

**PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY**

**Meeting Date:** April 1, 2008

☒ Consent

☐ Regular

☐ Public Hearing

☐ Workshop

**Department:**

**Submitted By:** Engineering and Public Works

**Submitted For:** Engineering Services Division

**I. EXECUTIVE BRIEF**

**Motion and Title:** Staff recommends motion to adopt: A Resolution authorizing execution of a Tri-Partite Agreement with the Florida East Coast Railway (FEC) and the Florida Department of Transportation (FDOT) for installation and maintenance responsibility of the FEC grade crossing on SE 23<sup>RD</sup> Avenue, Boynton Beach ( Milepost 313+848).

**Summary:** The FDOT has set aside Federal Rail Title II Signal Safety Funding for safety improvements to this crossing. The FEC will install these improvements and the FDOT will reimburse the FEC for all construction costs. Palm Beach County (County) will assume the maintenance responsibility of this railway crossing after the work is done.

**District:** 7 (MRE)

**Background and Justification:** The FDOT is having railroad protective devices upgraded at the subject grade crossing. The FEC will perform all work associated with the installation and the FDOT will reimburse the FEC for all material and construction costs. Once complete, the County will assume maintenance responsibility from the City of Boynton Beach since SE 23<sup>RD</sup> Avenue is a County maintained roadway. The County will pay \$1,573 (50%) of the annual signal maintenance fee of \$3,146 and any future maintenance and adjustment costs of the railroad crossing traffic control devices.

This office, having reviewed said Agreement, recommends that the Board of County Commissioners adopt the accompanying Resolution authorizing execution of the Tri-Partite Agreement.

**Attachments:**

1. Location Map
2. Resolution (3)
3. Agreements (6)

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

Division Director

2/15/08 \_\_\_\_\_  
Date

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

County Engineer

3/11/08 \_\_\_\_\_  
Date

## II. FISCAL IMPACT ANALYSIS

### A. Five Year Summary of Fiscal Impact:

Fiscal Years	2008	2009	2010	2011	2012
Capital Expenditures	\$ -0-	-0-	-0-	-0-	-0-
Operating Costs	-0-	\$1,573	\$1,573	\$1,573	\$1,573
External Revenues	-0-	-0-	-0-	-0-	-0-
Program Income (County)	-0-	-0-	-0-	-0-	-0-
In-Kind Match (County)	-0-	-0-	-0-	-0-	-0-
NET FISCAL IMPACT	\$ -0-	\$1,573	\$1,573	\$1,573	\$1,573

# ADDITIONAL FTE

POSITIONS (Cumulative) \_\_\_\_\_

Is Item Included in Current Budget? Yes \_\_\_\_\_ No \_\_\_\_\_

Budget Acct No.: Fund \_\_\_\_\_ Dept. \_\_\_\_\_ Unit \_\_\_\_\_ Object \_\_\_\_\_  
Program \_\_\_\_\_

### B. Recommended Sources of Funds/Summary of Fiscal Impact:

County Transportation Trust Fund  
Railroad Crossing Maintenance

This item has no immediate fiscal impact.

After completion of the upgrades, the County will pay an annual maintenance fee of \$1,573 plus any future maintenance and adjustment costs of the railroad crossing traffic control devices. This will be funded as an operating cost in the Railroad Crossing Maintenance account.

C. Departmental Fiscal Review: R.D. Ward 2/13/08

## III. REVIEW COMMENTS

### A. OFMB Fiscal and/or Contract Dev. and Control Comments:

Atwillhite 3.17.08  
OFMB  
3/17/08 SN 3/17/08 CW 3/12/08

Jim J. Jacobs 3/17/08  
Contract Dev. and Control

### B. Approved as to Form and Legal Sufficiency:

Malcolm R. Little 3/16/08  
Assistant County Attorney

This Contract complies with our contract review requirements.

### C. Other Department Review:

\_\_\_\_\_  
Department Director

This summary is not to be used as a basis for payment.



**ATTACHMENT NO. 1**

**RESOLUTION NO. R-2008 \_\_\_\_\_**

**RESOLUTION OF THE BOARD OF COUNTY  
COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA  
AUTHORIZING EXECUTION OF A RAILROAD  
REIMBURSEMENT AGREEMENT WITH THE FLORIDA  
DEPARTMENT OF TRANSPORTATION AND FLORIDA  
EAST COAST RAILWAY FOR SAFETY IMPROVEMENTS  
AT THE SE 23<sup>RD</sup> AVENUE RAILWAY CROSSING.**

**WHEREAS**, the Florida Department of Transportation (FDOT) is constructing, reconstructing or otherwise changing a portion of the Public Road System on SE 23<sup>RD</sup> Avenue which shall call for the installation and maintenance of railroad grade crossing traffic control devices for the railroad grade crossing over or near SE 23<sup>RD</sup> Avenue; and

**WHEREAS**, the FDOT will fund safety improvements to the SE 23<sup>RD</sup> Avenue at the Florida East Coast Railway, Inc. (FEC) crossing designated as Financial Number 420475-1-57-01 on SE 23<sup>RD</sup> Avenue at Crossing Number 272485-X in Boynton Beach, Florida and

**WHEREAS**, the FEC will construct the safety improvements; and

**WHEREAS**, Palm Beach County will fund 50 percent of the annual maintenance fees and future maintenance and adjustment costs of said devices.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY  
COMMISSIONERS OF PALM BEACH COUNTY FLORIDA:**

That Palm Beach County enter into the funding and maintenance agreement with FDOT and FEC for the funding, construction and maintenance of the safety improvements, and

That the Chairman of the Board of County Commissioners be authorized to enter into such agreements with the FDOT, as herein described: and

That this RESOLUTION shall take effect immediately upon adoption.

RESOLUTION NO. 2008-  
April 1, 2008

The foregoing Resolution was offered by Commissioner \_\_\_\_\_ who moved its adoption. The motion was seconded by Commissioner \_\_\_\_\_ and upon being put to a vote was as follows:

ADDIE L. GREENE, Chairperson

JOHN F. KOONS, Vice Chair

KAREN T. MARCUS

ROBERT J. KANJIAN

MARY McCARTY

BURT AARONSON

JESS R. SANTAMARIA

The Chairperson thereupon declared the resolution duly passed and adopted \_\_\_\_\_.

SHARON R. BOCK, CLERK & COMPTROLLER

By: \_\_\_\_\_  
Deputy Clerk

S E A L

APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY

By: \_\_\_\_\_  
(County Attorney)

RAILROAD REIMBURSEMENT AGREEMENT  
GRADE CROSSING TRAFFIC CONTROL DEVICES - COUNTY

FINANCIAL PROJECT NO.	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
42047515701	SE 23rd Avenue	PALM BEACH		00S4-044-J

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, by and between the STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, hereinafter called the DEPARTMENT, and Florida East Coast Railway, L.L.C., a corporation organized and existing under the laws of Florida, with its principal place of business in the City of Jacksonville, County of Duval, State of Florida, hereinafter called the COMPANY; and PALM BEACH County, a political subdivision of the State of Florida, acting by and through its Board of County Commissioners, hereinafter called the COUNTY.

