

**STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
RAILROAD REIMBURSEMENT AGREEMENT  
GRADE CROSSING AND CROSSING TRAFFIC CONTROL DEVICES  
SOUTH FLORIDA RAIL CORRIDOR ONLY  
COUNTY ROADS RR CROSSINGS ONLY**

Financial Project I.D.	Road Name or Number	County Name	Parcel & R/W Number	FAP Number
N/A	NW 48 <sup>th</sup> St (Green Rd)	Broward	N/A	N/A

**THIS AGREEMENT**, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ by and between the **STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION**, hereinafter called the **DEPARTMENT**, and **BROWARD COUNTY**, a political subdivision of the State of Florida, acting by and through its Board of County Commissioners, hereinafter called the **COUNTY**, and the **SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY**, a body politic and corporate and an agency of the State of Florida created pursuant to Chapter 343, Florida Statutes, hereinafter called the **SFRTA**.

WITNESSETH:

**WHEREAS**, the **DEPARTMENT** and CSX Transportation, Inc., ("**CSXT**") entered into a contract for Installment Sale and Purchase, for the South Florida Rail Corridor ("**SFRC**") dated May 11, 1988, at which time the **DEPARTMENT** became the owner of said property and **CSXT** retained an exclusive perpetual easement for Rail Freight Operations within the **SFRC** upon which railroad freight, intercity passenger and commuter rail services are currently being conducted, and

**WHEREAS**, the **DEPARTMENT** and **CSXT** entered into an Operating and Management Agreement Phase A (OMAPA) pertaining to the line of railroad between West Palm Beach and Miami, Florida and related properties on May 11, 1988 (the "Phase A Agreement"), pursuant to which **CSXT** managed and maintained the **SFRC** property on behalf of the **DEPARTMENT** until March 28<sup>th</sup>, 2015, and

**WHEREAS**, the **DEPARTMENT** and **CSXT** entered into an Amended South Florida Operating and Management Agreement (SFOMA) on January 25<sup>th</sup>, 2013, as may be further amended, which provides for termination of OMAPA and transition of management, operation, and maintenance of the **SFRC** from **CSXT** to the **DEPARTMENT** upon the date determined pursuant to subsection 1(c) of SFOMA (the "SFOMA Commencement Date", which was March 29<sup>th</sup>, 2015), and

**WHEREAS**, the **DEPARTMENT** and the **SFRTA** entered into the **SFRC** Operating Agreement ("Operating Agreement") on June 13<sup>th</sup>, 2013, by which the **SFRTA** on behalf of the **DEPARTMENT**, has been managing, operating, maintaining, and dispatching, railroad operations on the **SFRC** as of the SFOMA Commencement

Date, and also maintains and repairs the rights-of-way, layover facilities and yards, state-owned buildings and facilities, tracks, bridges, communications, signals and all appurtenances on the SFRC, and

**WHEREAS**, the **SFRTA**, is, constructing, reconstructing or otherwise changing a portion of the Public Road System, which crosses at grade the right-of-way and track(s) of the SFRC at milepost SX 1000.20, FDOT/Association of American Railroads (AAR) Crossing Number 621525H, at or near Deerfield Beach, Florida as shown on the Project Location Sheet N/A, attached hereto and made a part hereof, and

**WHEREAS**, the **COUNTY** is not a party to any of the aforementioned agreements and now agrees to enter into this Railroad Reimbursement Agreement ("Agreement") with the **DEPARTMENT** and **SFRTA**,

NOW, THEREFORE, in consideration of the mutual undertakings as set forth herein, the parties hereto agree as follows:

1. The **SFRTA** shall perform work based on the categories selected below, within the **DEPARTMENT's** right-of-way along the SFRC, over its tracks at the above-referenced location, herein referred to as the ("Project").

(a)  Surface Work

If crossing surface work is required for the Project, the **SFRTA**, shall provide, furnish or have furnished, all necessary material required for, and will construct at **COUNTY's** sole cost and expense a Standard Railroad Crossing Type C - Concrete in accordance with the **DEPARTMENT's** Standard Plans for Road and Bridge Construction Index No. 830-T01 attached hereto and by this reference made a part hereof, and in accordance with all other Federal Railroad Administration (FRA) and American Railway Engineering and Maintenance of Way Association (AREMA) standards and guidelines. The initial construction cost and the cost of any reconstruction or rehabilitation thereafter shall be paid by the **COUNTY**. In accordance with the Operating Agreement and the SFOMA Agreement, upon completion of the crossing, the SFRTA shall be responsible for the following:

1. Single Track crossing: routine maintenance of all trackbed and rail components plus the highway roadbed and surface for the width of the rail ties within the crossing area.
2. Multiple-track crossing: routine maintenance of all trackbed and rail components plus the highway roadbed and surface for the width of the rail ties within the crossing area and between tracks.

Routine maintenance includes but is not limited to regular track inspections and any repairs to the concrete panels or asphalt within the area described as **SFRTA's** responsibility. The **COUNTY** shall be responsible for the maintenance of the highway roadbed and surface outside the railway ties. IT BEING EXPRESSLY UNDERSTOOD AND AGREED that if the **COUNTY** does not properly maintain the highway roadbed and surface outside the railroad ties, the **SFRTA** may, at its option and upon notification to the **COUNTY**, perform such maintenance work and bill the **COUNTY** directly for costs thus incurred. All costs required for any subsequent reconstruction or rehabilitation of the crossing, as may be requested by any of the parties to this Agreement, shall be the sole financial responsibility of the **COUNTY**. This provision shall be governed and reimbursed in accordance with the paragraphs as specified below.

(b)  Signal Work (Non-US Code Title 23, Section 130)

If Railroad Grade Crossing Traffic Control Devices work is required for the Project, the **SFRTA**, shall provide, furnish or have furnished, all necessary material required for, and will install at the **COUNTY's** expense, automatic railroad grade crossing traffic control devices at said location in accordance with the **DEPARTMENT's** Standard Plans for Road and Bridge Construction Index No. 509-070 and/or 509-100 attached hereto, the Operating Agreement, and the SFOMA Agreement. This provision shall be governed and reimbursed in accordance with the paragraphs as specified below.

(c)  Signal Work (US Code Title 23, Section 130)

If traffic control devices are being installed/upgraded under the Signal Safety Program (US Code Title 23, Section 130), then the **DEPARTMENT** will reimburse **SFRTA** for 100% of the costs of installation/upgrades pursuant to the **DEPARTMENT's** Standard Plans for Road and Bridge Construction Index No. 509-070 and/or 509-100 attached hereto, the Operating Agreement, and the SFOMA Agreement. This provision shall be governed and reimbursed in accordance with the paragraphs as specified below.

**These paragraphs are applicable to work specified in paragraph 1(a) and/or 1(b):**

2. If the project is for surface work or signal work (Non-US Code Title 23, Section 130) as identified in paragraph 1(a) or 1(b) above; all labor, services, materials, and equipment furnished by **SFRTA** in carrying out work to be performed, shall be billed by **SFRTA** directly to the **COUNTY**.
3. The **COUNTY** will reimburse **SFRTA** for the cost of watchmen or flagging service in the carrying out of work within or adjacent to the **SFRC**, or work requiring movement of equipment, employees or trucks across the **SFRC**, or when at times **SFRTA** and/or the **DEPARTMENT** agree that such a service is necessary.
4. The **COUNTY** hereby agrees to reimburse **SFRTA**, as detailed in this Agreement, for all costs incurred by it in the installation and/or adjustment of said facilities, in accordance with the provisions above. It is understood and agreed by and between the parties hereto that preliminary engineering costs incorporated within this Agreement shall also be subject to payment by the **COUNTY**.
5. It is understood and agreed that, if the project, is at **COUNTY** expense, the **COUNTY** shall receive fair and adequate credit for any salvage as a result of the above adjustment work; otherwise, the **DEPARTMENT** shall receive the salvage credit.
6. Upon completion of the work, the **SFRTA** shall, within one hundred eighty (180) days, furnish the **COUNTY** with three (3) copies of its final and complete billing of all costs incurred in connection with the work performed hereunder, such statement to follow as closely as possible the order of items contained in the estimate attached hereto. The **COUNTY** shall reimburse the **SFRTA** for its portion of all actual costs attributable to the Project subject to other provisions in this Agreement. The total for labor, overhead, travel expenses, transportation, equipment, material and supplies, handling costs, and other services shall be shown in such a manner as will permit ready comparison with the approved plans and estimates. Material shall be itemized where they represent major components of cost in the relocation following the pattern set out in the approved estimate as closely as possible. Salvage credits from recovered and replaced permanent and recovered temporary materials shall be reported in said bills in relative position with the charge for the replacement or the original charge for temporary use.

