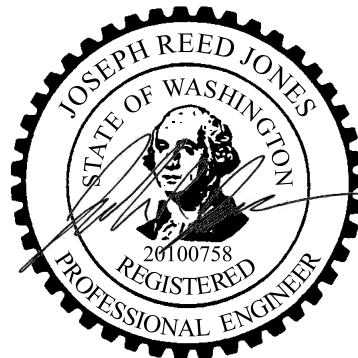




**EVALUATION OF AT GRADE RAIL CROSSING AT OLYMPIA AVE AND ADAMS
ST AND THURSTON AVE AND FRANKLIN ST**

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INTRODUCTION AND BACKGROUND

This evaluation focuses on two railroad grade crossings that intersect diagonally through two four-way intersections in the City of Olympia (refer to Figures 1, 2, 3, and 4). The intersections in question are located at Olympia Ave and Adams St, and Thurston Ave and Franklin St. The associated railroad crossing numbers at these intersections are USDOT 807853T, 807857V, and 807858C.

Currently, at the Olympia and Adams intersection, crossbuck assemblies are present on all four legs, with stop signs for northbound and southbound traffic, and yield signs for eastbound and westbound traffic. The Thurston and Franklin intersection is equipped with crossbuck assemblies on the east, west, and south legs, including a stop sign for northbound traffic and yield signs for eastbound and westbound traffic. Additionally, the City of Olympia has installed a stop sign for southbound traffic that does not include a crossbuck due to the railway configuration. The crossbuck with yield sign for southbound traffic occurs further north from the intersection and does not influence the intersections traffic control.

In May 2024, the City of Olympia formally contacted Union Pacific Railroad (UPRR) to request the replacement of the yield signs with stop signs at both intersections, to comply with the Manual on Uniform Traffic Control Devices (MUTCD) requirements. UPRR's response indicated that the City must submit a formal inquiry along with a preliminary engineering/reimbursement agreement, estimating a cost of \$30,000, as outlined in UPRR Public Project Manual Table 11.1.

Given the MUTCD non-compliance of the current signage, the City has decided to file a petition with the UTC, providing evidence to support the need for stop signs at these grade crossings in place of the existing yield signs.

GUIDANCE

MUTCD section 8B.03 paragraph 3:

“As a minimum, one Crossbuck sign shall be used on each highway approach to every highway-rail grade crossing, alone or in combination with other traffic control devices.”

MUTCD section 8B.04 paragraph 1:

“A Crossbuck Assembly shall consist of a Crossbuck (R15-1) sign, and Number of Tracks (R15-2P) plaque if two or more tracks are present, that complies with the provision of Section 8B.03, and either a YIELD (R1-2) or STOP (R1-1) sign installed on the same support, except as provided in Paragraph 10 of this Section. YIELD or STOP signs used at passive grade crossings shall be installed in compliance with the provisions of Section 2B.18, and Figures 8B-2 and 8B-3.”

MUTCD section 8B.04 paragraph 5:

“A YIELD sign shall be the default traffic control device for Crossbuck Assemblies on all highway approaches to passive grade crossing unless an engineering study performed by the regulatory agency or highway authority having jurisdiction over the roadway approach determines that a STOP sign is appropriate.”

MUTCD section 2B.06 paragraph 9:

“STOP signs and YIELD signs shall not be installed on different approaches to the same unsignalized intersection if those approaches conflict with or oppose each other, except as provided for in Items A and B in Paragraph 3 of Section 2B.10.”

MUTCD section 2B.10 paragraph 4:

“The YIELD signs should be installed on opposing minor-street approaches (for a four-leg intersection) or on the minor-street approach (for a three-leg intersection). When two intersecting roadways have relatively equal volumes, speeds, and other characteristics, yield control should be installed on the approach that conflicts the most with established pedestrian crossing activity, school walking routes, or bicycle crossing activity.”

MUTCD section 2B.10 paragraph 6:

“YIELD signs shall not be placed on all the approaches to an intersection, except at roundabouts.”

