

### MEMORANDUM

Date:

August 15, 2018

To:

**Betty Young, Transportation Planning Specialist** 

From:

Jeffrey Rivers, Snohomish County Public Works

**Subject:** 48<sup>th</sup> Ave Railroad Crossing – UTC Petition

Dear Ms. Young,

Attached is the revised *Petition to install highway rail grade crossing warning devices*, docket TR-170060 for the BNSF project to upgrade their railroad crossing DOT 084 683A on 48<sup>th</sup> Ave W in Stanwood, WA. Since the original petition was signed and submitted to the UTC the railroad has updated their cost estimate and revised their construction schedule.

This petition is to request that the grant amount be increased from the original approved amount to a new amount of \$480,794, with that amount available for reimbursement to Snohomish County through June 30<sup>th</sup>, 2019.

Regards,

Jeffrey Rivers 3/12

Encl: Revised UTC petition docket TR-170060 w/ waiver



### WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Snohomish County Public Works	) DOCKET NO. TR- )
•	) PETITION TO INSTALL HIGHWAY-
Petitioner,	) RAIL GRADE CROSSING ACTIVE
1 chiloner,	<ul><li>) WARNING DEVICES AND</li><li>) DISBURSEMENT OF FUNDS FROM</li></ul>
vs.	) THE GRADE CROSSING
Burlington Northern Santa Fe	) PROTECTIVE FUND
Respondent	) ) USDOT NO.:084-683A

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

## Section 1 – Petitioner's Information

Snohomish County Public Works Petitioner	
Petitioner	
3000 Rockefeller Ave, MS-607	
Street Address	
Everett, WA 98201	
City, State and Zip Code	
Same	
Mailing Address, if different than the stree	t address
Janice L. Fahning	at the state of th
Contact Person Name	
(425) 754-6618,	Janice.Fahning@snoco.org
Contact Phone Number and E-mail Addres	SS
1 61	8-14-18
Cionatura Cionatura	0-1-(-1)
Signature	

# Section 2 – Respondent's Information

Burlington Northern Santa Fe Railroad Respondent
2454 Occidental Avenue South, Suite 2D Street Address
Seattle, WA 98134 City, State and Zip Code
Same as above Mailing Address, if different than the street address
Stephen Semenick Contact Person Name
(206) 625-6152, Stephen.Semenick@BNSF.com Contact Phone Number and E-mail Address
Section 3 – Crossing Location
Section 3 – Crossing Location  1. Existing highway/roadway 48 <sup>th</sup> Ave NW
1. Existing highway/roadway 48th Ave NW
Existing highway/roadway 48 <sup>th</sup> Ave NW      Existing railroad Burlington Northern Santa Fe
Existing highway/roadway 48 <sup>th</sup> Ave NW      Existing railroad Burlington Northern Santa Fe      USDOT Crossing No. 084-683 A
1. Existing highway/roadway 48 <sup>th</sup> Ave NW  2. Existing railroad Burlington Northern Santa Fe  3. USDOT Crossing No. 084-683 A  4. Located in the SE 1/4 of the NE 1/4 of Sec. 33, Twp. 32, Range 4, W.M.

#### Section 4 – Project Information

#### Please attach additional sheets as necessary that provide the following:

1. A detailed summary of the project. Include any information about accidents or incidents at the site and photographs, drawings or other materials that support the application.

The current crossing is an at-grade crossing of the BNSF tracks and 48<sup>th</sup> Ave NW, near Stanwood WA. The crossing is only passively controlled with stop signs at the crossing and warning signs in advance of the crossing. The angle of intersection between the road and the tracks is 65 degrees.

The FRA accident database has three recorded collisions between trains and motor vehicles at the crossing. A summary of the collisions is:

August 2007, pickup truck attempted to cross tracks and was struck by an Amtrak train. January 2010, delivery truck attempted to cross tracks and was struck by a freight train. February 2012, automobile stuck on the tracks and was struck by an Amtrak train. Snow on the road may have contributed.

One of the three recorded collisions resulted in injuries to the motorist. No train passengers or crew were injured, and no fatalities were recorded.

All accidents occurred during nighttime conditions. There are no street lights at the crossing or along 48<sup>th</sup> Ave NW.

The improvements to the crossing include adding motorized two-quadrant gates with post-mounted flashing lights and warning bells, and an equipment bungalow with the required control equipment to operate the gates and lights.

# Section 5 - 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 48 <sup>th</sup> Ave NW
2. Road authority Snohomish County
3. Average annual daily traffic (AADT) 156
4. Number of lanes 2
5. Roadway speed 35 mph
6. Is the crossing part of an established truck route? Yes No X
7. If so, trucks are what percent of total daily traffic? n/a
8. Is the crossing part of an established school bus route? Yes No X
9. If so, how many school buses travel over the crossing each day? n/a
10. Describe any changes to the information in 1 through 7, above, expected within ten years:
No changes are expected.

