

**RAILROAD REIMBURSEMENT AGREEMENT
GRADE CROSSING TRAFFIC CONTROL DEVICES-COUNTY**

COUNTY	SECTION	JOB NUMBER	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
74	000	6927	Crawford Road	Nassau	1 (SIG-P)	RRP-000S(380)

THIS AGREEMENT, made and entered into this 20th day of May, 19 91,
by and between the STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, hereinafter called the
DEPARTMENT, and ~~Norfolk Southern Corporation~~ GEORGIA SOUTHERN AND FLORIDA RAILWAY
COMPANY, a corporation organized and existing under the laws of ~~Virginia~~ Georgia,
with its principal place of business in the City of Atlanta,
County of Fulton, State of Georgia, hereinafter called
the COMPANY; and Nassau 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 DEPARTMENT as Job No. 74000-6927,
~~between _____ and _____~~, which crosses at grade
the right-of-way and tracks of the COMPANY at a point _____ feet _____ from the
COMPANY'S Milepost Crawford 246.80 - G FDOT/AAR Crossing Number 713529-R,
at or near Callahan, Florida, as shown on DEPARTMENT'S Plan Sheet No.
1, A marked Exhibit A, dated August 24, 1989, 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 I Class I and/or other traffic control devices at said location on an actual
cost basis, and in accordance with the DEPARTMENT'S Plans and Standard Index Number 17882 attached
hereto and by reference 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.

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 of 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.

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 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 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. 132-046 "Reimbursement for Utility and Railroad Relocation," dated October 1, 1973, and Rule 014-46.002 "Responsibility for the Cost of Railroad/Highway Crossings," Florida Administrative Code, dated February 3, 1971,

XX (b) Federal Highway Administration Federal Aid Highway Program Manual Volume 1, Chapter 4, Section 3, dated August 5, 1988; and Volume 6, Chapter 6, Section 2, Subsection 1, dated April 24, 1984,

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 the above indicated Reimbursement Policy, 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 estimate of the cost thereof in the amount of \$ 56,430.00. 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 \$ _____, as supported by a detail analysis of estimated cost attached hereto. (NOTE: This method is not applicable where the estimated cost of the 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) \$ _____ credited for (betterment) and/or (expired service life) and/or (nonreimbursable segments) in accord with Article 9.(c) herein above.

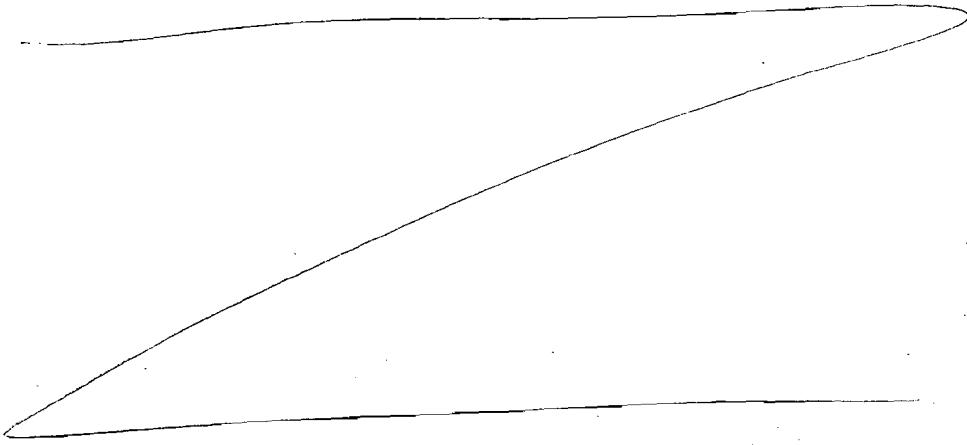
11. It is specifically agreed by and between the DEPARTMENT and the COMPANY that the DEPARTMENT shall receive fair and adequate credit for any salvage which shall accrue to the COMPANY as a result of the above installation and/or adjustment work.

12. It is further agreed that the cost of all installations and/or adjustments made during this installation work shall be borne by the COMPANY, subject only to the DEPARTMENT bearing such portion of this cost as represents the cost of installation and/or adjustment of the 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. The COMPANY covenants to indemnify, defend, save harmless and exonerate the DEPARTMENT of and from all liability, claims and demands arising out of work undertaken by the COMPANY pursuant to this agreement, due to the negligent actions, delay or omissions done or committed by the COMPANY, its subcontractors, employees, agents or representatives: excepting, however, any loss, damage or injury arising out of or caused by the negligent actions, delays or omissions done or committed by the DEPARTMENT, its subcontractors, employees, agents or representatives, which loss, damage or injury shall be borne by the DEPARTMENT except as otherwise covered by bonds or insurance.



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

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

BY: _____ (SEAL)

ATTEST: _____
Secretary

COMPANY: GEORGIA SOUTHERN AND FLORIDA RAILWAY COMPANY

BY: *R. E. [Signature]* (SEAL)
Vice President

ATTEST: *Debra M. Martin*
Assistant Secretary

NASSAU COUNTY, FLORIDA

BY: *[Signature]* (SEAL)
(Title: CHAIRMAN)

ATTEST: *[Signature]*

Approved as to Form, Legality
and Execution

Approved as to Funds
Available

Approved as to FHPM
Requirements

BY: *[Signature]* 3-25-91
Attorney - DOT Date

BY: _____
Fiscal-DOT Date

BY: _____
FHWA Date

COUNTY RESOLUTION

GRADE CROSSING TRAFFIC CONTROL DEVICES AND FUTURE RESPONSIBILITY

COUNTY	SECTION	JOB NUMBER	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
74	000	6927	Crawford Road	Nassau	1 (SIG-P)	

A RESOLUTION AUTHORIZING EXECUTION OF A RAILROAD REIMBURSEMENT AGREEMENT FOR THE INSTALLATION OF GRADE CROSSING TRAFFIC CONTROL DEVICES, AND FUTURE MAINTENANCE AND ADJUSTMENT OF SAID DEVICES; PROVIDING FOR THE EXPENDATURE OF FUNDS AND PROVIDING WHEN THIS RESOLUTION SHALL TAKE EFFECT.

