STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
STATE HIGHWAY IMPROVEMENT

PROJECT NO. C 2075 2 45

SMITH COUNTY
SL 323

FROM: 0.295 MILE NORTH OF SH 31 (ELM STREET), SOUTH
TO: 0.600 MILE SOUTH OF SH 31 (SHAW STREET)

CONSTRUCTION OF WIDENING A NON-FREeways FACILITY WITH RAILROAD BRIDGE

CONSISTING OF STRUCTURES, GRADING, PLANING, LEVELUP,
BASE, OCS, ACP OVERLAY REPLACEMENT OF RAILROAD BRIDGE
AND PAYMENT MARKINGS.

DESIGN SPEED = 35 MPH (CROSSING)
DESIGN SPEED = 40 MPH (MAIN RR TRACK)
OPERATING SPEED = 50 MPH (VERTICAL GEOMETRY CONFORMS
TO V/I REQUIREMENTS OF MAIN TRACK FOR UPRR)
DESIGN SPEED = 35 MPH (SHOOLY RR TRACK)

2010 ADT = 29,000 VPD
2030 ADT = 40,600 VPD

EXHIBIT A
FOR UPRR REVIEW ONLY
NOT FOR CONSTRUCTION, BIDDING, OR
PERMIT PURPOSES
PREPARED UNDER THE SUPERVISION OF
MARK S. SCHRANK, P.E.  72821

TExAS DEPARTMENT
OF TRANSPORTATION

SUBMITTED
FOR LETTING: 20

APPROVED
FOR LETTING:

DISTRICT DESIGN ENGINEER

RECOMMENDED
FOR LETTING: 20

DIRECTOR, TRAFFIC OPERATIONS DIVISION

APPROVED
FOR LETTING:

DISTRICT ENGINEER

DIRECTOR, DESIGN DIVISION

©2012 by Texas Department of Transportation
All rights reserved.

NEW BYPASS

CROSSING

SIGNING IN ACCORDANCE WITH STANDARD BC
SHEET AND PART II OF THE TEXAS MANUAL
ON UNIFORM TRAFFIC CONTROL DEVICES.

NO EXCEPTIONS
NO TOLLING
NO R.R. CROSSINGS ELIMINATED
NOT TO SCALE

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION
JUNE 1, 2004, AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS
SHALL GIVE ON THIS PROJECT SPECIAL LABOR PROVISIONS FOR
STATE PROJECTS, 1000-338811.
### Uprr Swoofy

**Curve Data**

- **P.I. Station:** 694+38.11
- **Delta:** 3'-21" 06.3331" (L, T)
- **Degree:** 2'-30" 00.0000°
- **Tangent:** 67.0988
- **Long Chord:** 134.0819
- **Wid. Ord.:** 0.9884
- **P.C. Station:** 693+64.05
- **X:** 2,943,761.1273
- **Y:** 8,923,012.8479
- **P.T. Station:** 694+06.12
- **X:** 2,943,827.6334
- **Y:** 8,923,002.3773
- **C.C.:**
  - **B.Ord.:** 83'-00" 05.4680°
  - **Ahead:** 63'-46" 49.1368°
- **Spiral Element:**
  - **Type:** 4
  - **Spiral Element:**
  - **Angle:** 0'-32" 59.8429" (L, T)
  - **P.Ord.:** 0.3352
- **LS:**
  - **X:** 44.0000
  - **Y:** 21.9999
- **T:**
  - **X:** 29.5355
  - **Y:** 14.6668
- **Diff.:**
  - **X:** 43.9996
  - **Y:** 43.9996

**Spiral Coordinates**

<table>
<thead>
<tr>
<th>Point</th>
<th>X</th>
<th>Y</th>
<th>Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>2,943,627.6334</td>
<td>6,823,020.2973</td>
<td>6814-18.12</td>
</tr>
<tr>
<td>PI</td>
<td>2,943,613.0529</td>
<td>6,823,000.3689</td>
<td>6815-12.70</td>
</tr>
<tr>
<td>ST</td>
<td>2,943,583.9400</td>
<td>6,822,997.1806</td>
<td>6815-42.12</td>
</tr>
<tr>
<td>CC</td>
<td>2,943,875.9521</td>
<td>6,820,723.7056</td>
<td></td>
</tr>
</tbody>
</table>
TYPICAL TRANSVERSE SECTION - MAINLINE
Typical Section