## WITNESSETH:

WHEREAS, the DEPARTMENT is constructing, reconstructing or otherwise changing a portion of the Public Road System, designated by the Financial Project ID 42047515701, on SE 23rd Avenue, which crosses at grade the right of way and tracks of the COMPANY'S Milepost 313 + 848', FDOT/AAR Crossing Number 272485-X, at or near Boynton Beach, as shown on DEPARTMENT'S Plan Sheet No. Location Map, attached hereto as a part hereof; and

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

1. The COMPANY shall furnish the necessary materials and install Automatic Grade Crossing Signals Type III Class III and/or other traffic control devices at said location on an actual cost basis and in accordance with (1) the attached detailed statement of the work, plans, and specifications; and (2) the DEPARTMENT'S Plans and Standard Index Number 17882 attached hereto and made a part hereof.
2. After installation of said signals is completed, fifty (50%) percent of the expense thereof in maintaining the same shall be borne by the COUNTY and fifty (50%) percent shall be borne by the COMPANY, as enumerated by the Schedule of Annual Cost of Automatic Highway Grade Crossing Devices attached hereto and by this reference made a part hereof and subject to future revision.
3. After said signals have been installed and found to be in satisfactory working order by the parties hereto, the same shall be immediately put into service, operated and maintained by the COMPANY so long as said COMPANY or its 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 signals thereat.

The COMPANY agrees that any future relocation or adjustment of said signals shall be performed by the COMPANY, but at the expense of the party initiating such relocation. Upon relocation the maintenance responsibilities 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 under Paragraph 2. above.~~

4. Unless otherwise agreed upon herein, the COUNTY agrees to insure that at the crossing the advance warning signs and railroad crossing pavement markings will conform to the U.S. Department of Transportation Manual on Uniform Traffic Control Devices within 30 days of notification that the railroad signal improvements have been completed and that such signs and pavement markings will be continually maintained at an acceptable level.

5. The COMPANY hereby agrees to install and/or adjust the necessary parts of its facilities along said road in accordance with the provisions set forth in the:

☐ (a) DEPARTMENT Procedure No. 725-080-002 Appendix D.4, and Rule 14.57.011 "Public Railroad-Highway Grade Crossing Costs", Florida Administrative Code.

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

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

6. The DEPARTMENT hereby agrees to reimburse the COMPANY for all costs incurred by it in the installation and/or adjustment of said facilities, in accordance with the provisions of Procedure No. 725-080-002 Appendix D-4 "Billing Requirements," and any supplements thereto or revisions thereof. It is understood and agreed by and between the parties hereto that preliminary engineering costs not incorporated within this agreement shall not be subject to payment by the DEPARTMENT.

7. Attached hereto, and by this reference made a part hereof, are plans and specifications of the work to be performed by the COMPANY pursuant to the terms hereof, and an itemized estimate of the cost thereof in the amount of \$ 199,080.00 . All work performed by the COMPANY 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.

8. All labor, services, materials, and equipment furnished by the COMPANY in carrying out the work to be performed hereunder shall be billed by the COMPANY direct to the DEPARTMENT. Separate records as to the costs of contract bid items and force account items performed for the COMPANY shall also be furnished by the COMPANY to the DEPARTMENT.

9. The COMPANY has determined that the method to be used in developing the relocation or installation cost shall be as specified for the method checked and described hereafter:

- ☒ (a) Actual and related indirect costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body.
- ☐ (b) Actual and related indirect costs accumulated in accordance with an established accounting procedure developed by the COMPANY and approved by the DEPARTMENT.
- ☐ (c) An agreed lump sum \$ 0.00 , as supported by a detail analysis of estimated cost attached hereto. (NOTE: This method is not applicable where the estimated cost of the proposed adjustment exceeds \$100,000.)

10. The installation and/or adjustment of the COMPANY'S facility as planned ☐ will ☒ will not involve additional work over and above the minimum reimbursable requirements of the DEPARTMENT. (If upgrading and/or nonreimbursable work is involved at the option of the COMPANY, then credit against the cost of the project is required and will be governed by the method checked and described hereafter):

- ☐ (a) \_\_\_\_\_ % will be applied to the final billing of work actually accomplished to determine required credit for (betterment) and/or (expired service life) and/or (nonreimbursable segments).
- ☐ (b) All work involving nonreimbursable segments will be performed by special COMPANY work or job order number apart and separate from the reimbursable portion of the work; such work or job order number to be \_\_\_\_\_. The COMPANY further agrees to clearly identify such additional work areas in the COMPANY'S plans and estimates for the total work covered by this Agreement.
- ☐ (c) \$ 0.00 credited for ☐ betterment ☐ expired service life  
☐ nonreimbursable segments in accord with Article 9.(c) hereinabove.

11. It is specifically agreed by and between the DEPARTMENT and the COMPANY that the DEPARTMENT shall receive fair and adequate credit for any salvage which shall accrue to the COMPANY as a result of the above installation and/or adjustment work.

12. It is further agreed that the cost of all improvements made during this adjustment work shall be borne by the COMPANY, subject only to the DEPARTMENT bearing such portion of this cost as represents the cost of adjustment of previously existing facility, less salvage credit as set forth in the immediately preceding paragraph.



13. Upon completion of the work the COMPANY shall, within one hundred eighty (180) days, furnish the DEPARTMENT with two (2) 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 the items contained in the estimate attached hereto. The totals for labor, overhead, travel expense, 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. Materials 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 is 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 expense was incurred; the date on which the last work was performed or the last item of billed expense was incurred; and the location where the records and accounts billed can be audited. Adequate reference shall be made in the billing to the COMPANY'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 provisions of the above indicated Reimbursement Policy, the DEPARTMENT agrees to reimburse the COMPANY in the amount of such actual costs as approved by the DEPARTMENT'S auditor.

14. 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 334.044(29), F.S., or by the Department of Financial Services under Section 215.422(14), Florida Statutes (F.S.).

15. In accordance with Section 287.058, Florida Statutes, 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 preaudit and postaudit thereof.

16. Bills for travel expenses specifically authorized in this agreement shall be submitted and paid in accordance with DEPARTMENT Rule 14-57.011 "Public Railroad-Highway Grade Crossing Costs" and the Federal Administration Federal-Aid Policy Guide, Subchapter B, Part 140, Subpart I "Reimbursement for Railroad Work."

17. 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 20 days to deliver a request for payment (voucher) to the Department of Financial Services. The 20 days are measured from the latter of the date the invoice is received or the goods or services are received, inspected and approved.

If a payment is not available within 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 Financial Services. The duties of this 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) 410-9724 or by calling the Department of Financial Services Hotline, 1-800-848-3792.

