



**Washington State  
Department of Transportation**  
**Douglas B. MacDonald**  
Secretary of Transportation

**Transportation Building**  
310 Maple Park Avenue S.E.  
P.O. Box 47300  
Olympia, WA 98504-7300  
  
360-705-7000  
TTY: 1-800-833-6388  
www.wsdot.wa.gov

December 6, 2005

Vicki Elliot  
Assistant Director Transportation Safety  
Washington Utilities and Transportation Commission  
PO Box 47250  
Olympia, WA 98504-7250

Subject: Petition for Interconnection of Signals

Dear Ms. Elliot:

Please docket and initiate proceedings for the enclosed petition for interconnection of railroad and highway traffic signals at SR-548 in Whatcom County, Washington. I have provided Mr. Dan MacDonald of the BNSF Railway Company with an identical petition, asking for BNSF's review and waiver of hearing in this matter.

I am available to meet with you at any time to discuss this project or petition. Please contact me at (360) 705-7271 if I can be of any assistance.

Sincerely,

Ahmer Nizam  
WSDOT Railroad Liaison

RECEIVED  
RECORDS MANAGEMENT  
05 DEC 12 PM 1:39  
STATE OF WASH.  
UTIL. AND TRANSP.  
COMMISSION

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

	)	
<b>The Washington State</b>	)	
<b>Department of Transportation</b>	)	DOCKET NO. TR-
	)	
Petitioner,	)	PETITION TO INTERCONNECT
	)	RAILROAD WARNING SIGNALS
v.	)	WITH HIGHWAY TRAFFIC SIGNALS
	)	
<b>The BNSF Railway Company</b>	)	WUTC CROSSING No. <b>2B 109.40</b>
	)	
Respondent.	)	DOT CROSSING No. <b>084841X</b>
.....	)	

Petitioner requests the Washington Utilities and Transportation Commission to enter an order authorizing interconnection between a highway signal and a grade crossing signal system as follows:

**1. Identifying information for the crossing:**

Existing highway, street or road: SR-548 (Grandview Road) at MP 0.31

Existing railway (company):BNSF Bellingham Subdivision at RRMP 109.40

**3. Description of current signals and/or gates at the crossing:** Crossing is equipped with cantilever-mounted signals with gates

**2. Type of current crossing circuitry:** Crossing is equipped with GCP 3000, Constant Warning Circuitry

**3. Project description and justification:**

(a) Description of proposed interconnection, including sequencing and advance preemption time, if any:

The project is related to the location of the SR-548/Portal Way roadway intersection approximately 60-feet east of the crossing (see attached plan). The roadway intersection is currently controlled by a Stop sign. WSDOT plans to install a highway traffic signal at the roadway intersection, as well as a pre-signal in advance of the grade crossing's eastbound approach. An approaching train will preempt the traffic signal at the intersection to clear any vehicular queues that may extend over the grade crossing, and cause the pre-signal to cycle to red in order to prevent any more vehicles from entering the limits of the crossing.

RR Preemption phasing is shown on the attached "Exhibit B".

- (b) Justification, including traffic and train counts, times when traffic backs up over the crossing, or any other pertinent information:

Average Daily Traffic through the crossing is 8,800, with an estimated 6% trucks – including hazmat transporters. Train traffic averages 10 trains per day, traveling at speeds of up to 79 mph. Due to the short storage between the tracks and the highway intersection, the potential exists for vehicle queues to extend back over the tracks. The signal interconnection will provide a mechanism to clear these queues, thereby improving safety for both roadway and railway users.

The WSDOT design manual requires pre-signals to be installed whenever there is less than feet between the nearest rail and roadway intersection stop line (Chapter 850-11 (b)) at an interconnected grade crossing.

- (c) Effects of proposed changes on warning devices and warning times for drivers:

From the perspective of motorists, the railroad warning devices will remain unchanged with regard to minimum warning time provided at the grade crossing. The traffic signals will improve both safety and efficiency of traffic through the grade crossing.

