.275	1.634	1.941	2.189	2.370	2.481	2.518	2.481	2.370	2.189	1.941	1.634	1.275	0.875	0.445	0.000
A/	Composite DL	0.000	0.100	0.196	0.286	0.367	0.436	0.491	0.532	0.557	0.565	0.557	0.532	0.491	0.436	0.367	0.286	0.196	0.100	0.000
	Total DL	0.000	0.545	1.071	1.561	2.000	2.377	2.680	2.902	3.038	3.084	3.038	2.902	2.680	2.377	2.000	1.561	1.071	0.545	0.000

CAMBER NOTES:

- 1. All deflection ordinates are given in inches.
- 2. Steel DL Includes the dead load due to the steel girder, stiffeners, diaphragms and other miscellaneous steel items.
- 3. Composite DL Includes the superimposed dead load consisting of the railings, deck, and any other superstructure materials not included with the steel dead load defined above.
- 4. This bridge is not on a vertical curve, therefore no vertical curve deflection values are required.
- 6. Positive deflections are downward.
- 7. Longitudinal dimensions are measured from a chord between centerline of bearings.
- 8. 4" wide Timber Stringers shall be placed between the top of the girder and the bottom of the deck to ensure that the deck elevation remains constant as shown on Sheet B1-1 and does not follow the shape of the deflected girder. The bottom of the stringer shall be flush with the top flange of the girder while the top of the stringer is flush with the bottom of the deck. See Sheet B-4 for more information regarding the stringers.

			REVIS	SIONS	3	AMERICAN CONSULTING ENGINEERS	DRAWN BY:					REF. DWG. NO.
D	ATE B	BY	DESCRIPTION	DATE	BY DESCRIPTION	OF FLORIDA, LLC	CHECKED BY:		CITY OF PORT S	T. LUCIE	DEFLECTION DIAGRAM	
				1		2818 Cypress Ridge Blvd, Suite 200	RH				_	
				i .		Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:	SHEET NO.
				l .		Certificate of Authorization No. 9302	55				DIVEDIMALK AND INFCTMODELAND DADK	OHEET NO.
				l		Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7	RIVERWALK AND WESTMORELAND PARK	B1 - 4





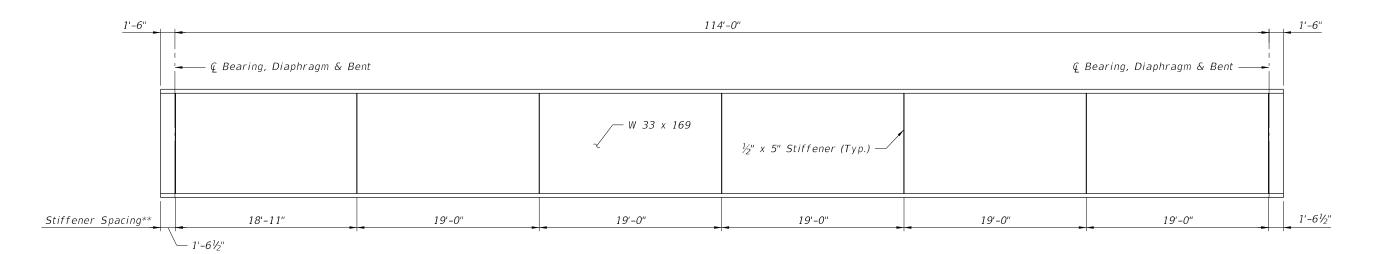
FRAMING PLAN

*90°00'00" (Typ.)
**All diaphragm and stiffener spacings given to $\c C$ Diaphragm and $\c C$ Stiffener, respectively.

- 1. All stiffeners are on each side of the girder web.
- 2. All dimensions shown are horizontal and measured along & Girder.

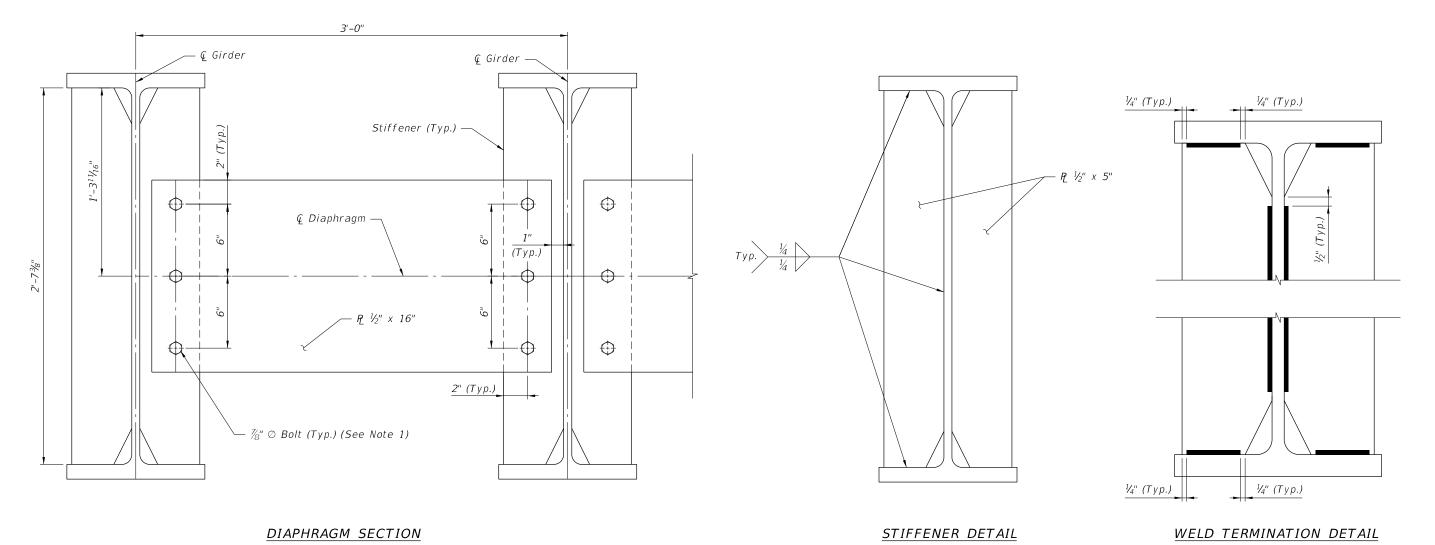
CROSS REFERENCE:

For girder details, see Sheet B1-6.