18. Records of costs incurred under terms of this Agreement shall be maintained and made available upon request to the Department at all times during the period of this Agreement and for five years after final payment is made. Copies of these documents and records shall be furnished to the Department upon request. Records of costs incurred includes the Contractor's general accounting records and the project records, together with supporting documents and records, of the Contractor and all subcontractors performing work on the project, and all other records of the Contractor and subcontractors considered necessary by the Department for a proper audit of costs.

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

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 such 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 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.

20. 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 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 in excess of the threshold amount provide in s.287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

21. In accordance with Section 287.0582, Florida Statutes, the following provisions are included in this Agreement:

The Department's obligation to pay under this contract is contingent upon an annual appropriation by the Florida Legislature.

22. ~~The COMPANY covenants and agrees that it will indemnify and hold harmless the DEPARTMENT and all of the DEPARTMENT'S officers, agents, and employees from any claim, loss, damage, cost charge, or expense arising out of any act, action, neglect, omission or delay by the COMPANY during the performance of the contract, whether direct or indirect, and whether to any person or property to which the DEPARTMENT or said parties may be subject, except that neither the COMPANY nor any of its sub-contractors will be liable under this section for damages arising out of injury or damage to persons or property directly caused or resulting from the sole negligence of the DEPARTMENT or any of its officers, agents, or employees.~~

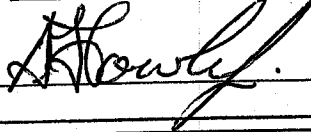
23. Paragraph 22 stricken through prior to execution by all parties.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers, the day and year first above written.

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

BY: \_\_\_\_\_  
(TITLE: Director of Transportation Development )

COMPANY: Florida East Coast Railway, LLC

BY:  **General Manager  
Signals & Communications**

Palm Beach COUNTY, FLORIDA

ATTEST:  
SHARON R. BOCK, CLERK

BY: ADDIE L. GREENE  
(TITLE: CHAIRPERSON, BOARD OF COUNTY COMMISSIONERS)

BY: \_\_\_\_\_  
DEPUTY CLERK

Legal Review  
BY: \_\_\_\_\_  
Attorney - DOT      Date

Approved as to Funds Available  
BY: \_\_\_\_\_  
Comptroller - DOT      Date

Approved as to FAPG Requirements  
BY: N/A \_\_\_\_\_  
FHWA      Date

PALM BEACH COUNTY:  
APPROVED AS TO TERMS &  
CONDITIONS

BY:   
ENGINEER

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

BY: \_\_\_\_\_  
COUNTY ATTORNEY

**WORK DESCRIPTION**  
**GRADE CROSSING TRAFFIC CONTROL DEVICES**

FINANCIAL PROJECT NO.	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
42047515701	SE 23rd Avenue	PALM BEACH		00S4-044-J

## RAILROAD COMPANY

Florida East Coast Railway, L.L.C.

- A. JOB DESCRIPTION & LOCATION: FL&G, CWT, Event Recorder, Cable
- B. TYPE OF ROADWAY FACILITY: \_\_\_\_\_
- C. FDOT/AAR XING NO.: 272485-X RR MILE POST TIE: 313+848'
- D. TYPE CROSSING PROPOSED: III CLASS: III DOT INDEX NO.: 178822
- E. STATUS AND PROPOSAL:
1. EXISTING DEVICES: (See Agreement dated \_\_\_\_\_)
- a.        None-New Crossing.
- b.        Crossbuck and Disk.
- c.        Flashing Signals with Disk.
- d.        Flashing Signals with Cantilever.
- e. XX Flashing Signals with Gates.
- f.        Flashing Signals with Cantilever and Gates.
2. PROPOSED DEVICES: (Safety Index Rating 60.28)
- a.        No revision required.
- b.        Crossbuck and Disk.
- c.        Flashing Signals and Disk.
- d.        Flashing Signals with Cantilever.
- e. XX Flashing Signals with Gates.
- f.        Flashing Signals with Cantilever and Gates.
- g.        Relocate existing signal devices:
- (1)        (With-Without) addition of Gates.
- (2)        (With-Without) synchronization with highway traffic signals.
- (3)        (With-Without) constant warning time.
- F. COMMUNICATION AND/OR POWER LINE ADJUSTMENTS
1. N/A By Others ( \_\_\_\_\_ Company.)
2. N/A By Railroad Company.
- G. AUTHORITY REQUESTED: (Draft attached: ☐ Yes ☒ No.)
1. XX Agreement (Third Party Participating Palm Beach County, FL.)
2.        Supplemental Agreement No. \_\_\_\_\_
3.        Crossing Permit.
4.        Estimate for Change Order No. \_\_\_\_\_
5.        Letter of Authority.
6.        Letter of Confirmation (No Cost to Department).
- H. OTHER REMARKS:

Negotiations to be completed by: \_\_\_\_\_

Signal installation target date: \_\_\_\_\_

Synchronization: (Draft attached ☐ Yes ☒ No.)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES

725-090-41  
RAIL  
OGC - 01/06

FINANCIAL PROJECT NO.	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
42047515701	SE 23rd Avenue	PALM BEACH		00S4-044-J

COMPANY NAME: Florida East Coast Railway, L.L.C.

A. FDOT/AAR XING NO.: 272485-X RR MILE POST TIE: 313+848'

B. TYPE SIGNALS PROPOSED III CLASS III 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	Flashing Signals - One Track	\$2,086.00
II	Flashing Signals - Multiple Tracks	\$2,760.00
III	Flashing Signals and Gates - One Track	\$3,146.00
IV	Flashing Signals and Gates - Multiple Tracks	\$3,950.00

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, 2006 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.

7/13/2001

FLORIDA DEPARTMENT OF TRANSPORTATION  
DIAGNOSTIC FIELD REVIEW SHEET  
RAIL-HIGHWAY GRADE CROSSING  
DATA SHEET

Page 1 of 1

PROJECT NO. \_\_\_\_\_

F.M. NO. \_\_\_\_\_

CROSSING NO.: 272485X      PRIORITY NO.: 422      COUNTY: PALM BEACH      CITY: BOYNTON BEACH      RDWY: SE 23RD AVE

CLASSIFICATION/LOCATION:      DATE LAST UPDATED: 08/13/2002

R. R. CO.: FEC      R. R. BRANCH: MAIN      STATION: BOCA RATON      R. R. MILEPOST: 0.00

R. R. CROSSING STATUS: OPEN-TRACK ACT AS OF 10/10/2002      LATITUDE: 26.51      LONGITUDE: 80.06

RAIL OPERATIONS:      DATE LAST UPDATED: 02/02/2000

TRAIN MOVEMENTS: 22      MAXIMUM TRAIN SPEED: 45      EFFECTIVE: 02/02/2000      NO. OF MAIN TRACKS: 1      OTHER TRACKS: 0

WARNING DEVICES:      DATE LAST UPDATED:

EXISTING WARNING: FL&G      TYPE OF TRAIN DETECTION: OTHER      PREEMPTION:      ADVANCE WARNING: Y

PHYSICAL DATA:      DATE LAST UPDATED: 08/13/2002

R. R. CROSSING ANGLE: 60-90 DEG      NO. OF THRU LANES: 2      OTHER LANES: 0      HIGHWAY SPEED: 30

CROSSING CONDITION: EXCELLENT      APPROACH CONDITION: NONE      MAINTAINING AGENCY: CITY

DEPARTMENT DATA:      DATE LAST UPDATED: 10/10/2002

TRAFFIC VOL. (ADT): 9,087 AS OF 2001      SCHOOL BUS COUNT: 6 AS OF 2005      PERCENT TRUCKS: 0.00

SAFETY DATA:      DATE LAST UPDATED: 05/27/2005

PRED. ACCID./YEAR: 0.05      SAFETY INDEX: 60.28      SAFETY INDEX UPDATE: 05/27/2005      RECOMMENDED WARNING DEVICE: FL & G

DESCRIPTION OF SITE / INSTALLATION CONFLICTS: *Old Xing,*

REVIEW TEAM RECOMMENDATION: *Reggie Case, New FL & G Gates, Recable Crossing, Make New*

DATE REVIEWED \_\_\_\_\_ BY *[Signature]*

REVIEW TEAM PERSONNEL: \_\_\_\_\_



FLORIDA EAST COAST RAILWAY  
OFFICE OF THE GENERAL MANAGER  
OF SIGNALS AND COMMUNICATIONS

DATE: 08/08/06  
FILE: 10.2  
TYPE: III  
CLASS: III  
NO. OF DAYS: 6  
AAR / DOT #: 272485X  
MILE POST: 313+848'

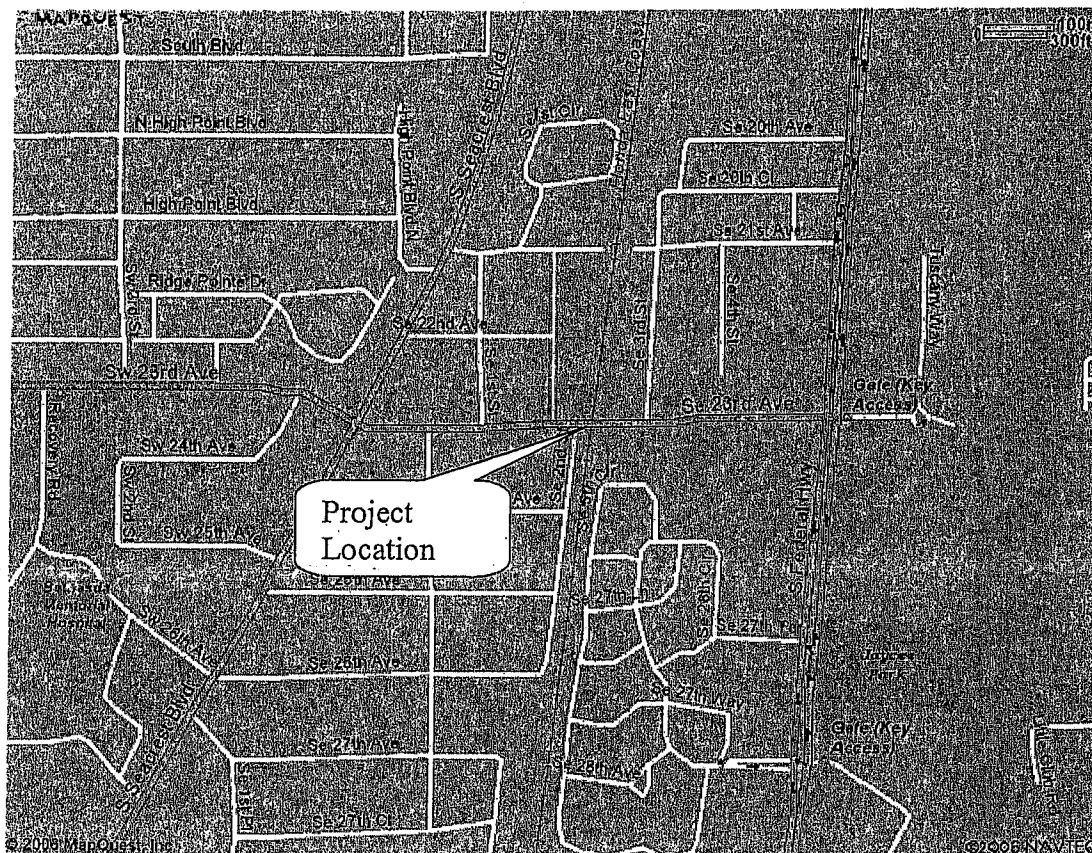
Project Type: FDOT

ESTIMATED COST FOR HIGHWAY CROSSING WARNING DEVICES AT S.E. 23rd AVENUE.

This estimate should be considered void after one (1) year.

MATERIAL	UNIT COST	UNITS	TOTAL COST
GATE ASSEMBLIES	\$7,479.00	2 EA.	\$14,958.00
GATES	\$500.00	2 EA.	\$1,000.00
GATE FOUNDATIONS	\$575.00	2 EA.	\$1,150.00
6' X 8' WIRED CASE, WITH HXP-3R2	\$76,760.00	1 EA.	\$76,760.00
BATTERY BOX	\$675.00	1 EA.	\$675.00
BATTERIES, SAFT SPL250	\$215.00	20 EA.	\$4,300.00
MISC. GROUND MATERIAL	\$1,681.57	1 PKG.	\$1,681.57
CONDUIT & DIRECTIONAL BORE	\$45.00	35 FT.	\$1,575.00
CABLE	\$4,000.00	1 PKG.	\$4,000.00
MISCELLANEOUS RELAY EQUIPMENT	\$1,120.00	1 PKG.	\$1,120.00
POWER SERVICE	\$1,800.00	1 EA.	\$1,800.00
MONITORING EQUIPMENT	\$12,985.00	1 PKG.	\$12,985.00
SANITATION & DISPOSAL	\$1,500.00	1 PKG.	\$1,500.00
FREIGHT & HANDLING			\$30,501.00
TAX @ 6.5%			<u>\$7,930.00</u>
TOTAL MATERIALS			\$161,935.57
EXCAVATING EQUIPMENT PER DAY	\$181.00	6 DAYS	\$1,086.00
EQUIPMENT RENTAL PER DAY	\$125.00	6 DAYS	\$750.00
FOREMAN'S TRUCK PER DAY	\$35.00	6 DAYS	\$210.00
GANG TRUCK PER DAY	\$63.00	6 DAYS	\$378.00
SUPERVISORS TRUCK PER DAY	\$35.00	6 DAYS	<u>\$210.00</u>
EQUIPMENT TOTAL			\$2,634.00
ENGINEERING	\$7,500.00	1	<u>\$7,500.00</u>
ENGINEERING TOTAL			\$7,500.00
CONSTRUCTION SUPERVISION	\$312.00	6 DAYS	\$1,872.00
LABOR ADDITIVE			<u>\$1,043.00</u>
SUPERVISION TOTAL			\$2,915.00
LABOR PER DAY	\$1,188.90		\$7,133.00
NUMBER OF DAYS	6		
LABOR ADDITIVE			<u>\$4,163.00</u>
TOTAL LABOR			\$11,296.00
GANG EXPENSES PER DAY	\$553.00		
NUMBER OF DAYS	6		
TOTAL GANG EXPENSES			\$3,318.00
SUB-TOTAL			\$189,598.57
CONTINGENCIES 5%			<u>\$9,480.00</u>
TOTAL			\$199,080.00





