

ALABAMA DEPARTMENT OF TRANSPORTATION

Bureau of County Transportation

1409 Coliseum Blvd., Montgomery, Alabama 36110-2060 Phone: (334) 242-6206 FAX: (334) 353-6530 Internet: http://www.dot.state.al.us



Robert Bentley Governor John R. Cooper Transportation Director

November 16, 2015

MEMORANDUM FY 2016-02

To: All County Engineers and Region County Transportation Engineers

From: Mr. D.E. Phillips, Jr., P.E.

State County Transportation Engineer

By:

Joshua A. Sanford, P.E. Design Section Engineer

RE: Revision to Procedural Guidelines for County Projects/ Railroad Involvement

Please see the attached memorandum regarding railroad crossing guidance. Section 8 regarding Railroad Involvement in the 2007 edition of the *Procedural Guidelines for County Projects* has been revised to include this directive from the Chief Engineer and is attached for your use. All projects will be required to include a "Certification of Railroad Involvement" letter (see page 8.10). This certification should be submitted along with all other required supporting documentation with Construction plans to this office. Scope of Work reviews should identify any railroad crossings within the limits or near the terminus of the projects effective immediately. If a crossing is identified, a "Railroad Crossing Warning Device Checklist" form is required to be completed during the review (see pages 8.11-8.12) in order to evaluate and determine if active devices are warranted. The Region Railroad Coordinator should be consulted as necessary. Section 8 will also be revised on the Bureau of County Transportation internet webpage.

Please feel free to contact me should you have any questions or comments concerning this matter.

DEP/JAS/lj Attachment

CC: Mr. Ed Austin, P.E., State Innovative Programs Engineer

PC: File



Robert Bentley Governor

ALABAMA DEPARTMENT OF TRANSPORTATION

1409 Coliseum Boulevard Montgomery, Alabama 36110

Telephone: 334/242-6311 • Fax No.: 334/262-8041



John R. Cooper Transportation Director

November 4, 2015

MEMORANDUM

To: Mr. D.E. (Ed) Phillips, Jr., P. E.

State County Transportation Engineer

Mr. Edward N. Austin, P. E.

State Innovative Programs Engineer

Region Engineers

From: Ronald L. Baldwin, P.E.

Chief Engineer

RE: Railroad Crossing Guidance

The purpose of this memorandum is to provide guidance when developing Federal-aid projects with railroad involvement.

In accordance with Title 23 CFR 635.309(b), all Federal-aid projects require a statement of railroad coordination verifying all relevant work has been completed or that necessary arrangements have been made to complete the work. The first step in this process is to determine if railroad work is involved in the project. Consideration should be given to rail-highway crossings that are "located within or near the terminus of a Federal-aid project", as stated in Title 23 CFR 646.214(b) (2). For the purpose of this guidance, "located within or near" is defined as; a rail-highway crossing within or immediately adjacent to the construction limits and within ALDOT right-of-way. The attached forms, *RR FORM 1* and *RR FORM 1A* are provided to comply with this requirement. One of the attached forms must be completed and submitted for all Federal-aid construction projects even if there is no railroad involvement on the project. This form should be submitted to the ALDOT State Office Engineer with the final plan assembly submittal.

If there is no railroad involvement, the process is limited to the completion and submission of form RR 1 or RR 1A.

When there is railroad involvement on a Federal-aid project, additional information is required. The condition of existing traffic control devices that are the responsibility of the highway owner for maintenance must be determined as follows:



Mr. D.E. (Ed) Phillips, Jr., P. E. Mr. Edward N. Austin, P. E. Region Engineers
November 3, 2015
Page 2

- 1. Are the current warning devices adequate for the rail-highway crossing? and,
- 2. Do the devices meet the current requirements in the Manual on Uniform Traffic Control Devices (MUTCD)?

Attached for your use in determining the adequacy of the existing devices is *Title 23 CFR 646.214(b)* and *Railroad Crossing Warning Device Checklist*. This review and determination should be included in the **project scope review**. All work to be undertaken as part of the project to comply with Title 23 CFR 646.214(b) will be included in the project cost unless the work is being done on a separate project or by the railroad at no cost to the project. If assistance is needed to determine whether active or passive warning devices are warranted, the Region Railroad Coordinator should be consulted.

