



Railroad-DOT Mitigation Strategies (R16)

Pipe and Wire Agreement

Agreements known generically as pipe and wire agreements are among the most commonly executed between highway agencies and railroads. These agreements are necessary whenever there is maintenance, construction, or installation of drainage pipes, pipelines, utility lines, or other linear structures that intersect a railway. The maintenance, construction, or installation of a device or structure above, adjacent to, or beneath a railway raises numerous safety concerns for the railroad. However, the frequency of pipe and wire projects has led to standardization of the agreements and of the approaches to the construction and maintenance of such structures or devices. Following is a model agreement for pipe and utility crossings.

RAILROAD-HIGHWAY MASTER AGREEMENT
FOR PIPE AND/OR WIRE ACTIVITIES

This Master Agreement (“MASTER AGREEMENT”) is made and entered into this _____ day of _____, 20____, by and between the _____ Department of Transportation, hereinafter called the “DEPARTMENT,” and _____ [Railroad Company], hereinafter called the “RAILROAD.”

WITNESSTH:

WHEREAS, the DEPARTMENT proposes to engage in certain projects for the construction, reconstruction, or other change of portions of the DEPARTMENT’S road system that will cross the right-of-way and/or track(s) of the RAILROAD at various locations throughout the State of _____;

WHEREAS, the DEPARTMENT may be involved in (1) installation of new culvert, pipe, and wire, (2) adding to existing culvert, pipe, and wire, or (3) adjustment and relocation of culvert, pipe, and wire throughout the State of _____;

WHEREAS in order to expedite the processing of applications for these utility projects and the preparation of agreements, it is the desire of the DEPARTMENT and the RAILROAD to enter into this MASTER AGREEMENT setting out the general terms and conditions under which the improvements shall be provided, with the understanding that supplements to this MASTER AGREEMENT will be issued and executed from time to time covering specific installations in the form marked Exhibit A, attached hereto and hereby made a part hereof (the “Supplement” or “Supplements”).

NOW, THEREFORE, it is mutually agreed by and between the parties hereto as follows:

Section 1: Federal-Aid Policy Guide

All work, procedures in general, plans, estimates of cost, specifications, and statements of work for projects authorized under this MASTER AGREEMENT and each Supplement shall be prepared in such form and detail as to enable the DEPARTMENT to comply with the Federal-Aid Policy Guide as published in 23 CFR 140, Subpart I, and 23 CFR 646, Subparts A and B. The DEPARTMENT and the RAILROAD shall be governed by the applicable provisions of the Federal-Aid Policy Guide and any special provisions agreed to herein concerning this MASTER AGREEMENT and each Supplement.

Section 2: Work Performed by the Railroad

The RAILROAD will determine if the work requires flagging. All required flagging will be provided by the RAILROAD at project expense.

The RAILROAD shall also furnish, at project expense, such detailed plans, specifications, and estimates of cost that may be required in addition to those prepared by the RAILROAD at the request of the DEPARTMENT. The plans, specifications, and estimates shall become a part of the applicable Supplement.

The position of the new utilities and additions to existing utilities shall be established jointly by representatives of the DEPARTMENT and the RAILROAD.

Section 3: Notice from Department

The DEPARTMENT shall not begin work until authorization is received from the RAILROAD.

The DEPARTMENT shall notify the RAILROAD at least forty-eight (48) hours prior to the commencement of the improvements. The DEPARTMENT shall notify the RAILROAD in writing of the date when all work is completed. At the completion of all work, representatives of the DEPARTMENT and the RAILROAD will conduct a joint inspection of the crossing improvements.

The DEPARTMENT shall furnish, at project expense, notice to the RAILROAD of proposed crossing improvements. Project notice shall contain a description of the site, a detailed plan showing location of the improvements proposed, funding sources proposed, and a request for the RAILROAD to prepare plans and estimates for the work involved.

Section 4: Work Performed by Department or Local Authority

Unless otherwise provided, the DEPARTMENT, at project expense, shall (1) furnish all supervision, labor, materials, and equipment that are needed to install and thereafter maintain the utility and (2) provide all necessary traffic control, barricades, and detour signing for utility work described in Exhibit A.