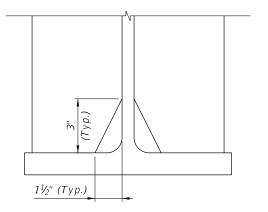
TYPICAL GIRDER ELEVATION

		REVIS	SIONS			AMERICAN CONSULTING ENGINEERS	DRAWN BY:				SHEET TITLE:		REF. DWG. NC	ა.
DATE B'	Y	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200	CHECKED BY:		CITY OF PORT S	ST. LUCIE		STEEL GIRDER FRAMING PLAN AND ELEVATION		
						Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 4295-2601 Certificate of Authorization No. 9302	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:		SHEET NO.	
						Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7		RIVERWALK AND WESTMORELAND PARK	B1-5	٦



(Exterior Bay Shown, Interior Bay Similar)





CORNER CLIP DETAIL

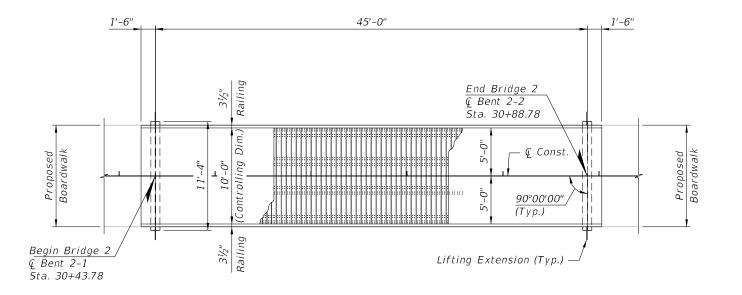
All bolt holes are standard with a $^{15}\!\!/_6$ " \odot . Bolts shall be High–Strength ASTM A325.

CROSS REFERENCE:

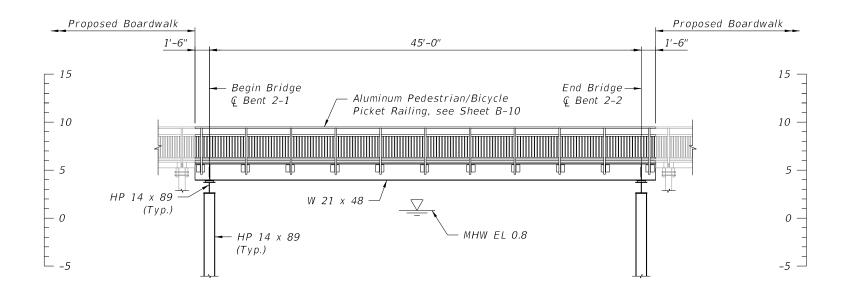
For locations of cross frames and stiffeners, see Sheet B1-5.

	REVIS	SIONS			AMERICAN CONSULTING ENGINEERS	DRAWN BY:		_		SHEET TITLE:		REF. DWG. NO.
DATE	BY DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC	CHECKED BY:		CITY OF PORT S	T. LUCIE		STEEL GIRDER DETAILS	
					2818 Cypress Ridge Blvd, Suite 200 Weslev Chapel, Florida 33544	RH		1		1		
					Phone: (813) 435-2600 Fax: (813) 4305-2601	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:		SHEET NO.
					Certificate of Authorization No. 9302	55					DIVEDIMALK AND INFCTMODELAND DADK	STILLT NO.
					Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7		RIVERWALK AND WESTMORELAND PARK	B1-6