Type IV Beams

Fence

E Track

PGL (Top of Rail)

3'-6" Ballast

Curb

Deck Drain

© Texas Department of Transportation
Bridge Division

P.E. SEAL
REQUIRED

PRELIMINARY
SUBJECT TO REVISION

This document is released for informational purposes
under the authority of
MICHAEL D. HEINZ,
P.E., 10/18/2013.
It is not to be used for
regulatory approval, aerial,
blasting, or construction
purposes.
STA 6905+13.47
EXISTING 4' x 4' x 86'
SINGLE CULVERT
EXTEND 59' LEFT
GENERAL NOTES:
1. Twenty trains per day at 40 mph.
2. 500 (900) vehicles per day.
3. Existing concrete crossing.
4. Existing 115 lb rail.
5. Crossing shall be open at night.

WORK TO BE DONE BY UPRR:
1. Remove and reinstall existing 24" full depth concrete crossing in conjunction with shorty tie in and removal of existing panels as necessary for final grade adjustment.
2. Adjust crossing approaches as necessary.

WORK TO BE DONE BY TxDOT CONTRACTOR:
1. Furnish and install traffic control.
2. Furnish and install cement or asphalt stabilized base.
3. Perform any approach grouting or pavement modifications needed for the planking removal and installation.

CHANGE ORDER NO. __________

Texas Department of Transportation
Bridge Division

POTENTIAL REPLANKING
SHOOFLY TRACK
AT LOOP 323

DOT 799066
RMP 549.05
PROPOSED TYPICAL SECTION
STA 388+48.86

EXHIBIT A
FOR UPRR REVIEW ONLY
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
PREPARED UNDER THE SUPERVISION OF MARK A STURROCK, P.E. 72207

Texas Department of Transportation

TYPICAL SECTION • UPRR
LOOP 323 • STA 388+48.86
Meeting the requirements of DWS-6200 Type 1

Install maintaining a minimum longitudinal grade of 0.01 ft/ft upstream towards Shorten Abutment No. 3. Outfall either into Retaining Wall No. 3 underdrain or laterally into base of Retaining Wall No. 4.

At Contractor's option, use crushed stone furnace slag, recycled crushed hydraulic cement concrete, or Type I filter material per Item 53B. Place and compact in lifts with placement of embankment.

PIPE UNDERDRAIN DETAIL

Filter material, filter fabric, fittings, and other appurtenances shall be considered subsidiary to Pipe Underdrain.
GENERAL SHORING NOTES:
1. All dimensions are measured perpendicular to E of T of Track.
2. Prior to commencing any work, submit for approval the following plans indicating the nature and extent of the track protection shoring proposed, instal the temporary shoring system per the approved plans. Comply with design requirements in the BNSF/PURR GUIDELINES FOR TEMPORARY SHORING.
3. For excavations which encroach into Zone A or B, provide shoring plans and design calculations. Plans and calculations must be signed and sealed by a Professional Engineer registered in the State of Texas.

GENERAL EXCAVATION ZONES

RAILROAD GENERAL NOTES:
1. Railroad review and approval of all shoring, erection, demolition, and followup is required. All work to be done is subject to the approval of the West Rail to construction.
2. The proposed grade separation project shall not increase the quantity and/or characteristics of the in the Railroad’s ditch and/or drainage structures.
3. Verify the elevation of the existing top-of-rail profile before shoring the Railroad.
4. Submit a proposal method of shoring and followup for review and approval by the Railroad.
5. Design and construct all systems that on the Railroad’s operations and the use of the Railroad’s operations for temporary shoring. See Exhibit "A".
6. Comply with Railroad Demolition Guidelines for all demolitions within the Railroad’s right-of-way and their demolition per the railroad’s operations for temporary shoring. See Exhibit "A".
7. Design shoring methods under the Railroad’s right-of-way to ensure no damage to the Railroad’s operations, enabling the Railroad to remain open to traffic per the Railroad’s requirements. Provide construction work windows with the Railroad’s Demolition Representative.
8. Design and construct. That monitor the Railroad’s operations to ensure no damage to the Railroad’s operations, enabling the Railroad to remain open to traffic per the Railroad’s requirements. Provide construction work windows with the Railroad’s Demolition Representative.
10. Verify all permanent clearances before project closing.