RESOLUTION NO. 90-47

ON MOTION OF Commissioner Higginbotham, District 1, seconded by Commissioner Testone, the following RESOLUTION was adopted:

WHEREAS, the State of Florida Department of Transportation is constructing, reconstructing or otherwise changing a portion of the Public Road System, between _____ and _____, which shall call for the installation and maintenance of railroad grade crossing traffic control devices for railroad grade crossing over or near said highway; and

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY COMMISSION OF Nassau COUNTY, FLORIDA;

That Nassau County enter into a RAILROAD REIMBURSEMENT AGREEMENT with the State of Florida Department of Transportation and the ~~Norfolk Southern Corp.~~ ^{Georgia Southern and Florida Railway} Company for the installation and maintenance of certain grade crossing traffic control devices designated as Job No. 74000-6927 on Crawford Road which crosses the right of way and tracks of the Company at FDOT/AAR Crossing No. 713529-R located near Callahan, Florida; and

That the County assume its share of the costs for future maintenance and adjustment of said grade crossing traffic control devices as designated in the RAILROAD REIMBURSEMENT AGREEMENT; and

That the Chairman and Clerk of the Board of County Commissioners be authorized to enter into such agreements with the State of Florida Department of Transportation and the ~~Corporation~~ ^{Norfolk Southern} Company as herein described; and

That this RESOLUTION shall take effect immediately upon adoption.

INTRODUCED AND PASSED by the Board of County Commissioners of Nassau County, Florida, in regular session, this 18th day of December 19 89

Jim Z. Howell
Chairman of the Board of County Commissioners

ATTEST: *[Signature]*
Clerk of the Board of County Commissioners

DETAILED ESTIMATE FOR GRADE CROSSING WARNING DEVICES

CALLAHAN
CITY: JACKSONVILLE STATE: FL ROAD: CRAWFORD RD.
MILEPOST: 246.8-G AAR NO.: 713529R
STAT PROJ. NO.: COUNTY: NASSAU
S&E PROJ. NO.: 02.000 AFE NO.:
MAN DAYS: 64.0 FILE NO.:

PURCHASES - OTHER

MEALS & LODGING:	3000.00
RENTAL OF EQUIPMENT:— (2 TRUCKS, 1 BACKHOE W/TRAILER AND 1 PIPE-PUSHER FOR 8.0 DAYS)	2200.00
CONSTRUCTION SUPERVISION VEHICLE:	140.00
CONTINGENCIES:	1110.00
PURCHASES - OTHER TOTAL:	6450.00

MATERIAL AND ADDITIVES

MATERIAL COST:	32060.00
SALES & USE TAX:	1280.00
FREIGHT CHARGES:	200.00
MATERIAL TOTAL:	33540.00

LABOR AND ADDITIVES

LABOR COST: (8 MAN CREW AT 1110 A DAY FOR: 8.0 DAYS)	8880.00
PAYROLL TAX & OVERHEADS:	4750.00
PRELIMINARY ENGINEERING:	1590.00
CONSTRUCTION SUPERVISION:	1220.00
LABOR TOTAL:	16440.00

SUBTOTAL:	56430.00
CREDIT: (SALVAGE/SCRAP)	
PROJECT TOTAL:	56430.00

89/09/26

OFFICE OF PUBLIC TRANSPORTATION
RAIL
03/81

RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES

COUNTY	SECTION	JOB NUMBER	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
74	000	6927	Crawford Rd.	Nassau	1(SIG-P)	RRP-000S(380)

COMPANY NAME: Georgia Southern and Florida Railway Co.

A. JOB DESCRIPTION & LOCATION: Crawford Road, Nassau County

B. TYPE OF ROADWAY FACILITY: Dirt Road

C. FDOT/AAR XING NO.: 713529-R RR MILE POST TIE: 246.80 G.

D. TYPE SIGNALS PROPOSED 1 CLASS 1 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	\$1,404.00
II	Flashing Signals - Multiple Tracks	\$1,858.00
III	Flashing Signals and Gates - One Track	\$2,117.00
IV	Flashing Signals and Gates - Multiple Tracks	\$2657.00

*Effective July 1, 1991

AUTHORITY: FLORIDA ADMINISTRATIVE RULE 014.46.002
Responsibility for the Cost of Automatic Highway
Grade Crossing Traffic Control Devices

EFFECTIVE DATE: July 1, 1991

GENERAL AUTHORITY: 334.044 F.S.