PLAN



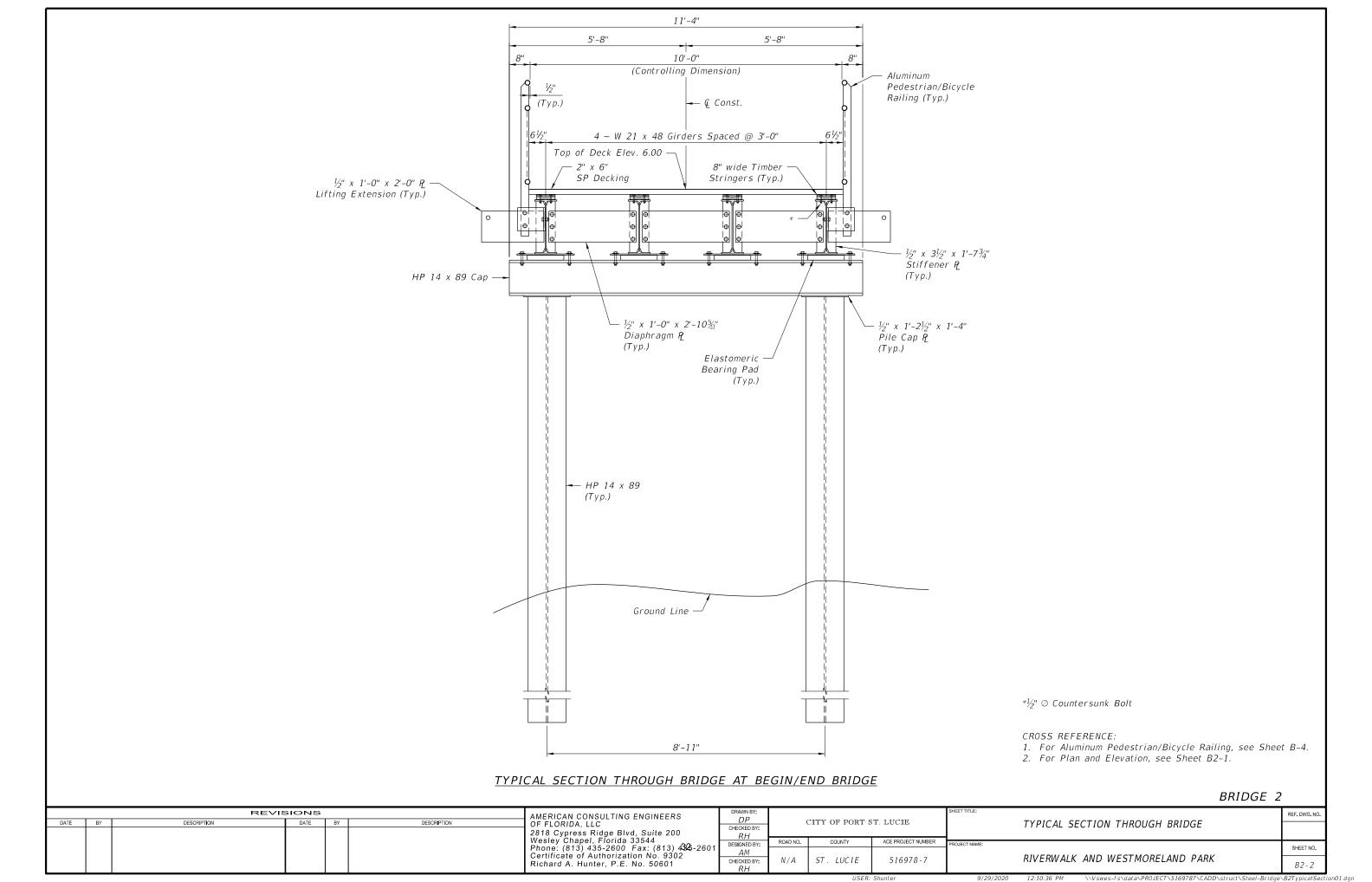
CROSS REFERENCE:

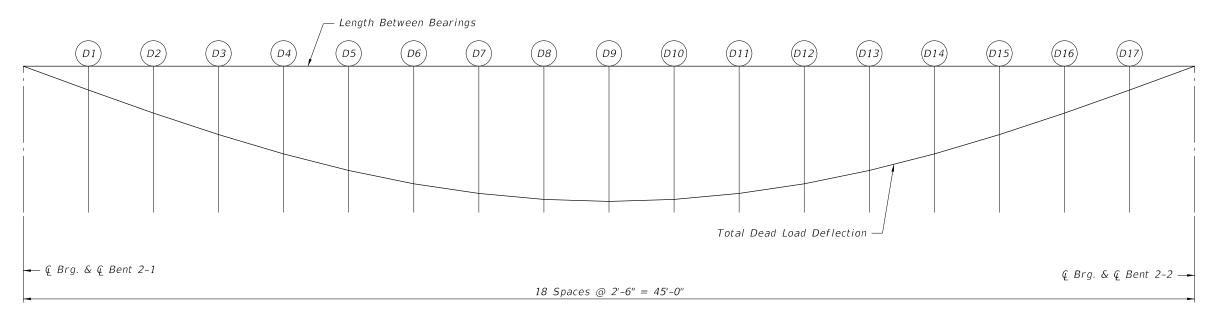
1. For Typical Section, see Sheet B2-2.

BRIDGE 2

DATE BY DESCRIPTION DATE BY DESCRIPTION OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2600 Fax			REVI	SIONS	;		AMERICAN CONSULTING ENGINEERS	DRAWN BY:				SHEET TITLE:		REF. DWG. NO.
Phone: (813) 435-2600 Fax: (813) 435-2601 DESIGNED BY: Certificate of Authorization No. 9302 N/A ST LUCIE 516078 7 RIVERWALK AND WESTMORELAND PARK	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200	CHECKED BY:	•	CITY OF PORT S	T. LUCIE		PLAN AND ELEVATION	
							Phone: (813) 435-2600 Fax: (813) 435-2601	4.84	ROAD NO.		AGE THOSE OF HOMBER	PROJECT NAME:		SHEET NO.
									N/A	ST. LUCIE	516978-7		RIVERWALK AND WESI MORELAND PARK	B2 - 1

ELEVATION





BENT 2-1

BENT 2-2

STEEL GIRDER DEFLECTION DUE TO DEAD LOAD

(Along & Girders)