The final billing shall show the description and site of the Project; the date on which the first work was performed, or, if preliminary engineering or right-of-way items are involved, the date on which the earliest item of billed expenses was incurred; the date on which the last work was performed or the last item of billed expenses was incurred; and the location where the records and accounts billed can be audited. Adequate reference shall be made in the billing to the **SFRTA's** records, accounts, and other relevant documents. All cost records and accounts shall be subject to audit by a representative of the **COUNTY**. Upon receipt of invoices, prepared in accordance with the above reimbursement provisions, the **COUNTY** agrees to reimburse the **SFRTA** in the amount of such actual costs approved by the **COUNTY's** auditor.

**These paragraphs are applicable to work specified in paragraph 1(c):**

7. If the Project is for Signal Safety improvements under Title 23, Section 130, as identified in Paragraph 1c, above; then the **DEPARTMENT** agrees to reimburse **SFRTA** for all costs incurred for the installation and/or adjustment of said Project in accordance with the provisions herein.
8. All labor, services, materials, and equipment furnished by **SFRTA** in carrying out work to be performed, shall be billed by **SFRTA** directly to the **DEPARTMENT**. Separate records as to costs of contract bid terms and force account items performed by **SFRTA** shall also be furnished by **SFRTA** to the **DEPARTMENT**.
9. Upon completion of the work, the **SFRTA** shall, within one hundred eighty (180) days, furnish the **DEPARTMENT** with three (3) copies of its final and complete billing of all costs incurred in connection with the work performed hereunder, such statement to follow as closely as possible the order of items contained in the estimate attached hereto. The **DEPARTMENT** shall reimburse the **SFRTA** for its portion of all actual costs attributable to the Project subject to other provisions in this Agreement. The total for labor, overhead, travel expenses, transportation, equipment, material and supplies, handling costs, and other services shall be shown in such a manner as will permit ready comparison with the approved plans and estimates. Material shall be itemized where they represent major components of cost in the relocation following the pattern set out in the approved estimate as closely as possible. Salvage credits from recovered and replaced permanent and recovered temporary materials shall be reported in said bills in relative position with the charge for the replacement or the original charge for temporary use.

The final billing shall show the description and site of the Project; the date on which the first work was performed, or, if preliminary engineering or right-of-way items are involved, the date on which the earliest item of billed expenses was incurred; the date on which the last work was performed or the last item of billed expenses was incurred; and the location where the records and accounts billed can be audited. Adequate reference shall be made in the billing to the **SFRTA's** records, accounts, and other relevant documents. All cost records and accounts shall be subject to audit by a representative of the **DEPARTMENT**. Upon receipt of invoices, prepared in accordance with the above reimbursement provisions, the **DEPARTMENT** agrees to reimburse the **SFRTA** in the amount of such actual costs approved by the **DEPARTMENT's** auditor.

10. In accordance with Section 215.422 Florida Statutes, the following provisions are in this Agreement:

Contractors providing goods and services to the **DEPARTMENT** should be aware of the following time frames. Upon receipt, the **DEPARTMENT** has five (5) working days to inspect and approve the goods and services, unless the Agreement specifies otherwise. The **DEPARTMENT** has twenty (20) working days to deliver a request for payment (voucher) to the Department of Banking and Finance. The twenty (20) days are measured from the latter of the date the invoice is received or the date the goods or services are received, inspected, and approved.

If a payment is not available, within forty (40) days, a separate interest penalty at a rate as established pursuant to Section 215.422 (3)(b), Florida Statutes, will be due and payable in addition to the invoice amount, to the Contractor. Interest penalties of less than one (1) dollar will not be enforced unless the Contractor requests payment. Invoices, which have to be returned to a Contractor because of Contractor preparation errors, will result in a delay in the payment. The invoice payment requirements do not start until a properly completed invoice is provided to the **DEPARTMENT**.

A Vendor Ombudsman has been established within the Department of Bank and Finance. The duties of the individual include acting as an advocate for contractors/vendors who may be experiencing problems in obtaining timely payment(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 413-5516, or by calling the Division of Consumer Services at 1-877-693-5236.

11. Payment shall be made only after receipt and approval of goods and services unless advance payments are authorized by the **DEPARTMENT**'s Comptroller under Section 334.44(29), F.S., or by the Department of Financial Services under Section 215.422(14), F.S.
12. In accordance with Section 287.058 F.S., the following provisions are in this Agreement: If this contract involves units of deliverables, then such units must be received and accepted in writing by the Contract Manager prior to payments. Bills for fees or other compensation for services or expenses shall be submitted in detail sufficient for a proper pre-audit and post-audit thereof.
13. Bills for travel expenses specifically authorized in this Agreement shall be submitted and paid in accordance with **DEPARTMENT** Rule 14-57.011, Florida Administrative Code, and the Federal Highway Administration Federal Aid Policy Guide, 23 C.F.R. Subchapter B, Part 140, Subpart I "Reimbursement for Railroad Work."

14. In the event this contract is for services in excess of TWENTY-FIVE THOUSAND DOLLARS (\$25,000.00) and a term of more than one year, the provisions of Section 339.135 (6)(a), Florida Statutes are hereby incorporated;

The **DEPARTMENT's** obligation to pay under this contract is contingent upon an annual appropriation by the Florida Legislature in accordance with Section 287.0582, Florida Statutes.

The **DEPARTMENT** during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditures 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 such funds are available prior to the entering into any such contract or other binding commitment of funds.

Nothing herein contained shall prevent the making of contracts for periods, exceeding one 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 **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.

15. In accordance with Section 287.133 (2)(a), Florida Statutes, the following provisions are included in this Agreement:

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids, proposals, or replies on leases for real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in section 287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

16. In accordance with Section 287.134(2)(a), Florida Statutes, the following provisions are included in this agreement:

An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity.

**These paragraphs are applicable to any type of work specified (paragraph 1(a), 1(b), or 1(c)):**

17. The cost of maintaining all signals at the crossing shall be allocated as follows; fifty percent (50%) of the expense thereof in maintaining the same shall be borne by the **COUNTY**, and fifty percent (50%) of the cost shall be borne by the **SFRTA**, as enumerated by the Schedule of Annual Cost of Automatic Highway Grade Crossing Traffic Control Devices attached hereto and by this reference made a part hereof and subject to future revision. Actual funding for the signals has been provided for in the Operating Agreement. **COUNTY** shall submit its 50% of the cost of the Annual Maintenance costs to the **DEPARTMENT**. In instances where signals are installed and/or adjusted pursuant to this Agreement and found to be in satisfactory working order by the parties hereto, the same shall be immediately put in service, operated and maintained by the **SFRTA** pursuant to the Operating Agreement and the SFOMA Agreement so long as **SFRTA** or successors or assigns shall operate the said signals at said grade crossing; or until it is agreed between the parties hereto that the signals are no longer necessary; or until the said crossing is abandoned; or legal requirements occur which shall cease operation of those signals. The **SFRTA** agrees that any future relocation or adjustment of said signals shall be performed by the **SFRTA**, but at the expense of the party initiating such relocation. Upon relocation, the maintenance responsibility shall be in accordance with the provisions of this Agreement. It is further agreed that the cost of maintaining any additional or replacement signal equipment at the same location will be shared as provided above.
  
18. Unless otherwise agreed upon herein, the **COUNTY** agrees to ensure that the advance warning signs and railroad crossing pavement markings will conform to the Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD) within 30 days of notification that the railroad signal improvements have been completed and that such signs and pavement markings will be continually maintained in conformance with the MUTCD as applicable.