SPECIFIC LAW IMPLEMENTED: 335.141 F.S.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
 OFFICE OF PUBLIC TRANSPORTATION
 WORK DESCRIPTION
 GRADE CROSSING TRAFFIC CONTROL DEVICES

FORM 725-000-00-4
 REPLACES 041-33
 01/80
 PAGE 1 of 1

COUNTY	SECTION	JOB NUMBER	ROAD NAME OR NUMBER	COUNTY NAME	PARCEL & R/W NUMBER	FAP NUMBER
74	000	6927	Crawford Road	Nassau	1(SIG-P)	RRP-000S(380)

RAILROAD COMPANY

~~Norfolk Southern Corporation~~ GEORGIA SOUTHERN AND FLORIDA RAILWAY COMPANY

A. JOB DESCRIPTION & LOCATION: Crawford Road, Nassau County

B. TYPE OF ROADWAY FACILITY: Dirt Road

C. FDOT/AAR XING NO. 713529-R RR MILE POST TIE: Crawford 246.80 - G

D. TYPE SIGNALS PROPOSED: I CLASS: I DOT INDEX NO.: 17882

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. Flashing Signals with Gates.
- f. Flashing Signals with Cantilever and Gates.

2. PROPOSED DEVICES (Safety Index Rating 234)

- a. No revision required.
- b. Crossbuck and Disk.
- c. Flashing Signals and Disk.
- d. Flashing Signals with Cantilever.
- e. Flashing Signals with Gates.
- f. Flashing Signals with Cantilevers and Gates.
- g. Relocate existing signal devices:
 - (1) (With-Without) addition of Gates.
 - (2) (With-Without) synchronization with highway traffic signals.

F. COMMUNICATION AND/OR POWER LINE ADJUSTMENTS:

- 1. N/A By Others (_____ Company)
- 2. By Railroad Company.

G. AUTHORITY REQUESTED: (Draft attached: Yes _____ No)

- 1. Agreement (Third Party Participating Nassau County)
- 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: June, 1990
 Signal installation target date: December, 1990
 Synchronization: (Draft attached _____ Yes No)

7/17/89

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

PAGE 1

PROJECT NO. _____

H.P.A. NO. _____

Look

Crawford R East

CROSSING NO.: 713529-R PRIORITY NO.: 0234 COUNTY: NASSAU CITY: CALLAHAN

RDWY: THOMASWAMP R

CLASSIFICATION/LOCATION: DATE LAST UPDATED: 860915

R.R. CO.: SOUTHERN RAILWAY COMPANY R.R. BRANCH: STATION: CRAWFORD R.R. MILEPOST: 0246.80
Georgia AND FLORIDA
R.R. CROSSING STATUS: OPEN AS OF 831115 PROPOSED STATUS: NO USE, OPEN

RAIL OPERATIONS: DATE LAST UPDATED: 880413

TRAIN MOVEMENTS: 11 PER DA MAXIMUM TRAIN SPEED: 055 EFFECTIVE: 880321 NO. OF MAIN TRACKS: 1 OTHER TRACKS: 00

WARNING DEVICES: DATE LAST UPDATED: 870803

EXISTING PROTECTION: X-BUCK TYPE OF TRAIN DETECTION: UNKNOWN PREEMPTION: N ADVANCE WARNING: N

PHYSICAL DATA: DATE LAST UPDATED: 860805

R.R. CROSSING ANGLE: 50-59 DEGREES NO. OF THRU LANES: 01 OTHER LANES: 0 HIGHWAY SPEED: 025 DIST. TO INTERSECT.: 00045
ACTUAL STOPPING SIGHT DIST.(FT): 160 MIN. CLEAR QUAD. SIGHT DIST.(FT): 025 PARALLEL RD.: XING RD PARA & OTHER RD T OR +
CROSSING CONDITION: FAIR APPROACH CONDITION: LARGE HUMP OR SAG - HAZARDOUS MAINTAINING AGENCY: COUNTY

DEPARTMENT DATA: DATE LAST UPDATED: 890615

TRAFFIC VOL.(ADT): 000270 AS OF 880815 SCHOOL BUS COUNT: 004 AS OF 1989 PERCENT TRUCKS: .00 HAZARDOUS MATLS.: U

SAFETY DATA: DATE LAST UPDATED: 890707

PRED. ACCID./YEAR: 000.148 SAFETY INDEX: 55.38 RECOMMENDED WARNING DEVICE: FL ESTIMATED COST: 0036.0 THOUSAND

DESCRIPTION OF SITE/INSTALLATION CONFLICTS: _____

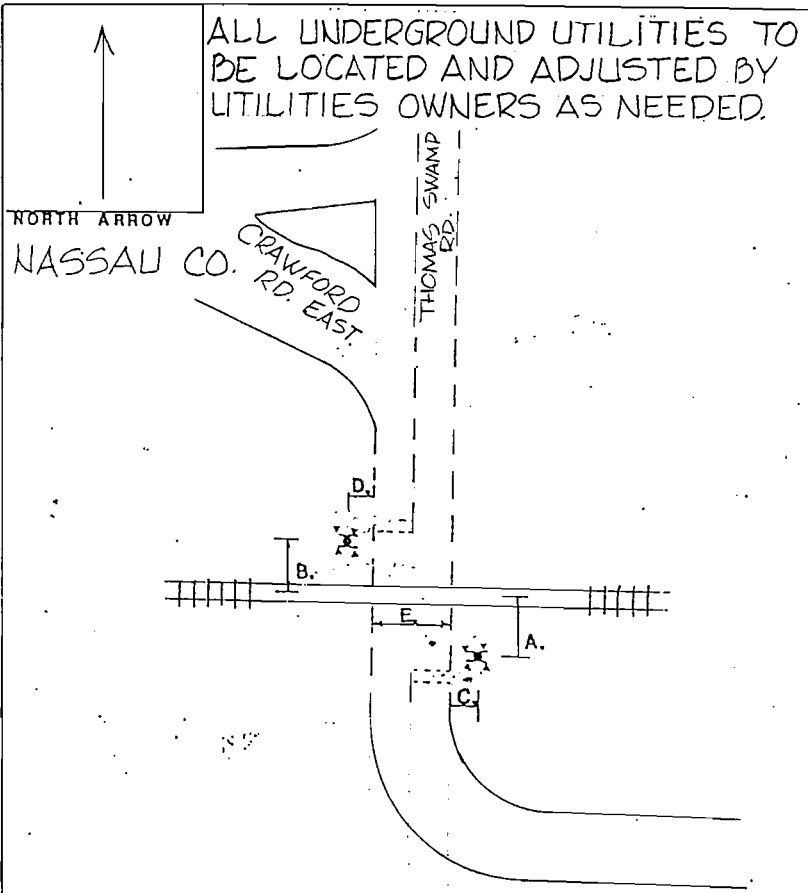
REVIEW TEAM RECOMMENDATION: *AD - RECOMMENDATION - CHANGE 11731 SECTION 1 DESIGN*