# LOCATION MAP

FEC Railway, LLC

LOCATION:	SE 23 <sup>rd</sup> Avenue
FINANCIAL PROJECT NO.:	420475-1-57-01
CROSSING NO.:	272485X
RAILROAD MILEPOST:	313+848'

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION  
OFFICE OF MODAL DEVELOPMENT  
DISTRICT 4 RAIL OFFICE

**PROJECT SCOPE AND COST ESTIMATE**

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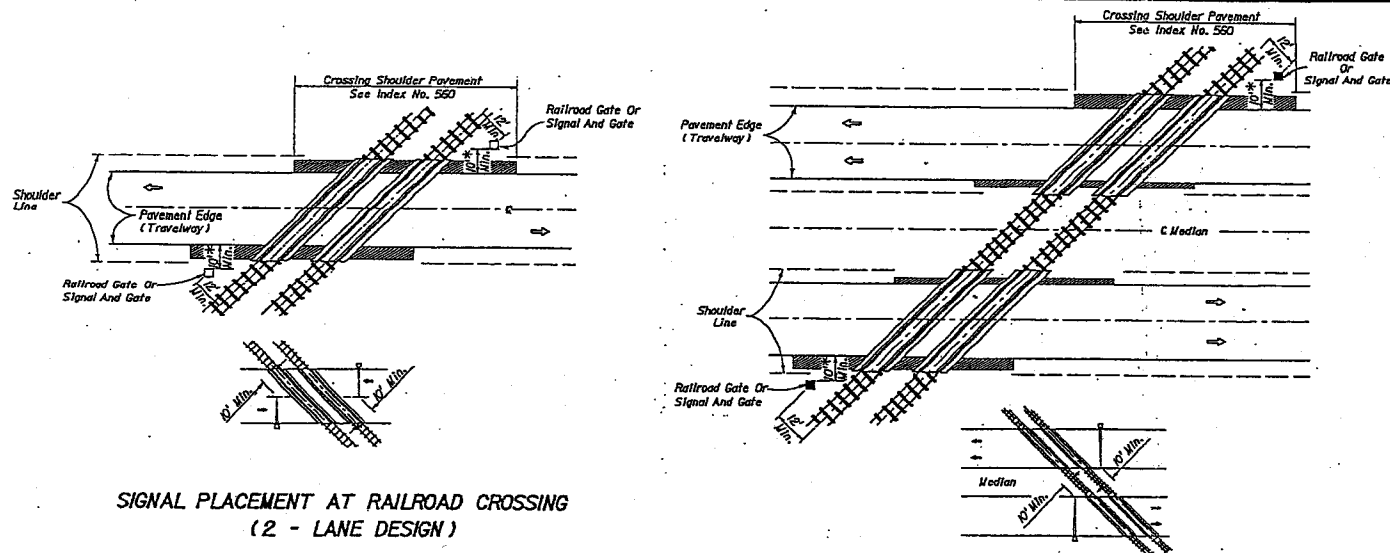
PROJECT INFORMATION

Financial Project No.: 420475-1-57-01  
FAP No.: 00S4-044-J  
Location: SE 23<sup>rd</sup> Avenue  
County: Palm Beach  
Crossing No.: 272485X  
RR MP: 313+848'  
Company: Florida East Coast Railway, L.L.C.

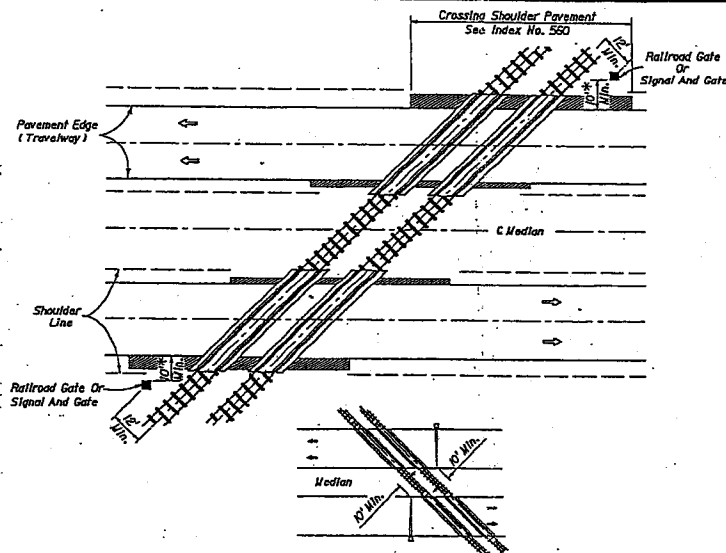
This project scope and cost estimate was prepared by:  
District Aviation & Rail Coordinator

**PROJECT SCOPE AND COST ESTIMATE**

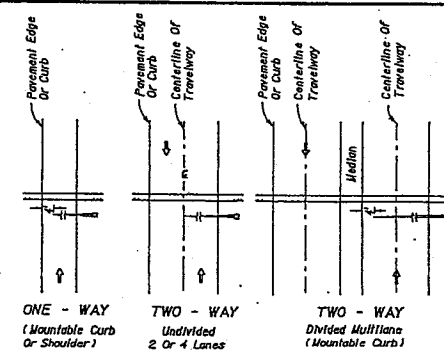
FL&G, CWT and Event Recorder  
..... \$199,080.00  
TOTAL ESTIMATED COSTS..... \$199,080.00