Modal Programs personnel will work with the railroad to secure a statement for the devices that are the responsibility of the railroad for maintenance and operation.

We anticipate that the vast majority of at grade railroad crossings will warrant passive warning devices only.

Please distribute this memorandum and attachments to all persons having responsibilities for Federal-aid project development and acceptance at both the state and local levels, as it is imperative that ALDOT comply with this guidance.

Your cooperation in this effort is greatly appreciated.

RLB/RRS:ep

Attachments (4)

cc:

Mr. John R. Cooper

Mr. Don Arkle Mr. Clay McBrien

Region Railroad Coordinators

FHWA File

DATE:	
EERTIFICATION OF RAILROAD INVOLVEMENT	Federal-Aid Project Construction No CPMS # Description
	County
Original Update	
n accordance with the provisions of 23 C	FR Part 635.309(b), this is to certify that:
The above referenced project h railroad coordination required the undertaken and completed with	nat would need to be
All railroad arrangements/coord the above referenced project to completed within the project as	be undertaken and
	lination have been made for the above aken and completed prior to project ject.
-	Region Engineer

	DATE:	Control (In the second	
ERTIFICATI	NVOLVEMENT	Federal-Aid Project Construction No CPMS # Description	
		County	
Original Jpdate			
n accordan	ce with the provisions of 23 CFR I	Part 635.309(b), this is to certify that:	
ra	ne above referenced project has <u>r</u> ilroad coordination required that v ndertaken and completed with the	vould need to be	
th	All railroad arrangements/coordination have been made for the above referenced project to be undertaken and completed within the project as part of the project cost.		
re	I railroad arrangements/coordinat ferenced project to be undertaker ompletion at no cost to the project		
	Signed:		
	Au	thorized Local Agency Representative	



vertical clearances used by the railroad in its normal practice subject to limitations as shown in the appendix or as required by a State regulatory agency.

(b) The Federal share of railroad/ highway crossing projects may be:

(1) Regular pro rata sharing as provided by 23 U.S.C. 120(a) and 120(b).

(2) One hundred percent Federal share, as provided by 23 U.S.C. 120(c).

(3) Ninety percent Federal share for funds made available through 23 U.S.C. 133(d)(1).

[40 FR 16059, Apr. 9, 1975, as amended at 47 FR 33955, Aug. 5, 1982; 53 FR 32218, Aug. 24, 1988; 62 FR 45328, Aug. 27, 1997]

§ 646.214 Design.

(a) General. (1) Facilities that are the responsibility of the railroad for maintenance and operation shall conform to the specifications and design standards used by the railroad in its normal practice, subject to approval by the State highway agency and FHWA.

(2) Facilities that are the responsibility of the highway agency for maintenance and operation shall conform to the specifications and design standards and guides used by the highway agency in its normal practice for Federal-aid

projects.

(b) Grade crossing improvements. (1) All traffic control devices proposed shall comply with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways supplemented to the extent applicable by State standards.

(2) Pursuant to 23 U.S.C. 109(e), where a railroad-highway grade crossing is located within the limits of or near the terminus of a Federal-aid highway project for construction of a new highway or improvement of the existing roadway, the crossing shall not be opened for unrestricted use by traffic or the project accepted by FHWA until adequate warning devices for the crossing are installed and functioning properly.

(3)(i) Adequate warning devices, under §646.214(b)(2) or on any project where Federal-aid funds participate in the installation of the devices are to include automatic gates with flashing light signals when one or more of the following conditions exist:

(A) Multiple main line railroad tracks.

(B) Multiple tracks at or in the vicinity of the crossing which may be occupied by a train or locomotive so as to obscure the movement of another train approaching the crossing.

(C) High Speed train operation combined with limited sight distance at either single or multiple track crossings.

(D) A combination of high speeds and moderately high volumes of highway and railroad traffic.

(E) Either a high volume of vehicular traffic, high number of train movements, substantial numbers of schoolbuses or trucks carrying hazardous materials, unusually restricted sight distance, continuing accident occurrences, or any combination of these conditions.

(F) A diagnostic team recommends them.