REFER TO PLAN AND PROFILE SHEETS FOR EXISTING TOP OF RAIL PROFILE.

MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

(NORMAL TO RAILROAD)

GENERAL NOTES:
1. Design and Construction for Railroad Projects shall be in accordance with the ARRA Manual for Rail Engineering and PURR Guidelines for Railroad Grade Separation Projects as annotated by TxDOT or Kansas City Southern Guidelines for the Design of Construction Value (DVC) and Alternative, DART Light Rail Project Design Criteria Manual, and the TxDOT Standard Specifications for Maintenance of Highway Streets and Bridges as applicable to the Railroad Company involved.

EXHIBIT "A"

Texas Department of Transportation
Bridge Division

PRELIMINARY SUBJECT TO REVISION

This document is revised for use by the Department of Transportation, SHOULDER AND SIDEWALK.

RAILROAD REQUIREMENTS FOR BRIDGE CONSTRUCTION

1. Grade crossing shall be designed to accommodate two-way traffic.
2. Pavement shall be designed to accommodate two-way traffic.
3. Roadway shall be designed to accommodate two-way traffic.
4. Sidewalk shall be designed to accommodate two-way traffic.
5. Bicycle facilities shall be provided.
6. Lighting shall be provided.
7. Noise barriers shall be provided.
8. Signage shall be provided.
9. Drainage facilities shall be provided.
10. Utility facilities shall be provided.

SHEET 1 OF 3
PART I - GENERAL

1.01 DESCRIPTION
This project includes construction work within the Right-of-Way and/or properties of the Railroad Company and adjacent to its track. All work performed by the Contractor shall be in accordance with the minimum special requirements for coordination with the Railroad when work is performed under an approved contract. The Contractor is responsible for necessary protection of all Railroad property while performing the work outlined herein, and for the removal and restoration of such property in a suitable condition. The Contractor shall submit work plans and provide work specifications in accordance with TxDOT Standard Specifications, Railroad Company special conditions, and special construction requirements for any minimum special requirements or as directed in writing by the Railroad Designated Representative.

For purposes of this project, the Railroad Designated Representative is the Rail Operations Manager or the Project Manager for the railroad company.

1.02 RAILROAD CONTACTS
The primary Railroad point of contact for this project and the contact for Railroad flagging services and track work can be obtained by contacting the Railroad Designated Representative for the project.

1.03 REQUEST FOR INFORMATION / CLARIFICATION
Submit Requests for Information (RFI) Involving work within any Railroad Right-of-Way to the TxDOT Engineer. The TxDOT Engineer will submit the RFI to the Railroad Designated Representative for review and approval. The RFI must be submitted to the Railroad company in writing.

1.04 PLANS / SPECIFICATIONS
TxDOT has received written Railroad approval of the plans and specifications for this project. Any revisions or changes in the plans and specifications shall be in conformance with written approval from the Railroad Designated Representative.

PART II - UTILITIES AND FIBER OPTIC

Construct all utility installations in accordance with current conditions and specifications. TxDOT shall provide a written notice of the utility specifications and requirements. Railroad general guidelines can be obtained from the Railroad website or by contacting the Railroad Designated Representative.

PART III - CONSTRUCTION

3.01 GENERAL
A. Perform all work in compliance with all applicable Railroad, TxDOT, and local governmental utilities and permitting requirements. Arrange and conduct work in a manner that does not interfere with the movement of trains and traffic, and in accordance with the safety requirements of the tracks and power lines. TxDOT will guide the Contractor's safety procedures.

