UTC
TILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

CITY OF TACOMA Petitioner, vs. BNSF RAILWAY COMPANY Respondent.	)	DOCKET NO. TR- PETITION TO MODIFY HIGHWAY-RAIL GRADE CROSSING ACTIVE WARNING DEVICES AND DISBURSEMENT OF FUNDS FROM THE GRADE CROSSING PROTECTIVE FUND USDOT CROSSING # 085730J

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

City of Tacoma, Public Works Department
Petitioner

747 Market Street, Room 644
Street Address

Tacoma, WA 98402
City, State and Zip Code

Mailing Address, if different than the street address

Brennan Kidd
Contact Person Name

Contact Person's Signature

253-591-5077, bkidd@cityoftacoma.org
Contact Phone Number and Email Address

Section 2 – Respondent's Information

BNSF Railway Company
Respondent

2454 Occidental Avenue So. Ste 2D
Street Address

Seattle, WA 98134
City, State and Zip Code

Mailing Address, if different than the street address

Stephen Semenick
Contact Person Name

206-625-6152, Stephen.Semenick@BNSF.com
Contact Phone Number and Email Address

Section 3 – Crossing Location

1. Existing highway/roadway McCarver Street

2. Existing railroad BNSF Railway Company

3. USDOT Crossing No. 085730J

4. Located in the ____ 1/4 of the ____ 1/4 of Sec. 30, Twp. 21N, Range 3E W.M.

5. GPS location, if known 47.2755522 Latitude, -122.4652872 Longitude

6. Railroad mile post (nearest tenth) 2.69

7. City Tacoma County Pierce

Section 4 – Project Information

Please complete all information in this section – attach additional sheets as necessary that provide the following:

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

The McCarver crossing has two main line tracks which are used for the movement of freight and passengers. Sadly, there have been two pedestrian fatalities at this crossing within a one year period (November 19, 2015 and November 18, 2016). In each instance, following the immediate passing of a freight train, a pedestrian crossed the tracks and was struck by a Amtrak train. On each occasion it was reported the vehicular gates remained down, lights flashed and the train horn sounded. Appendix A to this document contains information relative to these two incidents.

The goal of this project is to provide additional safety measures for pedestrian and vehicular safety by further defining this crossing and alerting the public that trains may be traveling from opposite directions at any time. To achieve this goal, the project will install permanent fencing that will limit the locations where pedestrians can cross, modify pedestrian/vehicular path delineation, and install train-activated pedestrian gates (across the planned sidewalk configuration) to deter crossings when vehicular traffic is stopped.

2. A detailed summary of the proposed project and how it will eliminate or mitigate the hazard. Include any drawings or construction plans for the proposed project.

To complement already installed signage and pavement marking modifications associated with the crossing, permanent ornamental fencing, new pedestrian signals/gates, and a re-aligned sidewalk/track-panel layout will be implemented to better define the pedestrian and vehicular environment at the McCarver crossing. Plans showing what control modifications have already been implemented to date and planned additional control modifications as described herein are contained in Appendix B.

Fencing/Sidewalk Improvements: Permanent ornamental fencing will be installed on both the east (~180 LF) and west (~267 LF) side of the rail crossing, running primarily along the north side of the railroad tracks, with limited installation planned for the south side (existing topography aids in controlling pedestrian access on this side of the tracks). The fencing will be used to close the crossing on the west side of the roadway and, in conjunction with recently installed signing, direct pedestrians to the sidewalk/crossing on the east side of the roadway. The sidewalk on the east side of McCarver Street (on both the north and south sides of the tracks), along with the concrete rail-crossing panels, will be realigned to direct pedestrians to the proposed limited-width crossing area. Although a "Z" pattern pedestrian approach to the

crossing was considered, there is limited available space to properly incorporate this corralling treatment and there was additional concern that its inclusion would deter pedestrians from using the prescribed east-side crossing such that they might opt to cross the tracks within the roadway or on the west side of the street instead.

Pedestrian Signals/Gates: New train-activated pedestrian signals with gates across the sidewalk on both the north and south sides of the railroad tracks will be installed to discourage pedestrian crossings when trains are approaching and the vehicular gates are down.

Channelization: To complement recent roadway striping/markings, vertical tube delineators (see example at right) will be installed at strategic areas to better direct vehicular traffic, prevent off-road maneuvers and potential vehicular/pedestrian conflicts in the immediate vicinity of the railroad tracks.