If a LOCAL AUTHORITY has jurisdiction of the highway or street and will have the responsibility to perform the work described or any other work set forth in this MASTER AGREEMENT or shall be responsible for any other obligations under this MASTER AGREEMENT, the DEPARTMENT, in a separate agreement with the LOCAL AUTHORITY, shall require the LOCAL AUTHORITY to perform such work and/or be responsible for such obligations and shall also require the LOCAL AUTHORITY to comply with the terms and conditions contained in this MASTER AGREEMENT and in the respective Supplement.

All work performed by the DEPARTMENT or the LOCAL AUTHORITY shall be in compliance with the current Manual on Uniform Traffic Control Devices.

Section 5: Maintenance of Utilities

The utilities shall be maintained by and at the expense of _____ [insert name of entity responsible for the utility or pipe], provided, however, that the RAILROAD'S agreement herein to operate and maintain said utilities shall not prejudice the RAILROAD from having the benefit and advantage of Federal, DEPARTMENT, or other public funds that may become available to pay or contribute to the cost of maintenance of warning devices at highway-railway grade crossings.

Section 6: Change in Ownership

It is the DEPARTMENT'S responsibility to inform the RAILROAD in writing of any change in name, ownership, or address.

Section 7: Noncompliance

Noncompliance by the DEPARTMENT, LOCAL AUTHORITY, and/or the DEPARTMENT'S Contractor with any terms of the Utility Accommodation policy (Exhibit E) may be considered as a cause for discontinuance of construction or operations until compliance is assured. Continued noncompliance will result in the revocation of the license. The cost of any work required by the RAILROAD in the removal of noncomplying construction will be assessed against the DEPARTMENT.

Section 8: Application Forms

The DEPARTMENT will use the Application Form set forth in Exhibit C to provide details of the pipes to be used in the project. The DEPARTMENT will use the Application Form set forth in Exhibit D to

provide details of wires to be used in the project. Exhibit C and Exhibit D are attached hereto and are hereby made part of this MASTER AGREEMENT.

Section 9: Working on Railroad Property

The DEPARTMENT, when working on any RAILROAD property, including, but not limited to, working on utilities, will comply with the terms and conditions set forth in Exhibit B, attached hereto and hereby made a part hereof, and will also require, in its separate contract with the LOCAL AUTHORITY and/or the DEPARTMENT'S Contractor (as such term is defined in this section below), that the LOCAL AUTHORITY and/or Contractor also comply with the terms and conditions contained in Exhibit B.

The term "Contractor" as used in this MASTER AGREEMENT or in any Supplement shall mean the contractor or contractors hired by the DEPARTMENT or the LOCAL AUTHORITY to perform any work on the RAILROAD'S property and shall also include the Contractor's subcontractors and the Contractor's and subcontractor's respective employees, officers, agents, and others acting under its or their authority.

Section 10: Billing the Department and the Department's Payment to the Railroad

The DEPARTMENT shall pay to the RAILROAD within forty-five (45) days after receipt of itemized bills of cost incurred by the RAILROAD in carrying out the work to be performed by the RAILROAD under the provisions of this MASTER AGREEMENT. The RAILROAD'S estimate of costs will be attached as an exhibit to each Supplement.

Within one hundred eighty (180) days of completion of the utility work on the project, the RAILROAD shall submit a final bill to the DEPARTMENT for all actual costs of the RAILROAD'S work less any previous payments received. All bills rendered by the RAILROAD and paid by the DEPARTMENT will be subject to audit and approval by the Federal Highway Administration ("FHWA"). Reimbursement shall be in accordance with provisions of the Federal-Aid Policy Guide, provided, however, that the use of said Federal-Aid Policy Guide as a guideline for reimbursement between the parties hereto shall not be as a condition precedent to the DEPARTMENT'S obligation to pay the RAILROAD for work performed by it. If the DEPARTMENT desires to secure reimbursement from the FHWA for the work performed by the RAILROAD, it is the responsibility of the DEPARTMENT to ensure that the interpretation of the Federal-Aid Policy Guide will permit Federal participation in the cost and expense of work that, pursuant to each Supplemental, is to be performed by the RAILROAD at the expense of the DEPARTMENT. All project records in support of all costs incurred and expenditures shall be open to inspection by the DEPARTMENT and the FHWA at the RAILROAD'S offices in _____, during normal business hours, and shall be retained and made available by the RAILROAD for such inspection for a period of not less than three (3) years from the date of final billing from the RAILROAD.

