



## King County

**Parks and Recreation Division**  
Department of Natural Resources and Parks  
Property Management  
King Street Center Building  
KSC-NR-0700  
201 South Jackson Street, Suite 700  
Seattle, WA 98104-3856

December 24, 2014

Ms. Kathy Hunter  
Washington Utilities and Transportation Commission  
P.O. Box 47250  
Olympia, WA 98504-8203

Re: Docket No. TR-143903-P

Dear Ms. Hunter:

Enclosed is a copy of the signed waiver regarding Docket No. TR-143903-P. Although King County Parks agrees to the crossing as proposed, we recommend that the City of Woodinville install signs in both directions warning bicycles of the risk of crossing the railroad tracks at an oblique angle which may result in bicycle tires being stuck in the grooves.

If you have any questions, please call me at 206-477-4561. Thank you.

Sincerely,

Kevin Workman  
Real Property Agent IV

STATE OF WASH.  
UTIL. AND TRANSPORTATION  
COMMISSION

2014 DEC 26 PM 2:32

RECEIVED  
PROGRAM MANAGEMENT



WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

	)	DOCKET NO. TR- 143903 -P
	)	
<u>City of Woodinville, WA</u>	)	PETITION TO CONSTRUCT OR
Petitioner,	)	RECONSTRUCT A HIGHWAY-RAIL
vs.	)	GRADE CROSSING AND INSTALL
<b>Eastside Community Rail</b>	)	AN INTER-TIE BETWEEN A
<b>King County</b>	)	HIGHWAY SIGNAL AND A
<b>Ballard Terminal Rail</b>	)	RAILROAD CROSSING SIGNAL
<b>WSDOT</b>	)	SYSTEM
	)	
<u>Respondent</u>	)	
.....	)	USDOT CROSSING NO.: 092050F

Prior to submitting a Petition to Construct a highway-rail grade crossing and install an inter-tie between a Highway Signal and a Railroad Crossing Signal System to the Washington Utilities and Transportation Commission (UTC), State Environmental Protection Act (SEPA) requirements must be met. Washington Administrative Code (WAC) 197-11-865 (2) requires:

All actions of the utilities and transportation commission under statutes administered as of December 12, 1975, are exempted, except the following:

(2) Authorization of the openings or closing of any highway/railroad grade crossing, or the direction of physical connection of the line of one railroad with that of another;


Please attach sufficient documentation to demonstrate that the SEPA requirement has been fulfilled. For additional information on SEPA requirements contact the Department of Ecology.

The Petitioner asks the Washington Utilities and Transportation Commission to approve construction or reconstruction of a highway-rail grade crossing and inter-tie the highway signal with the railroad crossing signal system.

Construction       Reconstruction

RECEIVED  
PROJECTS MANAGEMENT  
2014 NOV 18 PM 2:26  
STATE OF WASHINGTON  
UTIL. AND TRANSPORTATION  
COMMISSION

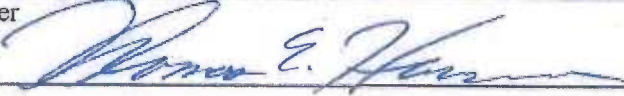
*Section 1 – Petitioner's Information*

City of Woodinville, WA
Petitioner

Signature
17301 133rd Ave NE
Street Address
Woodinville, WA 98072
City, State and Zip Code
_____
Mailing Address, if different than the street address
Thomas E. Hansen, PE
Contact Person Name
425-877-2291 thomash@ci.woodinville.wa.us
Contact Phone Number and E-mail Address

*Section 2 – Respondent's Information*

Eastside Community Rail (Freight Easement Owner on the Line)
Respondent
1011 Maple Avenue
Street Address
Snohomish, WA 98290
City, State and Zip Code
_____
Mailing Address, if different than the street address
Doug Engle
Contact Person Name
425-891-4223 Doug.Engle@EsCRail.Org
Contact Phone Number and Email Address

*Section 1 – Petitioner's Information*


City of Woodinville, WA
Petitioner

Signature
17301 133rd Ave NE
Street Address
Woodinville, WA 98072
City, State and Zip Code
Mailing Address, if different than the street address
Thomas E. Hansen, PE
Contact Person Name
425-877-2291 thomash@ci.woodinville.wa.us
Contact Phone Number and E-mail Address

*Section 2 – Respondent's Information*

<u>WSDOT</u> (Crossing is of a State Highway)
Respondent
310 Maple Park Ave SE
Street Address
Olympia, WA 98504-7407
City, State and Zip Code
PO Box 47316
Mailing Address, if different than the street address
Ahmer Nizam
Contact Person Name
360-705-7271 nizama@wsdot.wa.gov
Contact Phone Number and Email Address

*Section 3 – Proposed or Existing Crossing Location*

*Section 1 – Petitioner's Information*


City of Woodinville, WA
Petitioner

Signature
17301 133rd Ave NE
Street Address
Woodinville, WA 98072
City, State and Zip Code
Mailing Address, if different than the street address
Thomas E. Hansen, PE
Contact Person Name
425-877-2291 thomash@ci.woodinville.wa.us
Contact Phone Number and E-mail Address

*Section 2 – Respondent's Information*

<b>Ballard Terminal Rail (Freight Operator on the Line)</b>
Respondent
4725 Ballard Ave NW
Street Address
Seattle, WA 98107
City, State and Zip Code
Mailing Address, if different than the street address
Byron Cole
Contact Person Name
206-947-2120 byroncole@comcast.net
Contact Phone Number and Email Address