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 McCarver Road

2. Road authority City of Tacoma

3. Average annual daily traffic (AADT) 4,240

4. Number of lanes 2

5. Roadway speed 25 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? Although not part of a designated truck route, it is estimated that 6% of the total daily traffic are trucks.

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:

Average ADT can be expected to grow as much as 1% per year based on anticipated development along Ruston Way.

Section 6 – Current Crossing Information

1. Railroad company BNSF Railway Company

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 2

5. Average daily train traffic, freight 72

Authorized freight train speed 59 Operated freight train speed 57 mph

6. Average daily train traffic, passenger 10

Authorized passenger train speed 79 Operated passenger train speed 64 mph

7. Describe any changes to the information in 1 through 4, above, expected within ten years:

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?

For the SB approach: > 400 feet towards the west and towards the east (both tracks)
For the NB approach: > 400 feet towards the west and towards the east (both tracks)

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.

Note, for the NB approach discussed above, although the sight distance is greater than 400 feet in both directions, the sight distance triangle for vehicles to the east is partially hindered by the existing wayside horn pole and controller cabinet (affixed to the south side of the pole) located on the south side of the tracks/southeast quadrant of the track crossing location.

Section 7 – 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.

Per the USDOT Crossing Inventory, the McCarver crossing is equipped with two gates with mast mounted flashers (four total pairs), two sets of bells, a constant warning time train detection system, and a simultaneous preemption traffic light interconnect. The crossing is also equipped with wayside horns.

Section 8 – 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.

Pedestrian signals and gates will be installed (constant warning time system) on the east side of the roadway. The gates will span the sidewalk on both the north and south sides of the railroad crossing. Any signals (existing or new) at the crossing that can be upgraded to LED will be implemented as part of the BNSF efforts.

Section 9 – Illustration of Proposed Warning Devices

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

The proposed construction elements drawings are presented in Appendix B.

Section 10 – 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): _____
Title: _____
Company: _____
Signature: _____
Date: _____

Section 11 – 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.

a. The estimated total cost of the project is $299,305. The complete estimate is provided in Appendix C.
b. The City is funding 100% of the project and is responsible for all long-term maintenance.
c. The City is requesting $50,000 from the GCPF grant program to assist in supporting the implementation of these control modifications. Grant reimbursable costs are expected to include all new construction work elements described in this application which will be completed by City forces, City-contracted forces, and BNSF.

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

The City is responsible for the long-term maintenance of the new/existing sidewalk, existing signage, new/existing roadway markings/markers and fencing. BNSF will be responsible for the long-term maintenance of the two new pedestrian signals/gates; costs for this gate maintenance will be borne by the City through an agreement with BNSF.

Section 12 – Project Completion

1. An estimated timeline of the project.

The City has already installed the short-term traffic control modifications (signage and striping) at the crossing as shown on the plan contained in Appendix B. The City and BNSF are actively working towards completing a Grade Crossing Construction Agreement (or other similar agreement) to implement the fencing (including purchasing and obtaining an easement, or other equivalent mechanism, from BNSF), sidewalk improvements, and the two new pedestrian signals/gates.

A Temporary Occupancy Permit was obtained with BNSF through Jones Lang LaSalle Brokerage, Inc. that allowed access to the McCarver rail right-of-way to complete all survey work for preparing the engineering plans for the control modifications. Once the construction agreement finalized with BNSF, the City will immediately pursue all proposed and applicable control modifications that can be carried out by City staff and outside contractors. An estimated timeline for all this work is contingent upon BNSF's approval process, however it is the goal that all work will be complete within the fourth quarter of 2017.

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

- Pedestrian and vehicular traffic crossing the main lines will better understand that multiple tracks are present and that trains may approach from multiple directions and/or at the same time.
- Pedestrian crossing activity will naturally utilize a specific area (east side of roadway).
- Pedestrian crossings do not occur when the vehicular and pedestrian gates are lowered/lights flashing, even when it appears that no trains are present/approaching.
- Pedestrian injuries and fatalities associated with the crossing are eliminated.

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.

As many of our public works projects are funded primarily through grants (approximately 80% of project costs), the City has extensive experience managing and working with state, federal, and local granting organizations. Specifically, we successfully work with the Puget Sound Regional Council, the WA State Department of Transportation, Freight Mobility Strategic Investment Board, Transportation Improvement Board, Department of Ecology, and Recreation and Conservation Office, and the U.S. Environmental Protection Agency and Department of Housing and Urban Development, among others. Our finance and project staff is familiar with requirements involving obligation of funds, eligible costs, billing, design and construction phasing/procedures, and project closeout.