CALL IT UP IN CONDUCT

DATE REVIEWED _____ BY _____

REVIEW TEAM PERSONNEL: D.O.T. RAIL _____ D.O.T. SAFETY _____ RAILROAD CO. _____

FHWA _____ LOCAL _____



PROJECT NO. _____
 W.R.I. NO. _____
 F.A.P. NO. _____

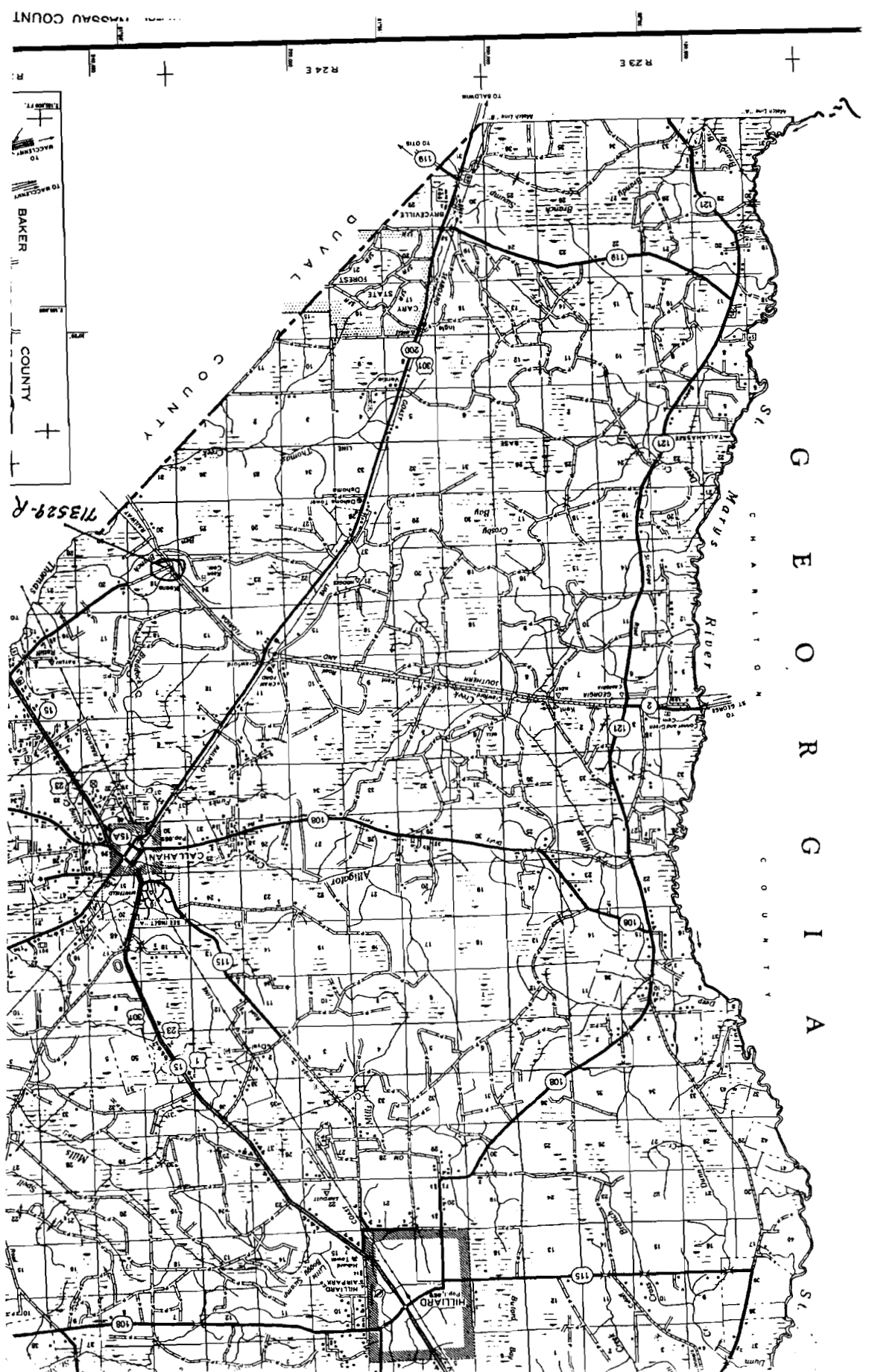
- A. 15'
- B. 15'
- C. 12'
- D. 12'
- E. 24'

REMARKS EXIST. WARNING DEVICES:
 CROSSBUCKS
 N/S TO INSTALL FLASHING LIGHTS WITH SIDE LIGHTS IN NW QUAD.
 COUNTY TO: ① TRIM TREES IN NW & SE QUADS, ② PAVE 50' N & S OF CROSSING.