*Section 1 – Petitioner's Information*

<u>City of Woodinville, WA</u> Petitioner
<u></u> Signature
<u>17301 133rd Ave NE</u> Street Address
<u>Woodinville, WA 98072</u> City, State and Zip Code
<u> </u> Mailing Address, if different than the street address
<u>Thomas E. Hansen, PE</u> Contact Person Name
<u>425-877-2291 thomash@ci.woodinville.wa.us</u> Contact Phone Number and E-mail Address

*Section 2 – Respondent's Information*

<u>King County (Land Owner)</u> Respondent
<u>201 S. Jackson Street Suite 700</u> Street Address
<u>Seattle, WA 98104</u> City, State and Zip Code
<u> </u> Mailing Address, if different than the street address
<u>Robert Nunnenkamp</u> Contact Person Name
<u>206-296-6520 engineering.roads@kingCounty.gov</u> Contact Phone Number and Email Address

*Section 3 – Proposed or Existing Crossing Location*

1. Existing highway/roadway SR 202

2. Existing railroad King Co (land owner) Operator Ballard Terminal Rail

3. Location of proposed crossing:  
Located in the SE 1/4 of the NE 1/4 of Sec. 9, Twp. 26N, Range 5E W.M.

4. GPS location, if known Latitude: 47.7531200 Longitude: -122.1696000

5. Railroad mile post (nearest tenth) 0000.2

6. City Woodinville County King

*Section 4 – Proposed or Existing Crossing Information*

1. Railroad company Ballard Terminal Rail

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 1

5. Average daily train traffic, freight <1  
Authorized freight train speed 10 Operated freight train speed <10

6. Average daily train traffic, passenger 0  
Authorized passenger train speed <10 MPH Operated passenger train speed <10 MPH

7. Will the proposed crossing eliminate the need for one or more existing crossings?  
Yes  No

8. If so, state the distance and direction from the proposed crossing.  
\_\_\_\_\_

9. Does the petitioner propose to close any existing crossings?

Yes  No

*Section 5 – Temporary Crossing*

1. Is the crossing proposed to be temporary? Yes  No

2. If so, describe the purpose of the crossing and the estimated time it will be needed

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Will the petitioner remove the crossing at completion of the activity requiring the temporary crossing? Yes  No

Approximate date of removal \_\_\_\_\_

*Section 6 – Current Highway Traffic Information*

1. Name of roadway/highway SR202

2. Roadway classification City of Woodinville: Arterial; WSDOT Urban Minor Arterial

3. Road authority City of Woodinville/WSDOT

4. Average annual daily traffic (AADT) 17,000

5. Number of lanes 2

6. Roadway speed 35

7. Is the crossing part of an established truck route? Yes  No

8. If so, trucks are what percent of total daily traffic? 6

9. Is the crossing part of an established school bus route? Yes  No

10. If so, how many school buses travel over the crossing each day? 50

11. Describe any changes to the information in 1 through 7, above, expected within ten years:  
**AADT expected to increase @ 2% or more per year**



*Section 7 – Alternatives to the Proposal*

1. Does a safer location for a crossing exist within a reasonable distance of the proposed location?  
Yes  No

2. If a safer location exists, explain why the crossing should not be located at that site.

---

---

---

---

3. Are there any hillsides, embankments, buildings, trees, railroad loading platforms or other barriers in the vicinity which may obstruct a motorist's view of the crossing?  
Yes  No

4. If a barrier exists, describe:

- ◆ Whether petitioner can relocate the crossing to avoid the obstruction and if not, why not.
- ◆ How the barrier can be removed.
- ◆ How the petitioner or another party can mitigate the hazard caused by the barrier.

---

---

---

---

5. Is it feasible to construct an over-crossing or under-crossing at the proposed location as an alternative to an at-grade crossing?  
Yes  No

6. If an over-crossing or under-crossing is not feasible, explain why.

**The crossing is located several feet from the signalized intersection of SR202 and Woodinville -Redmond Road so it is not possible to construct an approach grade. Also, the Sammamish River Bridge is 360' from the track which is insufficient to accommodate an approach grade of 5% or less.**

7. Does the railway line, at any point in the vicinity of the proposed crossing, pass over a fill area or trestle or through a cut where it is feasible to construct an over-crossing or an under-crossing, even though it may be necessary to relocate a portion of the roadway to reach that point?

Yes  No

8. If such a location exists, state:

- ◆ The distance and direction from the proposed crossing.
- ◆ The approximate cost of construction.
- ◆ Any reasons that exist to prevent locating the crossing at this site.

---

---

---

---

---

---

---

---

---

---

9. Is there an existing public or private crossing in the vicinity of the proposed crossing?

Yes  No

10. If a crossing exists, state:

- ◆ The distance and direction from the proposed crossing.
- ◆ Whether it is feasible to divert traffic from the proposed to the existing crossing.

**There is a public crossing 600' to the east on the same road due to wye for track**

**It is not feasible to divert traffic to this crossing. See vicinity map Exhpt A**

---

---

---

---

*Section 8 – Sight Distance*

1. Complete the following table, describing the sight distance for motorists when approaching the tracks from either direction.

a. Approaching the crossing from East, the current approach provides an unobstructed view as follows: (North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	26
Right	200	31
Right	100	36
Right	50	36
Right	25	38
Left	300	125
Left	200	140
Left	100	165
Left	50	230
Left	25	335

b. Approaching the crossing from NA, the current approach provides an unobstructed view as follows: (Opposite direction-North, South, East, West)

Direction of sight (left or right)	Number of feet from proposed crossing	Provides an unobstructed view for how many feet
Right	300	
Right	200	
Right	100	
Right	50	
Right	25	
Left	300	
Left	200	
Left	100	
Left	50	
Left	25	

2. Will the new crossing provide a level approach measuring 25 feet from the center of the railway on both approaches to the crossing?

