WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Union Pacific Railroad Petitioner, vs. City of Spokane Valley Respondents	)	DOCKET NO. TR- XXXX TR-150640 PETITION TO RECONSTRUCT A HIGHWAY-RAIL GRADE CROSSING USDOT NO.: 662510F UTC NO.: XXXX LOCATION: Spokane Valley, WA

The Petitioner asks the Washington Utilities and Transportation Commission to approve reconstruction of a highway-rail grade crossing.

Section 1 – Petitioner's Information

Union Pacific Railroad
Petitioner

9451 Atkinson Street
Street Address

Roseville, CA. 95747
City, State and Zip Code

Mailing Address, if different than the street address

Terrel A. Anderson
Contact Person Name

(916) 390-3693 taanders@up.com
Contact Phone Number and E-mail Address

Section 2 – Respondent's Information

City of Spokane Valley
Respondent

11707 E. Sprague Ave., Suite 106
Street Address

Spokane Valley, WA. 99206
City, State and Zip Code

Mailing Address, if different than the street address

Eric Guth Public Works
Contact Person Name

(509) 720-5000 cityhall@spokanevalley.org
Contact Phone Number and E-mail Address

Respondent

Street Address

City, State and Zip Code

Mailing Address, if different than the street address

Contact Person Name

Contact Phone Number and E-mail Address

Section 3 – Crossing Location

1. Existing highway/roadway N. Park Road

2. Existing railroad Union Pacific Railroad

3. Location of the crossing planned for reconstruction:
   Located in the SW of the NE of Sec. Twp. Range 41E

4. GPS location, if known 47 40'34.79"N 117 18'14 46" W

5. Railroad mile post (nearest tenth) 5.63

6. City Spokane Valley County Spokane

Section 4 – Crossing Information

1. Railroad company Union Pacific 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 1

5. Average daily train traffic, freight 7

   Authorized freight train speed 49 Operated freight train speed 49

6. Average daily train traffic, passenger 0

   Authorized passenger train speed NA Operated passenger train speed NA

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

8. If so, state the distance and direction from the reconstructed crossing.

   N/A

9. Does the petitioner propose to close any existing crossings?
   Yes ____ No X

Section 5 – Temporary Crossing

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

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 N. Park Rd

2. Roadway classification Collector Arterial

3. Road authority City of Spokane Valley

4. Average annual daily traffic (AADT) 2,100 (2014)

5. Number of lanes 2

6. Roadway speed 25

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

8. If so, trucks are what percent of total daily traffic? 5.11% (2014)

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

10. If so, how many school buses travel over the crossing each day? 120

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

No changes proposed to current traffic conditions. Union Pacific as part of the mandated CTC project would like to remove the out dated non standard cantilevers. We would like to place flashing lights with gates at this location. Very little growth in daily traffic volume is anticipated in the next 10 years.

Section 7 – Alternatives to the Proposal

1. Does a safer location for a crossing exist within a reasonable distance of the crossing planned for reconstruction? Yes ____ No X

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

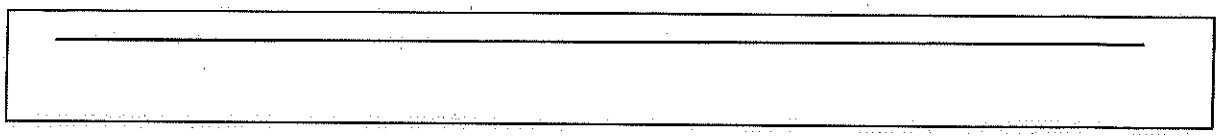
3. Are there any hillsides, embankments, buildings, trees, railroad loading platforms or other barriers in the vicinity which may obstruct a motorist's view of the crossing?
Yes ____ No X

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 as an alternative to an at-grade crossing?
Yes ____ No X

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

A grade separation at this location would be very cost prohibitive. The project seeks to enhance function and safety of the existing arrangement.



7. Does the railway line, at any point in the vicinity of the 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 X

8. If such a location exists, state:

- ♦ The distance and direction from the crossing planned for reconstruction.
- ♦ 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 crossing planned for reconstruction?

Yes ____ No X

10. If a crossing exists, state:

- ♦ The distance and direction from the crossing planned for reconstruction.
- ♦ Whether it is feasible to divert traffic from the crossing planned for reconstruction to the crossing located in the vicinity.