Section 11: Separate Agreement with Local Authority

If a utility project is subject to the jurisdiction of the LOCAL AUTHORITY instead of the DEPARTMENT, the DEPARTMENT shall enter into a separate agreement with the LOCAL AUTHORITY whereby the LOCAL AUTHORITY shall assume responsibility for the obligations set forth herein as applicable to the LOCAL AUTHORITY with jurisdiction over the highway or street.

Section 12: Civil Rights Act

If any work by the RAILROAD is performed by other than RAILROAD forces, the provisions of the Civil Rights Act of 1964 will apply and become a part of the Supplement for a particular project by reference.

Section 13: Successors and Assigns

This MASTER AGREEMENT and each Supplement shall be binding on and inure to the benefit of the parties hereto, their successors, and assigns.

Section 14: Indemnification

Nothing in this agreement is intended to be construed as a requirement for an indemnification against the sole negligence of the RAILROAD, its officers, employees, or agents. Moreover, for any work performed in the State of _____, the DEPARTMENT will require its contractor to indemnify the RAILROAD and any other railroad company occupying or using the RAILROAD’S right-of-way or line of railroad against all loss, liability, and damages, including environmental damages, hazardous materials damages, penalties, or fines that may be assessed for, caused by, or the result of the contractor’s negligence; provided, however, that if such loss, liability, damages, penalties, or fines are caused by or result from the concurrent negligence of (a) the RAILROAD or the RAILROAD’S officers, employees, or agents and (b) the DEPARTMENT’S contractor or the contractor’s employees, agents, or subcontractors, such indemnity shall be valid and enforceable only to the extent of the negligence of the DEPARTMENT’S contractor or the contractor’s employees, agents, or subcontractors. Likewise, if such loss, liability, damages, penalties, or fines are caused by or result from the concurrent negligence of (a) the RAILROAD or the RAILROAD’S officers, employees, or agents and (b) the DEPARTMENT’S officers, employees, or agents, such indemnity shall be valid and enforceable only to the extent of the negligence of the DEPARTMENT’S officers, employees, or agents.

IN WITNESS WHEREOF, the parties hereto have caused this MASTER AGREEMENT to be executed in duplicate by their proper officers thereunto duly authorized, as of the day and year first herein written.

RAILROAD
(Federal Tax ID # _____)
By: _____
Title: _____
Date: _____

DEPARTMENT
By: _____
Title: _____
Date: _____

EXHIBIT A

SUPPLEMENT TO
 RAILROAD-HIGHWAY MASTER AGREEMENT BETWEEN
 _____ TRANSPORTATION DEPARTMENT
 AND
 _____ RAILROAD
 FOR INSTALLING NEW, ADDING TO, OR REPLACING EXISTING
 PIPE AND/OR WIRE

Project Name: _____
 Project No.: _____ (the "Project") DOT No.: _____
 Key No.: _____
 Railroad Subdivision: _____ Railroad Milepost: _____
 Hwy, Road, or Street: _____ [Location]
 City: _____ County: _____

- A. Transportation Department ("DEPARTMENT") and _____ Railroad Company ("RAILROAD") entered into a RAILROAD-HIGHWAY MASTER AGREEMENT ("MASTER AGREEMENT") dated _____.
- B. As provided in the MASTER AGREEMENT for pipe and wire projects, the DEPARTMENT and the RAILROAD are to enter into supplements to the MASTER AGREEMENT.
- C. This supplement to the MASTER AGREEMENT ("Supplement") is being executed by the DEPARTMENT and the RAILROAD [*add if applicable*: City of _____, County of _____ ("LOCAL AUTHORITY")] to provide for the Project improvements described in this Supplement that are to be completed at the location described above pursuant to the terms and conditions of the MASTER AGREEMENT.
- D. Listed below are the proposed improvements, with cost estimates. The DEPARTMENT'S detailed plan is attached as Exhibit 1 and made a part of this Supplement. The RAILROAD'S force account estimate(s) and wiring diagram (if required) are attached as Exhibit 2 and made a part of this Supplement. All work and the financing thereof shall be subject to the terms and provisions of the MASTER AGREEMENT.
- E. Description of Work: _____

Estimated Total Cost	Federal Funds	State Funds	Local Funds	Railroad Funds
\$	\$	\$	\$	\$

F. The [DEPARTMENT] [Local Authority] shall be responsible for reimbursing the RAILROAD for railroad flagging costs relating to any work being performed by the DEPARTMENT, LOCAL AUTHORITY, or the Contractor.