(ii) In individual cases where a diagnostic team justifies that gates are not appropriate, FHWA may find that the above requirements are not applicable.

(4) For crossings where the requirements of §646.214(b)(3) are not applicable, the type of warning device to be installed, whether the determination is made by a State regulatory agency, State highway agency, and/or the railroad, is subject to the approval of FHWA.

(c) Grade crossing elimination. All crossings of railroads and highways at grade shall be eliminated where there is full control of access on the highway (a freeway) regardless of the volume of railroad or highway traffic.

[40 FR 16059, Apr. 9, 1975, as amended at 47 FR 33955, Aug. 5, 1982; 62 FR 45328, Aug. 27, 1997]

§ 646.216 General procedures.

(a) General. Unless specifically modified herein, applicable Federal-aid procedures govern projects undertaken pursuant to this subpart.

(b) Preliminary engineering and engineering services. (1) As mutually agreed to by the State highway agency and railroad, and subject to the provisions of \$646.216(b)(2), preliminary engineering work on railroad-highway projects may be accomplished by one of the following methods:

Railroad Crossing Warning Device Checklist

Date	
Fede	ral-Aid Project No.:
Cour	ty:
City:	
Road	way:
Cross	sing No.:
contro	Illowing checklist is an aid to determine the adequacy of existing rail-highway traffic I devices, when a rail-highway crossing falls within the construction limits, or when the ng is located within ALDOT right-of-way limits on Federal-aid projects. This checklist is sped according to the regulations listed in Title 23 CFR 646.214 (b)(3)(i)(A-F).
Checl	the statement that applies to this rail-highway crossing:
	 (A) Multiple main line railroad tracks. a. Main line.—The term "main line" means a segment or route of railroad tracks over which 5,000,000 or more gross tons of railroad traffic is transported annually.*
	(B) Multiple tracks at or in the vicinity of the crossing which may be occupied by a train or locomotive so as to obscure the movement of another train approaching the crossing.
	 (C) High Speed train operation combined with limited sight distance at either single or multiple track crossings. a. A high speed train is one that travels at a speed greater than 79 mph.* Note: no rail routes within Alabama are identified as High Speed. b. Limited sight distance is where available sight distance is less than desirable intersecting sight distance as defined by AASHTO. Sight distance is based on field measurements.
	(D) A combination of high speeds and moderately high volumes of highway and railroad traffic. a. All four conditions below must exist to meet (D). Basically an 'AND' condition. Definitions:
	 A high speed roadway is one that has a posted speed of 50 mph or more.* Moderately high volumes of highway traffic are when a highway's volume exceeds a Level of Service of 'D' (near capacity).* A high speed train is one that travels at a speed greater than 79 mph.* Moderately high volumes for a railroad traffic are when the railroad's volume exceeds a Level of Service of 'E' (at capacity).*

Railroad Crossing Warning Device Checklist

	(E) Either a high volume of vehicular traffic, high number of train movements, substantinumbers of school buses or trucks carrying hazardous materials, unusually restricted sight distance, continuing accident occurrences, or any combination of these conditions. If any of these conditions exist then (E) is met. Basically an 'OR' condition. Definitions:				
	 High volumes of vehicular traffic are those highways that are operating at a Level of Service of 'E' or greater.* High number of train movements will be identified as those rail lines where the railroad's volume exceeds a Level of Service of 'F' (above capacity).* Substantial school bus traffic is defined as locations that have twice the county wide average for school bus crossings.* Substantial hazardous materials truck traffic is defined as locations that have twice the national average for hazardous materials truck traffic. Note: National average, trucks transporting hazardous materials 7.2%. Unusually restricted sight distance is defined as sight distance that is restricted by a permanent, fixed object; or due to a severe skew of the crossing, where the acute angle between the rail line and highway is 30 degrees or less. Continuing crashes are applicable only to those sites that currently have 'lights and bells' but not 'gates' and there are documented crashes at those locations after the installation of the 'lights and bells' (Data Source: CARE). 				
	(F) A diagnostic team recommends active devices.				
	None of the above statements are applicable to this crossing.				
One o	of the statements below should also be selected:				
	The condition of existing traffic control devices that are the responsibility of the highway owner for maintenance (typically advanced warning signs and pavement markings) located at this crossing, are adequate and meet current MUTCD standards.				
	The condition of existing traffic control devices that are the responsibility of the highway owner for maintenance (typically advanced warning signs and pavement markings) located at this crossing, are adequate but <u>do not meet</u> current MUTCD standards and will be updated during the construction of the subject project.				
	BY: Authorized Signatory (Signature)				
	Type name of Authorized Signatory				

RAILROAD INVOLVEMENT

A "Certification of Railroad Involvement" (See example letter, page 8.10) must be furnished for all projects.