**SIGNAL PLACEMENT AT RAILROAD CROSSING  
(2 - LANE DESIGN)**

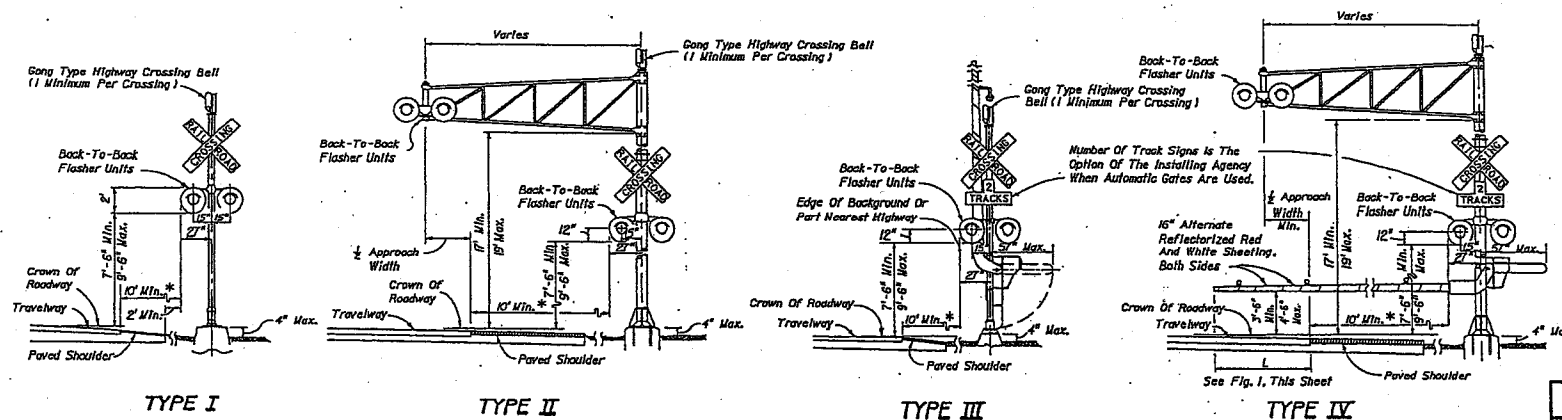


**SIGNAL PLACEMENT AT RAILROAD CROSSING  
(4 - LANE DESIGN)**



Note:  
Arrows denote direction of travel not lane indication

**FIGURE 1  
Gate Length Requirements  
See Note 6 Sheet 3**



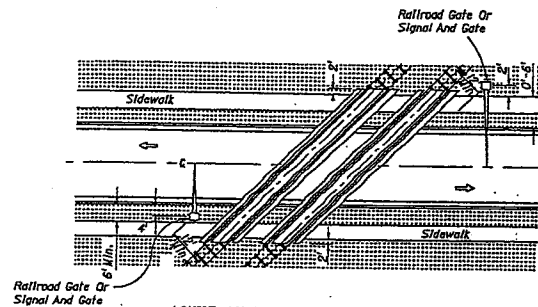
**General Notes**

1. No guardrail is proposed for signals; however, some form of impact attenuation device may be specified for certain locations.
2. Advance flasher to be installed when and if called for in plans or specifications.
3. Top of foundation shall be no higher than 4" above finished shoulder grade.
4. Type of traffic control device
  - I Flashing signals
  - II Flashing signals with cantilever
  - III Flashing signals with gate
  - IV Flashing signals with cantilever & gate
  - V Gate
5. Class of traffic control devices
  - I Flashing signals - one track
  - II Flashing signals - multiple tracks
  - III Flashing signals and gates - one track
  - IV Flashing signals and gates - multiple tracks

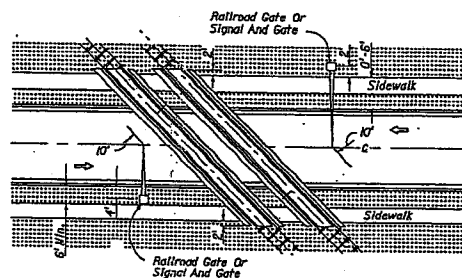
\* When 10' is deemed impracticable the control device can be located as close as 2' from the edge of a paved shoulder but not less than 6' from the edge of the near traffic lane.

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

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION					
RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES					
Designed By	6-76	Approved By	[Signature]		
Drawn By		Revision	Sheet No.	Index No.	
Checked by	6-76	00	1 of 4	17882	



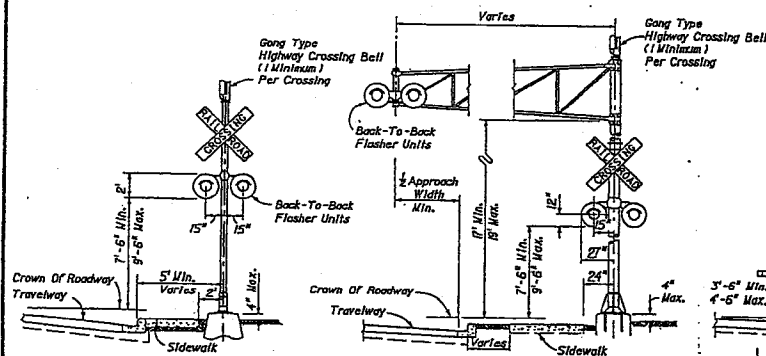
ACUTE ANGLE (AND RIGHT ANGLE)  
SIGNAL PLACEMENT AT RAILROAD CROSSING  
(2 LANES, CURB & GUTTER)



OBTUSE ANGLE  
SIGNAL PLACEMENT AT RAILROAD CROSSING  
(2 LANES, CURB & GUTTER)

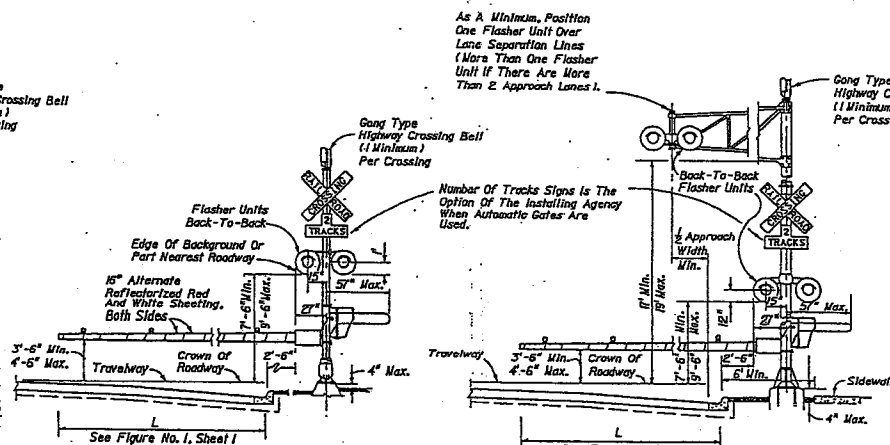
#### GENERAL NOTES

1. The location of flashing signals 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 curved 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.