RAILROAD
 (Federal Tax ID # _____)
 By: _____
 Title: _____

DEPARTMENT
 By: _____
 Title: _____
 Date: _____

Date: _____

LOCAL AUTHORITY [*add if applicable*]

By: _____

Title: _____

Date: _____

EXHIBIT B

TERMS AND CONDITIONS RELATING TO WORKING ON THE RAILROAD'S PROPERTY

1. The RAILROAD, at its determination, may provide inspection, security, flagging, or other protective services as necessary for the protection of the RAILROAD'S property or operations whenever there are DEPARTMENT, LOCAL AUTHORITY, or Contractor activities or work on the RAILROAD'S property.
2. All work to be done by the DEPARTMENT, LOCAL AUTHORITY, and any Contractor on RAILROAD property shall be done in a manner satisfactory to the RAILROAD. The work shall be performed diligently and completed within a reasonable time or within such period of time as may be specified in writing by the RAILROAD. The authorized representative of the RAILROAD shall have final authority in all matters affecting safe and timely train operations.
3. No Project work on any RAILROAD property shall commence until the DEPARTMENT, LOCAL AUTHORITY, or Contractor has provided fifteen (15) days' advance notice to the RAILROAD representative and at least fifteen (15) days' advance notice for any work to be performed within twenty-five (25) feet of any railway track, or where such work, personnel, or equipment will be near enough to any track that an equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track. No work of any kind shall be performed, and no person, equipment, temporary structures, machinery, tools, materials, or vehicles shall be located, operated, placed, or stored within twenty-five (25) feet of any railway track at any time, for any reason, unless and until the RAILROAD has given approval of such use and a RAILROAD flagger is available at the job site to provide flagging protection. When it becomes necessary for the RAILROAD to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, the DEPARTMENT, LOCAL AUTHORITY, or Contractor must provide the RAILROAD a minimum of five (5) days' notice prior to the cessation of the need for a flagman. If five (5) days' notice of cessation is not given, the DEPARTMENT or the LOCAL AUTHORITY will be required to pay flagging charges for the five (5)-day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional fifteen (15) days' notice must then be given to the RAILROAD if flagging services are needed again after such five (5)-day cessation notice has been given to the RAILROAD.
4. The work performed by the DEPARTMENT, LOCAL AUTHORITY, or Contractor shall be done at such time and in such manner as not to damage any railway tracks or interfere with (1) the timely and safe movement of the RAILROAD'S trains and on-track maintenance equipment or (2) the installations or operations of the RAILROAD'S tenants, unless mutually agreed upon prior to any such work activity.
5. The RAILROAD reserves the right to stop, by an oral directive followed by a written notice, any DEPARTMENT, LOCAL AUTHORITY, or Contractor activities or operations on RAILROAD property that, at the RAILROAD'S determination, could or is creating an imminent hazard to RAILROAD property or operations. After stopping any activity or operation, the RAILROAD is to notify the DEPARTMENT, LOCAL AUTHORITY, and Contractor in writing of the required modification to activities or operations, along with recommended protective services that will be provided by the RAILROAD to allow Project construction to continue.