**4. Drawings.** Please attach sketches, drawn to scale, accurately showing the current and proposed layout of the highway (including shoulders, sidewalks, lanes of travel, bike lanes and crossing warning devices), the intersection to which the inter-tie is proposed, and of the railway in the vicinity of the crossing.

I certify under penalty of perjury that the foregoing is true and correct.

Dated at Olympia, Washington this 7<sup>th</sup> day of December 2005.

Petitioner

Washington State Department of  
Transportation

Responsible official:



Ahmer Nizam, WSDOT Railroad Liaison  
WSDOT Design Office  
PO Box 47329  
Olympia, Washington 98504-7329

**WAIVER OF HEARING BY RESPONDENT**

The respondent has investigated the conditions existing at and in the vicinity of the grade crossing described herein and is satisfied that such conditions are substantially as described in the petition. Respondent consents to the interconnection of the specified traffic signal with the railroad crossing signal system as set forth in the petition. Hearing in this proceeding is hereby waived.

Dated at \_\_\_\_\_, Washington, on the \_\_\_\_\_ day of \_\_\_\_\_, 2005.

Respondent

BNSF Railway Company

Responsible official: \_\_\_\_\_

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
(Address)

## INSTRUCTIONS

Petitioner can be the railroad, the road authority or the Washington Utilities and Transportation Commission. If the railroad is the petitioner, the road authority will be the respondent. If the road authority is the petitioner, the railroad will be the respondent.

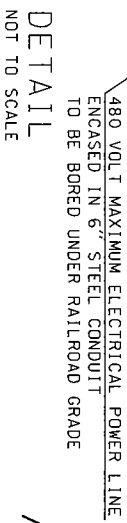
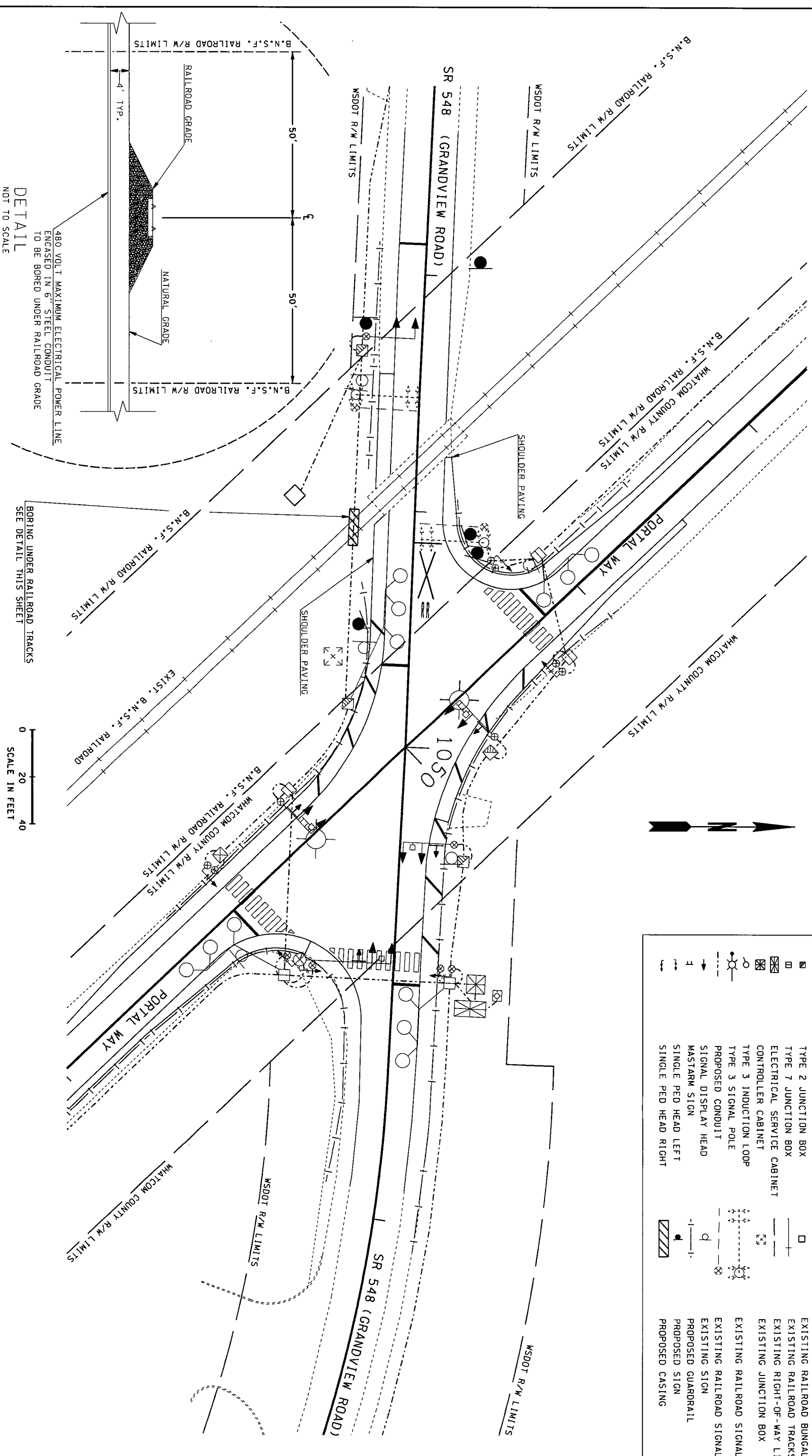
The original and two copies of the petition must be filed with the Washington Utilities and Transportation Commission.