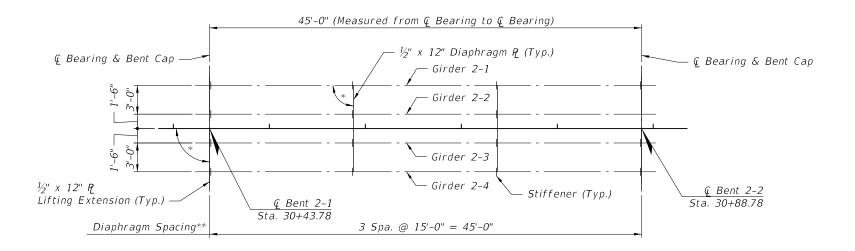
8											SPAN 1									
GIRDE	DEFLECTION DATA	Q Bent 2-1	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	Q Bent 2-2
	Steel DL	0.000	0.035	0.069	0.101	0.129	0.153	0.173	0.187	0.196	0.199	0.196	0.187	0.173	0.153	0.129	0.101	0.069	0.035	0.000
A	Composite DL	0.000	0.022	0.043	0.062	0.080	0.095	0.107	0.166	0.121	0.123	0.121	0.166	0.107	0.095	0.080	0.062	0.043	0.022	0.000
	Total DL	0.000	0.057	0.112	0.163	0.209	0.248	0.280	0.303	0.318	0.322	0.318	0.303	0.280	0.248	0.209	0.163	0.112	0.057	0.000

CAMBER NOTES:

- 1. All deflection ordinates are given in inches.
- 2. Steel DL Includes the dead load due to the steel girder, stiffeners, diaphragms and other miscellaneous steel items.
- 3. Composite DL Includes the superimposed dead load consisting of the railings, deck, and any other superstructure materials not included with the steel dead load defined above.
- 4. This bridge is not on a vertical curve, therefore no vertical curve deflection values are required.
- 6. Positive deflections are downward.
- 7. Longitudinal dimensions are measured from a chord between centerline of bearings.
- 8. 8" wide Timber Stringers shall be placed between the top of the girder and the bottom of the deck to ensure that the deck elevation remains constant as shown on Sheet B2-1 and does not follow the shape of the deflected girder. The bottom of the stringer shall be flush with the top flange of the girder while the top of the stringer is flush with the bottom of the deck. See Sheet B2-5 for more information regarding the stringers.

	REVIS	SIONS		AMERICAN CONSULTING ENGINEERS	DRAWN BY:				SHEET TITLE:		REF. DWG. NO.
DATE	BY DESCRIPTION	DATE BY	DESCRIPTION	OF FLORIDA, LLC	CHECKED BY:	(CITY OF PORT S	T. LUCIE		DEFLECTION DIAGRAM	
				2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544	RH	DOADAIO	COLINEY	ACE PROJECT NUMBER	<u> </u>		
				Phone: (813) 435-2600 Fax: (813) 4335-2601	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:		SHEET NO.
				Certificate of Authorization No. 9302 Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7		RIVERWALK AND WESTMORELAND PARK	B2 - 3





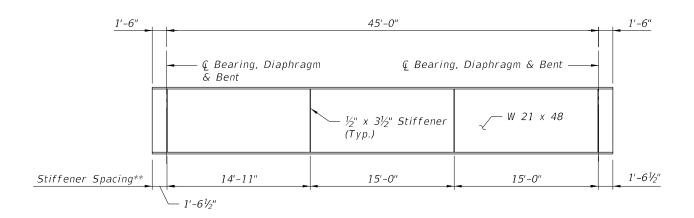
FRAMING PLAN

*90°00'00" (Typ.) **All diaphragm and stiffener spacings given to $\c C$ Diaphragm and $\c C$ Stiffener, respectively.

- 1. All stiffeners are on each side of the girder web.
- 2. All dimensions shown are horizontal and measured along & Girder.

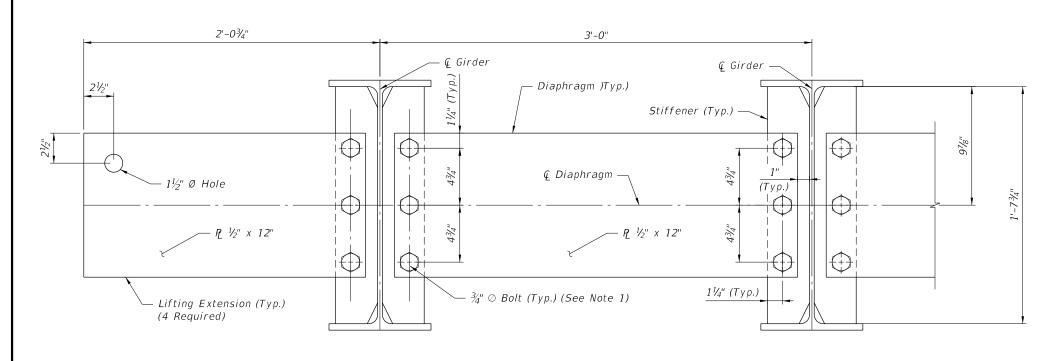
CROSS REFERENCE:

For girder details, see Sheet B2-5.



TYPICAL GIRDER ELEVATION

	REVISIONS	AMERICAN CONSULTING ENGINEERS	DRAWN BY:				SHEET TITLE:		REF. DWG. NO.
DATE	BY DESCRIPTION DATE BY DESCRIPTION	OF FLORIDA, LLC	CHECKED BY:	CITY OF PORT ST. LUCIE		ST. LUCIE		STEEL GIRDER FRAMING PLAN AND ELEVATION	
		2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544	RH DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:		
		Phone: (813) 435-2600 Fax: (813) 4345-2601 Certificate of Authorization No. 9302	AM				T NOCEOT WANTE.	DIVEDIMALK AND INFECTMODELAND DADK	SHEET NO.
		Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7		RIVERWALK AND WESTMORELAND PARK	B2 - 4



P2 1/2" x 31/2"

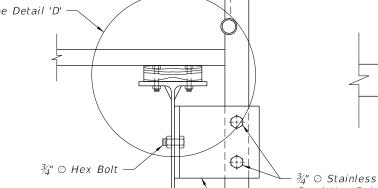
STIFFENER DETAIL

(Bolt Holes Not Shown)

DIAPHRAGM SECTION

(Exterior Bay Shown, Interior Bay Similar)

NOTE: All bolt holes are standard with a $\frac{13}{16}$ " \odot . Bolts shall be High-Strength ASTM A325. See Detail 'D' -

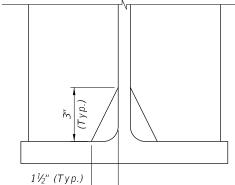


SECTION A-A

Timber Stringer (Typ.) (See Note 1) ½" ⊘ Connection Bolt (Typ.) (See Note 1) Steel Hex Bolt

Deck

SS Screw (Typ.) -



½" (Typ.)