6. Work on the job site shall not cease without the RAILROAD'S written consent and subject to such reasonable conditions as the RAILROAD may specify. It is understood that the RAILROAD'S tracks at and in the vicinity of the work will be in use during progress of the work and that movement or stoppage of rail traffic including track maintenance equipment, may cause delays in the work of the Project. The DEPARTMENT and/or LOCAL AUTHORITY hereby assume the risk of any such delays and agree that no claims for damage on account of any delay shall be made against the RAILROAD.
7. The DEPARTMENT or LOCAL AUTHORITY, at its own expense, shall adequately police and supervise all work to be performed by the Contractor. The responsibility of the DEPARTMENT or LOCAL AUTHORITY for safe conduct and adequate policing and supervision of the Project shall not be lessened or otherwise affected by the RAILROAD'S collaboration in performance of any work, or by the presence at the job site of the RAILROAD'S representatives, or by compliance by the DEPARTMENT or LOCAL AUTHORITY with any requests or recommendations made by such representatives.
8. All Project work shall be performed in compliance with all applicable Federal, DEPARTMENT, and local laws and regulations affecting the Project work, including, without limitation, all applicable Federal Railroad Administration regulations.
9. The DEPARTMENT, LOCAL AUTHORITY, or Contractor shall telephone the RAILROAD during normal business hours (, except holidays) at [also include a 24-hour, 7-day number for emergency calls] to determine if fiber optic cable is located within the job site area on RAILROAD property. If there are fiber optic cables on such property, the Contractor will telephone the telecommunications company(ies) involved, arrange for a cable locater, and make arrangements for relocation or other protection of the fiber optics, at Project expense, prior to beginning any work on RAILROAD property.
10. The DEPARTMENT, LOCAL AUTHORITY, and Contractor, at no expense to the RAILROAD, shall provide and maintain suitable facilities for draining the highway and its appurtenances, and shall not suffer or permit drainage water therefore to flow or collect on property of the RAILROAD. The DEPARTMENT and LOCAL AUTHORITY shall provide adequate passageway for the waters of any streams, bodies of water, and drainage facilities (either natural or artificial, including water from the RAILROAD'S culvert and drainage facilities), so that said waters may not, because of any facilities or work of the Contractor, be impeded, obstructed, diverted, or caused to back up, overflow, or damage the property of the RAILROAD or any part thereof, or the property of others. The Contractor shall not obstruct or interfere with existing ditches or drainage facilities.
11. Upon completion of work, the DEPARTMENT, LOCAL AUTHORITY, and Contractor shall remove from RAILROAD property all machinery, equipment, surplus materials, and rubbish and leave such property in a condition satisfactory to the RAILROAD.
12. The DEPARTMENT, LOCAL AUTHORITY, and Contractor shall remedy any damage to the RAILROAD property and the RAILROAD'S tenants' property caused by itself during Project activities or the failure to perform activities, and in the event the Contractor or its insurance carrier(s) fail to repair or restore the same.
13. Safety of personnel, property, rail operations, and the public is of paramount importance in the prosecution of the work performed by DEPARTMENT, LOCAL AUTHORITY, or Contractor. The DEPARTMENT, LOCAL AUTHORITY, or Contractor shall be responsible for initiating, maintaining, and supervising all safety, operations, and programs in connection with its work on RAILROAD property.

14. The DEPARTMENT and LOCAL AUTHORITY shall protect and hold harmless the RAILROAD and the RAILROAD'S tenants from and against all loss, liability, and damage arising from activities of the DEPARTMENT or LOCAL AUTHORITY on RAILROAD property during and after Project work.
15. The DEPARTMENT and LOCAL AUTHORITY shall provide, without expense to the RAILROAD and the RAILROAD'S tenants, a minimum of \$500,000 of liability insurance for bodily or personal injury, death, or property damage or loss as a result of any one occurrence or accident, regardless of the number of persons injured or the number of claimants during Project work.
16. The DEPARTMENT'S or LOCAL AUTHORITY'S contract with the Contractor shall require the Contractor to indemnify, defend, and hold harmless the RAILROAD, its officers, agents, and employees from and against any loss, damages, claims, actions, penalties, fines, costs, and expenses, including, without limitation, court costs and reasonable attorney's fees, which may result from (1) injury to or death of any person, including the RAILROAD'S and Contractor's officers, agents, and employees, as well as any other person, and/or (2) damage to or loss or destruction of property whatsoever, including the RAILROAD'S and the Contractor's property or property in their care or custody or any other property (hereinafter collectively "Loss") when the Loss is due to or arises from the Contractor's work or other acts or omissions on RAILROAD property, except to the extent that the Loss is caused by the sole negligence of the RAILROAD. The RAILROAD shall have the right to file a lawsuit or claim directly against the Contractor in connection with the provisions of this Section.
17. The DEPARTMENT'S or LOCAL AUTHORITY'S Contractor shall not store material or park equipment and vehicles on RAILROAD property when not in use in the Project.
18. Before commencing any work on any RAILROAD property, the Contractor will provide the RAILROAD and the DEPARTMENT or LOCAL AUTHORITY with the insurance binders, policies, certificates, and/or endorsements set forth in Exhibit B-1 of this AGREEMENT. All insurance correspondence, binders, policies, certificates, and/or endorsements shall be sent to:

RAILROAD
 Attention: _____
 Address: _____

 City: _____ State: _____

DEPARTMENT [OR LOCAL AUTHORITY]
 Attention: _____
 Address: _____

 City: _____ State: _____

EXHIBIT B-1

INSURANCE REQUIREMENTS FOR CONTRACTOR AS SPECIFIED BY RAILROAD

The Contractor shall, at its sole cost and expense, procure and maintain until Project completion the following insurance coverage:

- A. **Commercial General Liability** insurance. Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$6,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).
- B. **Business Automobile Coverage** insurance. Business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a limit of not less \$1,000,000 per occurrence.
- C. **Workers' Compensation and Employers' Liability** insurance. Coverage must include but not be limited to:

- Contractor's statutory liability under the workers' compensation laws of the Department of _____ of the State of _____.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy with a limit of \$500,000 per employee.

If the Contractor is self-insured, evidence of state approval and excess workers' compensation coverage must be provided. Coverage must include liability arising out of the U.S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

- D. **Railroad Protective Liability** insurance. The Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of the RAILROAD as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. This information must be submitted to the RAILROAD before the work may be commenced.
- E. **Umbrella or Excess** insurance. If the Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.
- F. **Pollution Liability** insurance. Pollution Liability coverage must be included when the scope of the work as defined in the AGREEMENT includes installation, temporary storage, or disposal of any "hazardous" material that is injurious in or upon land, the atmosphere, or any watercourses, or may cause bodily injury at any time.

Pollution Liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least \$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this AGREEMENT includes the disposal of any hazardous or nonhazardous materials from the job site, the Contractor must furnish to the RAILROAD evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

Other Requirements

G. All policy(ies) required above (except workers' compensation and employers' liability) must include the RAILROAD as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26 and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to the RAILROAD as additional insured shall, to the extent provided under ISO Additional Insured Endorsements CG 20 26 and CA 20 48, to provide coverage for the RAILROAD'S negligence whether sole or partial, active or passive, and shall not be limited by the Contractor's liability under any indemnity provisions under which the Contractor is to indemnify the RAILROAD under this Project.

The Contractor shall not assign or subcontract its contract with the DEPARTMENT or LOCAL AUTHORITY for this Project, or any interest therein, without the written consent of the DEPARTMENT or LOCAL AUTHORITY. The Contractor shall be responsible for the acts and omissions of all subcontractors. Before the Contractor commences any work, the Contractor shall, except to the extent prohibited by law: (1) require each of its subcontractors to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26 and CA 20 48 (or substitute forms providing equivalent coverage); (2) require each of its subcontractors to endorse the subcontractor's Commercial General Liability Policy with Contractual Liability—Railroads, ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage), for the job site; and (3) require each of its subcontractors to endorse the subcontractor's Business Automobile Policy with Coverage for Certain Operations in Connection with Railroads, ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage), for the job site.

- H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless (1) insurance coverage may not lawfully be obtained for any punitive damages that may arise under this agreement or (2) all punitive damages are prohibited by all states in which this agreement will be performed.
- I. The Contractor waives all rights against the RAILROAD and its agents, officers, directors, and employees for recovery of damages to the extent these damages are covered by the workers' compensation and employers' liability or commercial umbrella or excess liability insurance obtained by the Contractor as required by this agreement.
- J. Prior to commencing the work, the Contractor shall furnish the RAILROAD with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this AGREEMENT.
- K. All insurance policies must be written by a reputable insurance company acceptable to the RAILROAD or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the State of _____.
- L. The fact that insurance is obtained by the Contractor will not be deemed to release or diminish the liability of the Contractor, including, without limitation, liability under the indemnity provisions of this MASTER AGREEMENT. Damages recoverable by the RAILROAD from the Contractor or any third party will not be limited by the amount of the required insurance coverage.
- M. Nothing in this AGREEMENT is intended to be construed as a requirement for an indemnification against the sole negligence of the RAILROAD, its officers, employees, or agents. Moreover, for any work performed in the State of _____, the DEPARTMENT will require its contractor to indemnify the RAILROAD and any other railroad company occupying or using the RAILROAD'S