3.02 RAILROAD OPERATIONS
A. Trains and/or equipment are expected on any track, at any time, in either direction. Become familiar with the train schedule and the other facilities before entering or working near the railroad while performing the work outlined herein, and adhere to the same schedule while performing the work. Electrically interlocked track windows in this period, as defined in Paragraph 5.03 of the TxDOT Standard Specifications and railroad special conditions, will be maintained throughout the project. Activities may be maintained both through in-service rail activities and railroad support activities, including but not limited to the following:

1. Contact the Railroad Designated Representative at least 24 hours in advance of any work on or near the Railroad Right-of-Way to obtain a Visitation Permit.
2. No work on or near the Railroad Right-of-Way may be performed until a Visitation Permit has been obtained.
3. All work shall be performed in the presence of a Railroad employee or representative.

3.03 RIGHT OF ENTRY, ADVANCE NOTICE AND WORK STOPPAGES
A. Prior to beginning any work or on or over the property of, or affecting the facilities of the railroad company, enter into a "Contractor's Right of Entry Agreement" with the Railroad. The fee for processing the agreement is the responsibility of the Contractor. This agreement is the expression of the insurance policies, binding, and permits, and special conditions specific to the railroad system, and the TxDOT rules and regulations on Railroad property. Within the right of entry agreement, specify work time and work frame, flagging and inspection of work, and all other terms specified by the Railroad.

B. Give advance notice to the Railroad as required in the "Contractor's Right of Entry Agreement" before commencing work in connection with construction work or over Railroad property. The Contractor is responsible for preserving the Railroad rules and regulations with respect thereto.

C. Perform all required work upon Railroad Right-of-Way in a manner to avoid interference with or endanger the operations of the Railroad. All railroad work shall be done in advance of any railroad work. No work on or near the Railroad Right-of-Way may be performed until a Visitation Permit has been obtained. All work shall be performed in the presence of a Railroad employee or representative.

D. Provide written notice to the Railroad at least 48 hours before commencing work in connection with approved work plans, and prior to any work that is not covered by previously approved work plans.

E. Provide written notice of work on or over the property of the Railroad or under the jurisdiction of the Railroad company, and coordinate with the Railroad and TxDOT.

F. If the Contractor is constructing a bridge for railroad track, these facilities are designed in the plans. Be aware of the safety and coordination requirements for coordination with the Railroad and TxDOT.

3.04 INSURANCE
Do not begin work upon or over Railroad Right-of-Way until furnishing the Railroad with the insurance policies, binders, certificates and endorsements required by the Contractor's Right-of-Entry Agreement, and until the Railroad Designated Representative has advised TxDOT that such insurance is in accordance with the Agreement. Further information on insurance requirements appear in the Special Provisions to Title 7 of the TxDOT Standard Specifications and/or the project General Notes.

3.05 RAILROAD SAFETY ORIENTATION
A. Complete the railroad course "Orientation for Contractor's Safety" and maintain specific orientation and training for working on Railroad property. This orientation is available at www.contractororientation.com. This course is intended to enhance the safety of personnel on Railroad property, including Subcontractor personnel working on site.

3.06 COOPERATION
The Railroad will cooperate with the Contractor so that work may be conducted in an efficient manner, and will coordinate with Contractor in enabling use of Railroad Right-of-Way in performing the work.

3.07 MINIMUM CONSTRUCTION CLEAVERS FOR FALSEWORK AND OTHER TEMPORARY STRUCTURES

Abide by the following minimum temporary clearances during the course of construction:

- 10'-0" minimum clearances for all structures.
- 10'-0" above top of rail.
- For construction clearance less than listed above, obtain local Railroad Operating Unit review and approval.

3.08 APPROVAL OF REDUCED CLEARANCES
A. Maintain minimum clearances during construction as specified in Section 3.07.
B. Submit any proposed infringement on the minimum clearances to the Railroad Designated Representative, the Railroad Operating Unit, and TxDOT at least 30 days in advance of the work. Do not proceed with such infringements without written approval from the Railroad Designated Representative.
C. Do not commence work on or over the Railroad Right-of-Way until receiving written assurance from the Railroad Designated Representative that the clearances have been made for any necessary furring services.