If the waiver of hearing is executed, the petition will be investigated and a decision made within approximately two weeks from receipt of the documents.

If the waiver of hearing is not executed on the petition filed, a copy of the petition will be served upon the respondent by the Commission for answer within 20 days. Upon receipt of respondent's answer or after the 20 day period has elapsed, the application will be processed. Time for making a decision will depend on whether an answer is filed and the content of the answer.

T. 39N. R. 2E. W. M.

LEGEND	
	TYPE 1 JUNCTION BOX
	TYPE 2 JUNCTION BOX
	TYPE 7 JUNCTION BOX
	ELECTRICAL SERVICE CABINET
	CONTROLLER CABINET
	TYPE 3 INDUCTION LOOP
	TYPE 3 SIGNAL POLE
	PROPOSED CONDUIT
	SIGNAL DISPLAY HEAD
	MASTARM SIGN
	SINGLE PED HEAD LEFT
	SINGLE PED HEAD RIGHT
	TYPE 3A INDUCTION LOOP
	EXISTING RAILROAD BUNGALOW
	EXISTING RAILROAD TRACKS
	EXISTING RIGHT-OF-WAY LINE
	EXISTING JUNCTION BOX
	EXISTING RAILROAD SIGNAL
	EXISTING RAILROAD SIGNAL GATE
	EXISTING SIGN
	PROPOSED GUARDRAIL
	PROPOSED SIGN
	PROPOSED CASTING



BORING UNDER RAILROAD TRACKS  
SEE DETAIL THIS SHEET

SCALE IN FEET  
0 20 40

FILE NAME	I:\Design Projects\MS 508\CADD\Sheet\Railroad Permit.dgn			REGION	STATE	FED. AID PROJ. NO.	PLOT 11
TIME	11:01:48 AM			NO.			RRI
DATE	08/24/2005			JOB NUMBER	10 WASH		SHEET 1 OF 1 SHEETS
DESIGNED BY	J. ALVORD			CONTRACT NO.			
ENTERED BY	J. ALVORD			LOCATION NO.	375030		
CHECKED BY	G. DEETER			DATE			
PROJ. ENGR.	D. CRISMAN			P.E. STAMP BOX	DATE		
REGIONAL ADM.	L. ENG			P.E. STAMP BOX	DATE		
REVISION	DATE	BY					