Yes  No

3. If not, state in feet the length of level grade from the center of the railway on both approaches to the crossing. West of crossing length of level grade = 10' East of crossing is level

4. Will the new crossing provide an approach grade of not more than five percent prior to the level grade?

Yes  No

5. If not, state the percentage of grade prior to the level grade and explain why the grade exceeds five percent.

**Approach grade west of crossing will be at 6%. The existing approach grade is 6% and the widening of the roadway will match that grade. Reducing the approach grade would**

**would require significant regrading of Woodinville Redmond Road and 127<sup>th</sup> PL NE**

*Section 9 – Illustration of Proposed Crossing Configuration*

Attach a detailed diagram, drawing, map or other illustration showing the following:

- ◆ The vicinity of the proposed crossing.
- ◆ Layout of the railway and highway 500 feet adjacent to the crossing in all directions.
- ◆ Percent of grade.
- ◆ Obstructions of view as described in Section 7 or identified in Section 8.
- ◆ Traffic control layout showing the location of the existing and proposed signage.

**See Exhibits A-F**

*Section 10 – Sidewalks*

1. Provide the following information:

- a. Provide a description of the type of sidewalks proposed.
- b. Describe who will maintain the sidewalks.
- c. Attach a proposed diagram or design of the crossing including the sidewalks.

**New 5' wide sidewalks will be provided on both sides of the roadway. The**

**City of Woodinville will maintain sidewalks. See Exhibit B**

*Section 11 – Proposed Warning Signals or Devices*

1. Explain in detail the number and type of automatic signals or other warning devices planned at the proposed crossing, including a cost estimate for each. If requesting pre-emption include the type of train detection circuitry, sequencing and advanced preemption time, justification for the changes and its effects on current warning devices and warning times for drivers.

NE175th WB Approach: Progressive Rail Cantilver with flashers;      See Exhibit E

EB/WB Approach National Electric High Wind Gate 42'      See Exhibit F

2. Provide an estimate for maintaining the signals for 12 months. \$1500

3. Is the petitioner prepared to pay to the respondent railroad company its share of installing the warning devices as provided by law?

Yes   X                        No       

*Section 12 – Traffic Signal Preemption*

Complete the attached Guide for Determining Time Requirements for Traffic Signal Preemption at Highway-Rail Grade Crossings.

1. Specify simultaneous or advance preemption requested.

See attached preemption worksheet

If advance preemption, what is the preemption time.

See attached preemption worksheet



*Section 13 – Additional Information*

Provide any additional information supporting the proposal, including information such as the public benefits that would be derived from constructing a new crossing as proposed or modifying an existing crossing. Provide project specific information.

Modifying the grade crossing will allow for the widening of NE 175th (SR202) from 2 lanes to 4 will provide much needed congestion relief for passenger and freight road traffic. The modified crossing will have updated flashers and automatic gate sytem which will provide for higher safety. In addition, safety will be significantly improved by providing preemption to the Woodinville Redmond Road/NE 175<sup>th</sup> signal which will clear the ques west of the track.

---

---

---

---

---

---

*Section 14 – Waiver of Hearing by Respondent*

**Waiver of Hearing**

The undersigned represents the Respondent in the petition to construct or reconstruct a highway-railroad grade crossing and inter-tie the highway signal with the railroad crossing signal system.

USDOT Crossing No.: 092050F

We have investigated the conditions at the proposed or existing crossing site. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree that a crossing be

installed or reconstructed and the highway signals inter-tied with the railroad crossing signal system and consent to a decision by the commission without a hearing.

Dated at SEATTLE  
~~7:00 PM~~, Washington, on the 24<sup>TH</sup> day of  
DECEMBER, 20 14.

Monica Leers

Printed name of Respondent

Monica Leers

Signature of Respondent's Representative

Section Manager

Title

KING COUNTY PARKS

Name of Company

206-477-4561

KEVIN.WORKMAN@KINGCOUNTY.GOV

Phone number and e-mail address

201 SOUTH JACKSON ST., SUITE 700

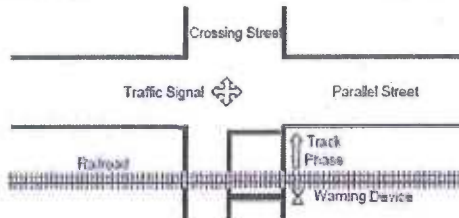
SEATTLE, WA 98104

Mailing address

## GUIDE FOR DETERMINING TIME REQUIREMENTS FOR TRAFFIC SIGNAL PREEMPTION AT HIGHWAY-RAIL GRADE CROSSINGS

City Woodinville  
 County King  
 District \_\_\_\_\_

Date \_\_\_\_\_  
 Completed by \_\_\_\_\_  
 District Approval \_\_\_\_\_



Parallel Street Name  
SR202 Wood-Red Rd  
 Crossing Street Name  
SR202 NE175th

Railroad Ballard Terminal Rail  
 Crossing DOT# 092050

Railroad Contact Byron Cole  
 Phone (206) 947-2120

### SECTION 1: RIGHT-OF-WAY TRANSFER TIME CALCULATION

#### Preempt verification and response time

1. Preempt delay time (seconds) .....	1.	<input type="text" value="0.0"/>	Remarks
2. Controller response time to preempt (seconds) .....	2.	<input type="text" value="0.0"/>	Controller type: <u>2070ECL</u>
3. Preempt verification and response time (seconds): add lines 1 and 2 .....	3.	<input type="text" value="0.0"/>	