19. The **DEPARTMENT** at its discretion, may arrange for the synchronization of the railroad crossing devices with existing or proposed highway traffic control devices at NW 48<sup>th</sup> Street. Neither of the parties shall disconnect the interconnection circuit or change or cause to be changed the signal sequence without prior notice to the other parties. Each party shall maintain its respective devices from the point of the junction box as provided for the interconnect cable.
20. All work contemplated at this crossing shall at all times be subject to the approvals, obligations, and notice provisions pursuant to the Operating Agreement and the SFOMA Agreement.
21. All contractors working in the SFRC are required to have Railroad Protective Public Liability and Railroad Protective Property Damage Liability insurance where the **DEPARTMENT**, **SFRTA**, and **CSXT** are named insureds, and with limits not less than \$ 2,000,000.00 combined single limit for bodily injury and/or property damage per occurrence and with an annual aggregate limit of no less than \$ 6,000,000.00 Contractor will furnish the **DEPARTMENT** and **SFRTA** a Certificate of Insurance showing that the contractor carries liability insurance (applicable to the job in question) in the amounts set forth above. Such insurance is to conform with the requirements of the U.S. Department of Transportation, Federal Highway Administration, Federal Aid Policy Guide, Subchapter G, Part 646, Subpart A, and any supplements thereto or revisions thereof.
22. **SFRTA** hereby agrees, as applicable, to install and/or adjust the necessary parts of the SFRC facilities in accordance with the provisions set forth in the:

(A) **DEPARTMENT** Procedure 725-080-002 Appendix D.4 and Rule 14-57.011 "Public Railroad-Highway Grade Crossing Costs", Florida Administrative Code,

(B) Federal Highway Administration's Federal Aid-Highway Policy Guide, 23 C.F.R. Subchapter B, Part 140, Subpart I; and 23 C.F.R. Subchapter G. Part 646, Subpart B,

and any supplements thereto or revisions thereof, which, by reference hereto, are made a part hereof. **SFRTA** further agrees to do all such work with its own forces or by a contractor paid under a contract held by **SFRTA** under the supervision and approval of the **DEPARTMENT**, and the Federal Highway Administration, when applicable.

23. Attached hereto, and by this reference made a part hereof, are plans and specifications of the work to be performed by **SFRTA** pursuant to the terms hereof, and an estimate of the costs thereof in the amount of \$767,168.51. All work performed by the **SFRTA** pursuant hereto, shall be performed according to these plans and specifications as approved by the **DEPARTMENT**, and the Federal Highway Administration, if federal aid participating; and all subsequent plan changes shall likewise be approved by the **DEPARTMENT** and the Federal Highway Administration, when applicable.
24. The **DEPARTMENT** has determined that the method to be used by the **SFRTA** in developing future relocation or installation cost shall be actual and related indirect costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.
25. The **DEPARTMENT** reserves the right to unilaterally cancel this agreement for refusal by the **COUNTY** or **SFRTA** for refusal to allow public access to all documents, or other material subject to the provisions of Chapter 119, Florida Statutes.
26. Should the use of said crossing be abandoned due to removal of the roadway then all rights hereby granted to the **COUNTY** shall thereupon cease and terminate and the **COUNTY** will, at its sole cost and in a manner satisfactory to the **SFRTA** and the **DEPARTMENT**, remove said crossing and restore the **SFRC** property to the condition previously found, provided that the **SFRTA** may, at its option, remove the said crossing and restore its property, and the **COUNTY** will, in such event, upon bill rendered, pay to the **SFRTA** the entire cost incurred by it in such removal and restoration.
27. Upon execution, this Agreement shall supersede all provisions, relating to said crossing contained in any previous agreements and shall become the permanent agreement of record.
28. The parties shall:
  1. Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the parties during the term of the contract; and
  2. Expressly require any subcontractors 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.

29. It is understood and agreed by the parties to this Agreement that if any part, term, or provision of this Agreement is held illegal by the courts or in conflict with any law of the State of Florida, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.
30. Any questions or matters arising under this Agreement as to validity, construction, enforcement, performance, or otherwise, shall be determined in accordance with the laws of the State of Florida. Venue for any action arising out of or in any way related to this Agreement shall lie exclusively in a state court of appropriate jurisdiction.
31. The parties agree to bear their own attorney's fees and costs with respect to this Agreement.
32. The parties agree that this Agreement is binding on the parties and their assigns and successors in interest as evidenced by their signatures and lawful executions below.
33. A modification or waiver of any of the provisions of this Agreement shall be effective only if made in writing and executed with the same formality as this Agreement.
34. If the Operating Agreement between the **DEPARTMENT** and the **SFRTA** ceases to exist, the responsibilities of **SFRTA** may be assigned to a party operating the railroad.

IN WITNESS WHEREOF, the Parties have made and executed this Contract: BROWARD COUNTY, through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the \_\_\_ day of \_\_\_\_\_, 2020, FLORIDA DEPARTMENT OF TRANSPORTATION, signing by and through its \_\_\_\_\_, duly authorized to execute same, and SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY, signing by and through its \_\_\_\_\_, duly authorized to execute same.

COUNTY

ATTEST:

BROWARD COUNTY, by and through its Board of County Commissioners

\_\_\_\_\_  
Broward County Administrator, as  
ex officio Clerk of the Broward County  
Board of County Commissioners

By: \_\_\_\_\_  
Mayor

\_\_\_\_\_ day of \_\_\_\_\_, 2020

Insurance requirements approved by  
Broward County Risk Management  
Division:

Approved as to form by  
Andrew J. Meyers  
Broward County Attorney  
Governmental Center, Suite 423  
115 South Andrews Avenue  
Fort Lauderdale, Florida 33301  
Telephone: (954) 357-7600  
Telecopier: (954) 357-7641

By: Tim Crawley  
Name: Tim Crawley  
Title: Property Specialist

By: Israel Fajardo 1/17/2020  
Assistant County Attorney (Date)

By: Michael J. Kerr 1/17/2020  
Deputy County Attorney (Date)

**SFRTA**

South Florida Regional Transportation Authority, A body politic and corporate and an agency of the State of Florida

By: \_\_\_\_\_  
SFRTA Executive Director

Approved as to form and legal sufficiency

By: \_\_\_\_\_  
SFRTA General Counsel

**DEPARTMENT**

State of Florida, Department of Transportation,  
An Agency of the State of Florida

By: \_\_\_\_\_  
Director of Transportation Development

Legal Review (DEPARTMENT):

By: \_\_\_\_\_

CROSSING SURFACES	
Type	Definition
C	Concrete
R	Rubber
RA	Rubber/Asphalt
TA	Timber/Asphalt

**GENERAL NOTES**

- The Railroad Company will furnish and install all track bed (ballast), crossties, rails, crossing surface panels and accessory components. All pavement material, including that through the crossing, will be furnished and installed by the Department or its Contractor, unless negotiated otherwise.
- When a railroad grade crossing is located within the limits of a highway construction project, a transition pavement will be maintained at the approaches of the crossing to reduce vehicular impacts to the crossing. The transition pavement will be maintained as appropriate to protect the crossing from low clearance vehicles and vehicular impacts until the construction project is completed and the final highway surface is constructed.
- The Central Rail Office will maintain a list of currently used Railroad Crossing Products and will periodically distribute the current list to the District Offices as the list is updated.
- The Railroad Company shall submit engineering drawings for the proposed crossing surface type to the Construction Project Engineer and/or the District Rail Office for concurrence along with the List of Railroad Crossing Products. The approved engineering drawings of the crossing surface type shall be made a part of the installation agreement.
- Sidewalks shall be constructed through the crossing between approach sidewalks of the crossing. Sidewalks shall be constructed with appropriate material to allow unobstructed travel through the crossing in accordance with ADA requirements.
- Install pavement in accordance with the Specifications.
- The Department will participate in crossing work, that requires adjustments to rail outside of the crossing, no more than 50 feet from the edge of the travel way.