SR 548  
SR 548/PORTAL WAY  
RAILROAD PERMIT



## Highway - Railroad Grade Crossing Agreement

Railroad Company and Address  
BURLINGTON NORTHERN SANTA FE RAILROAD  
Attn: Mike Cowles  
2454 Occidental Ave S., Suite 1A  
Seattle, WA 98134

WSDOT Billing Address  
WSDOT Northwest Region  
Attn: Dean Holman MS NB 82-113  
PO Box 330310  
Seattle, WA 98133-9710

Agreement Number  
RR00315      Project Number STPXP-0548(002)

State Route SR 548	Control Section xxxxx
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Section / Location  
SR 548 MP 0.31 Grandview Road Grade Crossing Signal Interconnect

Region Northwest	Estimated Amount \$ 60,233
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Railway's Reference  
FRA# 084841X RRMP 109.32; Seattle-Vancouver, BC Main Line

Description of Improvements and Division of Work

**A. Work to be performed by the RAILWAY, or its contractor, at STATE expense (included in the Estimate of Cost):**

Signal intertie between railroad grade crossing signal and traffic signal at Portal Way and SR 548..

While this is an actual cost agreement, the reimbursement shall be limited to the actual cost of labor, materials, and other services furnished by the RAILWAY up to the amount shown on Exhibit A without written approval from the STATE pursuant to this Agreement.

**B. Work to be performed by the RAILWAY, or its contractor, at RAILWAY expense (not included in the Estimate of Cost):**

None

**C. Work to be performed by the STATE, or its contractor, at STATE expense (not included in the Estimate of Cost):**

State to design and construct traffic signal at Grandview Road with which this interconnect will communicate.

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, between the STATE OF WASHINGTON, Department of Transportation, acting by and through the Secretary of Transportation, hereinafter called the "STATE", and the above named Railroad Company, hereinafter called the "RAILWAY".

WHEREAS, the STATE desires that the above described improvements be constructed at the referenced location, and

WHEREAS, it is deemed to be in the best public interest for the RAILWAY, as owners of the track or tracks, to perform specific work as herein described, and

WHEREAS, the STATE is obligated to reimburse the RAILWAY for all or part of the cost incurred by the RAILWAY in undertaking specific work as herein described.

NOW THEREFORE, in consideration of the terms, conditions, covenants and performances contained herein, or attached and incorporated and made a part hereof, IT IS MUTUALLY AGREED AS FOLLOWS:

## **I GENERAL**

This AGREEMENT will be governed by the applicable sections of Title 23, U.S. Code, Highways; Federal-Aid Policy Guide and amendments thereto. These references are incorporated hereby and made a part of this AGREEMENT for all intents and purposes as if fully set forth herein.

## **II DIVISION OF WORK**

The STATE and the RAILWAY will perform the work as set forth in the above "Description of Improvements and Division of Work."

The RAILWAY will provide all the work, labor, materials and services to install warning devices and/or perform other work as described and set forth in the "Description of Improvements and Division of Work." A site plan labeled Exhibit "B", attached hereto and by this reference made a part of this AGREEMENT, further described the proposed improvements.

The RAILWAY agrees that it will follow the provisions of Article 1 when selecting the services of a consultant or contractor or both. The RAILWAY's contract with the consultant or contractor or both is subject to approval by the STATE.

If work is to be performed by the STATE as described in this AGREEMENT, the RAILWAY hereby grants the STATE permission to enter upon the RAILWAY's property for the purpose of performing said work.

## **III AUTHORITY TO BEGIN WORK**

The RAILWAY agrees not to commence work until receipt of notice to begin work in writing by the STATE, and that reimbursement will be limited to those costs incurred subsequent to the date of such notification. The RAILWAY agrees to notify the STATE approximately one week prior to beginning work on the site.