# Section 6 – Current Crossing Information

1. Railroad company Burlington Northern Santa Fe
2. Type of railroad at crossing <b>x</b> Common Carrier □ Logging □ Industrial
x Passenger □ Excursion
3. Type of tracks at crossing X Main Line □ Siding or Spur
4. Number of tracks at crossing 1
5. Average daily train traffic, freight20 per 24 hour period
Authorized freight train speed Operated freight train speed 79
6. Average daily train traffic, passengerLess than one per day
Authorized passenger train speed 79 Operated passenger train speed 79 (est)
7. Describe any changes to the information in 1 through 4, above, expected within ten years:
No expected changes.
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?
Available sight distance exceeds 2,000 ft.
See exhibit #1 below showing the existing sight distance.
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.
No obstacles limit sight distance.

# Section 7 – Current Warning Devices

1. Provide a complete description of the warning devices currently located at the crossing, including signs and any other warning devices.
The crossing is protected by one R1-1 Stop sign on a wooden post on each side of the crossing. Each sign is on the right side of the road. Above each sign on the same post is a single-sided R15-1 railroad crossbuck. Next to each stop sign and across the width of the travel lane is one 12" white thermoplastic stop bar.
Ahead of each stop sign is one W10-1 RR Crossing Ahead sign on the right side of the road. Next to each RR Crossing Ahead sign are grade crossing pavement markings as shown in figure 8B-7 of the 2009 MUTCD.
Ahead of each RR Crossing Ahead sign is one W3-1 Stop Ahead sign on the right side of the road.
See exhibit #2 below for a plan of the existing conditions.

# Section 8 – Description of Proposed Changes

1. Describe in detail the number and type of automatic signals, gates or proposed warning devices, including the proposed type of train detection. Provide a description of the type of sidewalks proposed. Describe who will maintain the sidewalks.
The proposed plan will install two posts, each post will have one automatic gate, two flasher assemblies, and one bell, with crossbuck signs. The existing stop signs and stop ahead signs will be removed.
A new bungalow will be installed to operate the gates, lights, and bells. The bungalow will include batteries, chargers, an event recorder, and a constant warning detection system. The bungalow will be connected to utility power and will have a cellular modem for remote monitoring by the operating agency.
See Exhibit #3 below showing the proposed crossing system.
There are no existing sidewalks on 48 <sup>th</sup> Ave NW, and no new sidewalks will be constructed with this project.
The Railroad has requested improvements to the profile of 48 <sup>th</sup> Ave NW, but at this time Snohomish County does not have funds available for any improvements to the road.

### Section 9 – Illustration of Proposed Warning Devices

Attach a detailed diagram, drawing, map or other illustration showing the proposed warning devices and sidewalks.

See exhibit #3 below for a diagram of the proposed improvements

### Section 10 – Project Cost Information

- 1. A cost estimate, including:
  - a. An itemized list of the total costs of the project.
  - b. Names of parties contributing to the project, including the applicant, and the amount each is contributing.
  - c. The amount the applicant is requesting from the GCPF grant program.

1.1				
DESCRIPTION	QUANTITY	U/M	COST	TOTAL\$
******				
LABOR				
******				
ELECTRICAL LABOR F/SIGNAL EQUIPMENT	108	МН	3,323	
SIGNAL FIELD - INSTALL	2006	МН	61,845	
SIGNAL SHOP LABOR - CAP	1.2	МН	41	
PAYROLL ASSOCIATED COSTS			41,615	
DA OVERHEADS			67,392	
EQUIPMENT EXPENSES			13,367	
INSURANCE EXPENSES			10,953	
TOTAL LABOR COST			198,536	\$ 198,536
*******			130,330	130,330
MATERIAL				
******				
ARRESTOR, MDSA-2 XS	1	EA	697	
BATTERY, 10 VGL-255, 9 VGL-350	1	LS	4,659	
BELLS	2	EA	412	
BERM WALL, CONCRETE, 6'x10'x12', L SHAPE	22	FT	5,246	
BUNGALOW 8X8 W/AC	1	LS	9,377	
BUNGALOW MATERIAL	1	LS	7,564	
CABLE, 2C/6 TW	500	FT	630	
CABLE, 3C/2	500	FT	3,000	
CABLE, 5C/10	70	FT	133	
CABLE, 5C/6	500	FT	2,105	