All projects let to contract, where work is being performed within the railroad's ROW (e.g., railroad bridge replacement/bridge rehabilitation, paving, paint striping, markings and legends, etc.), will require a properly executed railroad agreement. This agreement, in most cases, should be prepared by the Alabama Department of Transportation. If the agreement is not prepared by the ALDOT, the County should work out the necessary arrangements for the railroad crossing and the work should be completed before the project is authorized by the Federal Highway Administration.

Scope of Work reviews should identify any railroad crossings within the limits or near the terminus of the project. If a crossing is identified, a "Railroad Crossing Warning Device Checklist" form is required to be completed during the scope of work review (See example, pages 8.11-8.12). The presence and condition of the roadway and traffic control markings and legends should be evaluated in accordance with CFR 646.214. The adequacy of warning devices should be evaluated to determine if active or passive devices are warranted. If assistance is necessary to determine whether these devices are warranted, the Region/Area Railroad Coordinator should be consulted.

All resurfacing and minor widening projects (RRR), where the work limits extend inside the railroad's ROW limits, will require an agreement. The required contract items of work will determine the appropriate work limits. The station to station limits at the railroad, where no work is being performed, shall be noted on the title sheet as an "Exception". As a general rule, a 20' railroad exception is recommended, measuring 10' back and ahead of the centerline of the track. The paving limits can extend up to this point. These exception limits will allow for the placement of the stop line closest to the track without encroaching into the exception limits. If no work is required within the railroad right-of-way, the station to station limits for the "exception" will reflect the railroad right-of-way limits.

The County shall furnish to the Bureau of County Transportation all information necessary for preparation of the agreement (See example letter, page 8.7). This letter should identify the name of the railroad, the DOT crossing number and the railroad milepost. This office will forward this information on to the Bureau of Transportation Planning and Modal Programs for preparation of the railroad agreement. This submittal should be sent after the "Project Engineering Record" is approved and shall include the following:

- 1. Two (2) half size prints of the title sheet showing the location of the project and the location of the railroad crossing. The name of the railroad and the exception limits should be noted on the title sheet in the appropriate place.
- 2. Two (2) half size prints of the typical section sheet with a pavement tie-in sketch showing the paving limits in relation to either the centerline of the track or the nearest rail.

3. Two (2) prints of a plan layout or detail sketch showing the following information:
(See example- page 8.9)

NAME OF RAILROAD
RAILROAD ROW (Labeled and dimensioned)
LIMITS OF PAVING
DOT CROSSING NUMBER
RAILROAD MILE POST AT THE CROSSING
MARKINGS AND LEGENDS

The layout sketch may be either half size or letter size and does not have to be to scale. No profile information is required, unless the grade is being adjusted. The schematic does not need to show any stationing. The "Markings and Legends" should be shown on the layout, but there is no need to show any dimensions or stations for these items since they will be placed in accordance with Special Drawings RRX-107-3, PS-701-6, and Section 8B.27 of the 2009 MUTCD.

- 4. Railroad Involvement Certification Letter Signed by Region Engineer (See example letter, page 8.8). The letter should include the following information:
 - (a) Name of the RR
 - (b) The DOT crossing number and RR milepost
 - (c) The condition of the existing railroad crossing.
 - (d) Whether the crossing is wide enough for the improved pavement.
 - (e) The condition of the existing traffic markings and legends and railroad advance warning signs. If these items are not in-place or are in poor condition, provide information on who will furnish these items and how the cost is to be handled.
 - (f) Whether the railroad-highway crossing (crossbuck) signs are in-place.
 - (g) A description of the work being performed within the railroad's ROW.
 - (h) The estimated number of working days within the railroad's ROW.