#### Worst-case conflicting vehicle time

4. Worst-case conflicting vehicle phase number .....	4.	<input type="text" value="8"/>	Remarks
5. Minimum green time during right-of-way transfer (seconds) .....	5.	<input type="text" value="0.0"/>	
6. Other green time during right-of-way transfer (seconds) .....	6.	<input type="text" value="0.0"/>	
7. Yellow change time (seconds) .....	7.	<input type="text" value="3.6"/>	
8. Red clearance time (seconds) .....	8.	<input type="text" value="1.0"/>	
9. Worst-case conflicting vehicle time (seconds): add lines 5 through 8 .....	9.	<input type="text" value="4.6"/>	

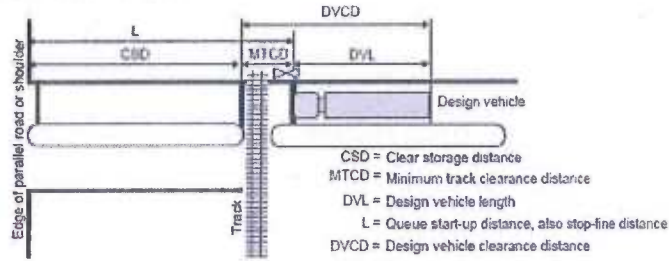
#### Worst-case conflicting pedestrian time

10. Worst-case conflicting pedestrian phase number .....	10.	<input type="text" value="4"/>	Remarks
11. Minimum walk time during right-of-way transfer (seconds) .....	11.	<input type="text" value="0.0"/>	
12. Pedestrian clearance time during right-of-way transfer (seconds) .....	12.	<input type="text" value="0.0"/>	
13. Vehicle yellow change time, if not included on line 12 (seconds) .....	13.	<input type="text" value="3.6"/>	
14. Vehicle red clearance time, if not included on line 12 (seconds) .....	14.	<input type="text" value="1.0"/>	
15. Worst-case conflicting pedestrian time (seconds): add lines 11 through 14 .....	15.	<input type="text" value="4.6"/>	

#### Worst-case conflicting vehicle or pedestrian time

16. Worst-case conflicting vehicle or pedestrian time (seconds): maximum of lines 9 and 15 .....	16.	<input type="text" value="4.6"/>
17. Right-of-way transfer time (seconds): add lines 3 and 16 .....	17.	<input type="text" value="4.6"/>

**SECTION 2: QUEUE CLEARANCE TIME CALCULATION**



		Remarks
18.	Clear storage distance (CSD, feet) .....	18. <input type="text" value="60"/>
19.	Minimum track clearance distance (MTCD, feet) .....	19. <input type="text" value="10"/>
20.	Design vehicle length (DVL, feet) .....	20. <input type="text" value="74"/> Design vehicle type: _____
21.	Queue start-up distance, L (feet): add lines 18 and 19 .....	21. <input type="text" value="70"/>
22.	Time required for design vehicle to start moving (seconds): calculate as $2+(L+20)$ .....	22. <input type="text" value="5.5"/> <span style="float: right;">Remarks _____</span>
23.	Design vehicle clearance distance, DVCD (feet): add lines 19 and 20 .....	23. <input type="text" value="84"/>
24.	Time for design vehicle to accelerate through the DVCD (seconds) .....	24. <input type="text" value="14.0"/> <span style="float: right;">Read from Figure 2 in Instructions.</span>
25.	Queue clearance time (seconds): add lines 22 and 24 .....	25. <input type="text" value="19.5"/>

**SECTION 3: MAXIMUM PREEMPTION TIME CALCULATION**

		Remarks
26.	Right-of-way transfer time (seconds): line 17 .....	26. <input type="text" value="4.6"/>
27.	Queue clearance time (seconds): line 25 .....	27. <input type="text" value="19.5"/>
28.	Desired minimum separation time (seconds) .....	28. <input type="text" value="4.0"/>
29.	Maximum preemption time (seconds): add lines 26 through 28 .....	29. <input type="text" value="28.1"/>

**SECTION 4: SUFFICIENT WARNING TIME CHECK**

		Remarks
30.	Required minimum time, MT (seconds): per regulations .....	30. <input type="text" value="20.0"/>
31.	Clearance time, CT (seconds): get from railroad .....	31. <input type="text" value="32.0"/>
32.	Minimum warning time, MWT (seconds): add lines 30 and 31 .....	32. <input type="text" value="52.0"/> <span style="float: right;">Excludes buffer time (BT) _____</span>
33.	Advance preemption time, APT, if provided (seconds): get from railroad ..	33. <input type="text" value="0.0"/>
34.	Warning time provided by the railroad (seconds): add lines 32 and 33 .....	34. <input type="text" value="52.0"/>
35.	Additional warning time required from railroad (seconds): subtract line 34 from line 29, round up to nearest full second, enter 0 if less than 0 .....	35. <input type="text" value="0"/>

If the additional warning time required (line 35) is greater than zero, additional warning time has to be requested from the railroad. Alternatively, the maximum preemption time (line 29) may be decreased after performing an engineering study to investigate the possibility of reducing the values on lines 1, 5, 6, 7, 8, 11, 12, 13 and 14.