CHANCE ORDER NO. 1

TEXAS DEPARTMENT OF TRANSPORTATION
Bridge Division

RAILROAD REQUIREMENTS FOR BRIDGE CONSTRUCTION

EXHIBIT "A"

SHEET 2 OF 3
3.9 CONSTRUCTION AS-BUILT SUBMITTALS


B. The tables below provide the Railroad's minimum submittal requirements for the project. Submittal requirements are in addition to those specified elsewhere in this document. The minimum submittal requirements are authorized up to 90 days after contract award, including the initial 30-day notice required by the Railroad.

C. TxDOT will forward relevant submittals to the Railroad manager of Inspections and Public Projects unless otherwise directed by the Railroad.

D. TxDOT will review and include comments prior to forwarding the documents to the Railroad. TxDOT shall submit the approved documents to the Railroad.

TABLE 1 - RAILROAD SUBMITTAL REQUIREMENTS FOR OVERPASS & UNDERPASS PROJECTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>SETS</th>
<th>NOTES</th>
<th>REVIEW TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shop drawings</td>
<td>6</td>
<td>Steel and Concrete members</td>
<td>6 weeks</td>
</tr>
<tr>
<td>2</td>
<td>Drawings</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>3</td>
<td>Watermark designs</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>4</td>
<td>Repairs &amp; String certification</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>5</td>
<td>28 day concrete strength</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>6</td>
<td>Waterstop materials certification</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>7</td>
<td>Structural steel certification</td>
<td>6</td>
<td>All Grade 60 Members &amp; other members requiring improved notch toughness</td>
<td>6 weeks</td>
</tr>
<tr>
<td>8</td>
<td>Fabrication and Test Report</td>
<td>6</td>
<td>All Grade 60 Members &amp; other members requiring improved notch toughness</td>
<td>6 weeks</td>
</tr>
<tr>
<td>9</td>
<td>Welding Procedures and Welder Qualification</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>10</td>
<td>Foundation Construction Notes or Reports</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>11</td>
<td>Compaction testing results or compaction</td>
<td>6</td>
<td>Must meet 95% minimum for compacted Holcim Premier ATM D155</td>
<td>6 weeks</td>
</tr>
</tbody>
</table>

5. TxDOT shall submit As-Built Records to the Railroad when TxDOT has processed the final project plans. These records shall be in accordance with the items below:

- Overpass Projects
  - Electronic files of all structure design drawings with as-built modifications shown, in Microstation or CAD format.
  - Hand copies of all structure design drawings with as-built modifications shown, in Microstation or CAD format.

- Underpass Projects
  - Electronic files of all structure design drawings with as-built modifications shown, in Microstation or CAD format.
  - Hand copies of all structure design drawings with as-built modifications shown, in Microstation or CAD format.

3.10 APPROVAL OF DETAILS

Submit designs of the construction affecting Railroad tracks and property not already included in the Contractor Plans to the Roadways for review and approval. A summary of the submittals is provided through TxDOT Quality Assurance Manual available at www.dot.state.tx.us/publications/bridge/items/reviewed.pdf.

A. Submittal, including review and approval, shall be made at least 30 days before planned work or 90 days after contract award, whichever is later.

B. The notes below provide the Railroad's minimum submittal requirements for the project. Submittal requirements are in addition to those specified elsewhere in this document. The minimum submittal requirements are authorized up to 90 days after contract award, including the initial 30-day notice required by the Railroad.

C. TxDOT will forward relevant submittals to the Railroad manager of Inspections and Public Projects unless otherwise directed by the Railroad.

D. TxDOT will review and include comments prior to forwarding the documents to the Railroad. TxDOT shall submit the approved documents to the Railroad.