right-of-way or line of railroad against all loss, liability, and damages, including environmental damages, hazardous materials damages, penalties, or fines that may be assessed for, caused by, or the result of the contractor's negligence; provided, however, that if such loss, liability, damage, penalties, or fines are caused by or result from the concurrent negligence of (a) the RAILROAD or the RAILROAD'S officers, employees, or agents and (b) the DEPARTMENT'S contractor or the contractor's employees, agents, or subcontractors, such indemnity shall be valid and enforceable only to the extent of the negligence of the DEPARTMENT'S contractor or the contractor's employees, agents, or subcontractors. Likewise, if such loss, liability, damage, penalties, or fines are caused by or result from the concurrent negligence of (a) the RAILROAD or the RAILROAD'S officers, employees, or agents and (b) the DEPARTMENT officers, employees, or agents, such indemnity shall be valid and enforceable only to the extent of the negligence of the DEPARTMENT'S officers, employees, or agents.

EXHIBIT C

Note: This example is based on a BNSF Pipeline Crossing Application.

Application for Pipeline Crossing or Longitudinal Encroachment Related to Highway Project		
Form available at www:insertwebaddress@railroad.com		Date:
Legal name of applicant:		
Address:		
Phone:		
Fax:		
Applicant contact:		Telephone:
Nature of encroachment or type of pipeline:		
Location of encroachment (include log points) Section:		Range: Milepost:
Nearest public road crossing:		
Is this crossing within a public right-of-way?		If so, name of right-of-way owner:
Point of contact for right-of-way owner:		Phone: Fax:
Address of ROW owner:		
Contents of pipeline:		Carrier:
Pipe dimensions:	Length of pipe (feet):	Interior diameter:
If a longitudinal encroachment, describe limits and nature of encroachment:		
If perpendicular encroachment, describe limits and nature of crossing:		
Name and address of contractor:		
Phone number:		
Request date of installation:		
Estimated days needed for construction:		
Installation method: <input type="checkbox"/> Open trench <input type="checkbox"/> Jacking <input type="checkbox"/> Boring		
Minimum depth of pipeline below top of rail:		
Attach as reference set of plans, including all dimensions, specifications, and construction methods.		
Pipeline Details	Pressure:	Number of vents: Pipe material:
Rate Pipe PSI:	Case material:	Customers served by pipeline:
Name of protective liability carrier for contractor:		
Surety bond amount required (to be determined by railroad):		
Name, address, and telephone of bond underwriter:		
Applicant's acknowledgment of its responsibility to pay for required flagging services: <input type="checkbox"/>		
Maintenance agreement included: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Type of organization for which this relocation is required: <input type="checkbox"/> Private company <input type="checkbox"/> Public highway agency <input type="checkbox"/> Municipality <input type="checkbox"/> Other		
Is this relocation related to a federally funded project? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		
Special circumstances: List any unusual or complicating circumstances that may affect the approach, duration, or difficulty of project.		
Signature of Applicant		

Print name : _____	Signature: _____
Title: _____	Date: _____

EXHIBIT D

Application for Wire Line Crossing for Highway Agency Project			
Form available at: www:insertwebaddress@railroad.com		Date:	
Legal name of applicant:			
Address:		State:	City: Zip:
Telephone:			
Fax:			
Type of Crossing:	<input type="checkbox"/> Perpendicular	<input type="checkbox"/> Longitudinal	
Type of utility: <input type="checkbox"/> Electric <input type="checkbox"/> Telephone <input type="checkbox"/> Other If other, explain:			
Location of crossing Nearest public roadway:		Railroad milepost:	
Owner of utility:			
Utility's address:		City:	State: Zip:
Utility contact:		Contact's phone:	
Contractor to perform installation:			
	Address:		
	Contractor point of contact:		
	Telephone:		
Are plans included with application? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are plans available? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Encroachment location: <input type="checkbox"/> Above rails <input type="checkbox"/> Below rails			
Proposed vertical clearance above top of rail:			
Poles or appurtenances on RR property? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, type:			
Location of appurtenances:			
If below, what is depth beneath top of rail?			
Installation method: <input type="checkbox"/> Open trench <input type="checkbox"/> Jacking <input type="checkbox"/> Boring			
Installation plans included: <input type="checkbox"/> Yes <input type="checkbox"/> No			
If under, type of conduit:		If over, type of wire:	
Name, address of protective liability carrier for contractor		Name:	
		Address:	
		City:	State: Zip:
		Phone:	Fax:
Amount of surety bond provided and underwriter		Amount:	Carrier:
Maintenance agreement attached: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Requested date of installation:		Estimated days of installation:	
Contractor acknowledges need to schedule and pay for flagging: <input type="checkbox"/>			
Type of organization for which this relocation is required: <input type="checkbox"/> Private company <input type="checkbox"/> Public highway agency <input type="checkbox"/> Municipality <input type="checkbox"/> Other			
Is this relocation related to a federally funded project? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Special circumstances: List any unusual or complicating circumstances that may affect the approach, duration, or difficulty of project.			
Signature:		Title:	
Print name:			