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**SECTION 6: TRACK CLEARANCE GREEN TIME CALCULATION (OPTIONAL)**

**Preempt Trap Check**

36. Advance preemption time (APT) provided (seconds):	36.	0.0	Line 33 only valid if line 35 is zero.
37. Multiplier for maximum APT due to train handling	37.	0.00	See Instructions for details.
38. Maximum APT (seconds): multiply line 36 and 37	38.	0.0	Remarks
39. Minimum duration for the track clearance green interval (seconds)	39.	15.0	For zero advance preemption time
40. Gates down after start of preemption (seconds): add lines 38 and 39	40.	15.0	
41. Preempt verification and response time (seconds): line 3	41.	0.0	Remarks
42. Best-case conflicting vehicle or pedestrian time (seconds): usually 0	42.	0.0	
43. Minimum right-of-way transfer time (seconds): add lines 41 and 42	43.	0.0	
44. Minimum track clearance green time (seconds): subtract line 43 from line 40	44.	15.0	

**Clearing of Clear Storage Distance**

45. Time required for design vehicle to start moving (seconds), line 22	45.	5.5	
46. Design vehicle clearance distance (DVCD, feet), line 23	46.	84	Remarks
47. Portion of CSD to clear during track clearance phase (feet)	47.	0	CSD* in Figure 3 in Instructions.
48. Design vehicle relocation distance (DVRD, feet): add lines 46 and 47	48.	84	
49. Time required for design vehicle to accelerate through DVRD (seconds)	49.	14.0	Read from Figure 2 in Instructions.
50. Time to clear portion of clear storage distance (seconds): add lines 45 and 49	50.	19.5	
51. Track clearance green Interval (seconds): maximum of lines 44 and 50, round up to nearest full second	51.	20	

**SECTION 6: VEHICLE-GATE INTERACTION CHECK (OPTIONAL)**

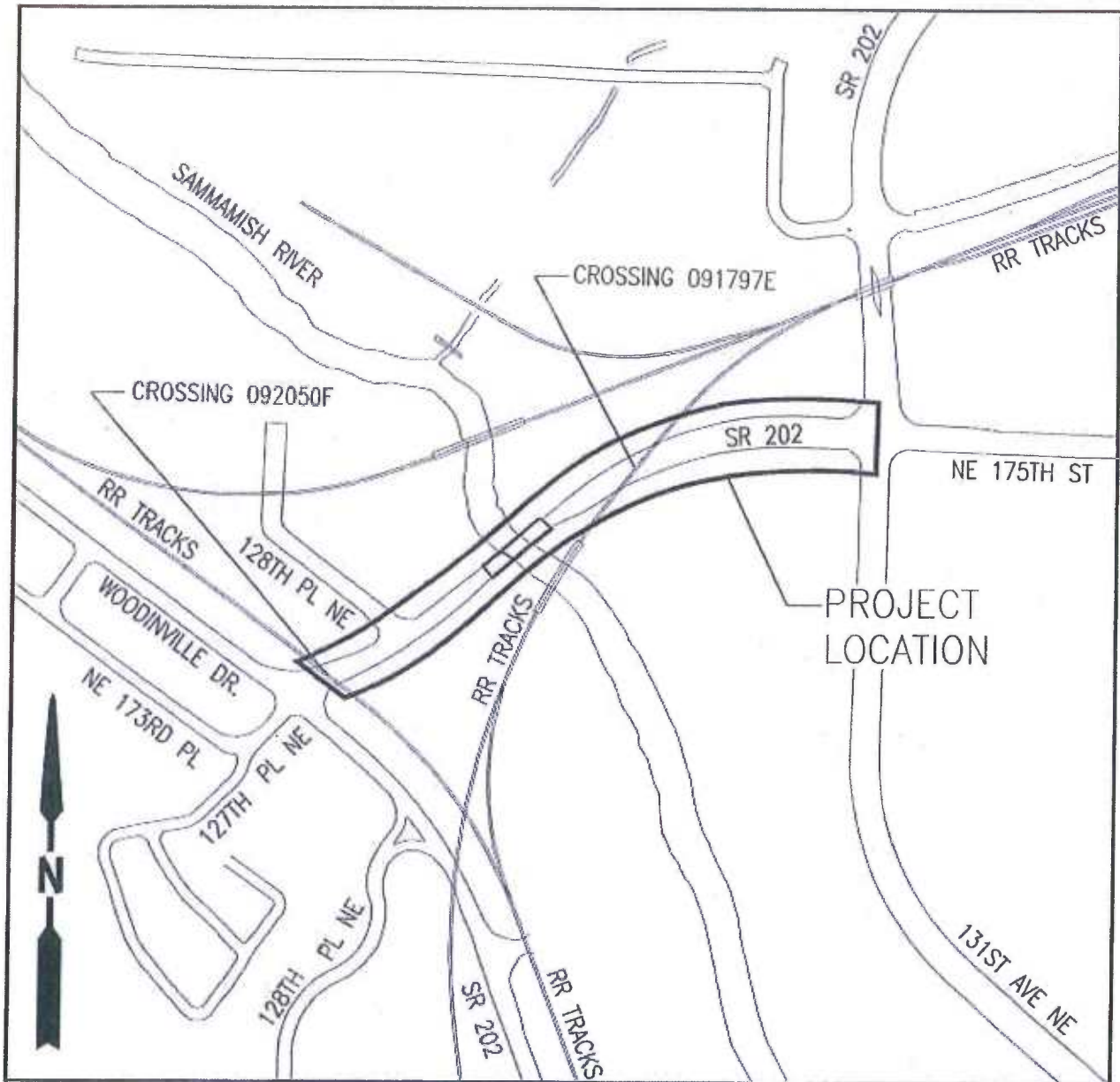
52. Right-of-way transfer time (seconds): line 17	52.	4.6	
53. Time required for design vehicle to start moving (seconds), line 22	53.	5.5	
54. Time required for design vehicle to accelerate through DVL (on line 20, seconds)	54.	11.0	Read from Table 3 in Instructions
55. Time required for design vehicle to clear descending gate (seconds): add lines 52 through 54	55.	21.1	Remarks
56. Duration of flashing lights before gate descent start (seconds): get from railroad	56.	0.0	Remarks
57. Full gate descent time (seconds): get from railroad	57.	7.0	
58. Proportion of non-interaction gate descent time	58.	0.50	Read from Figure 5 in Instructions.
59. Non-interaction gate descent time (seconds): multiply lines 57 and 58	59.	3.5	
60. Time available for design vehicle to clear descending gate (seconds): add lines 56 and 59	60.	3.5	
61. Advance preemption time (APT) required to avoid design vehicle-gate interaction (seconds): subtract line 60 from line 55, round up to nearest full second, enter 0 if less than 0	61.	18	