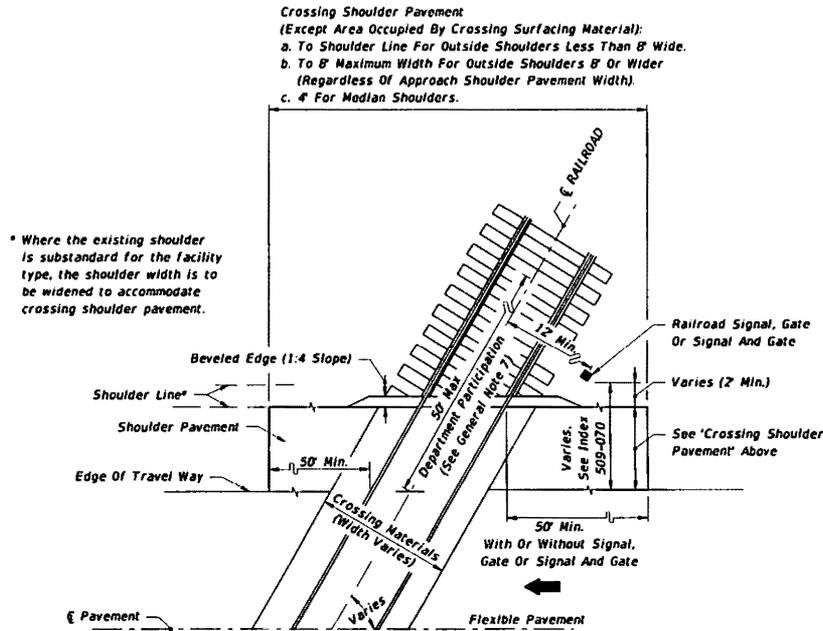
STOP ZONE FOR RUBBER CROSSING	
Design Speed (mph)	Zone Length (Distance From Stop)
45 Or Less	250'
50 - 55	350'
60 - 65	500'
70	600'

**Notes:**

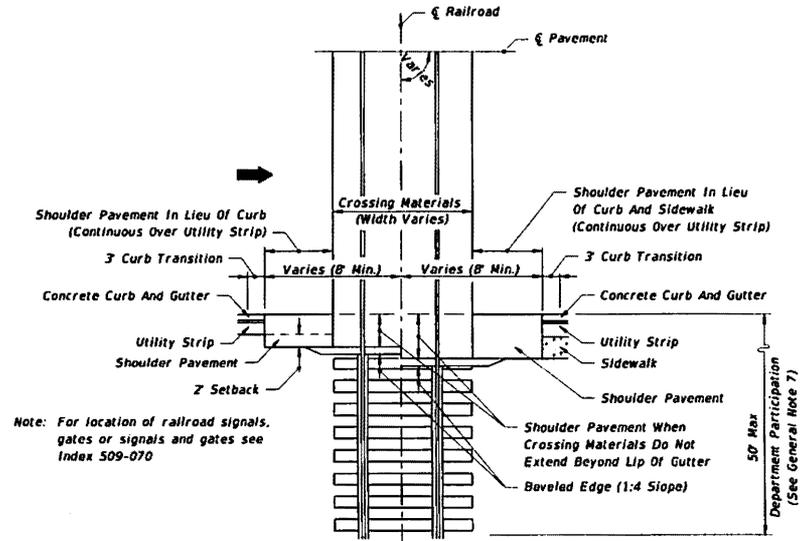
- Type R Crossings are NOT to be used for multiple track crossings within zones for an existing or scheduled future vehicular stop. Zone lengths are charted above.
- Single track Type R Crossings within the zones on the chart may be used unless engineering or safety considerations dictate otherwise.

8/14/2018 2:00:48 PM

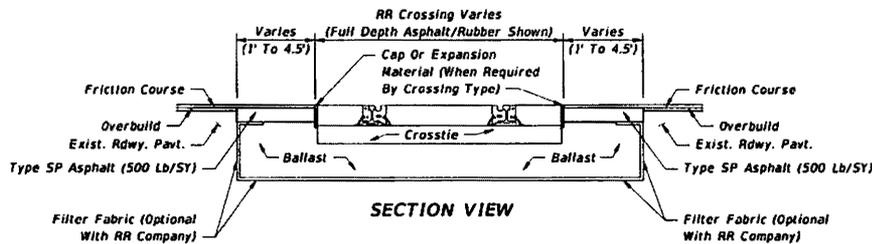
LAST REVISION 11/01/17	DESCRIPTION:	 FY 2019-20 STANDARD PLANS	RAILROAD (GRADE) CROSSING	INDEX 830-T01	SHEET 1 of 2
---------------------------	--------------	---	---------------------------	------------------	-----------------



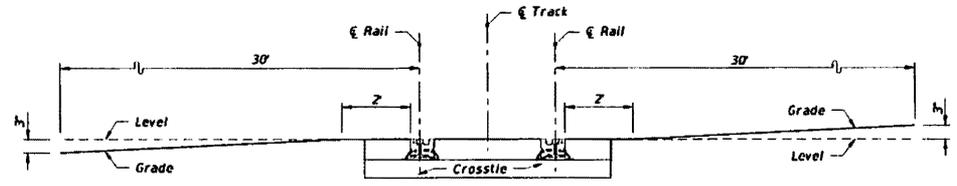
**HALF PLAN  
ROADWAYS WITH FLUSH SHOULDERS**



**HALF PLAN  
CURBED ROADWAYS**



**TYPICAL CROSSING MATERIAL REPLACEMENT AT RR CROSSINGS**

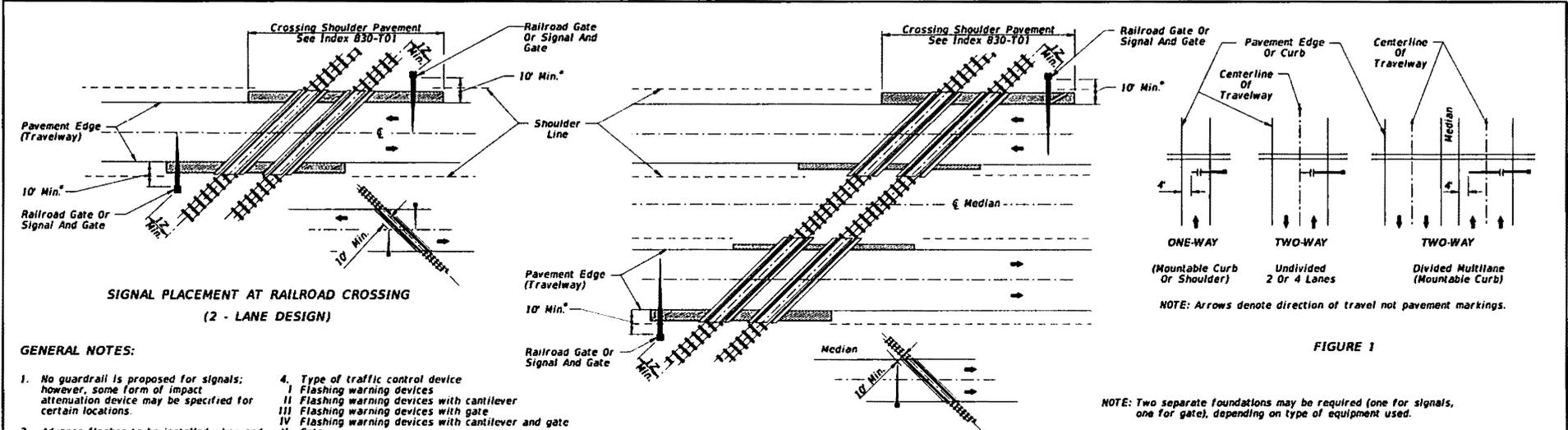


To prevent low-clearance vehicles from becoming caught on the tracks, the crossing surface should be at the same plane as the top of the rails for a distance of 2 feet outside the rails. The surface of the highway should also not be more than 3 inches higher or lower than the top of the nearest rail at a point 30 feet from the rail unless track superelevation makes a different level appropriate. Vertical curves should be used to traverse from the highway grade to a level plane at the elevation of the rails. Rails that are superelevated, or a roadway approach section that is not level, will necessitate a site specific analysis for rail clearances.