CABLE, 7C/14	500	FT	875	
CHARGERS, 12/20, 12/40	1	LS	987	
CONSTANT WARNING, XP4, 1TK	1	EA	16,252	
ELECTRICAL MATERIAL	1	EA	1,500	
EVENT RECORDER	1	EA	3,250	
FIELD MATERIAL	1	LS	7,386	
FILL DIRT	20	CY	500	
FILTER, TRACK	2	EA	482	
FOUNDATION, CONCRETE	2	EA	547	
GATE KEEPER	2	EA	3,334	
GUARD RAIL, ONE-HALF	2	EA	886	
LED LIGHT	8	EA	1,461	
LED LIGHT GATE KIT	2	EA	338	
LIGHT OUT DETECTOR	1	EA	913	
MODEL S-60 GATE MECHANISM	2	EA	10,941	
SHUNT, NBS	2	EA	1,998	
SURFACE ROCK	10	CY	500	
X REM HSE - ARRESTOR, MDSA-2 XS	1	EA	697	
X REM HSE - BATTERY, 18 VGL-350	1	LS	5,110	
X REM HSE - BUNGALOW 8X8 W/ AC	1	LS	9,377	
X REM HSE - BUNGALOW MATERIAL	1	LS	3,928	
X REM HSE - CABLE, 2C/6 TW	200	FT	252	
X REM HSE - CABLE, 3C/2	250	FT	1,500	
X REM HSE - CABLE, 7C/14	5500	FT	9,625	
X REM HSE - CHARGER, 12/80 (20/40/60)	1	EA	987	
X REM HSE - CONSTANT WARNING, XP4, 2TK	1	EA	27,034	
X REM HSE - CONVERTOR, 10-10	2	EA	372	
X REM HSE - ELECTRICAL MATERIAL	1	EA	1,500	
X REM HSE - FIELD MATERIAL	1	LS	4,832	
X REM HSE - FILL DIRT	20	CY	500	
X REM HSE - FILTER, TRACK	2	EA	482	
X REM HSE - GENERATOR, ACG-3	1	EA	313	
X REM HSE - INDUCTOR, DUMMY LOAD	2	EA	1,588	
X REM HSE - RELAY, DAX	2	EA	1,500	
X REM HSE - SHUNT, NBS	4	EA	3,995	
X REM HSE - SURFACE ROCK	10	CY	500	
USE TAX			15,101	
OFFLINE TRANSPORTATION			1,995	
TOTAL MATERIAL COST			\$ 177,161	\$ # 177,161
**************************************				

AC POWER SERVICE	1	EA	5,000		
BUNGALOW, WIRE AND TEST 1TK	1	EA	10,061		
CONTRACT ENGINEERING	1	LS	12,000		
DIRECTIONAL BORING	400	FT	20,000		
X REM HSE - AC POWER SERVICE	1	EA	10,000		
			\$		\$
TOTAL OTHER ITEMS COST			57,061	#	57,061
PROJECT SUBTOTAL					432,758
CONTINGENCIES					43,275
BILL PREPARATION FEE					4,761
GROSS PROJECT COST					480,794
LESS COST PAID BY BNSF					0
					\$
TOTAL BILLABLE COST					480,794

2. The name of the party responsible for long-term maintenance.

Burlington Northern Santa Fe

### Section 11 - Project Completion

### 1. An estimated timeline of the project.

December 2016: Petition review & submission to UTC

January 2017: Petition approved, Notice to Proceed issued

November, 2017: Petition extension requested

December, 2017: Petition extension granted by UTC

August, 2018: Railroad Agreement finalized, Petition request for funding increase submitted

September 2018: Equipment ordered by Railroad, final engineering initiated

March 2019: Work completed, final inspection & approval

June 2019: Railroad submits final bill to Snohomish County

### 2. A description of how the project's success would be measured.

Completion of this project should significantly reduce vehicle-train collisions at this crossing, especially collisions occurring at night.

3. A description of the applicant's experience in grant management or completing grant projects of this nature, including years of experience, types of projects completed and project cost/scope.
Snohomish County has been CA certified for over 20 years, and administers an annual construction program of about \$30 million per year. Some recent projects funded in part or in whole with grants include:
128 <sup>th</sup> Ave Near-Side Signal Heads (phases 1 & 2) – Upgrade existing County traffic signals to have near-side indications and ADA accessible pushbuttons
Construction Amount: \$216,000 Completed: December, 2013
North Road Corridor Improvements – Widen North Road between SR-524 and 148 <sup>th</sup> St SW from a two-lane road to three lanes with curb, gutter, sidewalk, stormwater detention facilities, and new traffic signal interconnect system.  Construction Amount: \$13,000,000 Completed: November, 2015
52 <sup>nd</sup> Avenue West Corridor Improvements – Widen 52 <sup>nd</sup> Ave W between Lynnwood City Limits and 164 <sup>th</sup> St SW from a two lane road to three lanes with curb, gutter, sidewalk, stormwater detention facilities, and new traffic signal interconnect system.
Construction Amount: \$6,900,000 Completed: April, 2014
4. Any other information the applicant believes would be useful to the Commission in considering the project.

### Section 12 - Waiver of Hearing by Respondent

# Waiver of Hearing The undersigned represents the Respondent in the petition to install highway-rail grade crossing warning signals at the following crossing. USDOT Crossing No. 084-683A 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 installed and consent to a decision by the commission without a hearing. Dated at BINGGO, Washington, on the 20th day of January, 20 17. BICHERD WEGNER Printed name of Respondent Signature of Respondent's Representative Mar Rugue Project NW DIJISION Company Name Phone number and email address 206.625,6152 Richard. Warren Busflow 2454 DUCIDENTAL AUG SO SEG 20 98134 Mailing address