EXHIBIT A

FLORIDA DEPARTMENT OF TRANSPORTATION
 RAIL-HIGHWAY GRADE CROSSING IMPROVEMENT
 CROSSING NO. 713529-R COMPANY N/S
 TYPE I CLASS I
 DRAWN BY S. IS DATE 8/24/89

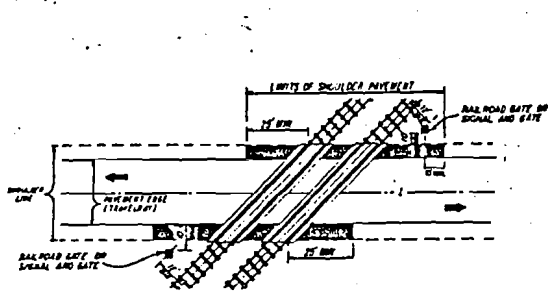
G E O R G I A



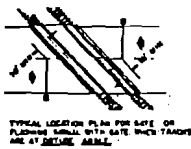
FLORIDA COUNTY

BAKER COUNTY

713529-R

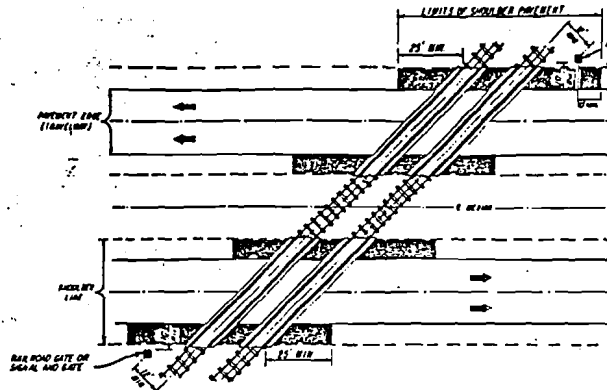


TRACK CLEARANCE FOR ACUTE OR RIGHT ANGLE CROSSINGS



TYPICAL LOCATION PLAN FOR GATE OR FLASHING SIGNAL WITH GATE WHEN TRACKS ARE AT OBLIQUE ANGLES

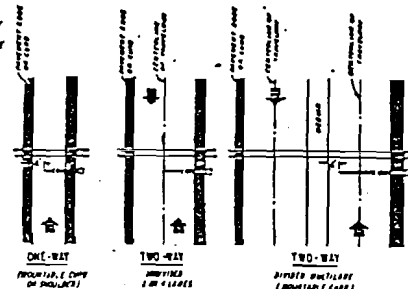
NOTE: IT IS INTENDED THAT THE FULL SHOULDER WIDTH OF THE EXISTING ROADWAY BE MAINTAINED. WHERE AN EXISTING SHOULDER IS SUBSTANTIALLY SUBPARAGARD FOR THE FACILITY INVOLVED, THE SHOULDER WIDTH SHOULD BE UPGRADED TO MEET CURRENT STANDARDS.



TRACK CLEARANCE FOR ACUTE OR RIGHT ANGLE CROSSINGS



TYPICAL LOCATION PLAN FOR GATE OR FLASHING SIGNAL WITH GATE WHEN TRACKS ARE AT OBLIQUE ANGLES

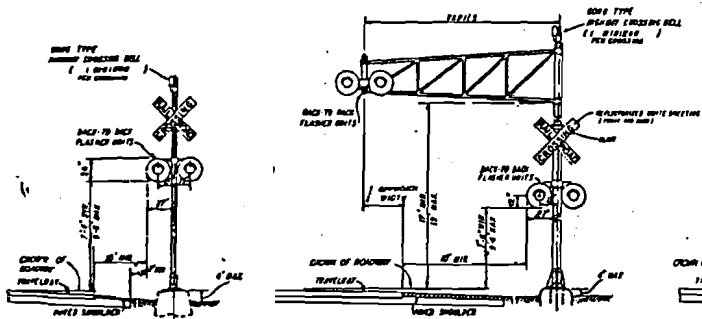


NOTE: ARROWS SHOW DIRECTION OF TRAVEL, BUT GATE INDICATIONS SHOWS DIRECTION OF TRAVEL.

FIGURE 1

GATE LENGTH REQUIREMENTS

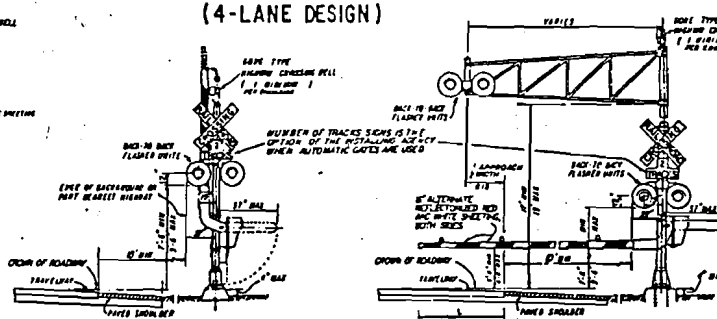
SIGNAL PLACEMENT AT RAILROAD CROSSING
(2-LANE DESIGN)



TYPE I

TYPE II

SIGNAL PLACEMENT AT RAILROAD CROSSING
(4-LANE DESIGN)



TYPE III

TYPE IV

NOTE: TWO SEPARATE FOUNDATIONS MAY BE REQUIRED ONE FOR SIGNALS, ONE FOR GATES, DEPENDING ON TYPE OF EQUIPMENT USED.