4. Any other information the applicant believes would be useful to the Commission in considering the project.

Having any train-related fatality in the City, never mind two within a year at the same location and under similar circumstances is heartbreaking and hard to accept. Although the controls at the crossing met industry standards at the time of the incidents, the City, working with BNSF, desires to do what we can to prevent these types of events moving forward. The control modifications in this grant request are a step in that direction.

Additionally, our long working history with BNSF on many of the crossing in Tacoma helps ensure that we will have a successful and cost-effective project, implemented as quickly as possible.

Section 13 – 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. 085730J

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 Seattle, Washington, on the 21st day of September, 2017.

Stephen Semenick

Printed name of Respondent

Signature of Respondent's Representative

Manager Public Projects

Title

206-625-6152; Stephen.Semenick@BNSF.com

Phone number and email address

2454 Occidental Ave S, Suite 2D

Seattle, WA 98134

Mailing address


3191 McCarver St
RAILROAD CROSSING
2 TRACKS
© 2015 Europa Technologies
© 2015 Google
© 2015 Google
lat 47.2756368° lon -122.465298° elev


RAILROAD
CROSSING
2
TRACKS

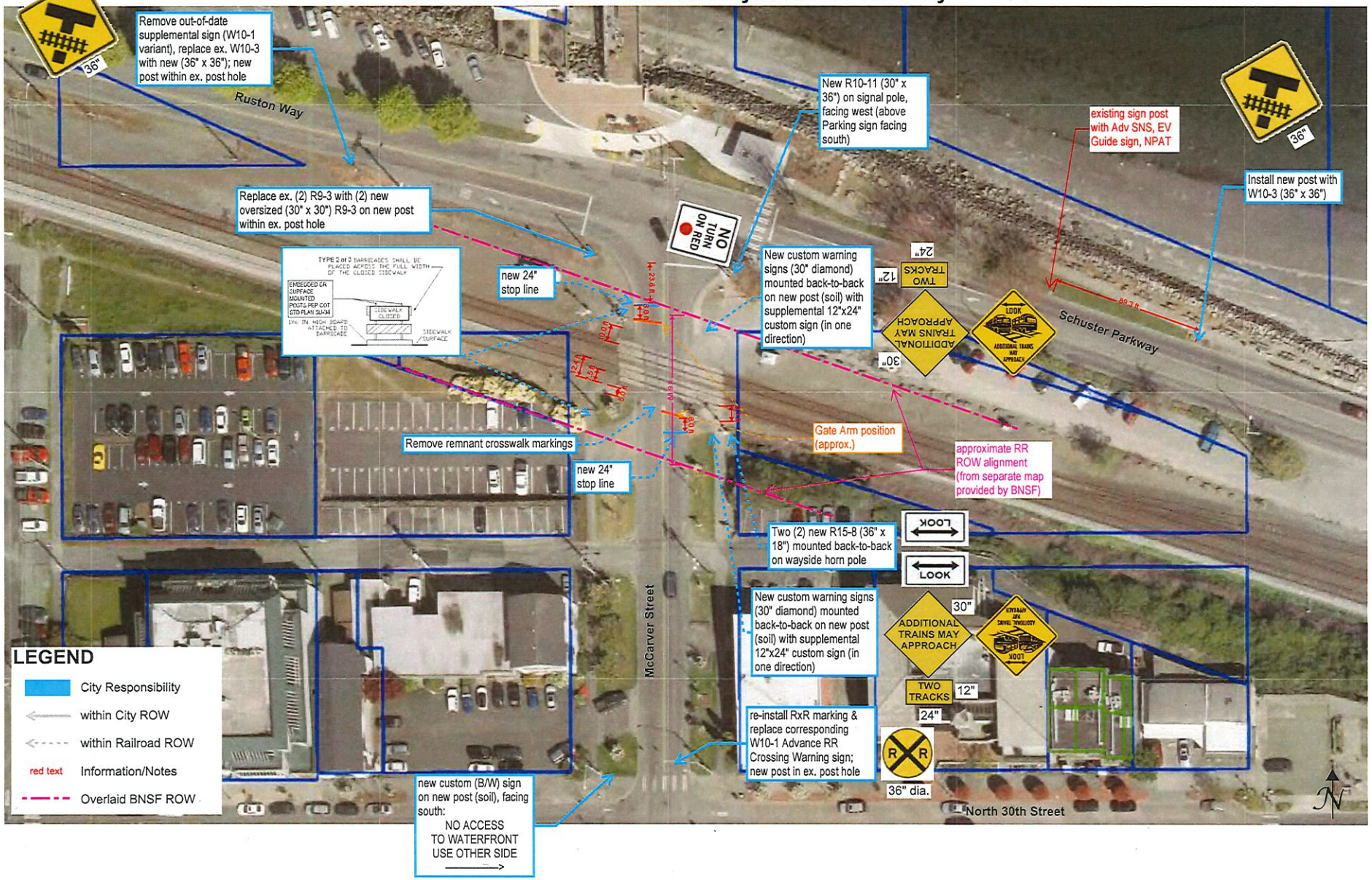

DANGER
TRESPASSING ON RAILWAY PROPERTY IS ILLEGAL
OFFENDERS WILL BE PROSECUTED
BNSF POLICE
1-800-832-5452
BNSF RAILWAY
IN EMERGENCY CALL
1-800-832-5452
McCARVER ST.
MP 2.7
DOT 085-730J

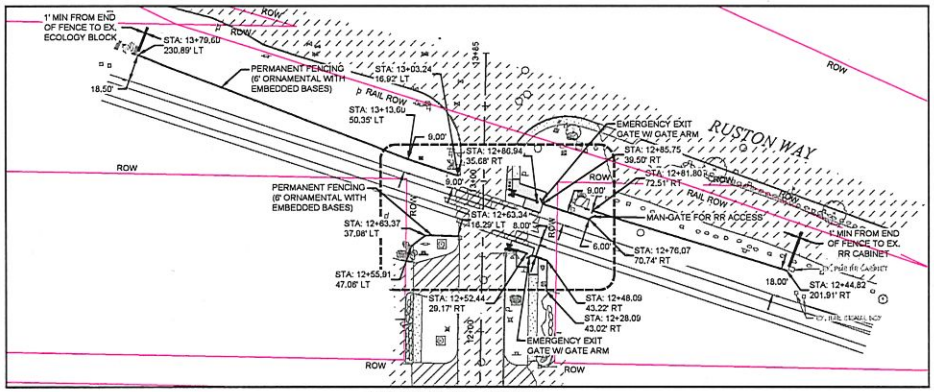

ER ST.
DANGER
TRESPASSING ON
RAILWAY PROPERTY
IS ILLEGAL
OFFENDERS WILL
BE PROSECUTED
BNSF POLICE
1-800-832-5452

APPENDIX B

PROPOSED CONSTRUCTION ELEMENTS

Implemented Short-Term Traffic Control Enhancements in the Vicinity of McCarver Street and Ruston Way/Schuster Parkway





NEW FENCE LAYOUT

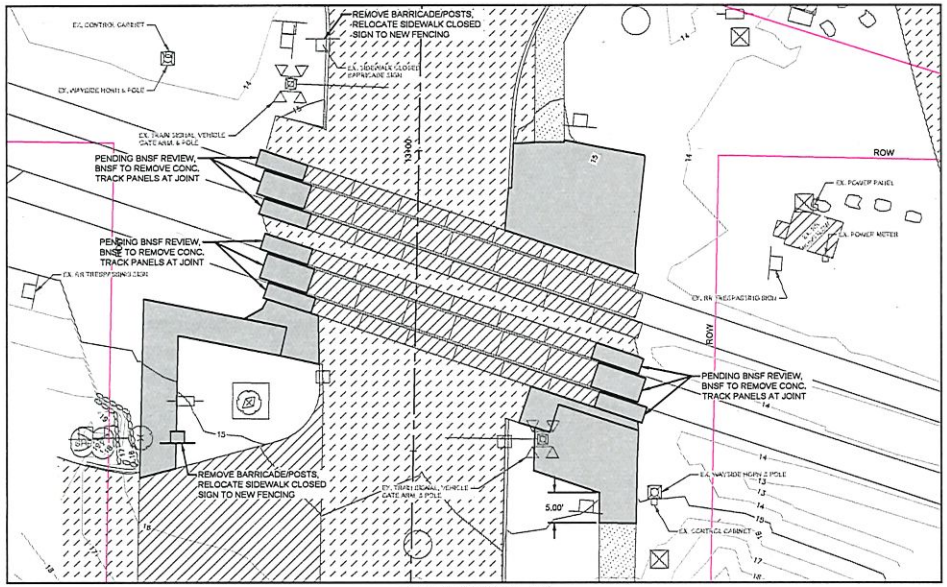
SCALE IN FEET

CITY OF TACOMA

HORIZ. DATUM: N.A.D. 83/91
VERT. DATUM: N.G.V.D. 29
BENCH MARK: S.B.M.
INTERSECTION OF N. 30TH ST. & McCARVER ST.
ELEV. = 38.66'