## **IV PAYMENT**

The STATE, in consideration of the faithful performance of the work to be done by the RAILWAY, agrees to pay the RAILWAY actual direct and related indirect costs accumulated in accordance with a work order accounting procedure as prescribed and approved by the ICC Uniform System of Accounts, or its equivalent.

An itemized estimate of cost for work to be performed by the RAILWAY at the STATE's expense is shown on Exhibit "A," attached hereto and by this reference made a part of this agreement.

Following execution of this AGREEMENT, progress bills may be submitted to the STATE to cover costs incurred and the STATE shall pay such progress billings promptly upon receipt. Progress bills are not to be submitted more frequently than one (1) per month. Billings should clearly identify preliminary engineering charges from construction and construction engineering charges.

Final and detailed billing on all incurred costs shall be made by the RAILWAY and furnished to the STATE within one hundred twenty (120) days of project completion, and the STATE shall pay all eligible amounts of such bill, less progress payments previously made.

It is agreed that payment of any billing will not constitute agreement as to the appropriateness of any item and that at the time of final audit, all required adjustments will be made and reflected in a final payment. In the event that such final audit reveals an overpayment to the RAILWAY, the RAILWAY agrees to refund such overpayment to the STATE.

During the progress of construction and for a period not less than three years from the date of final payment to the RAILWAY, the records and accounts pertaining to the construction of the project and accounting therefor are to be kept available for inspection and audit by the STATE and/or Federal Government and copies of all records, accounts, documents or other data pertaining to the project will be furnished upon request. If any litigation, claim, or audit is commenced, the records and accounts along with supporting documentation shall be retained until all litigation, claim or audit finding has been resolved even though such litigation, claim, or audit continues past the three-year retention period.



V  
**PROTECTIVE SERVICES**

All work herein provided for to be done by the STATE or its contractors, if any, on the RAILWAY's right of way, shall be performed by the STATE or its contractors in a manner as not to interfere with the movement of trains or traffic upon the tracks of the RAILWAY. The STATE or its contractors, shall use all care and precaution necessary to avoid accident, damage, or interference to the RAILWAY's tracks or to the trains or traffic using its tracks and notify the RAILWAY a sufficient time in advance whenever it is about to perform work adjacent to any track to enable the RAILWAY to furnish flagging and such other protective services and devices as might be necessary to ensure safety of railway operations, and the RAILWAY shall have the right to furnish all such flagging or protective services and devices as in its judgment are necessary, and the STATE shall reimburse the RAILWAY for the cost thereof. Whenever safeguarding of trains or traffic of the RAILWAY is mentioned in this AGREEMENT, it is intended to cover and include all users of the RAILWAY's tracks having permission for such use.

The RAILWAY will submit bills for such flagging and other protective services and devices used during progress of the work contemplated by this AGREEMENT. The RAILWAY will submit a final billing for flagging and other protective services and devices within one hundred twenty (120) days after notification by the STATE of completion of project, said one hundred twenty (120) days to commence upon receipt, by the RAILWAY, of the said notification of completion of the project.

*The indemnity*

VI  
**INSURANCE**

The contract between the STATE and its contractor for construction work herein provided, if any, shall require the contractor to ~~protect~~ and hold harmless the RAILWAY and any other railroad company occupying or using the RAILWAY's right of way or line of railroad against all loss, liability and damage arising from activities of the contractor, its forces or any of its subcontractors or agents. Such indemnity provision shall be in accordance with RCW 4.24.115 as amended by ch. 305, Laws of 1986. The contract shall further provide that the contractor shall:

1. Furnish to the RAILWAY a Railroad Protective Insurance Policy in the form provided by FHPM 6-6-2-2. The combined single limit of said policy shall not be less than Two Million Dollars (\$2,000,000) for all damages arising out of bodily injuries to or death of any person or persons and for all damages arising out of the loss or destruction of or injury or damage to property in any one occurrence during the policy period, and subject to that limit a total (or aggregate) limit of not less than Six Million Dollars (\$6,000,000) for all damages during the policy period. Said insurance policy is to be executed by a corporation qualified to write the same in the state in which the work is to be performed, shall be in the form and substance satisfactory to the RAILWAY and shall be delivered to an approved by the RAILWAY prior to the entry upon or use of its property by the contractor.