½" (Typ.)

1/4" (Typ.)

WELD TERMINATION DETAIL

CORNER CLIP DETAIL

1. Timber stringers shall be 8" wide and shall have a minimum longitudinal length of 4'-0". Stringer heights shall vary as needed to adjust for the deflection of the girders as shown on Sheet B2-3. Stringers shall be connected using a minimum of $2-\frac{1}{2}$ " \odot Connection Bolts per stringer. Longitudinal spacing between Connection Bolts shall not be greater than 4'-0". Connection Bolt heads shall be countersunk into the stringers as shown in Detail "D". Refer to the General Notes on Sheet B-2 for more information.

WT 10.5 x 31

DETAIL "D"

⊈ Girder —

(Exterior Girder shown, Interior Girder similar) (Handrail connection not shown for clarity)

- 1. For locations of cross frames and stiffeners, see Sheet B2-4.
- 2. Work Handrail Connection Details, Section A-A and Detail 'D' with Sheet B-4.

BRIDGE 2

Varies

		REVI	REVISIONS				AMERICAN CONSULTING ENGINEERS DRAWN BY:				SHEET TITLE:	
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC 2818 Cypress Ridge Blvd. Suite 200	CHECKED BY:		CITY OF PORT ST. LUCIE		STEEL GIRDER DETAILS	
						Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:	SHEET NO.
						Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	516978-7	RIVERWALK AND WESTMORELAND PARK	B2-5

Steel Girder

NOTES:

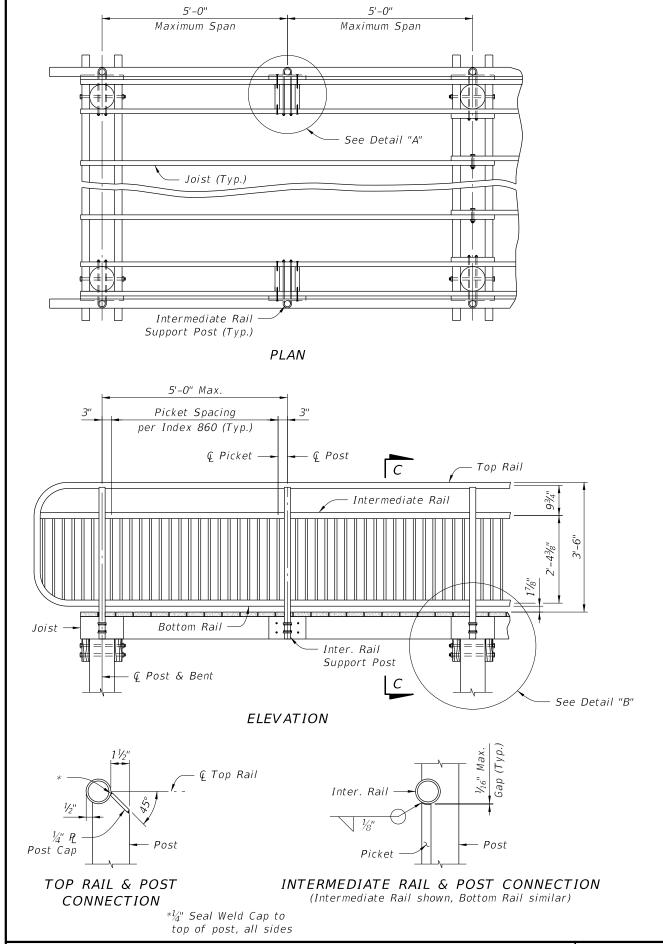
- 1. Specifications: Designed in accordance with:
 - AASHTO LRFD Bridge Design Specifications, 7th Edition
 - AASHTO LRFD Guide Specification for the Design of Pedestrian Bridges, 2nd Edition
- 2. Lumber sizes shown are nominal sizes. Lumber shall be furnished in sizes meeting the requirements of the American Softwood Lumber Standard, PS20-94. Lumber grade shall be No. 1, in accordance with Standard Specification 952. The decking and railing cap shall be Structural Plastic (SP). Structural Plastic shall be Fiberglass Fiber Reinforced Composite Lumber (FFRCL) in accordance with FDOT Standard Specification 973.
- 3. Design Loading:

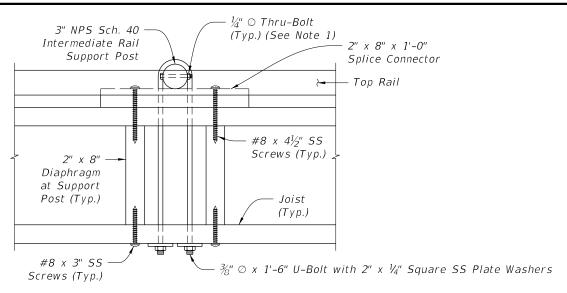
Pedestrian LL: 90 psf Rail and Post LL: 200 lb + 50 plf Timber DL: 34.3 pcf Structural Plastic DL: 65 pcf Maximum Deck Weight: 8.13 psf