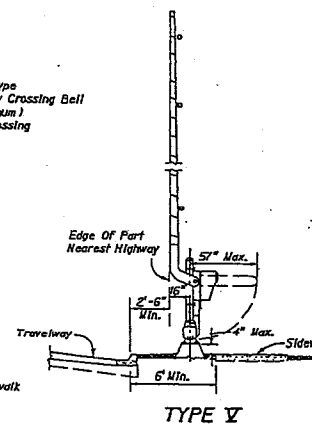
TYPE I

TYPE II



TYPE III

TYPE IV



TYPE V

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

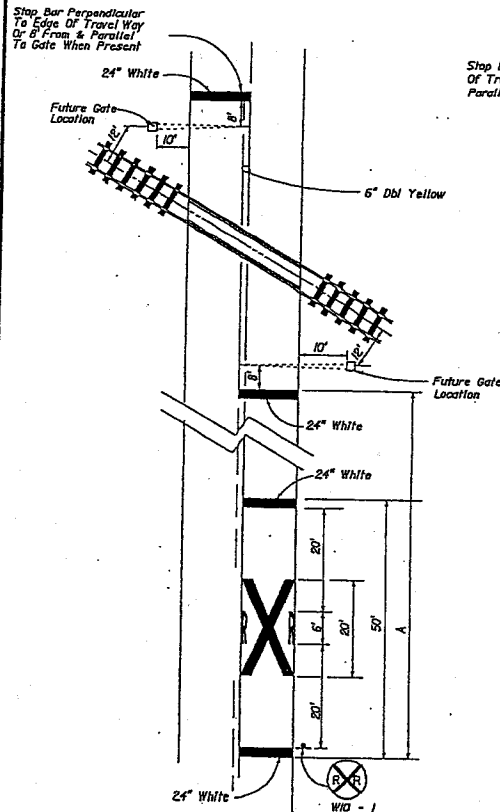
### RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES

Designed By	Drawn By	Checked By	Name	Date	Approved By

Index No.

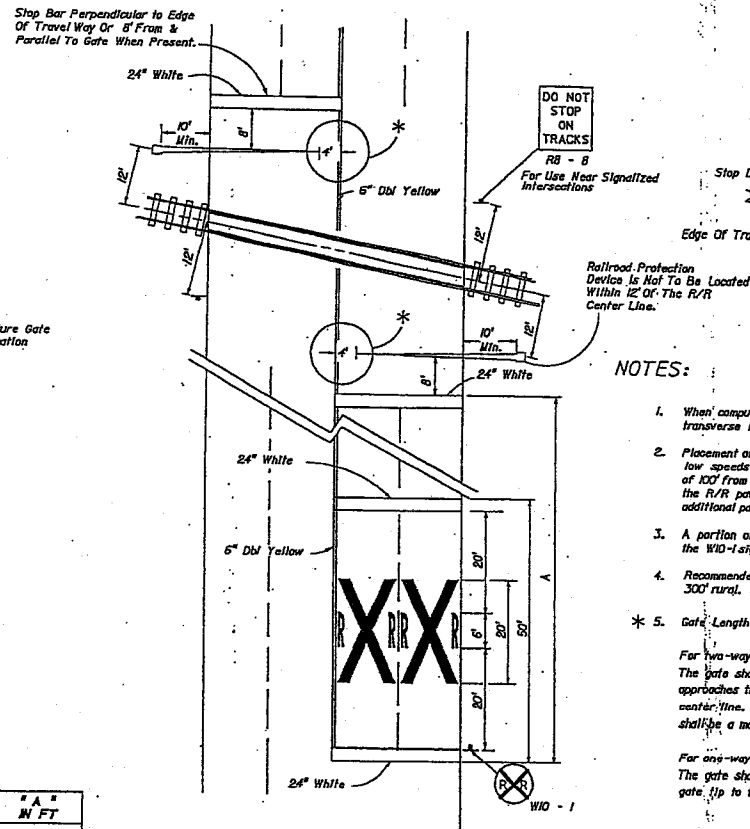
17882

# RAILROAD CROSSING AT TWO (2) - LANE ROADWAY

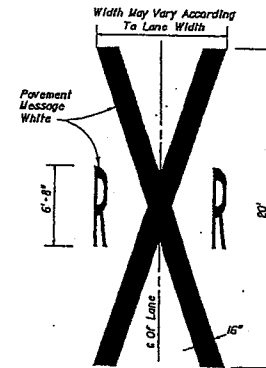
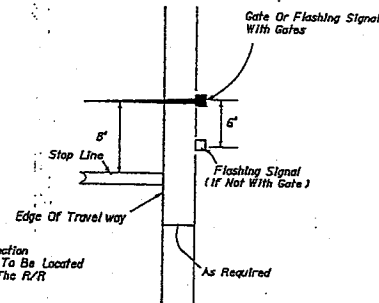


SPEED MPH	"A" IN FT
60	550
55	450
50	375
45	300
40	225
35	150
30	100
URBAN	50 MIN.

# RAILROAD CROSSING AT MULTI-LANE ROADWAY



# RELATIVE LOCATION OF CROSSING TRAFFIC CONTROL DEVICES



## NOTES:

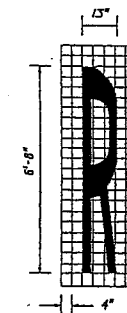
- When computing pavement message, quantities do not include transverse lines.
- Placement of sign W10-1 in a residential or business district, where low speeds are prevalent, the W10-1 sign may be placed a minimum distance of 100' from the crossing. Where street intersections occur between the R/R pavement message and the tracks an additional W10-1 sign and additional pavement message should be used.
- A portion of the pavement markings symbol should be directly opposite the W10-1 sign.
- Recommended location for FTP-SI-04 or FTP-62-04 signs, 100' urban and 300' rural. See Index 17355 for sign details.
- Gate Length Requirements

## For two-way undivided sections:

The gate should extend to within 1' of the center line. On multilane approaches the maximum gate length may not reach to within 1' of the center line. For these cases, the distance from the gate to the center line shall be a maximum of 4'.

## For one-way or divided sections:

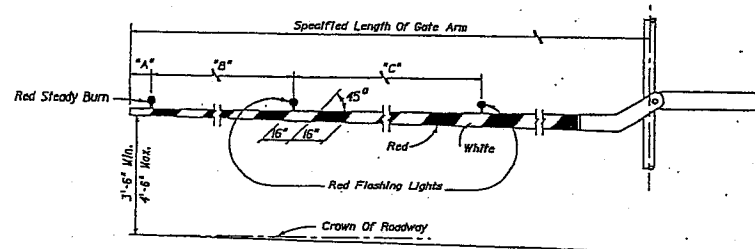
The gate shall be of sufficient length such that the distance from the gate tip to the inside edge of pavement is a maximum of 4'.