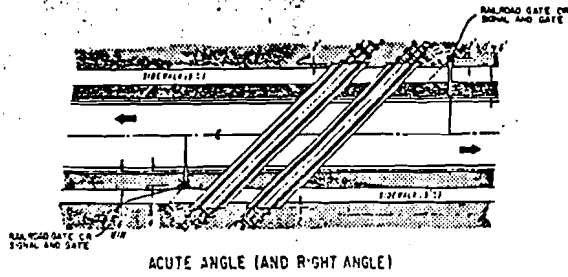
GENERAL NOTES

- NO GUARDRAIL IS PROPOSED FOR SIGNALS; HOWEVER, SOME FORM OF IMPACT ATTENUATION DEVICE MAY BE SPECIFIED FOR CERTAIN LOCATIONS.
- ADVANCE FLASHERS TO BE INSTALLED WHEN AND IF CALLED FOR IN PLANS OR SPECIFICATIONS.
- TOP OF FOUNDATION SHALL BE NO GREATER THAN 4" ABOVE FINISHED SHOULDER GRADE.
- TYPE OF TRAFFIC CONTROL DEVICES
 - FLASHING SIGNALS
 - FLASHING SIGNALS WITH CANTILEVER
 - FLASHING SIGNALS WITH GATE
 - FLASHING SIGNALS WITH CANTILEVER & GATE
 - GATE
- CLASS OF TRAFFIC CONTROL DEVICES
 - FLASHING SIGNALS-ONE TRACK
 - FLASHING SIGNALS-MULTIPLE TRACKS
 - FLASHING SIGNALS AND GATES-ONE TRACK
 - FLASHING SIGNALS AND GATES-MULTIPLE TRACKS

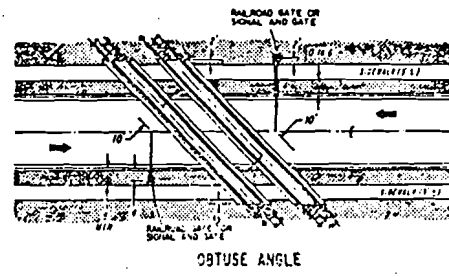
FLORIDA DEPARTMENT OF TRANSPORTATION TRAFFIC DESIGN RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES			
DATE	INITIALS	DESCRIPTION	APPROVED BY
8-7-83	A.B.	CHANGE NUMBER OF FLASHER UNITS	Checked by
8-15-83	A.B.	ADDED LINEY "A" OF 4 TO 10013	Checked by
10-15-83	A.B.	REVISIONS TO MEET LATEST EDITION OF CONSULTANTS' SPEC. FOR RAILROAD CROSSING	Checked by

REVISIONS			
DATE	INITIALS	DESCRIPTION	APPROVED BY
7-15-71	J.J.	ADDED 6000 TYPE SIGNAL SIGNALING BELL	Checked by
11-10-71	J.J.	ADDED 6000 TYPE SIGNAL SIGNALING BELL	Checked by
8-15-72	A.B.	REVISIONS TO MEET LATEST EDITION OF CONSULTANTS' SPEC. FOR RAILROAD CROSSING	Checked by
8-15-72	A.B.	REVISIONS TO MEET LATEST EDITION OF CONSULTANTS' SPEC. FOR RAILROAD CROSSING	Checked by

DRAWING NO. 17882
 INDEX NO. 1 of 4



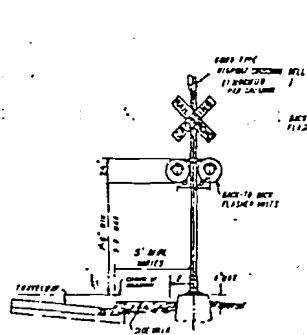
SIGNAL PLACEMENT AT RAILROAD CROSSING
(2 LANES, CURB & GUTTER)



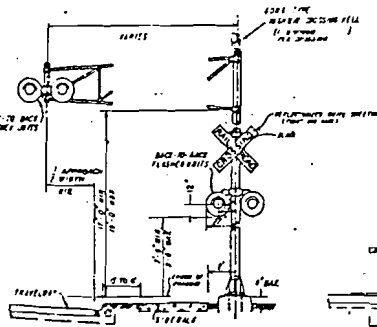
SIGNAL PLACEMENT AT RAILROAD CROSSING
(2 LANES, CURB & GUTTER)

GENERAL NOTES

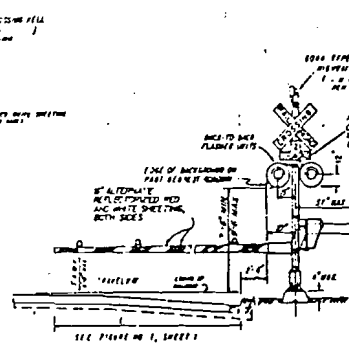
- 7 THE LOCATION OF FLASHING SIGNALS AND STOP LINES SHALL BE ESTABLISHED BASED ON PRACTICE FOR PRESENT INSTALLATION OF GATES & IN APPROPRIATE TRACK CLEARANCES
- 8 WHERE PLUS CALL FOR RAILROAD TRAFFIC CONTROL DEVICES TO BE INSTALLED WITHOUT MEDIAN, THE MINIMUM MEDIAN WIDTH SHALL BE 12.5 FEET
- 9 LOCATION 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
- 10 STOP LINE TO BE PERPENDICULAR TO EDGE OF ROADWAY, APPROX 15 FEET MINIMUM FROM RAIL OR 8 FEET MIN AND PARALLEL TO GATE WHEN PRESENT