**VERTICAL ROADWAY ALIGNMENT THROUGH A RAILROAD CROSSING**

8/16/2016 2:00:50 PM

LAST REVISION 11/01/17	DESCRIPTION:	 FY 2019-20 STANDARD PLANS	<b>RAILROAD (GRADE) CROSSING</b>	INDEX 830-T01	SHEET 2 of 2
---------------------------	--------------	----------------------------------	----------------------------------	------------------	-----------------

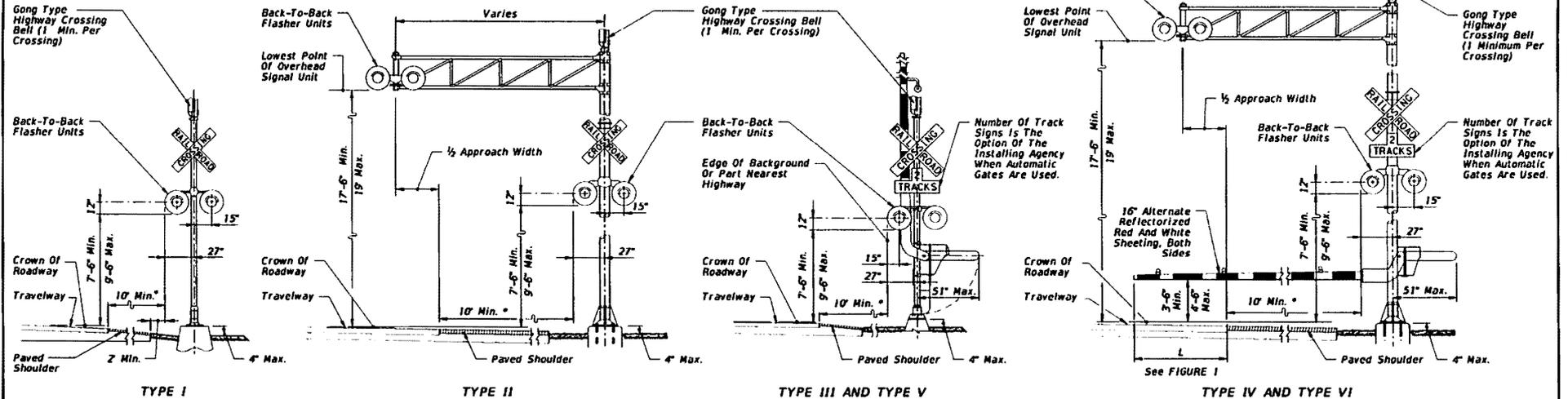


**GENERAL NOTES:**

- No guardrail is proposed for signals; however, some form of impact attenuation device may be specified for certain locations.
- Advance flasher to be installed when and if called for in Plans or Specifications.
- Top of foundation shall be no higher than 4" above finished shoulder grade.
- Type of traffic control device
  - Flashing warning devices
  - Flashing warning devices with cantilever
  - Flashing warning devices with gate
  - Flashing warning devices with cantilever and gate
  - Gate
- Class of traffic control devices (Not Shown)
  - 2 Quadrant flashing warning devices-one track
  - 2 Quadrant flashing warning devices-multiple tracks
  - 2 Quadrant flashing warning devices and gates-one track
  - 2 Quadrant flashing warning devices and gates-multiple tracks
  - 3-4 Quadrant flashing warning devices and gates-one track
  - 2-4 Quadrant flashing warning devices and gates-multiple tracks

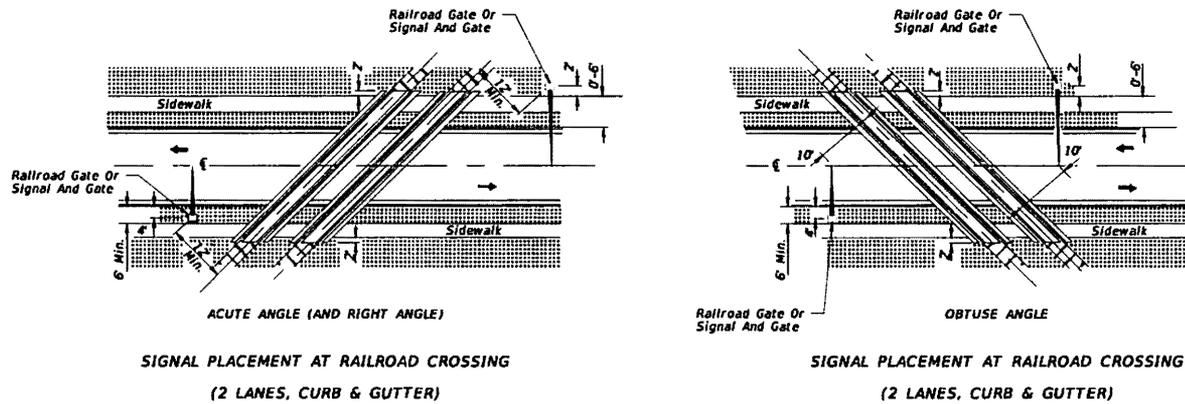
NOTE: Two separate foundations may be required (one for signals, one for gate), depending on type of equipment used.

\* When 10' is deemed impractical the control device can be located as close as 2' from the edge of a paved shoulder but not less than 6' from the edge of the near traffic lane.



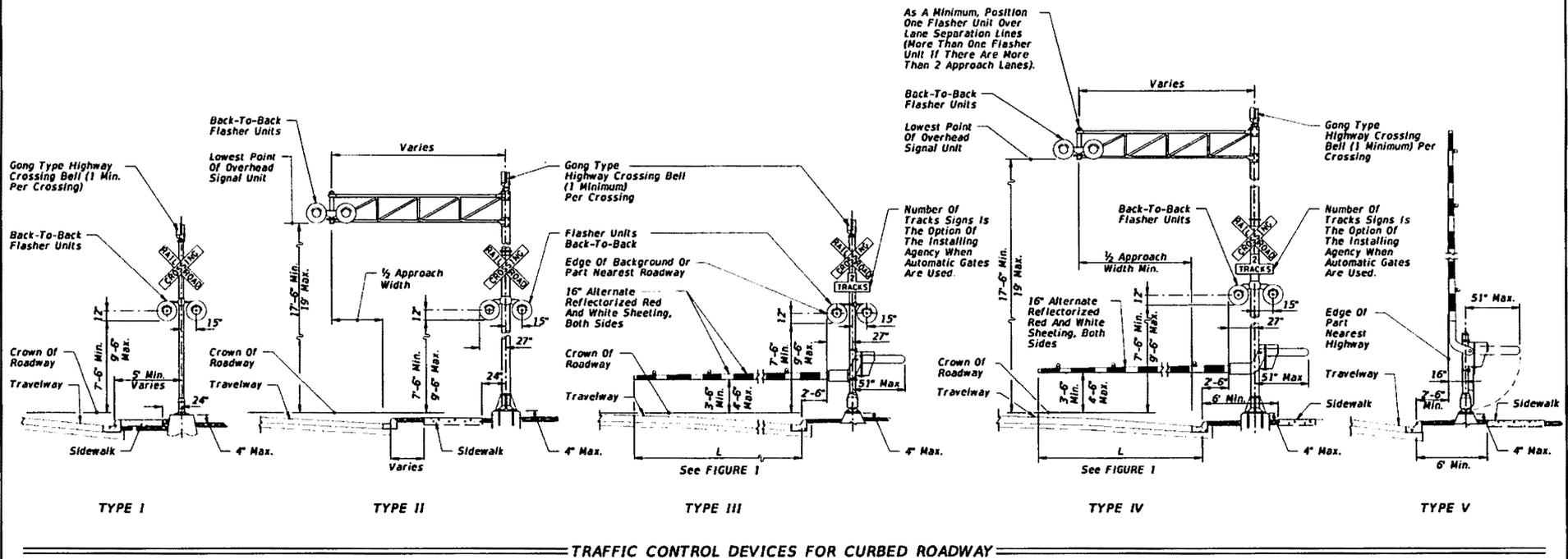
**TRAFFIC CONTROL DEVICES FOR FLUSH SHOULDER ROADWAY**

LAST REVISION 11/01/17	DESCRIPTION:	 FY 2019-20 STANDARD PLANS	<b>RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES</b>	INDEX 509-070	SHEET 1 of 4
---------------------------	--------------	----------------------------------	--	------------------	-----------------



**NOTES:**

1. The location of flashing warning devices and stop lines shall be established based on future (or present) installation of gate with appropriate track clearances.
2. Where plans call for railroad traffic control devices to be installed in curbed medians, the minimum median width shall be 12'-6".
3. Location of railroad traffic control device is based on the distance available between face of curb & sidewalk. 0 to 6' - Locate device outside sidewalk. Over 6' - Locate device between face of curb and sidewalk.
4. Stop line to be perpendicular to edge of roadway, approx. 15' from nearest rail; or 8' from and parallel to gate when present.
5. When a cantilevered-arm flashing warning device is used, the minimum vertical clearance shall be 17'-6" from above the Crown of Roadway to the Lowest Point of the Overhead Signal Unit.