- 4. All lumber (Timber & Post) shall be treated in accordance with FDOT Standard Specification 955. All posts shall receive treatment as required for piling. All posts, except those for the boat dock, shall be treated with Chromated Copper Arsenate (CCA) in accordance with FDOT Standard Specification 955-2.1. All other timber, including boat dock posts, shall be treated in accordance with FDOT Standard Specification 955-2.2 for wood products of pedestrian bridges. All posts shall be wrapped with a high density polyethylene material that has a minimum thickness of 0.03". The seams of the wrap shall use a 6" minimum overlap with 1½" stainless steel ring-shank roofing nails spaced every 2" along entire length of seam. The wrap shall extend from the mudline to the mean high water of approximately EL. 2.0.
- 5. Use bolts or screws, as shown, for assembly of the boardwalk. All bolt assemblies shall have washers under both the bolt head and nuts. Screws shall be countersunk and installed in holes drilled with a countersunk drill bit. Nails may only be used for pre-assembly as shown. All fasteners, including bolts, nuts, washers, screws, nails and plate washers, shall be ASTM F593C or F593D stainless steel.
- 6. Details for these standards are shown for straight sections only. Moderately curved (R > 1300') boardwalks shall use chorded sections and variable decking spacing. For smaller radius curves, (R > 350') wedge blocks at joist splices, mitered handrail splices and tapered decking at interior supports will be required for turns at interior bents.
- 7. The color of the Structural Plastic shall be Color No. 30227 in accordance with Federal Color Standard 595B.
- 8. Lengths of U-bolts are measured from the inner diameter to the end of bolt (End to end of bolt minus one bolt diameter). Lengths of all bolts given in this set of plans assusume a maximum 8" post diameter and may not be sufficient for post diameters over 8". The contractor shall verify that the lengths of all bolts are sufficient prior to ordering bolts.

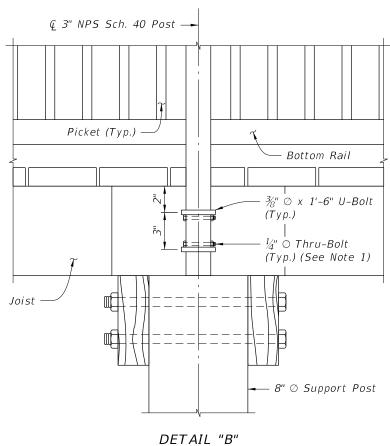
L														
	REVISIONS						AMERICAN CONSULTING ENGINEERS	DRAWN BY:				SHEET TITLE:		REF. DWG. NO.
	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC	JV/RR/CB CHECKED BY:		CITY OF PORT S	T. LUCIE		GENERAL NOTES	—
							2818 Cypress Ridge Blvd, Suite 200	RH						
							Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:		SHEET NO.
							Certificate of Authorization No. 9302	AM		CT LUCIE	5160707		RIVERWALK AND WESTMORELAND PARK	OFFICE THO.
							Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	SI. LUCIE	5169787		NIVERWALK AND WESTMONELAND PANK	5 - 1

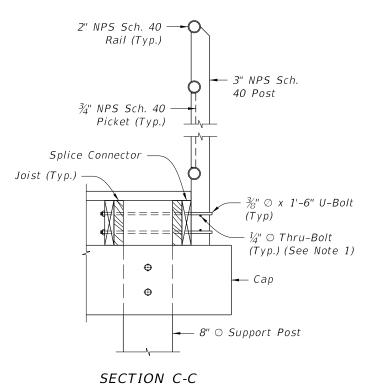
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DETAIL "A"