TABLE 2 - RAILROAD SUBMITTAL REQUIREMENTS FOR UNDERPASS PROJECTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>SETS</th>
<th>NOTES</th>
<th>REVIEW TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shop drawings</td>
<td>6</td>
<td>Steel and Concrete members</td>
<td>6 weeks</td>
</tr>
<tr>
<td>2</td>
<td>Drawings</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>3</td>
<td>Watermark designs</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>4</td>
<td>Repairs &amp; String certification</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>5</td>
<td>28 day concrete strength</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>6</td>
<td>Waterstop materials certification</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>7</td>
<td>Structural steel certification</td>
<td>6</td>
<td>All Grade 60 Members &amp; other members requiring improved notch toughness</td>
<td>6 weeks</td>
</tr>
<tr>
<td>8</td>
<td>Fabrication and Test Report</td>
<td>6</td>
<td>All Grade 60 Members &amp; other members requiring improved notch toughness</td>
<td>6 weeks</td>
</tr>
<tr>
<td>9</td>
<td>Welding Procedures and Welder Qualification</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>10</td>
<td>Foundation Construction Notes or Reports</td>
<td>6</td>
<td>All structures</td>
<td>6 weeks</td>
</tr>
<tr>
<td>11</td>
<td>Compaction testing results or compaction</td>
<td>6</td>
<td>Must meet 95% minimum for compacted Holcim Premier ATM D155</td>
<td>6 weeks</td>
</tr>
</tbody>
</table>

3.11 MAINTENANCE OF RAILROAD FACILITIES

A. Maintain all drainage and road work free of all objects that may interfere with the traffic of the Railroad or its property. Submittal, including review and approval, shall be made at least 30 days before planned work or 90 days after contract award, whichever is later.

B. Form all such maintenance and repair of damages to the Contractor's property on the sites.

C. Submittal, including review and approval, shall be made at least 30 days before planned work or 90 days after contract award, whichever is later.

D. Site inspection is in accordance with the minimum submittal requirements for the project. Site inspection shall be included on all plans and specifications and be submitted with final drawings.

3.12 SITE INSPECTIONS BY RAILROAD'S DESIGNATED REPRESENTATIVE

A. Site inspections may be performed by the Railroad's designated representative. Site inspections may be performed by the Railroad's designated representative on the project site during construction, including the following:

1. Pre-construction meetings.
2. Pile driving of piles or driven shafts.
3. Reinforcement and concrete placement for railroad bridge structures.
4. Erection of precast concrete or steel bridge superstructures.
5. Placement of waterproofing on the bridge deck.
6. Completion of the bridge structure.

B. Site inspection is not limited to the milestones listed above. It is to be performed as needed by the Railroad during the project.

C. Provide a detailed project schedule, including the proposed temporary horizontal and vertical clearances and construction sequence for all work on the railroad right-of-way. The schedule shall be submitted to the Railroad's designated representative for review prior to commencement of work. The schedule shall be updated as needed during the project. Each month on or before the 20th of the month for which the work occurs, a schedule shall be submitted to the Railroad's designated representative for review before the 25th of the month.

D. 13 RAILROAD REPRESENTATIVES

Railroad representatives, contractors, and persons of their becoming shall be provided by the Railroad at no expense to the Contractor. The Railroad representatives shall be responsible for the design, property, and movement of its trains or engines. In general, the Railroad shall furnish such information as may be required by the Railroad.

A. When any port of any equipment is being operated on the Railroad, the representative of the Railroad shall be present on the property, and the representative may stop the operation at any time. The representative may require the removal of any equipment from the property.

B. Any equipment operated on the Railroad shall be subject to inspection and to any regulations of the Railroad.

C. During any clearing, grubbing, excavation, or grading in proximity to Railroad facilities, the Railroad representative, or other Railroad representatives, may require Railroad facilities or operations.

D. During any clearing, grubbing, excavation, or grading in proximity to Railroad facilities, the Railroad representative, or other Railroad representatives, may require Railroad facilities or operations.

E. During any clearing, grubbing, excavation, or grading in proximity to Railroad facilities, the Railroad representative, or other Railroad representatives, may require Railroad facilities or operations.

F. During any clearing, grubbing, excavation, or grading in proximity to Railroad facilities, the Railroad representative, or other Railroad representatives, may require Railroad facilities or operations.

G. During any clearing, grubbing, excavation, or grading in proximity to Railroad facilities, the Railroad representative, or other Railroad representatives, may require Railroad facilities or operations.

H. During any clearing, grubbing, excavation, or grading in proximity to Railroad facilities, the Railroad representative, or other Railroad representatives, may require Railroad facilities or operations.

I. During any clearing, grubbing, excavation, or grading in proximity to Railroad facilities, the Railroad representative, or other Railroad representatives, may require Railroad facilities or operations.