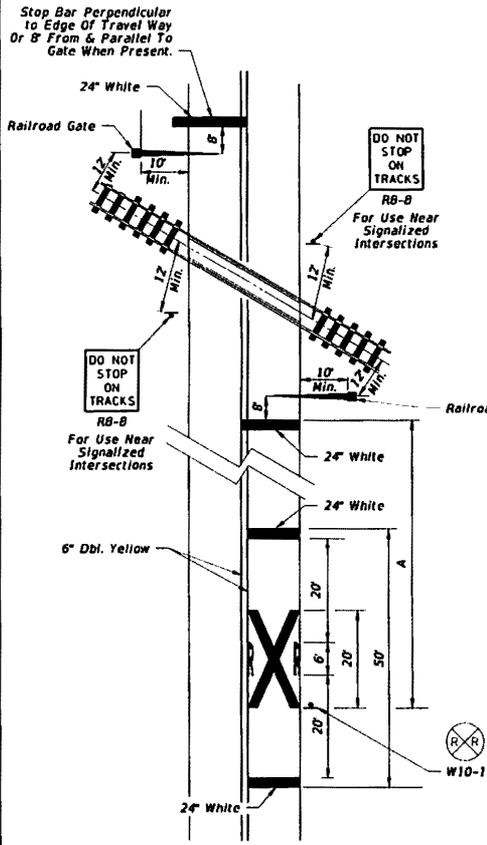


LAST REVISION 11/01/17	DESCRIPTION: FDOT FY 2019-20 STANDARD PLANS	RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES	INDEX 509-070	SHEET 2 of 4
---------------------------	--	--	------------------	-----------------

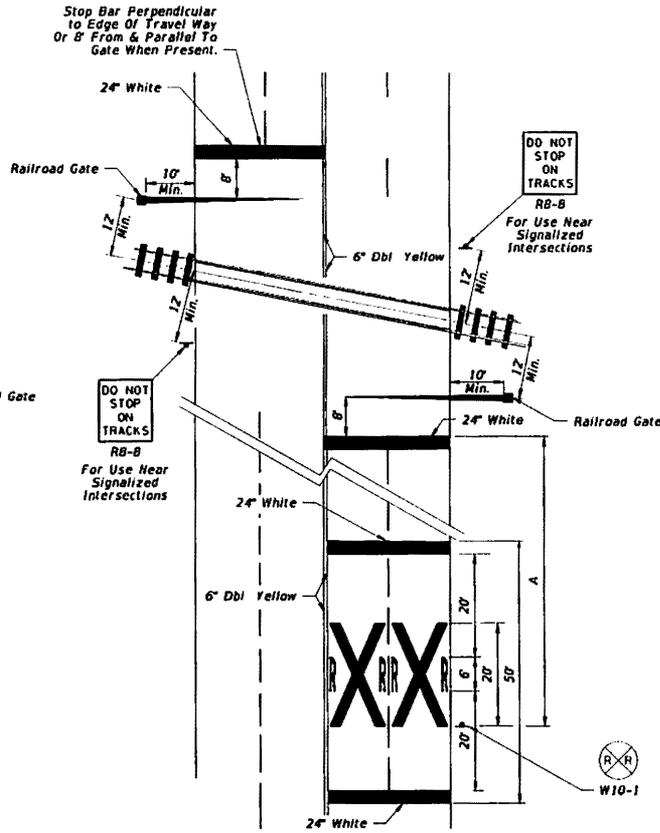
**NOTES:**

1. Place an additional W10-1 sign where intersections occur between the R/R pavement message and the tracks.
2. Place FTP-61-06 or FTP-62-06 sign 100' in advance of crossing for urban conditions and 300' in advance of crossing for rural conditions. See Index 700-102 for sign details.

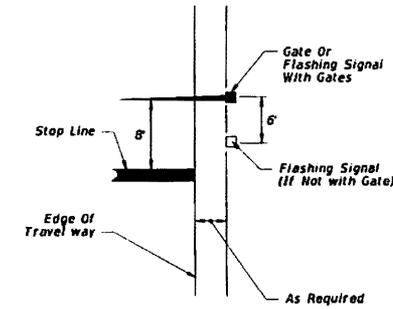
Design Speed (mph)	Distance "A" (ft)
60	400
55	325
50	250
45	175
40	125
35	100
URBAN	85 Min.



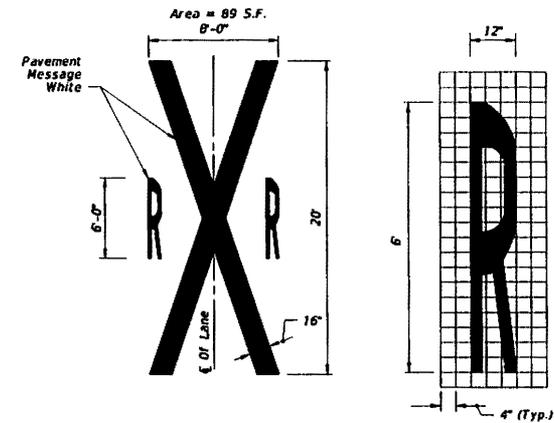
**RAILROAD CROSSING AT TWO-LANE ROADWAY**



**RAILROAD CROSSING AT MULTILANE ROADWAY**

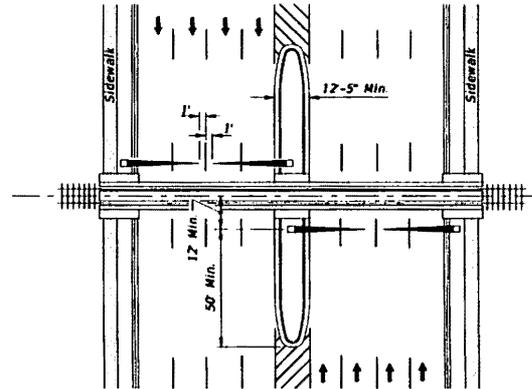
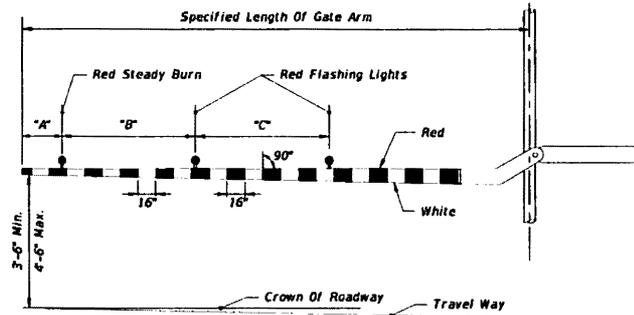


**RELATIVE LOCATION OF CROSSING TRAFFIC CONTROL DEVICES**

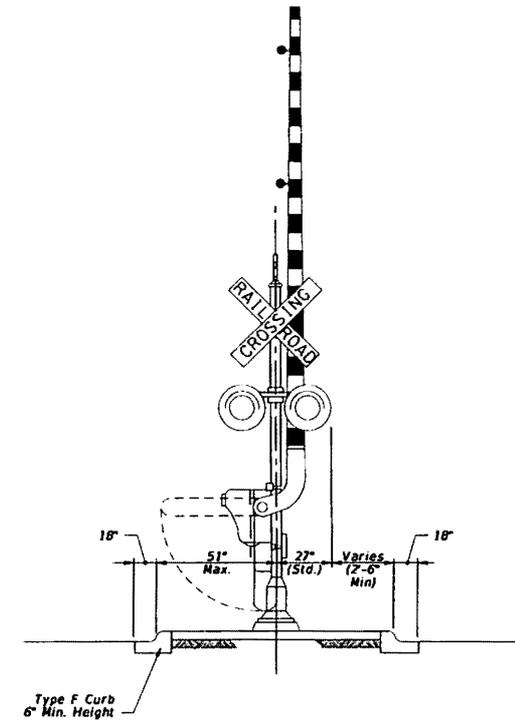


**RAILROAD CROSSING PAVEMENT MESSAGE**

10/18/2018 11:04:04 AM



PLAN



MEDIAN SECTION AT SIGNAL GATES

RAILROAD GATE ARM LIGHT SPACING

Specified Length Of Gate Arm	Dimension "A"	Dimension "B"	Dimension "C"
14 Ft.	6"	36"	5'
15 Ft.	18"	36"	5'
16-17 Ft.	24"	36"	5'
18-19 Ft.	28"	41"	5'
20-23 Ft.	28"	4'	5'
24-28 Ft.	28"	5'	5'
29-31 Ft.	36"	6'	6'
32-34 Ft.	36"	7'	7'
35-37 Ft.	36"	9'	9'
38 And Over	36"	10'	10'

NOTE:  
For additional information see the "Manual On Uniform Traffic Control Devices", Part 8; The "Traffic Control Handbook", Part VIII; and AASHTO "A Policy On Geometric Design Of Streets And Highways".