EXHIBIT A

GENERAL SITE DESCRIPTION:

S.E. 1/4 OF SECTION 9, T. 26 N., R 5 E, W. M.



VICINITY MAP

NTS





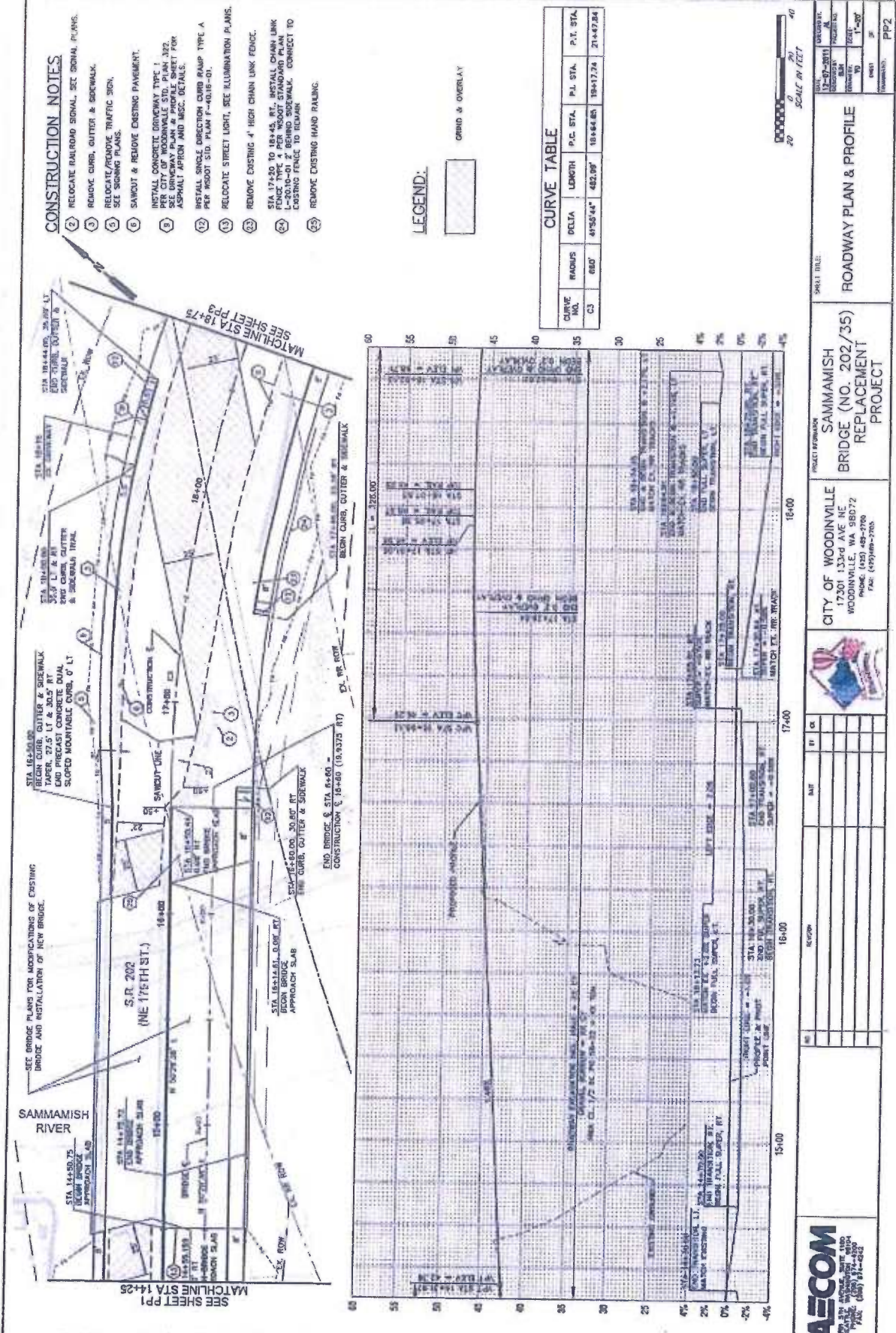












**CONSTRUCTION NOTES**

- 1) RELOCATE RAILROAD SIGNAL, SEE SIGNAL PLANS.
- 2) REMOVE CURB, CUTTER & SIDEWALK.
- 3) RELOCATE/REMOVE TRAFFIC SIGN, SEE SIGNING PLANS.
- 4) SAWCUT & REMOVE EXISTING PAVEMENT.
- 5) INSTALL CONCRETE DRIVEWAY TYPE 1 PER CITY OF WOODINVILLE STD. PLAN 322.
- 6) INSTALL ASPHALT DRIVEWAY TYPE 1 PER CITY OF WOODINVILLE STD. PLAN 322.
- 7) INSTALL ASPHALT DRIVEWAY TYPE 2 PER CITY OF WOODINVILLE STD. PLAN 322.
- 8) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 9) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 10) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 11) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 12) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 13) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 14) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 15) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 16) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 17) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 18) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 19) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 20) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 21) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 22) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 23) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 24) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.
- 25) REMOVE EXISTING 4" HIGH CHAIN LINK FENCE.

**LEGEND:**



**CURVE TABLE**

CURVE NO.	RADIUS	DELTA	LENGTH	P.C. STA.	P.T. STA.	P.T. STA.
C3	660'	41°52'44"	482.00'	18+64.68	19+17.74	21+47.84



**CITY OF WOODINVILLE**  
 17301 133rd AVE NE  
 WOODINVILLE, WA 98072  
 PHONE: (425) 485-2700  
 FAX: (425) 485-2700

**SAMMAMISH BRIDGE (NO. 202/35) REPLACEMENT PROJECT**

**ROADWAY PLAN & PROFILE**

PP2











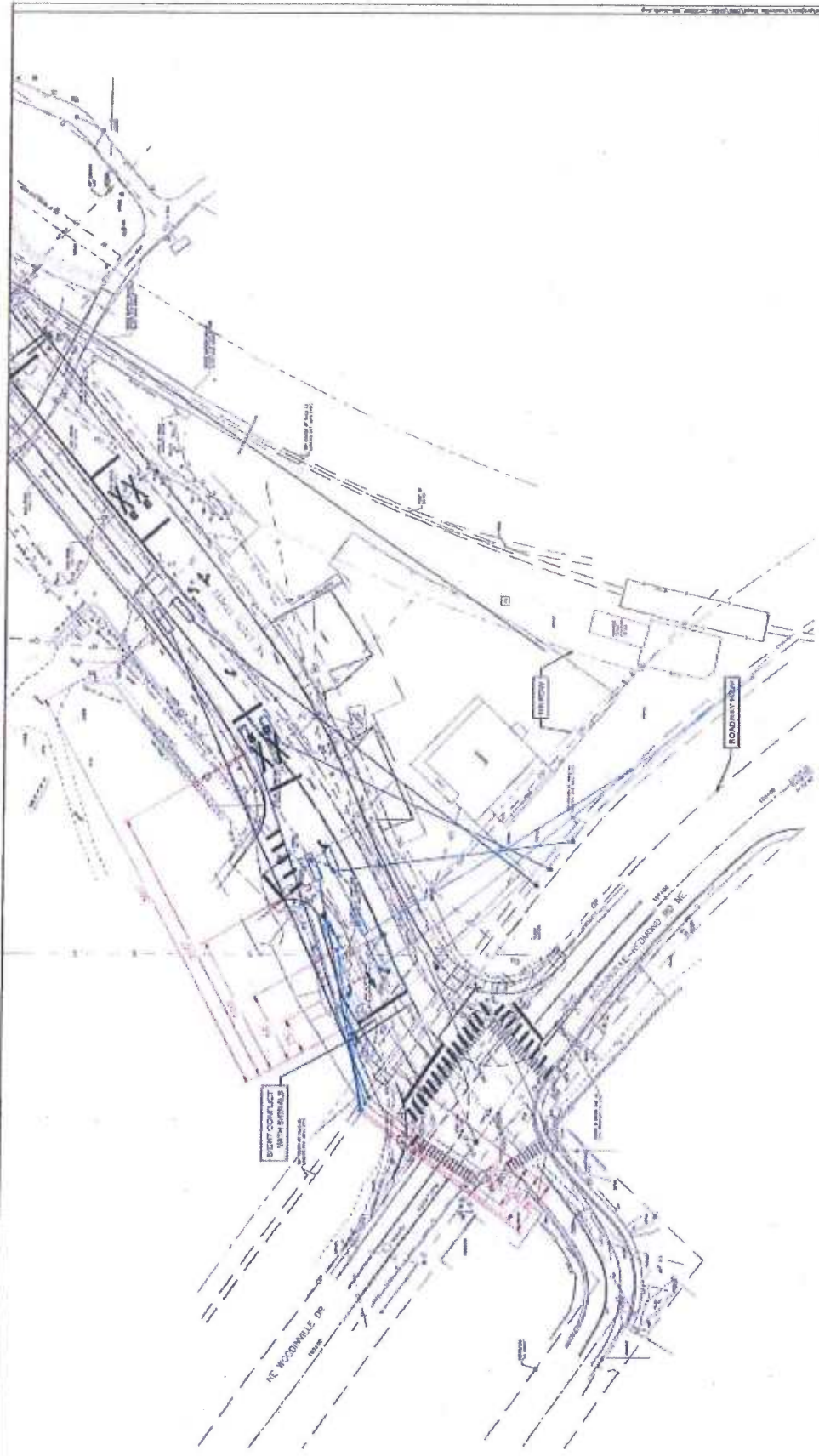












LEGEND:  
 - - - - - 0 FEET FROM STOP  
 - - - - - 25 FEET FROM STOP  
 - - - - - 50 FEET FROM STOP  
 - - - - - 100 FEET FROM STOP  
 - - - - - 200 FEET FROM STOP  
 - - - - - 300 FEET FROM STOP