Section 8 – Sight Distance

1. What is the sight distance in each quadrant at the crossing planned for reconstruction?
   NW quadrant: 4000
   NE quadrant: 2400
   SW quadrant: 4000
   SE quadrant: 2400

2. Will the reconstructed crossing provide a level approach measuring 25 feet from the center of the railway on both approaches to the crossing?
   Yes X No ____

3. If not, state in feet the length of level grade from the center of the railway on both approaches to the crossing. _____

4. Will the new crossing provide an approach grade of not more than five percent prior to the level grade?
   Yes X No ____

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

_____

_____

_____

_____

Section 9 – Illustration of Proposed Crossing Configuration

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

- ♦ The vicinity of the crossing planned for reconstruction.
- ♦ 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 existing and proposed signage.

Section 10 – Proposed Warning Signals or Devices

1. Explain in detail the number and type of automatic signals or other warning devices planned at the reconstructed crossing, including a cost estimate for each.

As part of the Federally Mandated CTC project Union Pacific would like to remove the existing non standard cantilevers. Would like to replace with shoulder mounted LED flashing lights with gates. There will be no changes to the existing train detection as it is already constant warning

2. 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 11 – Additional Information

Provide any additional information supporting the proposal, including information such as the public benefits that would be derived from reconstructing the crossing as proposed.

Section 12 – Waiver of Hearing by Respondent

Waiver of Hearing

The undersigned represents the Respondent in the petition to reconstruct a highway-railroad grade crossing.

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

Dated at 12:10 pm, Washington, on the 13th day of April, 2015.

ERIC P. GUTH
Printed name of Respondent

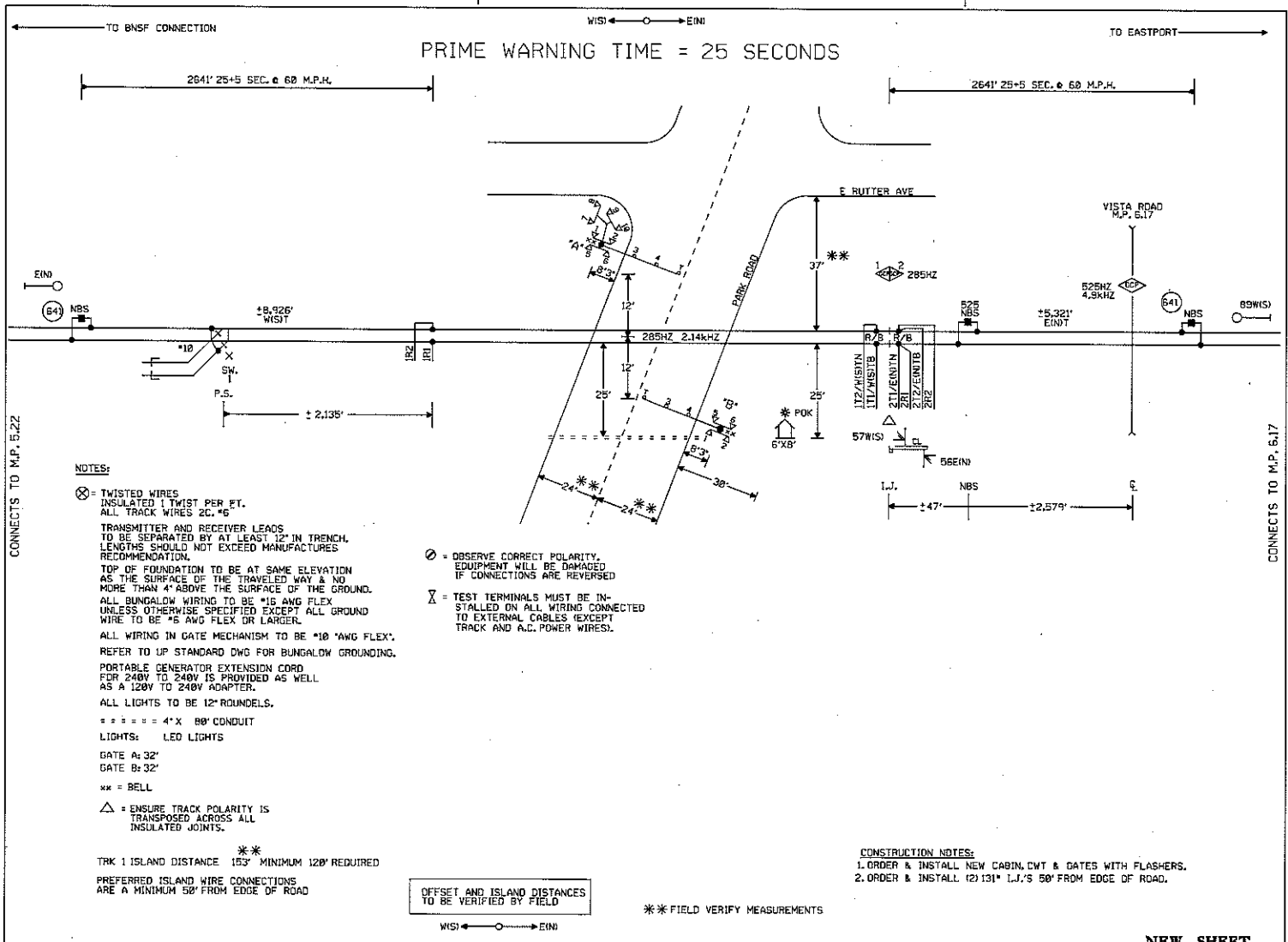
Signature of Respondent's Representative