NOTE: Plan submittals for railroad agreements may be on $\frac{1}{2}$ size (11" x 17") or legible letter size sheets. In lieu of the two sets of prints, electronic file copies (PDF files) may be furnished.

For new and/or reconstructed roadways, in addition to items numbers 1, 2, 3, and 4, as noted above, the county should furnish two (2) $\frac{1}{2}$ size prints of the plan-profile sheets, as well as other plan sheets that may be available such as paving layout sheets or project detail sheets pertaining to the work to be done at the railroad crossing.

All bridge replacement projects spanning a railroad will require a railroad agreement. The County should furnish the Bureau of County Transportation two (2) prints of the title sheet, typical section, and plan & profile sheets in the area of the railroad. The plan & profile should contain a railroad traverse 500 feet each side of the centerline and the distance to the nearest milepost with milepost number. This information should be submitted as early as possible, since it takes several months to obtain an executed railroad agreement. This information will be forwarded to the Bridge Bureau for their use in the bridge design. The Bridge Bureau will furnish the Bureau of Transportation Planning and Modal Programs all information necessary for preparation of the railroad agreement. The railroad agreement must be approved prior to the Construction Bureau plan review in accordance with step 252.0 of the ALDOT Guide for Developing Construction Plans, which states in part:

252.0 MILESTONE - CONSTRUCTION REVIEW SUBMITTAL

Transmit (1) complete plan set ready for letting and (1) construction cost estimate to the Construction Bureau. Plans shall be submitted at least 12 weeks prior to the "Work Plan Date" A Railroad Agreement shall also accompany plans if railroad coordination is required.

The Construction Bureau will not complete their plan review until the agreement is approved.

Any project with railroad involvement should list the following applicable project notes. These should be listed as series "900" notes on the project note sheet. These notes are specific depending on the type of work (i.e. bridge replacement, resurfacing, new roadway, etc.), and which railroad owner is affected by the project.

✓ □ ALL PERSONS WORKING ON OR OVER CSX'S TRACKS MUST COMPLY WITH CSX'S

CSX RAILROAD NOTES

		SAFETY RULES.
ſ		THE CONTRACTOR SHALL NOTIFY CSX TRANSPORTATION, INC. IN WRITING, A MINIMUM OF 10 DAYS BEFORE WORK IS TO BE STARTED ON THE RAILROAD'S RIGHT OF WAY.
ſ		THE CONTRACTOR NEEDS TO CONTACT THE CSX TRANSPORTATION INC. FOR INFORMATION ABOUT OBTAINING A COPY OF THEIR SAFETY VIDEO.
Ø		THE RAILROAD COMPANY SHALL NOTIFY THE STATE IN WRITING A MINIMUM OF 10 DAYS BEFORE WORK IS TO BE STARTED ON THIS PROJECT.
Ø		THE RAILROAD SHALL FURNISH AND INSTALL ALL MATERIALS FOR 2-30' CANTILEVER SIGNALS, 2-35' GATES, BELLS, THE 81' OF CROSSING SURFACE AND MOTION DETECTORS AND INVOICE THE STATE FOR THE ACTUAL COST THEREOF.
Ø		ALL NECESSARY TRAFFIC CONTROL DEVICES (SIGNS, CONES, FLAGGERS, ETC.) WHICH ARE REQUIRED WHEN WORK IS BEING PERFORMED BY THE RAILROAD SHALL BE FURNISHED BY THE CONTRACTOR AND PAID FOR UNDER THE APPROPRIATE ITEMS OF WORK.
LEC	GEN	ID .
Γ		Applicable notes for bridge replacement projects.
		Applicable notes for resurfacing and minor widening projects (RRR) or for new and/or reconstructed roadway projects.
Ø		Applicable notes, as needed, for projects where work is being performed by CSX Railroad.