Date:

EXHIBIT E

UTILITY LICENSE AGREEMENT REQUIREMENTS

1. General: Utility License Agreements are required when utility facilities are installed, relocated, removed, or maintained along or across all RAILROAD property. If liability insurance is required, then evidence of adequate liability insurance is to be on file with the RAILROAD for each agreement.
2. Applications: Approved requests to install, maintain, relocate, or remove a utility within the property of the RAILROAD shall be authorized by a Utility License Agreement. The applications for Utility License Agreements, along with plans for the proposed installation, shall be submitted to the RAILROAD and approved before construction has commenced.
3. Location:
 - A. Utility lines shall be located so as to avoid or minimize the need for adjustments for future railroad improvements and to permit access to the utility lines for their maintenance with minimum interference to railroad traffic.
 - B. Pipelines shall be installed under tracks by boring, jacking, or in some cases, open-trenching. WATER JETTING IS NOT PERMITTED.
 - C. Where practical, pipelines carrying liquefied petroleum gas shall cross the railway where the tracks are carried on an embankment.
 - D. All high-pressure pipelines (greater than 60-psi internal pressure), except those in public roads, shall be prominently marked at the property line (on both sides of the track for undercrossings) by signs that state the size of the line and its depth.

Example:

CAUTION: 30-inch diameter high-pressure gas main 7 feet deep.

4. Design Considerations:
 - A. The design of any utility installation will be the responsibility of the Utility Owner. An installation within the RAILROAD property must be reviewed and approved by the RAILROAD with regard to location and the manner of adjustment. This includes the measures to be taken to preserve the safety and flow of rail traffic, structural integrity of the roadway or structure, ease of maintenance, and the integrity of the utility facility. Utility installations on, over, or under RAILROAD property shall conform with requirements contained herein and/or, as a minimum, the appropriate requirements outlined in the following:
 - i. Safety Rules for the Installation and Maintenance of Electric Supply and Communication Lines, National Electrical Safety Code.
 - ii. Title 49 CFR Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards and Amendments.
 - iii. Title 49 CFR Part 195, Transportation of Liquids by Pipelines and Amendments.
 - iv. American Society for Testing and Materials (ASTM) Specifications, latest edition.
 - v. Manual on Uniform Traffic Control Devices, with revisions.
 - vi. Rules and Regulations for Public Water Systems, latest edition, published by the appropriate State Health Department.
 - B. All utility installations on, over, or under RAILROAD property shall be of durable materials designed for long service life and relatively free from routine servicing and maintenance. Conformance with current applicable material specifications and codes is mandatory.

- C. References given to any publication, manual, or specification are intended to be the most current edition. If a conflict occurs between any publication, manual, or specification, the most restrictive provision of said publication, manual, or specification will be used.
- D. For all boring and jacking installations under main and passing tracks greater than 26 inches in diameter and at a depth of between 5.5 and 10.0 feet below top of tie, a geotechnical study will need to be conducted to determine the presence of granular material and/or high water table elevation, at the sole expense of the Permittee. The study will include recommendations and a plan for a procedure to prevent failure and a collapse of the bore. Generally, core samples are to be taken near the ends of tie at the proposed location, at least as deep as the bottom of the proposed horizontal bore. Test results must be reviewed and approved by the RAILROAD or its agent prior to boring activities commencing. The RAILROAD reserves the rights, based on test results, to require the Permittee to select an alternate location, or to require that additional engineering specifications be implemented, at the sole expense of the Permittee, in order to utilize existing location.