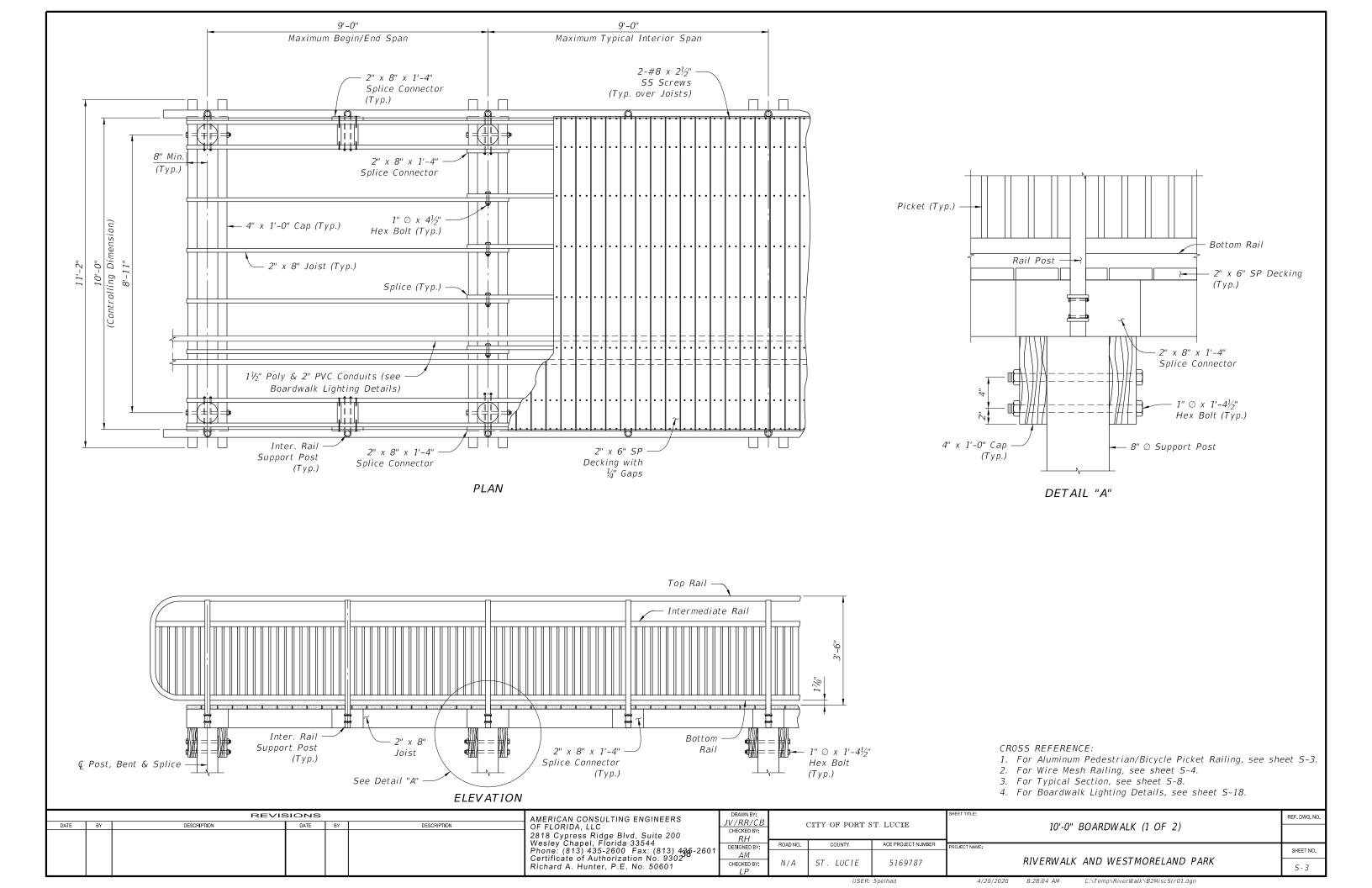


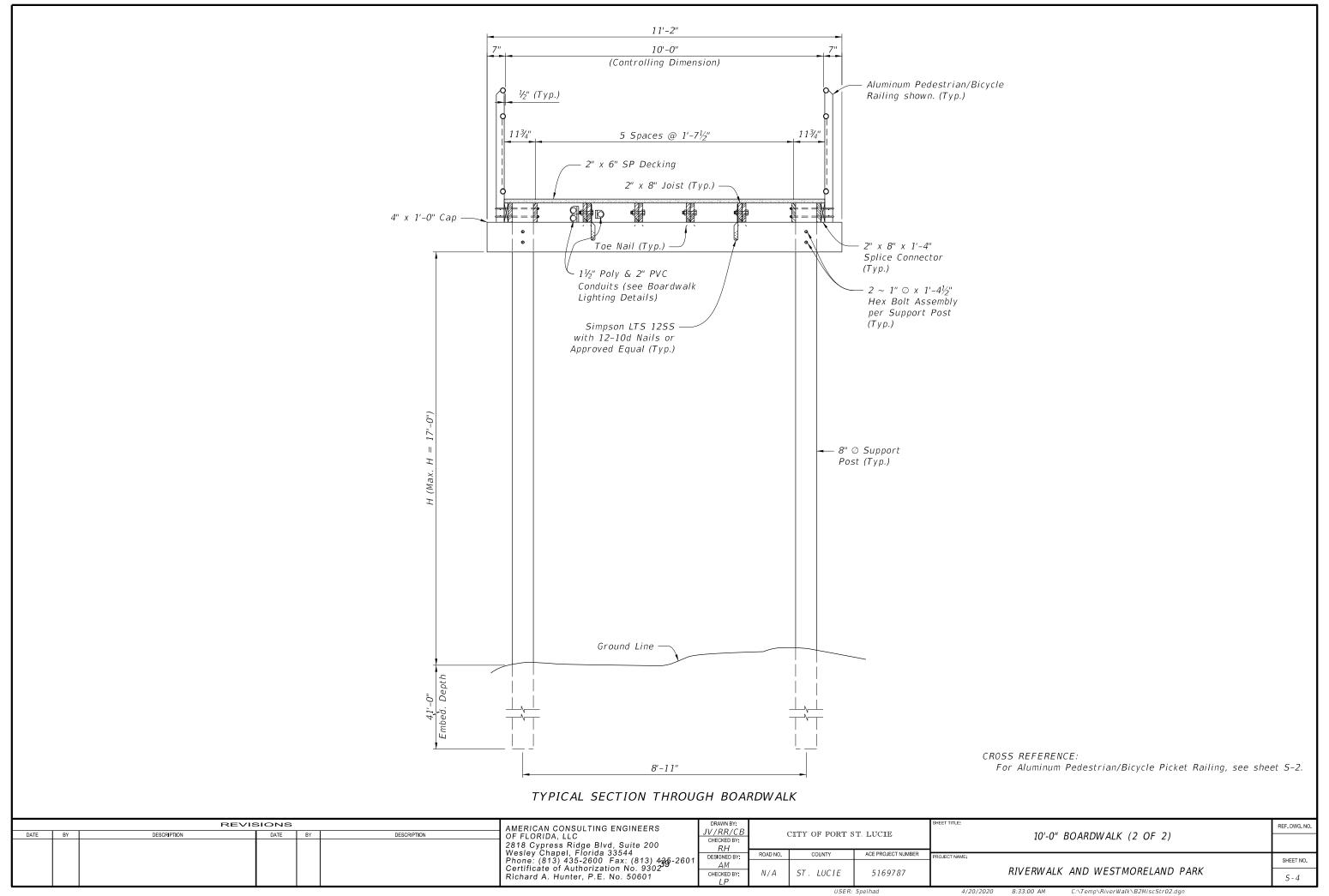
NOTE

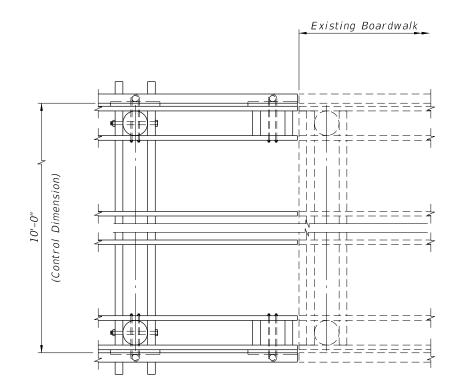
- 1. Contractor shall install bolts such that either the $\frac{3}{6}$ " \oslash U-Bolt bears on the head and nut of the $\frac{1}{4}$ " \oslash Thru-Bolt or the $\frac{3}{6}$ " \oslash U-Bolt bears on the $\frac{1}{4}$ " \oslash Thru-Bolt itself. Contractor shall deform the threads at the end of the $\frac{1}{4}$ " \oslash Thru-Bolt after installation to prevent the nut from working free.
- 2. For additional Aluminum Pedestrian/Bicycle Picket Railing details, see FDOT 2010 INTERIM DESIGN STANDARD INDEX NO. 860.
- 3. Contractor shall submit shop drawings for the Aluminum Pedestrian/Bicycle Picket Railing.

REVISIONS						AMERICAN CONSULTING ENGINEERS	DRAWN BY:				SHEET TITLE:	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC 2818 Cypress Ridge Blvd. Suite 200	JV/RR/CB CHECKED BY:		CITY OF PORT S	T. LUCIE	ALUMINUM PEDESTRIAN/BICYCLE PICKET RAILING	
						Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302	DESIGNED BY:	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:	SHEET NO.
						Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	5169787	RIVERWALK AND WESTMORELAND PARK	5 - 2

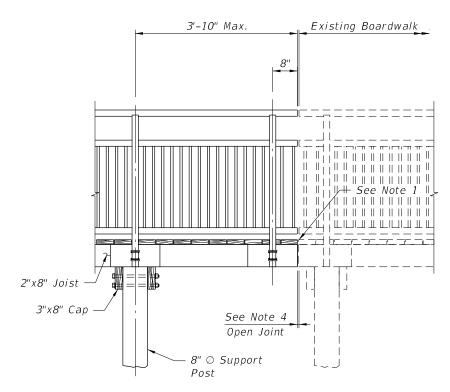
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PLAN VIEW AT BEGIN/END BOARDWALK



ELEVATION VIEW AT BEGIN/END BOARDWALK

NOTES:

- 1. Top of boardwalk to be flush with top of existing boardwalk. 2. ¾" Min./½ Max. Open Joint Typical.

		REVI	SIONS	> _		AMERICAN CONSULTING ENGINEERS	DRAWN BY: JV/RR/CB				SHEET TITLE:		REF. DWG. NO.
	DATE BY	DESCRIPTION	DATE	BY	DESCRIPTION	OF FLORIDA, LLC			CITY OF PORT S	ST. LUCIE		END BOARDWALK DETAILS	
1	0/10/19 RH	Removed Gravity Wall Option 3, added				2818 Cypress Ridge Blvd, Suite 200	CHECKED BY:						1
		Blocking Detail, and expanded notes.				Wesley Chapel, Florida 33544	DECICNED DV	ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:		+