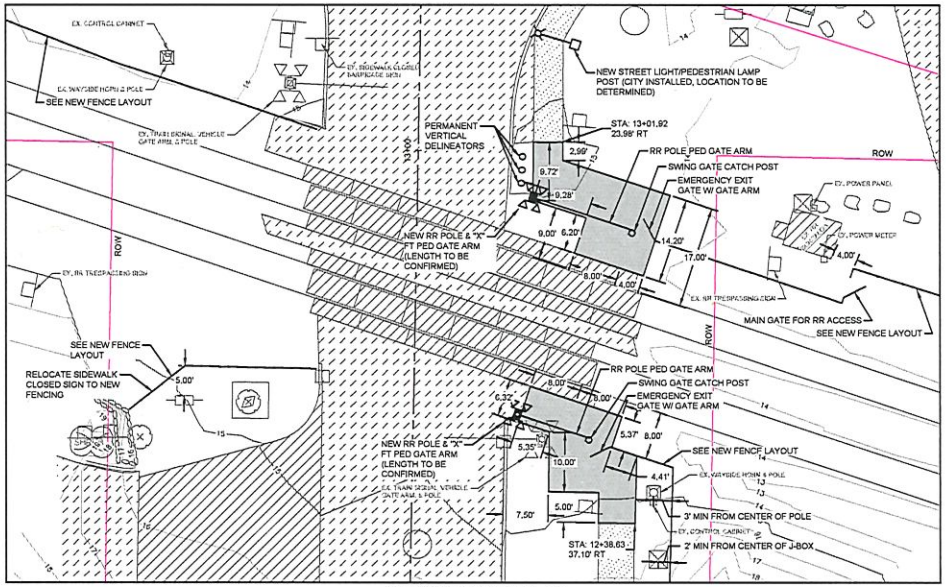
NOTE:

PERMANENT FENCING (6' ORNAMENTAL WITH EMBEDDED BASES)



DEMOLITION PLAN

SCALE IN FEET



CONSTRUCTION PLAN

SCALE IN FEET

CALL BEFORE YOU DIG

EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY PER BEST AVAILABLE INFO, AND MAY BE INCOMPLETE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, POTHOLING AND AVOIDING ALL EXISTING UTILITIES.

CALL TWO BUSINESS DAYS BEFORE YOU DIG (1-800-424-5555) OR VISIT ONLINE: www.callbeforeyoudig.org

NO	REVISION	DATE	APPD

FINAL CONSTRUCTION CHECKED	DATE	Aug 2017	SCALE 1" = 20'
BY	DESIGNED	BDK	CHECKED
DATE	DRAWN	COB	PROJECT NAME McCARVER
FIELDBOOKS	DRAWING NAME	McC_Combined	

DRAFT

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

McCARVER STREET CROSSING
McCarver St. between N. 30th St. & Ruston Way
TRAFFIC CONTROL ENHANCEMENT PLAN

