

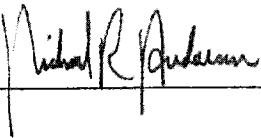


WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

	)	DOCKET NO. TR- 160284
	)	
Northwest Railway Museum	)	PETITION TO MODIFY HIGHWAY-
_____	)	RAIL GRADE CROSSING ACTIVE
Petitioner,	)	WARNING DEVICES AND
	)	DISBURSEMENT OF FUNDS
vs.	)	FROM THE GRADE CROSSING
Washington State Department of	)	PROTECTIVE FUND
Transportation	)	
_____	)	
Respondent.	)	
	)	USDOT CROSSING #
	)	092040A
.....	)	

The Petitioner asks the Washington Utilities and Transportation Commission to approve the modification of highway-rail grade crossing warning signals and disburse funds from the Grade Crossing Protective Fund.

*Section 1 – Petitioner’s Information*

Northwest Railway Museum
Petitioner
38625 SE King Street
Street Address
Snoqualmie, WA 98065
City, State and Zip Code
PO Box 459, Snoqualmie, WA 98065
Mailing Address, if different than the street address
Richard R. Anderson
Contact Person Name

Contact Person’s Signature
425.301.1566      richard@trainmuseum.org
Contact Phone Number and Email Address

## Section 2 – Respondent's Information

Respondent	Washington State Department of Transportation
Street Address	310 Maple Park Avenue SE
City, State and Zip Code	Olympia WA 98504
Mailing Address, if different than the street address	PO Box 47329 Olympia WA 98504-7329
Contact Person Name	Anmer Nizam
Contact Phone Number and Email Address	360-705-7271      nizam@wsdot.wa.gov

## Section 3 – Crossing Location

1. Existing highway/roadway	State Route 202 / Bendigo Street
2. Existing railroad	Northwest Railway Museum dba Snoqualmie Valley Railroad
3. USDOT Crossing No.	092040A
4. Located in the <u>NE</u> 1/4 of the <u>NE</u> 1/4 of Sec. 9 Twp. 23N _____, Range 8 W.M.	
5. GPS location, if known	
6. Railroad mile post (nearest tenth)	35.9
7. City	North Bend
County	King

*Section 4 – Current Highway Traffic Information*

**Please complete all information in this section.  
Incomplete information may cause delays in the petition approval process.**

1. Name of highway	<u>State Route 202/Bendigo Street</u>
2. Road authority	<u>Washington State Department of Transportation</u>
3. Average annual daily traffic (AADT)	<u>11,060</u>
4. Number of lanes	<u>Three</u>
5. Roadway speed	<u>30 MPH</u>
6. Is the crossing part of an established truck route?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
7. If so, trucks are what percent of total daily traffic?	<u>&gt;10</u>
8. Is the crossing part of an established school bus route?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
9. If so, how many school buses travel over the crossing each day?	<u>12</u>
10. Describe any changes to the information in 1 through 7, above, expected within ten years:	<u>Increases are likely but the extent is unknown</u> <u> </u> <u> </u>

Section 5 - Current Crossing Information

1. Railroad company Northwest Railway Museum dba Snoqualmie Valley Railroad

2. Type of railroad at crossing     Common Carrier     Logging     Industrial  
 Passenger     Excursion

3. Type of tracks at crossing     Main Line     Siding or Spur

4. Number of tracks at crossing One

5. Average daily train traffic, freight Zero  
Authorized freight train speed N/A    Operated freight train speed N/A

6. Average daily train traffic, passenger Two  
Authorized passenger train speed Fifteen    Operated passenger train speed Five - Fifteen

7. Describe any changes to the information in 1 through 4, above, expected within ten years:  
No changes anticipated  
\_\_\_\_\_  
\_\_\_\_\_

8. What is the available sight distance from the stop bar (or 25 feet from the tracks if no stop bar) on both approaches to the crossing?  
Fifty feet eastward, approximately twenty five feet westward approaching the crossing, and then two hundred fifty feet westward at the stop bar.  
\_\_\_\_\_

9. If the sight distance is less than 400 feet, describe the structures, roadway or track curvature, visual obstacles or other characteristics that limit sight distance.  
Beautification planters placed by city of North Bend limit eastward sight distance. Building to west limits sight distance to about twenty five feet except what actually at the stop bar  
\_\_\_\_\_

*Section 6 – Current Warning Devices*

1. Provide a complete description of the warning devices currently located at the crossing, including signs, gates, lights, train detection circuitry, preemption (advance or simultaneous) and any other warning devices.

**Train detection**

Train detection is a style C circuit and includes advance traffic pre-emption for the nearby intersection of North Bend Way and SR 202/Bendigo Street.

The train detector until last fall was a Harmon model SCX-1 installed new in November 1995. It had an apparent activation failure and as a result was immediately taken out of service. The issue reoccurred at least once on the test bench, and the railroad has been unable to determine the cause. (Intermittent problems in a safety-critical system such as a railroad crossing are not only inconvenient, they are potentially dangerous. The offending circuit(s) must be removed from service unless or until they can be fully restored to their former function and reliability.)