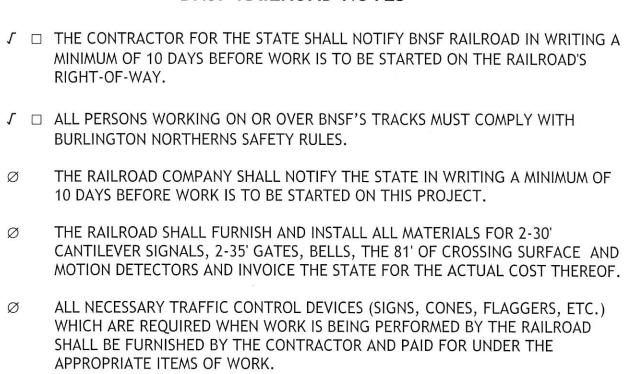
NORFOLK SOUTHERN RAILROAD NOTES

- THE CONTRACTOR FOR THE STATE SHALL NOTIFY NORFOLK SOUTHERN RAILROAD IN WRITING A MINIMUM OF 10 DAYS BEFORE WORK IS TO BE STARTED ON THE RAILROAD'S RIGHT-OF-WAY.
- ALL WORK ON, OVER, UNDER OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS (NS SPECIAL PROVISIONS)".
- THE RAILROAD COMPANY SHALL NOTIFY THE STATE IN WRITING A MINIMUM OF 10 DAYS BEFORE WORK IS TO BE STARTED ON THIS PROJECT.
- Ø THE RAILROAD SHALL FURNISH AND INSTALL ALL MATERIALS FOR 2-30'
 CANTILEVER SIGNALS, 2-35' GATES, BELLS, THE 81' OF CROSSING SURFACE AND
 MOTION DETECTORS AND INVOICE THE STATE FOR THE ACTUAL COST THEREOF.
- ALL NECESSARY TRAFFIC CONTROL DEVICES (SIGNS, CONES, FLAGGERS, ETC.)
 WHICH ARE REQUIRED WHEN WORK IS BEING PERFORMED BY THE RAILROAD
 SHALL BE FURNISHED BY THE CONTRACTOR AND PAID FOR UNDER THE
 APPROPRIATE ITEMS OF WORK.

LEGEND

- Applicable notes for bridge replacement projects.
- Applicable notes for resurfacing and minor widening projects (RRR) or for new and/or reconstructed roadway projects.
- Applicable notes, as needed, for projects where work is being performed by Norfolk Southern Railroad.

BNSF RAILROAD NOTES



LEGEND

Γ	Applicable notes for bridge replacement projects.
	Applicable notes for any resurfacing and minor widening projects (RRR) or for new and/or reconstructed roadway projects.
Ø	Applicable notes, as needed, for projects where work is being performed by BNSF Railroad.

RAILROAD AGREEMENT REQUEST - EXAMPLE

(Date)			
Mr. D. E. Phillips, Jr., P.E. State County Transportation Engineer Alabama Department of Transportation Montgomery, AL 36110-2060			
Dear Sir:			
	Re:	Project No County No County	
Attached are two (2) $\frac{1}{2}$ size prints of the title sheet, typical section, and a plan layout sheet showing the railroad crossing for the above referenced project. We are requesting your assistance in preparing a railroad agreement for Marengo County with Alabama & Gulf Coast Railway for this project. The DOT crossing number is "665154X". The milepost is 760.05			
You may contact this office if yo	u need	any additional information.	
Sincerely,			
		County Engineer	
Copy: Region			
		OR	

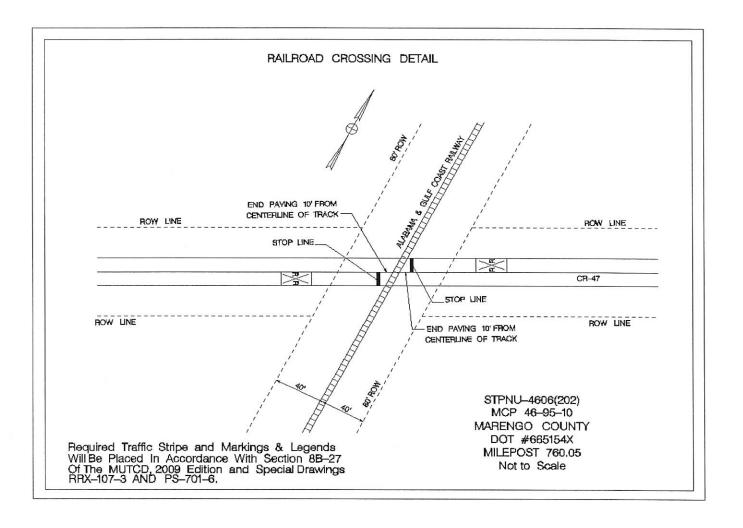
ALTERNATE SUBMITTAL - ELECTRONIC FILES

The attachment contains PDF files for the title sheet, typical section, and a plan layout sheet showing the railroad crossing for the above referenced project. We are requesting your assistance in preparing a railroad agreement for Marengo County with Alabama & Gulf Coast Railway for this project. The DOT crossing number is "665154X". The milepost is 760.05