PWK-01017

SHEET NO. PAGE 1 OF 1

APPENDIX C

PROJECT COST ESTIMATE

CITY OF TACOMA
PUBLIC WORKS DEPARTMENT

PROJECT: McCARVER CROSSING CONTROL ENHANCEMENTS

PROJECT ESTIMATE

DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	COST
REMOVE EXISTING SIDEWALK ASPHALT/CONCRETE	SY	88.00	$60.00	$5,280.00
C.S.T.C.	TN	5.00	$30.00	$150.00
CEMENT CONC. SIDEWALK	SY	70.00	$75.00	$5,250.00
STREET LIGHT POLE & INFRASTRUCTURE	LS	1.00	$10,000.00	$10,000.00
6' ORNAMENTAL METAL FENCING, BLACK*	LF	441.00	$77.64	$34,241.44
CHANNELIZATION/DELINEATORS	LS	1.00	$3,500.0	$3,500.00
REMOVE/RELOCATE/REUSE SIGNAGE	LS	1.00	$500.0	$500.00
RAILROAD PEDESTRIAN SIGNALS/GATES*, BNSF	LS	1.00	$82,853.00	$82,853.00
SOIL TESTING, REMOVAL AND DISPOSAL	LS	1.00	$3,000.0	$3,000.00
SURVEYING	LS	1.00	$8,000.00	$8,000.00
RAILROAD FLAGGERS	DAY	8.00	$2,000.00	$16,000.00
PEDESTRIAN TRAFFIC CONTROL	LS	1.00	$500.00	$500.00
PROJECT TEMPORARY TRAFFIC CONTROL	LS	1.00	$1,500.00	$1,500.00
REMOVE TRACK BED PANELS*, BNSF	LS	1.00	$6,723.00	$6,723.00
STORMWATER POLLUTION PREVENTION PLAN	LS	1.00	$500.00	$500.00
SPCC PLAN	LS	1.00	$500.00	$500.00
INLET PROTECTION	EA	3.00	$150.00	$450.00
RIGHT-OF-WAY/EASEMENT	LS	1.00	$15,000.00	$15,000.00
EROSION/WATER POLLUTION CONTROL	LS	1.00	5.0%	$8,947.37
CLEARING & GRUBBING	LS	1.00	1.0%	$1,789.47
MOBILIZATION	LS	1.00	10.0%	$17,894.74
CONTINGENCY	LS	1.00	15.0%	$26,842.12
TOTAL ESTIMATED CONSTRUCTION COST				**$249,421.15**

* SEE ADDITIONAL PROVIDED DETAILS

PRELIMINARY ENGINEERING (15%)	$24,942.11
CONSTRUCTION ENGINEERING (15%)	$24,942.11

ESTIMATED PROJECT TOTAL	**$299,305.38**

8/22/2017

Tacoma Public Utilities Annual Fence Installation, Maintenance and Repair 2017-2018