Train detection is at present a temporary installation that includes a TD-4 signal generator and a mechanical interlocking conventional track relay. This is also a style C circuit, but is using components that – though tested in compliance with Federal regulation - are more than sixty years old. The traffic pre-emption is at present provided with a slow release relay also more than sixty years old.

**Lights/Gates** Crossing has an existing pair of cantilever structures with a pair of front/back lights over each side of the roadway. A second pair of front/back lights is shoulder-mounted on each side of the roadway. Safetran S-20 crossing gates are located on either side of the road. A set of cross bucks are mounted on the crossing signal mast on each side of the road. This equipment was salvaged from the Burlington Northern Raymond Branch in 1995.

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*Section 7 – Description of Proposed Changes*

1. Describe in detail the number and type of proposed signals, gates or other warning devices, including proposed type of train detection. Include the funding source for the proposed modification, if other funding sources will be used in addition to GCPF.

The Northwest Railway Museum proposes replacing the style C circuit with a predictor that was recovered from a recent local railway line abandonment. This device was functional when removed from service approximately six years ago and has been successfully tested by the Museum, but the device does not have current field service bulletins applied.

Under this proposal, this Harmon HXP3R-2 would be sent to Alstom (Harmon successor) where it will have all field service bulletins applied, and have the circuit cards tested by Alstom to ensure no other repairs are required. Unit will then be installed in place of the style C mechanical interlocking relay now in service at SR 202. At the same time, applicable track couplers, terminations, and other changes required for the predictor to operate correctly will be applied.

Use of the recycled and reconditioned HXP3R-2 predictor represents good value. It allows improved train detection for less than a quarter of the cost of a new equivalent unit. Furthermore, the predictor circuit will reduce traffic congestion at the crossing by providing constant warning time, and the motion sense function will reset the lights and gates when trains and engines stop in one of the approach blocks.

The Museum installed a new HSP3R on River Street in Snoqualmie in 2003. This installation has been very reliable, demonstrating that the proposed circuit design is appropriate for an excursion line, and that the Museum has experience maintaining the proposed new circuit.

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*Section 8 – Illustration of Proposed Warning Devices*

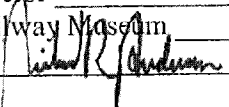
Attach a detailed diagram, drawing, engineering plan or other illustration showing the proposed crossing modification.

Proposed warning devices will not result in a change in appearance or configuration. The train detection will be changed from a style C AC/DC circuit to audio frequency predictor circuit using a wiring diagram to be designed with proceeds from the requested grant. All other aspects of the crossing will remain the same.

*Section 9 – Use of Surplus Equipment*

If surplus or used equipment is being installed as part of the project, please review the following statement and sign, accepting the terms and conditions.

“The recipient of surplus equipment voluntarily accepts the equipment as is. Proper installation and testing is required per Code of Federal Regulations 49, prior to activating the signal equipment. The recipient assumes full responsibility for functionality of the equipment.”

Name (print): Richard R. Anderson  
Title: Executive Director  
Company: Northwest Railway Museum  
Signature:   
Date: 26 February 2016

*Section 10 – Project Cost Information*

1. Breakdown of estimated total cost.

- Engineering design \$3,200
- Upgrade and repair circuit cards for used HXP3R-2 \$5,500
- Traffic pre-emption cards, \$1,100
- Wire, terminations, interface, misc hardware \$2,100
- Labor to install \$2,300 (Museum)
- Misc materials from inventory \$700 (Museum)

2. Names of the parties contributing to the project and the amount each is contributing.

In kind contribution of labor and materials from the Northwest Railway Museum valued at \$3,000.

3. Provide the amount the applicant is requesting from the GCPF grant program.

\$11,900.

**Section 11 – Project Completion Date**

Project completion date: 1 July 2016



Section 12 - Waiver of Hearing by Respondent

**Waiver of Hearing**

The undersigned represents the Respondent in the petition to modify highway-rail grade crossing warning signals at the following crossing:

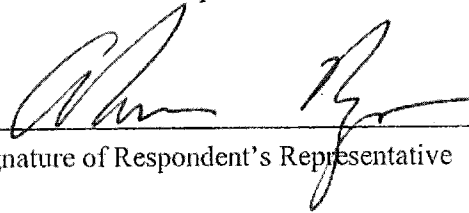
USDOT Crossing No. 092040A

We have investigated the conditions at the crossing. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree the warning signals should be modified and consent to a decision by the commission without a hearing.

Dated at Olympia, Washington, on the 29<sup>th</sup> day of February, 2016.

Ahmer Nizam

Printed name of Respondent



Signature of Respondent's Representative

Technical Services & Business Manager

Title

360.705.7271 nizama@wsdot.wa.gov

Phone number and email address

PO Box 47329

Olympia WA 98504-7329

Mailing address