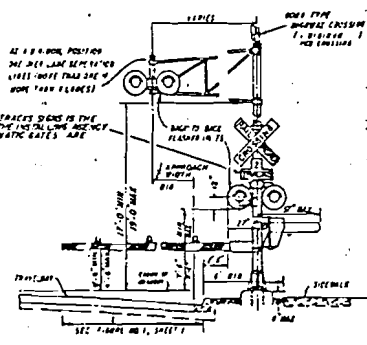
TYPE I



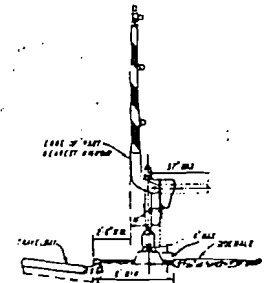
TYPE II



TYPE III



TYPE IV



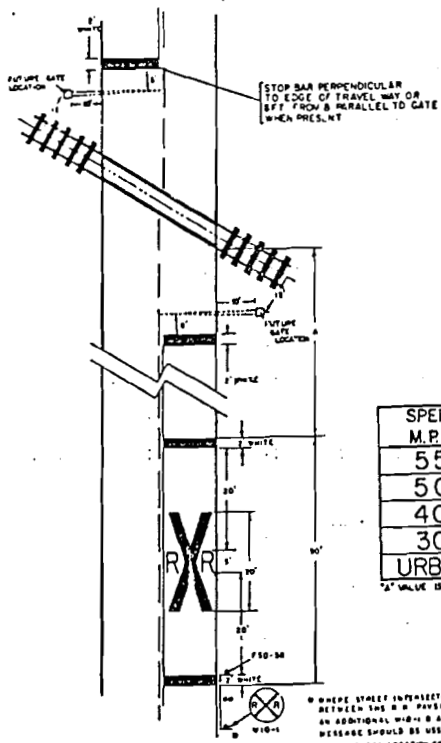
TYPE V

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

REVISIONS			REVISIONS			INITIALS	DATE
DATE	INITIALS	DESCRIPTION	DATE	INITIALS	DESCRIPTION	DESIGNED BY	DATE
8-7-55	L.B.	CHANGED DIMENSIONS OF FLASHING UNITS	7-19-57	J.J.	ISSUED ROAD TYPE APPROX SIGNALS BELL	Checked by	8-8-56
10-15-55	J.S.	ADDED SHEET 4 OF 6 TO INDEX	11-8-57	J.J.	ADDED SHEET 5 AND 6 TO INDEX	Checked by	8-8-56
10-9-55	J.S.	REVISED NOTES, MEDIAN WIDTH PROVISIONS	8-21-58	A.S.L.	REVISED NOTES FOR THE APPROX TYPE TO INCLUDE THE LATEST SIGNAL PLACEMENTS AS PER LATEST SIGNAL PLACEMENTS	Checked by	
			10-21-58	A.S.L.	REVISED NOTES FOR THE APPROX TYPE TO INCLUDE THE LATEST SIGNAL PLACEMENTS AS PER LATEST SIGNAL PLACEMENTS	Checked by	

CALCULATING NO. : INDEX NO.
2 of 4 : 17882

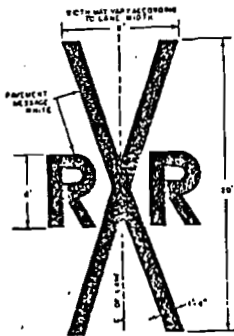
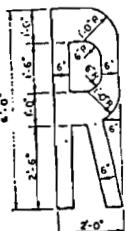
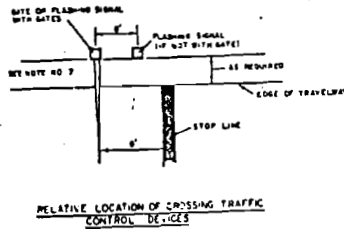
RAILROAD CROSSING AT TWO (2)-LANE ROADWAY



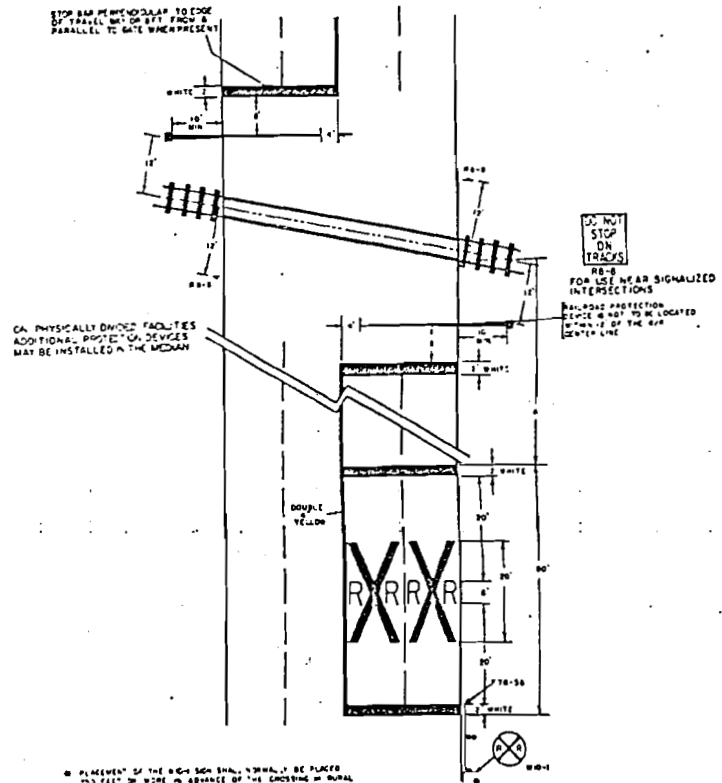
SPEED M.P.H.	"A" IN FT.
55	425
50	350
40	275
30	200
URBAN	50 MIN.