Bid Number: Job Name: McCarver St. Date: 5/22/17

Contract Number: Estimate Requested by: Mark D'Andrea

Item	Description	Quantity	Unit	Unit Price	TOTAL AMOUNT
1a	Relocate Existing 1/2-Inch Fence Fabric as Ordered, 9-Gauge, 96-Inches High, 1-Foot Buri		LF	$13.75	$0.00
1b	Relocate Existing 2-Inch Fence Fabric as Ordered, 9-Gauge, 84-Inches High		LF	$12.25	$0.00
1c	Relocate Existing 2-Inch Fence Fabric as Ordered, 9-Gauge, 48-Inches High		LF	$11.25	$0.00
2a	Install 2-Inch Chain Link Fence Fabric, 9-Gauge, 84-Inches High		LF	$14.75	$0.00
2b	Install 2-Inch Chain Link Fence Fabric, 9-Gauge, 48-Inches High		LF	$8.25	$0.00
3	Install 1/2-Inch Chain Link Fence Fabric, 9-Gauge, 96-Inches High, 1-Foot Buried		LF	$72.00	$0.00
4a	Install 2-3/8-Inch Line Posts, 84-Inches High (for 2-Inch fabric)		EA	$80.00	$0.00
4b	Install 2-3/8-Inch Line Posts, 48-Inches High (for 2-Inch fabric)		EA	$65.00	$0.00
5a	Install 2-7/8-Inch Terminal or Corner Posts, 84-Inches High (for 2-Inch fabric)		EA	$101.00	$0.00
5b	Install 2-7/8-Inch Terminal or Corner Posts, 48-Inches High (for 2-Inch fabric)		EA	$78.00	$0.00
6	Install 3-1/2-Inch Line Posts, 84-Inches High (for 1/2-Inch fabric)		EA	$200.00	$0.00
7	Install 4-Inch Terminal or Corner Posts, 84-Inches High (for 1/2-Inch fabric)		EA	$250.00	$0.00
8a	Install 1-5/8-Inch Rails, Top		LF	$3.50	$0.00
8b	Install 1-5/8-Inch Rails, Middle		LF	$4.00	$0.00
8c	Install 1-5/8-Inch Rails, Bottom		LF	$4.00	$0.00
9a	Install Outriggers, V-Type		EA	$16.50	$0.00
9b	Install Outriggers, Single Arm		EA	$14.00	$0.00
10a	Install Wire as Ordered, Barbed Wire		LF	$1.65	$0.00
10b	Install Wire as Ordered, 7-Gauge, Tension Wire		LF	$0.40	$0.00
10c	Install Wire as Ordered, Coiled Razor Wire		LF	$3.75	$0.00
11a	Install Fence Isolation Panel, 6-foot Wide x 7-Foot High (for 1/2-Inch fabric)		EA	$780.00	$0.00
11b	Install Fence Isolation Panel, 6-foot Wide x 7-Foot High (for 2-Inch fabric)		EA	$350.00	$0.00
12a	Install 7-Foot High Chain Link Vehicle Gate, 20'-0" Wide (for 2-Inch fabric)		EA	$1,400.00	$0.00
12b	Install 7-Foot High Chain Link Vehicle Gate, 24'-0" Wide (for 2-Inch fabric)		EA	$1,525.00	$0.00
12c	Install 7-Foot High Chain Link Vehicle Gate, 30'-0" Wide (for 2-Inch fabric)		EA	$1,850.00	$0.00
13a	Install 7-Foot High Chain Link Vehicle Gate, 20'-0" Wide (for 1/2-Inch fabric)		EA	$3,200.00	$0.00
13b	Install 7-Foot High Chain Link Vehicle Gate, 24'-0" Wide (for 1/2-Inch fabric)		EA	$3,530.00	$0.00
13c	Install 7-Foot High Chain Link Vehicle Gate, 30'-0" Wide (for 1/2-Inch fabric)		EA	$4,300.00	$0.00
14a	Install 4-Foot Wide x 7-Foot High Chain Link Mangate (for 1/2-Inch fabric)		EA	$575.00	$0.00
14b	Install 4-Foot Wide x 7-Foot High Chain Link Mangate (for 2-Inch fabric)		EA	$465.00	$0.00
15a	Miscellaneous Fence Work as Ordered, Non-Emergency	114	HR	$80.00	$9,120.00
15b	Miscellaneous Fence Work as Ordered, Emergency		HR	$110.00	$0.00
16	Install City Furnished Gate Locking Assembly		EA	$275.00	$0.00
17a	Install and Uninstall Temporary Fencing, Temporary Panels		LF	$6.75	$0.00
17b	Install and Uninstall Temporary Fencing, Temporary Fence & Posts		LF	$15.75	$0.00
18a	Addition of Vinyl and Powder Coating for Complete Fence, 84-Inches High (for 2-Inch fabric		LF	$5.50	$0.00
18b	Addition of Vinyl and Powder Coating for Complete Fence, 48-Inches High (for 2-Inch fabric		LF	$3.75	$0.00
19a	Install Vinyl Slats for Chain Link Fence Fabric, 84-Inches High (for 2-Inch fabric)		LF	$9.25	$0.00
19b	Install Vinyl Slats for Chain Link Fence Fabric, 48-Inches High (for 2-Inch fabric)		LF	$7.25	$0.00
20a	Mobilization and Demobilization, Cowlitz Project		EA	$425.00	$0.00
20b	Mobilization and Demobilization, Cushman Project		EA	$525.00	$0.00
20c	Mobilization and Demobilization, Nisqually Project		EA	$375.00	$0.00
20d	Mobilization and Demobilization, Wynoochee Project		EA	$625.00	$0.00
21	Provide Materials at Cost Plus 25%	$ 17,584.25	25%	1.25	$21,980.31
22	Force Account (Time and Materials)		LS	$5,000.00	$0.00
		SUBTOTAL			$31,100.31
		W.S.S.T.	10.10%		$3,141.13
		TOTAL AMOUNT			$34,241.44

***** MAINTAIN PROPRIETARY CONFIDENTIALITY *****

BNSF RAILWAY COMPANY
FHPM ESTIMATE FOR
TACOMA, WA

LOCATION HARBOR | DETAILS OF ESTIMATE | PLAN ITEM : 000288916 | VERSION : 1

PURPOSE, JUSTIFICATION AND DESCRIPTION

MCCARVER ST - TACOMA, WA; INSTALL PEDESTRIAN FLASHERS / GATES; NORTHWEST DIV; SEATTLE SUBDIV; LS 52; MP 2.68; DOT# 085730J; SEQ# 68307.

MONTHLY POWER UTILITY COST CENTER : 61504.

THE MATERIAL LIST BELOW REFLECTS TYPICAL REPRESENTATIVE PACKAGES USED FOR ESTIMATING PURPOSES ONLY.

THIS ESTIMATE IS GOOD FOR 90 DAYS. THEREAFTER THE ESTIMATE IS SUBJECT TO CHANGE IN COST FOR LABOR, MATERIAL, AND OVERHEAD.