2. Carry regular Contractor's Public Liability and Property Damage Insurance providing for a limit of not less than One Million Dollars (\$1,000,000) for all damages arising out of bodily injuries to or death of one person, and, subject to the limit for each person, a total limit of not less than Two Million Dollars (\$2,000,000) for all damages arising out of bodily injuries to or death of two or more persons in any one occurrence; and providing for a limit of not less than One Million Dollars (\$1,000,000) for all damages to or destruction of property in any one occurrence and subject to that limit a total (or aggregate) limit of not less than Two Million Dollars (\$2,000,000) for all damages to or destruction of property during the policy period. A certificate of insurance providing proof of Contractor's Public Liability and Property Damage Insurance, executed by a corporation qualified to write the same in the State of Washington and in form and substance satisfactory to the RAILWAY, shall be delivered to and approved by the RAILWAY prior to the entry upon or use of the RAILWAY's property by the contractor.

If the STATE, its contractor, subcontractor or agents, in the performance of the work herein provided for or by the failure to do or perform anything for which it is responsible under the provisions hereof, shall damage or destroy any property of the RAILWAY, such damage or destruction shall be corrected by the STATE in the event its contractor or the insurance carriers fail to repair or restore the same.

For any work performed in the State of Washington, nothing in this agreement is intended to be construed as a requirement for an indemnification against the sole negligence of the RAILWAY, its officers, employees or agents. Moreover, for any work performed in the State of Washington, the contractor shall specifically and expressly agree to indemnify the RAILWAY and any other railroad company occupying or using the RAILWAY's right-of-way or line of railroad against all loss, liability and damages, including environmental damage, hazardous materials damage, or penalties or fines that may be assessed, caused by or resulting from the contractor's negligence, provided, however, if such loss, liability, damage, penalties or fines are caused by or result from the concurrent negligence of (a) the RAILWAY or the RAILWAY's officers, employees or agents, and (b) the contractor or the contractor's employees, agents of subcontractors, such indemnity shall be valid and enforceable only to the extent of the negligence of the contractor or the contractor's employees, agents or subcontractors.

The contractor shall further agree that it has a duty to defend at its own expense, in the name and on behalf of the RAILWAY, all claims or suits for injuries or death of persons or damage to property arising or growing out of the work carried on under this agreement, for which the RAILWAY is liable or is alleged to be liable. However, upon a final determination in court of law in which a percentage of negligence is attributed to the RAILWAY, the RAILWAY agrees to reimburse the contractor in the same percentage for the costs involved in defending the suit.

**VII  
SALVAGE**

All material removed by the RAILWAY, which has been replaced at STATE expense, shall be reclaimed or disposed of by the RAILWAY and shall be credited to the STATE in accordance with Federal-Aid Highway Program Manual, Volume 1, Chapter 4, Section 3. The RAILWAY shall furnish written notice to the STATE for the time and place the materials will be available for inspection. If salvage credit is anticipated on this project, an estimate of the salvage credit will be included in the estimate of cost.

**VIII  
MAINTENANCE OF FACILITY**

Upon completion of the project, the STATE, at its sole cost and expense, shall maintain all improvements, other appurtenances, advance warning signs, standard pavement markings and guardrails with the exception of the crossing which will be maintained by the RAILWAY and STATE as provided by law.

Upon completion of the installation of said signals, the RAILWAY, at its sole cost and expense, shall operate and maintain said signals, provided however that the RAILWAY shall be entitled to receive reimbursement for any or all of the cost of such maintenance as may be made available by reason of any law, order, regulation or otherwise providing for the reimbursement of said costs.