RAILROAD ROW & EASEMENTS  
 ROADWAY ROW



WOODVILLE  
 175TH ST - WEST CROSSING  
 092050F - WESTBOUND  
 NORTH LINES OF SIGHT

DESIGNED BY  
 C-06  
 NTS  
 SHEET NO.  
 6 OF 6

STV 1625 WEST WILSON STREET, SUITE 3100  
 LOS ANGELES, CA 90017-2555

DESIGNED BY	L. TERRELL
CHECKED BY	L. TERRELL
DATE	07/24/14

DATE	07/24/14
BY	NTS
CHECKED BY	L. TERRELL
DATE	07/24/14

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

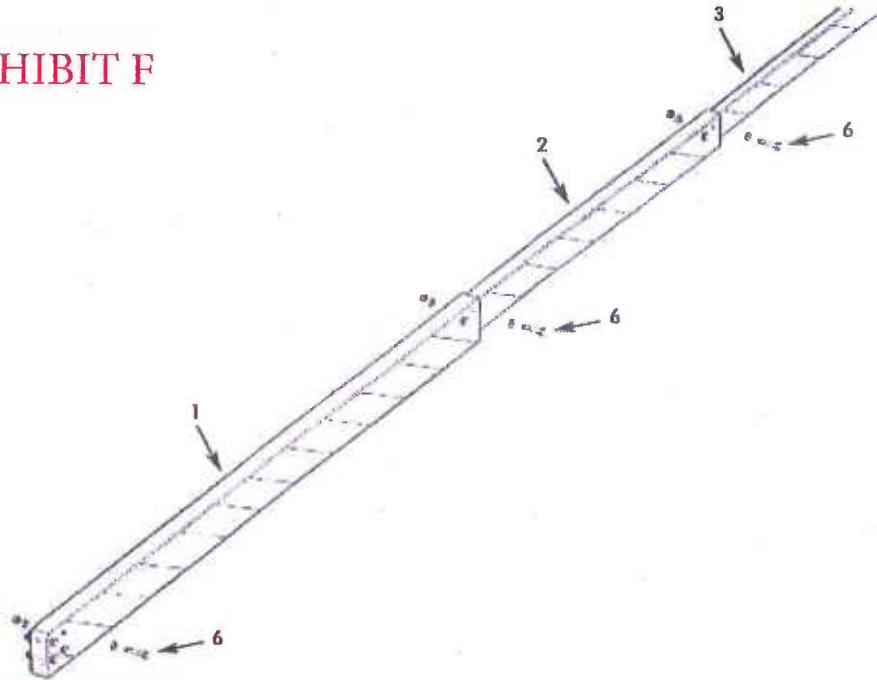






## High Wind Profile—Fiberglass—Alumi-Glass®— Alumi-Lite® Gate Arms

### EXHIBIT F



#### High Wind Profile Gate Arms

Fiberglass 13' to 26'	Description	NEG Number
1	Fiberglass Base Section	NEG-1WC501B
2	Fiberglass 2nd Section	NEG-1WC502B
3	Fiberglass 3rd Section	NEG-1WC503B

Fiberglass 18' to 33'	Description	NEG Number
1	Fiberglass Base Section	NEG-1WC501C
2	Fiberglass 2nd Section	NEG-1WC502B
3	Fiberglass 3rd Section	NEG-1WC503B

Fiberglass 18' to 40**	Description	NEG Number
1	Fiberglass Base Section	NEG-1WC501C
2	Fiberglass 2nd Section	NEG-1WC502C
3	Fiberglass 3rd Section	NEG-1WC503B

Alumi-Glass 18' to 33'	Description	NEG Number
1	Aluminum Base Section	NEG-1WC3130
2	Fiberglass 2nd Section	NEG-1WC502B
3	Fiberglass 3rd Section	NEG-1WC503B

Alumi-Glass 18' to 40**	Description	NEG Number
1	Aluminum Base Section	NEG-1WC3130
2	Fiberglass 2nd Section	NEG-1WC502C
3	Fiberglass 3rd Section	NEG-1WC503B

\*Available in lengths beyond AAR recommended maximum length of 38'.

Alumi-Lite 18' to 33'	Description	NEG Number
1	Aluminum Base Section	NEG-1WC3130
2	Aluminum 2nd Section	NEG-1WCA502B
3	Aluminum 3rd Section	NEG-1WCA503C

Alumi-Lite 18' to 42**	Description	NEG Number
1	Aluminum Base Section	NEG-1WC3130
2	Aluminum 2nd Section	NEG-1WCA502C
3	Aluminum 3rd Section	NEG-1WCA503C

4	Retro-Reflective Sheeting—Red Engineer Grade High Intensity	NEG-150 NEG-158
---	---	--------------------

5	Retro-Reflective Sheeting—White Engineer Grade High Intensity	NEG-151 NEG-159
---	---	--------------------

6	Hardware Packs 2 Piece Gate Arm 3 Piece Gate Arm	NEG-2PK NEG-3PK
---	--	--------------------

7	Aluminum Sleeve (Not Shown) (Designate Length)	NEG-?SL
---	---	---------

8	Optional Buffer Leg with Bracket (Not Shown)	NEG-130B
---	---	----------