CONTRACTS HAVE BEEN ESTABLISHED FOR PORTIONS OF SIGNAL WORK ON THE BNSF RAILROAD.

********** SIGNAL WORK ONLY **********

THE CITY OF TACOMA, WA IS FUNDING 100% OF THIS PROJECT.

MAINTAIN PROPRIETARY CONFIDENTIALITY.

PRIMARY FUNDING SOURCE IS CITY FUNDS
** BUY AMERICA(N) APPLIES **

DESCRIPTION	QUANTITY	U/M		COST	TOTAL $
**********					
LABOR					
**********					
SIGNAL FIELD - INSTALL	160.0	MH		4,933	
PAYROLL ASSOCIATED COSTS				2,885	
DA OVERHEADS				4,606	
EQUIPMENT EXPENSES				961	
INSURANCE EXPENSES				828	
TOTAL LABOR COST				14,213	14,213
**********					
MATERIAL					
**********					
BATTERY, 10 VGL-255	1.0	LS	N	2,320	
BELLS	2.0	EA	N	392	
CABLE, 5C/6	200.0	FT	N	839	
CABLE, 7C/14	200.0	FT	N	358	
CHARGERS, 12/80 (20/40/60)	1.0	EA	N	1,085	
FIELD MATERIAL	1.0	LS	N	5,000	
FOUNDATION, CONCRETE	2.0	EA	N	600	
GATE KEEPER	2.0	EA	N	3,726	
GATE MECHANISM, M-95	2.0	EA	N	20,590	
LED LIGHT	12.0	EA	N	2,412	
LED PED GATE LIGHT KIT	2.0	EA	N	164	
LIGHT ASSEMBLY, 1 WAY	2.0	EA	N	1,144	
RELAY, GATE DOWN	1.0	EA	N	1,000	
USE TAX				3,739	
OFFLINE TRANSPORTATION				493	
TOTAL MATERIAL COST				43,862	43,862
**********					
OTHER					
**********					
CONTRACT ENGINEERING	1.0	LS	N	6,500	
DIRECTIONAL BORING	200.0	FT	N	10,000	
TOTAL OTHER ITEMS COST				16,500	16,500
PROJECT SUBTOTAL					74,575
CONTINGENCIES					7,457
BILL PREPARATION FEE					821

GROSS PROJECT COST	82,853
LESS COST PAID BY BNSF	0
TOTAL BILLABLE COST	82,853

***** MAINTAIN PROPRIETARY CONFIDENTIALITY *****

BNSF RAILWAY COMPANY
FHPM ESTIMATE FOR
CITY OF TACOMA

LOCATION HARBOR | DETAILS OF ESTIMATE | PLAN ITEM : 230509000 | VERSION : 1

PURPOSE, JUSTIFICATION AND DESCRIPTION

PIP NWW DIV SEATTLE SUB LS 52 MP 2.69 - 100% BILLABLE TO CITY OF TACOMA

MCCARVER ST (085730J) SURFACE ESTIMATE

REQUESTOR: STEPHEN SEMENICK 8/9/17
PRIMARY FUNDING SOURCE IS FHWA
** BUY AMERICA(N) APPLIES **

DESCRIPTION	QUANTITY	U/M	COST	TOTAL $
**********				
LABOR				
**********				
PLACE CROSS TIES - CAP	18.9	MH	606	
REMOVE PUBLIC CROSSING	30.0	MH	851	
PAYROLL ASSOCIATED COSTS			851	
DA OVERHEADS			1,359	
EQUIPMENT EXPENSES			691	
INSURANCE EXPENSES			243	
TOTAL LABOR COST			4,601	4,601
**********				
MATERIAL				
**********				
SPIKE, TRACK, 5/8 X 6-IN.-DIRECT BULK SHIPMENT IN	60.0	EA **	21	
TIE, TRK,10FT,PRE-PLATED,6IN, STD AREA	15.0	EA **	1,436	
MATERIAL HANDLING			72	
ONLINE TRANSPORTATION			30	
USE TAX			136	
TOTAL MATERIAL COST			1,695	1,695
**********				
OTHER				
**********				
TOTAL OTHER ITEMS COST			0	0
PROJECT SUBTOTAL				6,296
CONTINGENCIES				360
BILL PREPARATION FEE				67
GROSS PROJECT COST				6,723
LESS COST PAID BY BNSF				0
TOTAL BILLABLE COST				6,723