MEDIAN SIGNAL GATES FOR  
MULTILANE UNDIVIDED URBAN SECTIONS  
(THREE OR MORE DRIVING LANES IN ONE DIRECTION, 45 MPH OR LESS)

10/18/2018 11:00:00 AM

LAST REVISION 11/01/17	DESCRIPTION:	FDOT FY 2019-20 STANDARD PLANS	RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES	INDEX 509-070	SHEET 4 of 4
---------------------------	--------------	--------------------------------------	--	------------------	-----------------

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES  
ANNUAL MAINTENANCE COSTS**

725-090-41  
RAIL  
OGC - 07/16

FINANCIAL PROJECT NO.	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
N/A	NW 48th St	BROWARD	N/A	N/A

COMPANY NAME: SFRTA

A. FDOT/AAR XING NO.: 621525H RR MILE POST TIE: SX 1000.20

B. TYPE SIGNALS PROPOSED N/A CLASS IV DOT INDEX: 17882

**SCHEDULE OF ANNUAL COST OF AUTOMATIC  
HIGHWAY GRADE CROSSING TRAFFIC CONTROL DEVICES**

Annual Maintenance Cost Exclusive of Installation

<u>CLASS</u>	<u>DESCRIPTION</u>	<u>COST*</u>
I	2-Quadrant Flashing Lights with One Track	\$2,386.00
II	2-Quadrant Flashing Lights with Multiple Tracks	\$3,158.00
III	2-Quadrant Flashing Lights and Gates with One Track	\$3,600.00
IV	2-Quadrant Flashing Lights and Gates with Multiple Tracks	\$4,520.00
V	3 or 4-Quadrant Flashing Lights and Gates with One Track	\$7,116.00
VI	3 or 4-Quadrant Flashing Lights and Gates with Multiple Tracks	\$8,930.00

AUTHORITY: FLORIDA ADMINISTRATIVE RULE 14-57.011  
Public Railroad-Highway Grade Crossing Costs

EFFECTIVE DATE: July 22, 1982

GENERAL AUTHORITY: 334.044, F.S.

SPECIFIC LAW IMPLEMENTED: 335.141, F.S.

\*This schedule will become effective July 1, 2016 and will be reviewed every 5 years and revised as appropriate based on the Consumer Price Index for all Urban Consumers published by the U.S. Department of Labor.



06 DECEMBER 2018

**SFRTA ENGINEERING & CONSTRUCTION  
ESTIMATE SUMMARY  
NW 48TH STREET (621525-H) – GRADE CROSSING RECONSTRUCTION**

ITEM	AMOUNT	FUNDING SOURCE
DESIGN	\$ 34,416.75	RRA
CONSTRUCTION	\$ 688,335.01	RRA
FLAGGING*	\$ -	RRA
CE&I	\$ 34,416.75	RRA
CONTINGENCY	\$ -	
 SUBTOTAL	 \$ 757,168.51	
 PTC IMPACT	 \$ 10,000.00	 RRA
OPERATING COST IMPACT	\$ -	
 <b>TOTAL</b>	 <b>\$ 767,168.51</b>	

\* Flagging cost included in Construction.

Estimate expires 30 days after transmittal date. Please increase values 1.5% for every month after expiration time.

---

Emmanuel Cumberbatch, P.E.  
Senior Project Manager - SFRC

Railroad-Highway Road Crossing Construction and Traffic Control Device Installation ICE - NW 48th Street (621525-H)		
Item	Description	Cost
1.0	RAILROAD-HIGHWAY ROAD CROSSING CONSTRUCTION - TRACK WORK	\$ 553,505.64
2.0	RAILROAD-HIGHWAY ROAD CROSSING CONSTRUCTION - ROADWAY WORK	\$ 90,298.79
3.0	RAILROAD-HIGHWAY ROAD CROSSING CONSTRUCTION - SIGNALS WORK	\$ 20,150.00
4.0	RAILROAD-HIGHWAY ROAD CROSSING - TRAFFIC CONTROL DEVICE INSTALLATION	\$ -
5.0	FLAGGING SERVICES	\$ 15,544.00
6.0	SFRC - INFRASTRUCTURE UPGRADES	\$ 8,836.57
	<b>Construction Total</b>	\$ 688,335.01
	CEI	\$ 34,416.75
	Design	\$ 34,416.75
	<b>Grand Total</b>	\$ 757,168.51

<b>1.0 ROAD CROSSING CONSTRUCTION - TRACK WORK</b>					
<b>Item</b>	<b>Description</b>	<b>Units</b>	<b>No. of Units</b>	<b>Unit Cost</b>	<b>Total Cost</b>
1.1	Road Crossing < 100 Track Feet	TF		\$ 4,133.07	\$ -
1.2	Road Crossing 101 < 250 Track Feet	TF	210	\$ 2,603.83	\$ 546,804.69
1.3	Road Crossing 250+ Track Feet	TF		\$ 1,816.31	\$ -
1.4	Remove and Install 8.5-foot Pre-Plated Wood Crossties	EA	80	\$ 83.76	\$ 6,700.95
1.5	Remove and Install 8.5-foot Concrete Crossties	EA		\$ 58.02	\$ -
1.6	Remove and Install 8.5-foot E-Clip Concrete Crossties	EA		\$ 58.02	\$ -
1.7	136RE (new) to 115RE (worn) HH Compromise Rail	EA	2	\$ 1,409.37	\$ 2,818.74
<b>Total</b>					<b>\$ 553,505.64</b>

2.0 ROAD CROSSING CONSTRUCTION - ROADWAY WORK					
Item	Description	Units	No. of Units	Unit Cost	Total Cost
2.1	Superpave Ashaltic Concrete, Traffic C	TN		\$ 196.31	\$ -
2.2	Asphaltic Concrete Friction Course (FC-9.5)	TN	55.00	\$ 282.64	\$ 15,545.37
2.3	Milling Existing Asphalt Pavement, 1-1/2" Avg depth	SY	2600.00	\$ 5.25	\$ 13,639.84
2.4	MAINTENANCE OF TRAFFIC	DY	7.00	\$ 5,872.91	\$ 41,110.34
2.5	CONCRETE CURB & GUTTER, TYPE F	LF		\$ 46.30	\$ -
2.6	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	170.00	\$ 81.42	\$ 13,841.13
2.7	ADA-COMPLIANT CAST-IN-PLACE DETECTABLE WARNING	SF	32.00	\$ 54.24	\$ 1,735.76
2.8	SINGLE POST SIGN	AS		\$ 638.01	\$ -
2.9	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	100.00	\$ 6.33	\$ 632.66
2.10	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	EA	0.00	\$ 175.56	\$ -
2.11	THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	0.22	\$ 8,449.94	\$ 1,858.99
2.12	THERMOPLASTIC, OTHER SURFACES, WHITE, SKIP, 6",10-30 SKIP OR 3-9 LANE DROP	GM		\$ 2,312.61	\$ -
2.13	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	0.22	\$ 8,568.53	\$ 1,885.08
2.14	Reflective Pavement Marker	EA	8.00	\$ 6.20	\$ 49.64
2.15	Sod - Landscaping	SYD		\$ 9.79	\$ -
Total				\$	<u>90,298.79</u>