3.13 COMMUNICATIONS AND SIGNAL LINES

If required by the Railroad, the Contractor shall provide communications and signal lines, in good working order, and as required by the Railroad. The Contractor shall be responsible for the installation and maintenance of the communications and signal lines. The Contractor shall be responsible for the installation and maintenance of the communications and signal lines. The Contractor shall be responsible for the installation and maintenance of the communications and signal lines.
WORK TO BE PERFORMED BY TXDOT’S CONTRACTOR:

1. Furnish and install warning signs, barricades, SRM measures, and handle traffic according to traffic control plans and SRM sheets as directed by the Engineer.
2. Furnish and erect guardrail as shown in the plans.
3. Provide all materials and construct shoulder work, embankments, ditches, and culverts as shown in the plans.
4. Furnish all materials and construct shoulder rollover and paper ballast as shown in the plans, a total of 101,340 lbs of track work.
5. Deliver and stockpile all approved ballast at a convenient location for filling tie holes associated with the shoulder rollovers and paper ballast to the minimum tie length and color separation in the plans.
6. Furnish and install all required equipment if requested by UPRR to deliver ballast to rail locations.

WORK TO BE PERFORMED BY UNION PACIFIC RAILROAD (UPRR):

1. Perform engineering inspection of railroad facilities.
2. Provide flagmen as required for the safe movement of trains during the construction.
3. Install shovels to 13’ offset points in the two end tie in regions as shown in the plans.
4. Cut and clear new rail to 13’ offset points from existing track, install new rail, tamping, and set the rails in the two 13’ offset point zones. Total track work to be performed is 40,952 ft.
5. Provide and install any signal work for the shovels.
6. Work for installation of other railroad work.
7. After UPRR’s contractor has completed the shoveling bridge construction, cut and move the rail over to the existing tie holes in the new rail.
8. Adjust signal work for rail.
9. Move trains back to mainline.

TRAFFIC NOTES:

1. All barricades, warning signs, lights, devices, etc., for the guidance of vehicle traffic and pedestrians in the right-of-way, must be installed at the locations shown in the plans.
2. Contractor shall provide daily installation of barricades and flashing lights to ensure proper placement and functioning of warning devices.
3. Grade crossing guard traffic during construction shall be blocked in accordance with the MUTCD.
4. At all grade crossings, the following signs are required: pedestrian crossing signs and both crossing signals.
5. The contractor is responsible for the safe replacement of any railroad track or signal facilities damaged as a direct result of mishandling.

RAILROAD CLOSURE TABLE

<table>
<thead>
<tr>
<th>WORK ITEM NO.</th>
<th>DESCRIPTION</th>
<th>RESPONSIBLE ENTITY</th>
<th>EST. DURATION</th>
<th>ABSOLUTE WORK WINDOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shovel tie Install in 13’ offset</td>
<td>UPRR</td>
<td>20 ft</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>Adjust planking at Whitsett Rd as</td>
<td>UPRR</td>
<td>20 ft</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>necessary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Cut and shift rail into abutment</td>
<td>UPRR</td>
<td>40 ft</td>
<td>64</td>
</tr>
<tr>
<td>4</td>
<td>Pavement and approach grading at</td>
<td>TaDOT Contractor</td>
<td>1.0 hr</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Whitsett Rd as necessary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Signal adjustment for shovels</td>
<td>UPRR</td>
<td>1.0 hr</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Mainline tie Install in 13’ offset</td>
<td>UPRR</td>
<td>40 ft</td>
<td>64</td>
</tr>
<tr>
<td>7</td>
<td>Adjust planking at Whitsett Rd as</td>
<td>UPRR</td>
<td>2.0 hr</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>necessary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Cut and shift rail into abutment</td>
<td>UPRR</td>
<td>40 ft</td>
<td>64</td>
</tr>
<tr>
<td>9</td>
<td>Pavement and approach grading at</td>
<td>TaDOT Contractor</td>
<td>1.0 hr</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Whitsett Rd as necessary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Signal adjustment for mainline</td>
<td>UPRR</td>
<td>1.0 hr</td>
<td>1</td>
</tr>
</tbody>
</table>