PUBLIC WORKS DIRECTOR
Title

509.720.5000 eguth@spokanevalley.org
Phone number and e-mail address

11707 E. SPRAGUE AVENUE, SUITE 106

SPOKANE VALLEY, WA 99206
Mailing address



NOTES:

⊗ = TWISTED WIRES
INSULATED 1 TWIST PER FT.
ALL TRACK WIRES 2C. #6

TRANSMITTER AND RECEIVER LEADS
TO BE SEPARATED BY AT LEAST 12" IN TRENCH.
LENGTHS SHOULD NOT EXCEED MANUFACTURES
RECOMMENDATION.

TOP OF FOUNDATION TO BE AT SAME ELEVATION
AS THE SURFACE OF THE TRAVELED WAY & NO
MORE THAN 4" ABOVE THE SURFACE OF THE GROUND.

ALL BUNGALOW WIRING TO BE #16 AWG FLEX
UNLESS OTHERWISE SPECIFIED EXCEPT ALL GROUND
WIRE TO BE #6 AWG FLEX OR LARGER.

ALL WIRING IN GATE MECHANISM TO BE #10 "AWG FLEX".

REFER TO UP STANDARD DWG FOR BUNGALOW GROUNDING.

PORTABLE GENERATOR EXTENSION CORD
FOR 240V TO 240V IS PROVIDED AS WELL
AS A 120V TO 240V ADAPTER.

ALL LIGHTS TO BE 12" ROUNDELS.

= = = = = = 4" X 80' CONDUIT

LIGHTS: LED LIGHTS

GATE A: 32'
GATE B: 32'

** = BELL

△ = ENSURE TRACK POLARITY IS
TRANSPOSED ACROSS ALL
INSULATED JOINTS.

** TRK 1 ISLAND DISTANCE 153' MINIMUM 120' REQUIRED

PREFERRED ISLAND WIRE CONNECTIONS
ARE A MINIMUM 50' FROM EDGE OF ROAD

⊘ = OBSERVE CORRECT POLARITY.
EQUIPMENT WILL BE DAMAGED
IF CONNECTIONS ARE REVERSED

⧖ = TEST TERMINALS MUST BE IN-
STALLED ON ALL WIRING CONNECTED
TO EXTERNAL CABLES (EXCEPT
TRACK AND A.C. POWER WIRES).

OFFSET AND ISLAND DISTANCES
TO BE VERIFIED BY FIELD

W(S) ⟷ E(N)

** FIELD VERIFY MEASUREMENTS

CONSTRUCTION NOTES:
1. ORDER & INSTALL NEW CABIN, CWT & GATES WITH FLASHERS.
2. ORDER & INSTALL (2) 131# I.J.'S 50' FROM EDGE OF ROAD.