*"A" VALUE IS BASED ON AASHTO M1530

WHERE STREET INTERSECTIONS OCCUR BETWEEN THE 8' PAVEMENT MESSAGE & THE TRACKS AN ADDITIONAL WIDTH & AN ADDITIONAL PAVEMENT MESSAGE SHOULD BE USED.
RECOMMENDED LOCATION FOR F10-30 SIGNS 100' URBAN AND 100' RURAL.



RAILROAD CROSSING AT MULTI-LANE ROADWAY

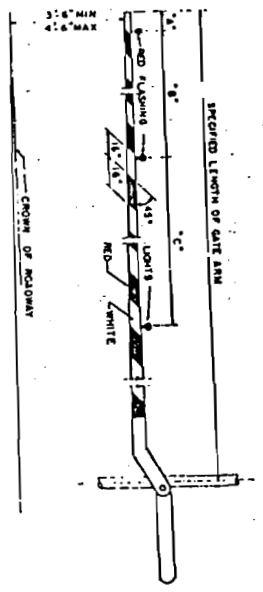


PLACEMENT OF THE HIGH SIGN SHALL BE PLACED 100 FEET OR MORE IN ADVANCE OF THE CROSSING IN RURAL AREAS AND 150 FEET IN ADVANCE OF THE CROSSING IN URBAN AREAS EXCEPT THAT IN A RESIDENTIAL OR BUSINESS DISTRICT, WHERE LOW SPEEDS ARE PREVALENT, THE SIGN MAY BE PLACED 60 FEET BEHIND OR 100 FEET FROM THE CROSSING IF THERE IS A STREET INTERSECTION WITHIN 125 FEET OF A CONTROL SIGN OR SIGN MAY BE PLACED TO MARK TRAFFIC APPROACHING THE CROSSING FROM EACH DIRECTION TO THE
RECOMMENDED LOCATION FOR F10-30 SIGN 100' URBAN AND 100' RURAL.

FLORIDA DEPARTMENT OF TRANSPORTATION TRAFFIC DESIGN			
RAILROAD GRADE CROSSING TRAFFIC CONTROL DEVICES			
REVISIONS		INITIALS / DATE	
DATE	INITIALS	DESCRIPTION	DESIGNED BY JMC 02/26/77
02-27-77	JMC	ADDED 10' SIGN	CHECKED BY
03-17-77	JMC	REPLACED STOP BAR & MESSAGE WITH RR-8	DESIGNED BY
03-17-77	JMC	REPLACED 10' SIGN WITH RR-8	CHECKED BY
04-20-77	JMC	REVISED R/R "X" DIMENSIONS	DESIGNED BY
07-17-77	JMC	ADDED SHEET 4 OF 4 TO SHEET	CHECKED BY

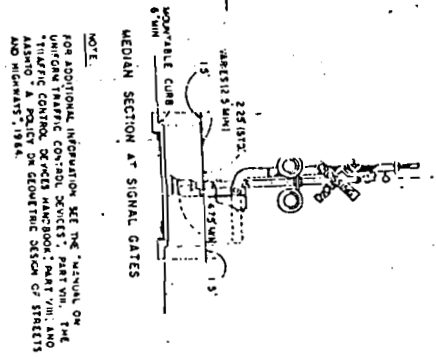
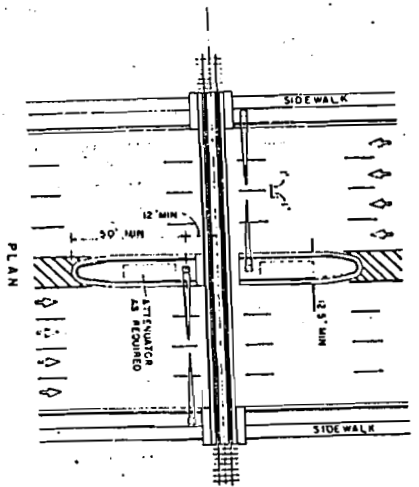
APPROVED BY: *[Signature]*
STATE DESIGN ENGINEER-ADULT

DRAWING NO: 3 OF 4
INDEX NO: 17882



RAILROAD GATE ARM - LIGHT SPACING

PROJECTED LENGTH OF GATE ARM	WIDTH OF GATE ARM	CROWN OF ROADWAY	OVERLAP
1-4 FT	6"	36"	5'-0"
5-15 FT	18"	36"	5'-0"
16-17 FT	24"	36"	5'-0"
18-19 FT	24"	41"	5'-0"
20-21 FT	28"	41"	5'-0"
22-28 FT	28"	41"	5'-0"
29-31 FT	35"	51"	5'-0"
32-34 FT	35"	51"	5'-0"
35-37 FT	35"	51"	5'-0"
38 AND OVER	36"	10'-0"	12'-0"



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

NOTE:
FOR ADDITIONAL INFORMATION SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART VIII, AND THE MANUAL ON GEOMETRIC DESIGN OF STREETS AND HIGHWAYS, 1984.

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

Project No. 2-111
Contract No. 4-17882

DATE: 1/18/84