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

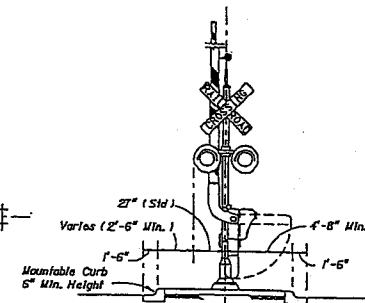
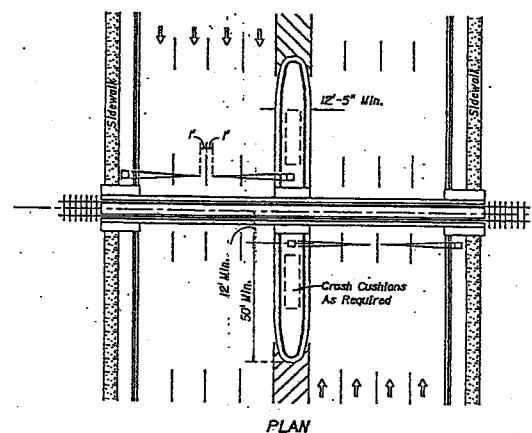
## RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES

Designed By	10-77	Approved By	10-77
Drawn By		Revision	3 of 4
Checked By		Sheet No.	17882



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"	4'	5'
20-23 Ft.	28"	4'	5'
24-28 Ft.	28"	5'	5'
29-31 Ft.	30"	6'	6'
32-34 Ft.	36"	7'	7'
35-37 Ft.	36"	9'	9'
38 And Over	36"	10'	10'



NOTE :

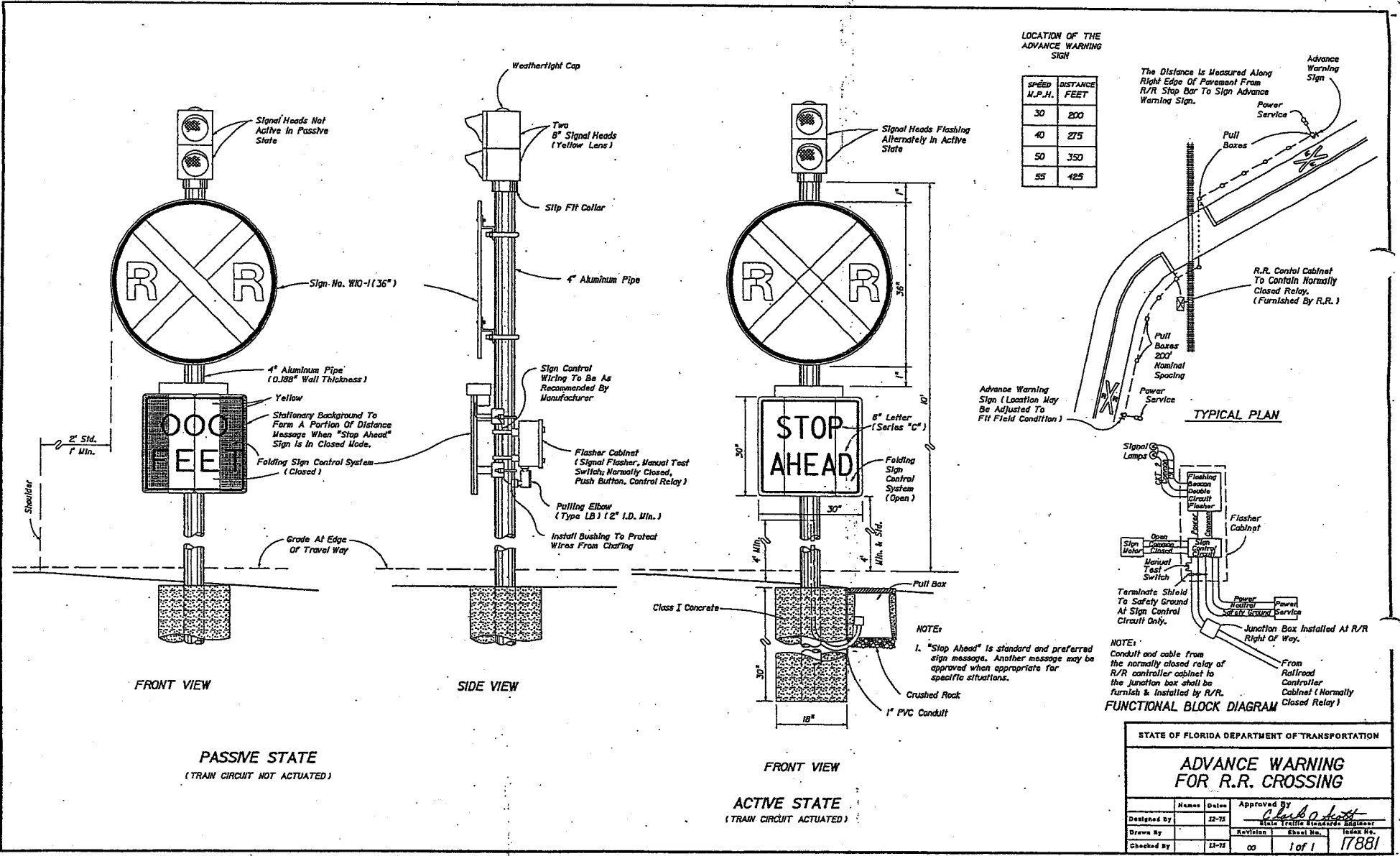
For additional information see the "Manual On Uniform Traffic Control Devices", Part VIII; The "Traffic Control Devices Handbook", Part VIII; and AASHTO "A Policy On Geometric Design Of Streets And Highways".

# **MEDIAN SIGNAL GATES FOR** **MULTI LANE UNDIVIDED URBAN SECTIONS** (THREE OR MORE DRIVING LANES IN ONE DIRECTION, 45 mph OR LESS)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

## **RAILROAD GRADE CROSSING** **TRAFFIC CONTROL DEVICES**

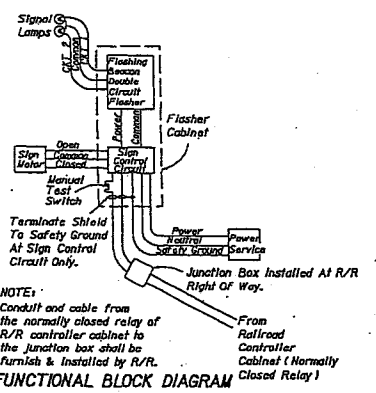
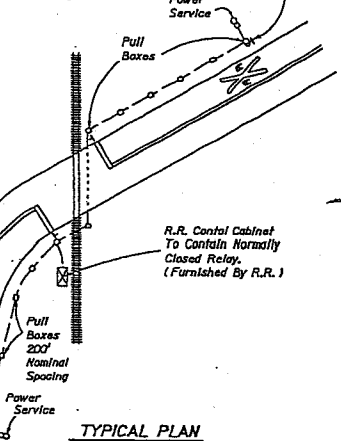
Designed By	Revised	Date	Approved By
		10-15	<i>Charles J. Smith</i>
Drawn By	Revised	10-15	State Traffic Standards Engineer
Checked By	Revised	00	Sheet No. 4 of 4 Index No. 17882



LOCATION OF THE  
ADVANCE WARNING  
SIGN

SPEED M.P.H.	DISTANCE FEET
30	200
40	275
50	350
55	425

The Distance Is Measured Along  
Right Edge Of Pavement From  
R/R Stop Bar To Sign Advance  
Warning Sign.



NOTE:  
1. "Stop Ahead" is standard and preferred sign message. Another message may be approved when appropriate for specific situations.