3.0 ROAD CROSSING CONSTRUCTION - SIGNALS WORK					
Item	Description	Units	No. of Units	Unit Cost	Total Cost
3.1	JUMPER CABLES	FT		\$39.91	\$ -
3.2	TRACK WIRES #6 TWISTED PAIR	FT		\$ 11.98	\$ -
3.3	DAX CABLING (12 CONDUCTOR 14)	FT		\$ 17.49	\$ -
3.4	3M SPLICING KIT	Kit		\$ 81.27	\$ -
3.5	INSULATED JOINTS (136 RE)	EA		\$ 6,995.75	\$ -
3.6	INSULATED BOND STRANDS	KIT		\$ 30.66	\$ -
3.7	3/16 X 3/16 FIELD SLEEVES	EA		\$ 1.75	\$ -
3.8	BONDING EQUIPMENT (ERICO or approved equal)	SY		\$ 279.83	\$ -
3.9	Labor (2 signal-person crew)	HR	96	\$ 209.87	\$ 20,150.00

**Total** **\$** 20,150.00

4.0 RAILROAD-HIGHWAY ROAD CROSSING - TRAFFIC CONTROL DEVICE INSTALLATION					
Item	Description	Units	No. of Units	Unit Cost	Total Cost
4.1	AAR Terminal-Posts	EA		\$ 166.68	\$0.00
4.2	Tray, Holds 4, 12" x 27"	EA		\$ 195.27	\$0.00
4.3	Battery, SPL 250 NiCad	Bank		\$ 300.21	\$0.00
4.4	Battery, SPL 340 NiCad	Bank		\$ 404.23	\$0.00
4.5	Battery, SPL 420 NiCad	Bank		\$ 496.70	\$0.00
4.6	Charger, ELC 12/20 D, 120/240 VAC, 12V, 20A (Dark Gray)	EA		\$ 842.53	\$0.00
4.7	Charger, ELC 12/20 D, 120/240 VAC, 12V, 40A (Dark Gray)	EA		\$ 1,061.53	\$0.00
4.8	8x8 Aluminum w/AC	EA		\$ 16,424.81	\$0.00
4.9	DTMF Radio	EA		\$ 1,881.37	\$0.00
4.10	DTMF Antenna Kit	EA		\$ 365.00	\$0.00
4.12	Led, 12"	EA		\$ 288.96	\$0.00
4.13	Bell, Electronic	EA		\$ 565.74	\$0.00
4.14	Gate Arm, 24', Alumi-Glass, Diamond Grade-Vertical Striping	EA		\$ 862.61	\$0.00
4.15	Gate Arm, 32', Alumi-Glass, Diamond Grade-Vertical Striping	EA		\$ 1,020.77	\$0.00
4.16	Construction Total	EA		\$ 547.49	\$0.00
4.17	Windguard	EA		\$ 534.11	\$0.00
4.18	Gate Arm, 24', Alumi-Glass, Diamond Grade-Vertical Striping	EA		\$ 742.16	\$0.00
4.19	Gate Arm, 32', Alumi-Glass, Diamond Grade-Vertical Striping	EA		\$ 3,224.13	\$0.00
4.20	Grand Total	EA		\$ 2,743.52	\$0.00
4.21	Gate Mech S-60, includes all hardware and grey flexible conduit, no MTSS, w/maintenance switch, 115 VAC gate heater	EA		\$ 6,879.56	\$0.00
4.22	Gate Mech, S-60 Exit Gate includes all hardware and flexible conduit, no MTSS, w/maintenance switch, 115 VAC gate heater	EA		\$ 8,389.43	\$0.00

4.0 RAILROAD-HIGHWAY ROAD CROSSING - TRAFFIC CONTROL DEVICE INSTALLATION					
Item	Description	Units	No. of Units	Unit Cost	Total Cost
4.23	Sidewalk Arm Kit	EA		\$ 973.32	\$0.00
4.24	Gate Conversion Bracket with Cast Adapter and Shear Bolts	EA		\$ 549.93	\$0.00
4.25	Offset Bracket for 5" Mast	EA		\$ 699.58	\$0.00
4.26	Pinnacle, 5"	EA		\$ 163.64	\$0.00
4.27	Mast, 18"x 5" with Pigtail, Fits Double Sided Jnct Box Base	EA		\$ 1,099.85	\$0.00
4.28	Crossarm Assy, 5" Mtg., 1 Way Gate Back Mast , Bracket, Hoods, Backgrounds, Lightheads	EA		\$ 1,025.64	\$0.00
4.29	Crossarm Assy, 4" Mtg., 1 Way (Sidelight, Mast Flasher, Cant Arm), Bracket, Hoods, Backgrounds, Lightheads	EA		\$ 1,025.64	\$0.00
4.30	Junction Box, Double Sided 2" Flange	EA		\$ 1,085.25	\$0.00
4.31	Lock, Barrell	EA		\$ 312.68	\$0.00
4.32	Power Off Light, 18 Watt Inc. 2 Wire (10V)	EA		\$ 494.42	\$0.00
4.33	Event Analyzer	EA		\$ 5,208.49	\$0.00
4.34	Hold Down Spring for KRPA Relay	EA		\$ 137.23	\$0.00
4.35	KRPA-11AN-240, 240V, 10A-8 Pin	EA		\$ 159.15	\$0.00
4.36	Socket, 27E122 ,KRPA Type, 8 Pin	EA		\$ 142.94	\$0.00
4.37	Plugboard, Kit includes contacts, 1E, and 3E Test Posts	EA		\$ 549.81	\$0.00
4.38	500 ohm, 4FB-2F-1B, Neutral	EA		\$ 1,410.51	\$0.00
4.39	Crossbuck	EA		\$ 239.07	\$0.00
4.40	Sign, "2 Track"	EA		\$ 121.36	\$0.00
4.41	5" Sign Kit-Sign Mtg. Brackets, Extensions, U-bolts & Hdwr.	EA		\$ 135.96	\$0.00
4.42	Wago Kit	EA		\$ 228.12	\$0.00
4.43	Cable, XIP 8 ft (cable 1) (need 1 for XP4 Assy)	EA		\$ 481.41	\$0.00

4.0 RAILROAD-HIGHWAY ROAD CROSSING - TRAFFIC CONTROL DEVICE INSTALLATION					
Item	Description	Units	No. of Units	Unit Cost	Total Cost
4.44	Cable, XIP 8 ft (cable 2) (need 1 for XP4 Assy)	EA		\$ 481.30	\$0.00
4.45	Module, IXC-20S, PM	EA		\$ 978.47	\$0.00
4.46	XIP-20, Crossing Interface Panel 20A	EA		\$ 1,311.89	\$0.00
4.47	Module, IXC-20S+	EA		\$ 3,476.05	\$0.00
4.48	Siemens GCP 4000	EA		\$ 38,213.24	\$0.00
Total				\$	-

<b>5.0 FLAGGING SERVICES</b>					
<b>Item</b>	<b>Description</b>	<b>Units</b>	<b>No. of Units</b>	<b>Unit Cost</b>	<b>Total Cost</b>
5.1	Flagging	Hourly	116	\$134.00	\$15,544.00

Total \$ 15,544.00

Grand Total

6.0 SFRC INFRASTRUCTURE UPGRADES					
Item	Description	Units	No. of Units	Unit Cost	Total Cost
6.1	<u>Remove and Install Insulated Joints - 136 RE -6 bolt Premium - 40 foot</u>	EA		\$ 1,462.32	\$ -
6.2	<u>Install 136 RE HH Rail</u>	GM	0.06	\$ 145,803.39	\$ 8,836.57
6.3	Install 8.5 foot Concrete Crossties - 136 RE	EA		\$ 58.02	\$ -
6.4	Install 8.5 foot Concrete Crossties - 115 RE	EA		\$ 58.02	\$ -
6.5	<u>Remove and Install 8.5 foot- Pre-Plated Wooden Crossties - 115 RE</u>	EA		\$ 83.76	\$ -
6.6	<u>Remove and Install 8.5 foot- Pre-Plated Wooden Crossties - 136 RE</u>	EA		\$ 83.76	\$ -
6.7	Track Surfacing	GM		\$ 228,667.11	\$ -
6.8	Install 10 foot Pre-Plated Wooden Crossties - 115 RE	EA		\$ 122.78	\$ -
6.9	Install 10 foot Pre-Plated Wooden Crossties - 136 RE	EA		\$ 122.78	\$ -
6.10	<u>Ballast - AREMA Gradation 4A</u>	TN		\$ 63.29	\$ -
TOTAL					<u>\$ 8,836.57</u>