						Phone: (813) 435-2600 Fax: (813) 435-2601	AM			FPID	1		SHEET NO.
						Certificate of Authorization No. 9302*** Richard A. Hunter, P.E. No. 50601	CHECKED BY:	N/A	ST. LUCIE	FPID 5169787		RIVERWALK AND WESTMORELAND PARK	6.5
						Richard A. Hunter, P.E. No. 50601	I P	,					5-5

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Permit N.: 2020-C-490-00004
COUNTY: Saint Lucie County
5.R. No.: 716/Port St Lucie

Boulevard

EXHIBIT C

MAINTENANCE PLAN REQUIREMENTS

The **AGENCY** shall submit to the **DEPARTMENT** a maintenance plan detailing the means and methods for accomplishing repairs to the **IMPROVEMENTS** in accordance with all **DEPARTMENT** Standards, Procedures and Specifications. This plan shall be submitted and approved by the **DEPARTMENT** prior to commencing any maintenance or repair activities. The plan should at minimum detail how the **AGENCY** will address the following:

- Providing for continuous traffic control and necessary traffic control devices as required for the safe movement of traffic of vehicular and pedestrian traffic past the location of the structure being repaired for the duration of the repair in accordance with **DEPARTMENT** Standards, Procedures and Specifications.
- 2. Protection of adjacent surrounding property, real estate, vehicles, pedestrians, attachments to the light poles, or other assets during the preparation and recoating of surfaces.
- 3. Containment of debris or materials used in or resulting from the repair.

After the maintenance plan is approved, the **AGENCY** shall submit a work plan to the **DEPARTMENT** for approval prior to each repair to be performed detailing:

- 1. The proposed date of the repair
- 2. The location of the repair
- 3. The nature of the repair
- 4. The materials to be used for the repair
- 5. The methods to be used for the repair