NEW SHEET

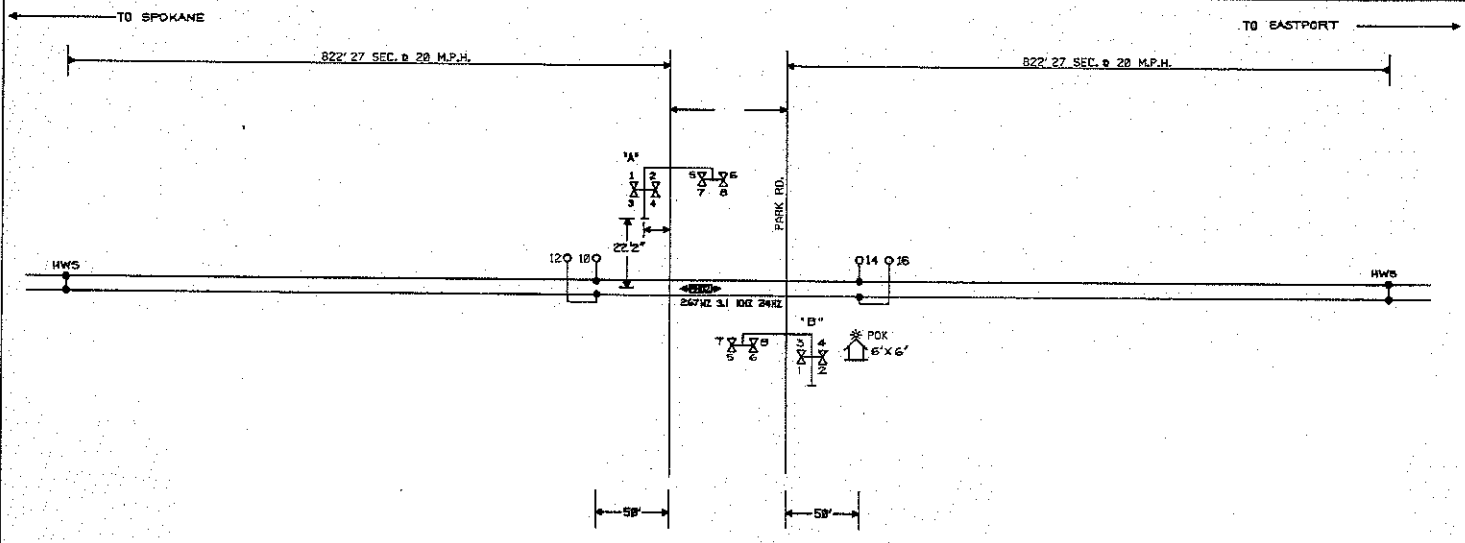
Designed: 12/07/14	
INSTALL ETC SPOKANE SUBDIVISION (M.P. 2.87 - 37.78)	
Rev's By:	WO#: 27431
MODIFICATION LEVEL	
O. A. LAST LEVEL CHECKED	DU
LAST LEVEL MOD THIS TYPICAL	DU
LAST LEVEL BY DESIGNER	DU
CHANGED FROM TYPICAL?	Y

CIRCUIT MODIFICATIONS ARE NOT TO BE MADE WITHOUT AUTHORITY FROM THE OFFICE OF SIGNAL DESIGN

Date: 12/07/14
Des: XRL
Chk:
APE: 27431

UNION PACIFIC RAILROAD
SPOKANE, WASHINGTON
PARK ROAD
SPOKANE SUBDIVISION
Office of AVP Engineering - Signal Omaha, Nebraska

Sh.: 1
DOT 662510F
MP: 5.68
ID: 4823568.IX



THE OPERATION OF THE CIRCUITS AND DEVICES REFERENCED HEREON CANNOT BE CHECKED IN THE FIELD UNLESS CONNECTED TO A COMPLETE WORKING OR AN EFFECTIVE PORTION THEREOF. WHEN SYSTEM OPERATION MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTING SHALL BE PERFORMED AS REQUIRED HEREON.