You may contact this office if you need any additional information. (Copy to Region)

RAILROAD INVOLVEMENT CERTIFICATION - EXAMPLE

(Date)			
Alabama Depa	ips, Jr., P.E. Transportation Engineer artment of Transportation AL 36130-3050		
Dear Sir:			
		Re:	Project No County No DOT Crossing No Milepost
Alabama & Gulf Coast railway crosses CR-47 within the limits of the above referenced project. The in-place pavement at the crossing is in good condition with no apparent signs of settlement. The existing crossing is wide enough to accommodate the proposed typical section. The railroad crossing signs (crossbucks) are in-place and in good condition. Stop signs, advance warning signs, and "No Passing" signs are also in-place and in good condition. The proposed pavement buildup will tie in to the existing pavement ten feet on either side of the railroad (measured from the centerline of the track). Traffic markings and legends are in-place; however these will be replaced as part of this project due to the paving limits. Work within the railroad right-of-way will consist of resurfacing, paint striping, placing markings and legends, and placement of pavement markers. It is estimated that the required work within the railroad right-of-way will take 2 (two) working days.			
meets the cor	ive from this Region has v nditions as stated above and e proposed project.	verifie nd tha	d that the existing railroad crossing t any required items of work are
APPROVED:	Region Engineer	-	



	DATE:
CERTIFICATION OF RAILROAD INVOLVEMENT	Federal-Aid Project Construction No CPMS # Description
	County
Original Jpdate	
n accordance with the provisions of 23 CFR Part	t 635.309(b), this is to certify that:
	no railroad involvement or railroad coordination dertaken and completed with the physical
	tion have been made for the above referenced eleted within the project as part of the project
3 All railroad arrangements/coordina project to be undertaken and compthe project.	tion have been made for the above referenced pleted prior to project completion at no cost to
Si	gned:
	County Engineer

Railroad Crossing Warning Device Checklist

The following checklist is an aid to determine the adequacy of existing rail-highway traffic control devices, when a rail-highway crossing falls within the construction limits, or when the crossing is located within ALDOT right-of-way limits on Federal-Aid projects. This checklist is developed according to the regulations listed in Title 23 CFR 646.214 (b)(3)(i)(A-F).

Check the statement that applies to this rail-highway crossing:

- (A) Multiple main line railroad tracks.
 - a. Main line. The term "main line" means a segment or route of railroad tracks over which 5,000,000 or more gross tons of railroad traffic is transported annually.*
- □ (B) Multiple tracks at or in the vicinity of the crossing which may be occupied by a train or locomotive so as to obscure the movement of another train approaching the crossing.
- (C) High Speed train operation combined with limited sight distance at either single or multiple track crossings.
 - a. A high speed train is one that travels at a speed greater than 79 mph.*
 - Note: no rail routes within Alabama are identified as High Speed
 - b. Limited sight distance is where available sight distance is less than desirable intersecting sight distance as defined by AASHTO.
 - Sight distance is based on field measurements.
- (D) A combination of high speeds and moderately high volumes of highway and railroad traffic.
 - All four conditions below must exist to meet (D). Basically an 'AND' condition.
 - Definitions:
 - A high speed roadway is one that has a posted speed of 50 mph or more.*
 - Moderately high volumes of highway traffic are when a highway's volume exceeds a Level of Service of 'D' (near capacity).*
 - A high speed train is one that travels at a speed greater than 79 mph.*
 - Moderately high volumes for a railroad traffic are when the railroad's volume exceeds a Level of Service of 'E' (at capacity).*

*Data Source: Included in Rail Crossing Inventory

Revision Date: 10/26/2015