**IX  
REPAIR OR REPLACEMENT  
OF DAMAGED FACILITY**

In the event the signal system installed under this AGREEMENT is partially or wholly destroyed and the cost of repair or replacement cannot be recovered from the person or

persons responsible for such destruction, then, in that event the cost of repair or replacement shall be borne by the STATE and the RAILWAY at the same ratio under which the signals were installed.

In the event that either highway or railway changes will necessitate revisions of the signals by rearrangement, replacement or additions at the said location, the party whose changes cause said revisions will bear the entire cost of the same without obligation to the other.

**X  
DISPOSITION OF SIGNALS  
NO LONGER REQUIRED**

If for any reason signals shall no longer be required at said grade crossing, the RAILWAY, on the approval of the STATE, may remove said signals. If in the opinion of the RAILWAY said signals are not obsolete, they may, as agreed to by the STATE and RAILWAY under a separate agreement, be reinstalled at some other State Highway - railroad grade crossing. If no other crossing is agreed upon by the STATE and the RAILWAY, and prescribed by public authority, the STATE will be credited with the salvage value for material not previously replaced by the RAILWAY during maintenance, less cost of removal.

Ownership of the signals vests in the RAILWAY or STATE, whichever one paid for the signals as shown on the face of this agreement.

**XI  
PROJECT COMPLETION**

Within 30 days of project completion the RAILWAY will by letter notify the STATE that construction is completed.

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

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT as of the day and year first above written.

**Railway**

**State of Washington  
Department of Transportation**

By John Brock  
Title Mgr. Public Projects  
Date 9/23/03

By Conner Shaw  
Title Railroad Liaison

ANY MODIFICATION, CHANGE OR REFORMATION of this Boilerplate Agreement shall require approval as to form by the Office of the Attorney General.

APPROVED AS TO FORM 9/16/03  
Weldon



# Exhibit B

## HIGHWAY/RAILROAD INTERCONNECTED SIGNALS - INSPECTION FORM

CITY Ferndale, WA	COUNTY Whatcom	OPERATING AGENCY WSDOT
HIGHWAY INTERSECTION SR 54B (Grandview)/Portal Way		WHDOT DISTRICT Mt. Baker
RAILROAD COMPANY BNSF		RAILROAD INVENTORY NUMBER
<b>2. LOCATION DIAGRAM</b>		
<p>SKETCH RAILROAD/TRAFFIC SIGNAL INTERSECTION (include RR approach &amp; storage lengths, signal phasing, warning devices, pavement markings, etc.)</p>		
<b>3. RR PREEMPTION PHASING SEQUENCE</b>		
<p>Phase 6 ↓</p> <p>Phase 2 ↑</p> <p>Phase 5 ↓</p>	<p>Phase 4 →</p> <p>Track Clearance</p>	<p>Phase 6 ↓</p> <p>Hold</p> <p>Phase 2 ↑</p>
<b>4. RAILROAD INFORMATION</b> (Provided by Railroad Agency)		<b>5. SIGNAL INFORMATION</b>
RAILROAD CONTROLLER		CONTROLLER
RR WARNING DEVICE WORK CORRECTLY (flashers, gates, etc.?)		ACTUATED <input checked="" type="checkbox"/> PRETIMED <input type="checkbox"/>
DETECTOR		DOES RR PREEMPTION HAVE PRIORITY OVER EVP? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
DC <input type="checkbox"/>	ELECTRIC <input type="checkbox"/>	MOTION <input type="checkbox"/>
PREDICT <input type="checkbox"/>	OTHER <input type="checkbox"/>	DOES EVP EXIST? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
MAXIMUM TRAIN SPEED FOR THE SECTION _____ MPH		ARE THERE EVP CONFIRMATION LIGHTS? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
		DESCRIBE EVP OPERATION WHEN PREEMPTED BY AN APPROACHING TRAIN.
<b>6. REVIEW TEAM</b>		
WHO WAS PRESENT DURING THE REVIEW?		DATE