NOTES:

1. CONNECT TO HEAVY DUTY CONTACTS & SHOW CONTACT NUMBERS.
2. CONNECT TO REGULAR DUTY CONTACTS & SHOW CONTACT NUMBERS.
3. SHOW HEAVY DUTY CONTACTS & RELAY RES.
4. WIRE #16 AWG-1 CONDUCTOR STRANDED S.D. COPPER 19 STRANDS, INSULATED WITH 2/64" ETHYLENE PROPYLENE, 1/64" NEOPRENE JACKET, 18/64" O.D. RATED 300 V. 19A. CASE WIRE.
5. WIRE #12 AWG-1 CONDUCTOR STRANDED S.D. COPPER 19 STRANDS, INSULATED WITH 3/64" ETHYLENE PROPYLENE, 1/64" NEOPRENE JACKET, 14/64" O.D. RATED 600 V. 26A. CASE WIRE.
6. SAME WIRE AS 5 BUT TW. IN PAIRS.
7. ALL WIRES CONNECTED TO BATT. TO BE TW. #10 AWG-1 CONDUCTOR SOLID, S.D. COPPER ANNEALED, INSULATED WITH 2/64" CROSS LINK POLYETHYLENE, TYPE RHH OR RHW U.L.S.E. 13/64" O.D. RATED 75 DEG.C. WET, 90 DEG.C. DRY, RATED 600V. 42A. BATTERY WIRE.
8. WIRE #18 AWG-1 CONDUCTOR STRANDED S.D. COPPER 19 STRANDS, INSULATED WITH 3/64" ETHYLENE PROPYLENE, 1/64" NEOPRENE JACKET, 1/4" O.D. RATED 600V. 25A. CASE WIRE.
9. SAME WIRE AS 8 BUT TW. IN PAIRS.

⊗ = TWISTED WIRES

\# = RUN NEG. LEAD FROM RECT. DIRECTLY TO NEG. TERM. OF BATT. RUN POS. LEAD FROM HEEL OF "CHARGE" TEST SW. DIRECTLY TO POS. TERM. OF BATT

⊘ = OBSERVE CORRECT POLARITY. EQUIPMENT WILL BE DAMAGED IF CONNECTIONS ARE REVERSED

ALL TRACK WIRES #6 TW. UNLESS OTHERWISE SPECIFIED

① = HOUSE TO BE 25' FROM NEAR RAIL OF TRACK AND 30' FROM EDGE OF ROADWAY.

1. SET UP THUMBNAIL ADJUSTMENT ON PMD2 TO PROVIDE TRANSFER TIME OF 5 MINUTES. ISLAND RELATED FAILURE WILL INITIATE TRANSFER INSTANTANEOUSLY.

⚹ = POWER OFF INDICATION

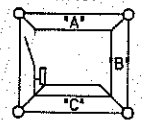
2/#6 TO BE USED ON ALL TRACK CONNECTIONS. THE SUM TOTAL OF THE PMD REC. & XMTR. TRACK WIRE LENGTH SHOULD NOT EXCEED 500'.

TOP OF FOUNDATION TO BE AT SAME ELEVATION AS THE SURFACE OF THE TRAVELED WAY & NO MORE THAN 4" ABOVE THE SURFACE OF THE GROUND, WITH CURB TO BE MAXIMUM OF 4" ABOVE CURB.

ALL LIGHTS TO BE 12" ROUNDELS.

LIGHTS: A & B 1,2 30"/15"
3,4 70"
5,6,7,8 20"/32"

GROUNDING LAYOUT



S ⟵ ⟶ N

TO BE VOIDED

W.O. # 27431 12-07-14 XRL

SPOKANE SUBDIVISION
SPOKANE, WASHINGTON
PARK ROAD
M.P. 5.60
DOT. #662510F
S.T.R.R.

				REV. 2-7-07 91 & 92 BATTERIES UPDATED. REC. #14385 1-11-07 TS/WITT	2 REV. 03-30-05 MODIFIED APPROACH'S & INSTALLED POK STROBE PER AC. REC. #12478 02-28-05 CRD/NST	REV. 1-17-95 HOUSE MOVED FROM TEKOA TRACK REALIGNED I.S. 12-22-94 RAR/COR	CIRCUIT MODIFICATIONS ARE NOT TO BE MADE WITHOUT AUTHORITY FROM THE OFFICE OF SIGNAL DESIGN	DES. RTC DRN. RTC CHK. JRE-HWY A.F.E. ID=VOID_4823568	UNION PACIFIC RAILROAD SPOKANE, WASHINGTON HIGHWAY CROSSING SIGNALS CIRCUITS OFFICE OF DGN'L SIGNAL ENGR. DRAWN NEW.	DATE 3-29-87 SHEET 1 DWG 5.60 B-4823

TIF FILE ATTACHED. TIF ID=VOID_4823568.IX.TIF

REMOD. 1 2-24-87