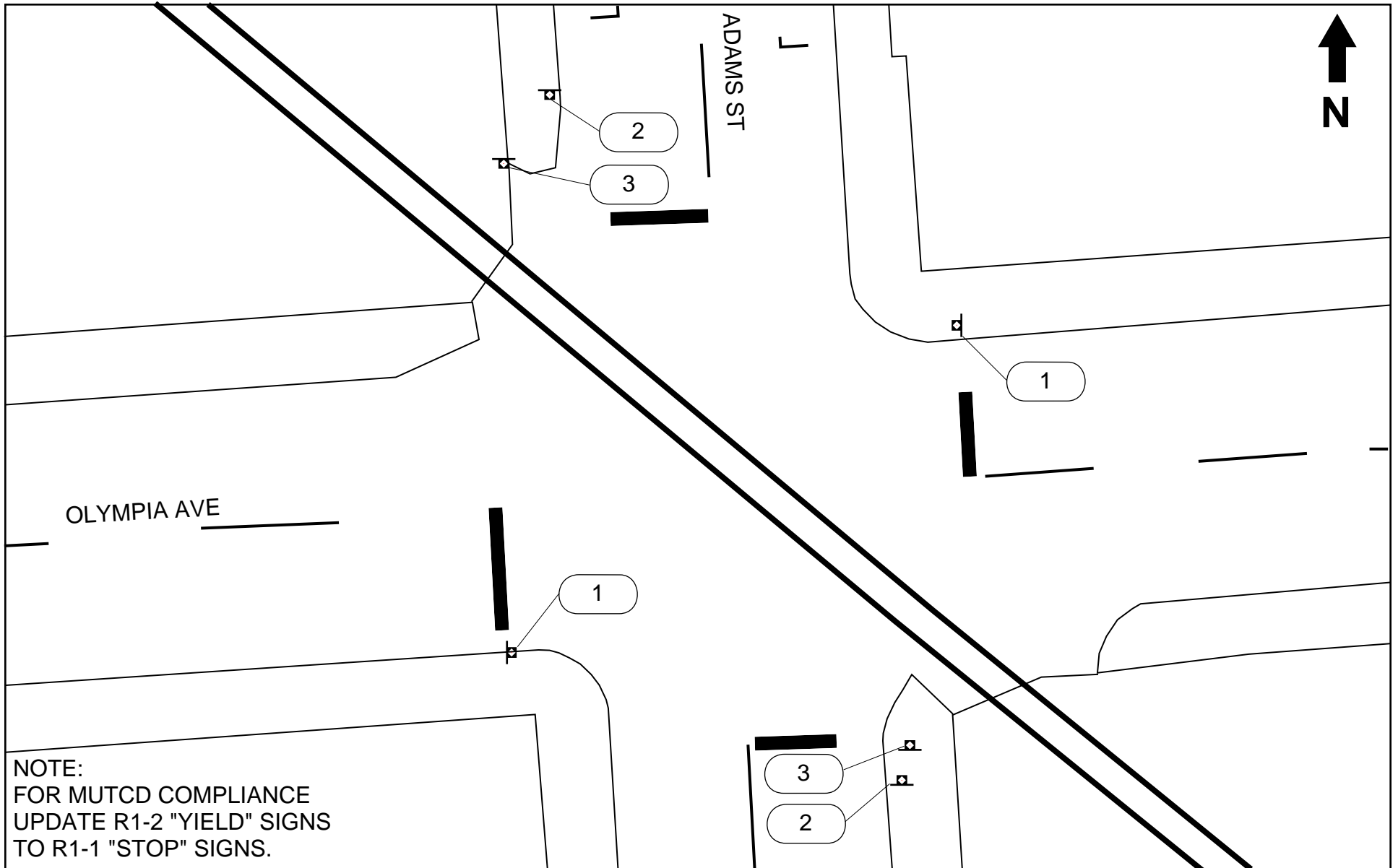
EVALUATION AND CONCLUSIONS

Due to the proximity of the grade rail crossing to the intersections in question, the traffic control devices on the crossbuck assemblies also serve as traffic control for the intersections. The current conditions pose a significant safety risk, causing driver confusion about the right of way when approaching the intersections, and are in direct conflict with several MUTCD sections cited above.

Given that all four legs at Olympia and Adams and three of the four legs at Thurston and Franklin have crossbuck assemblies, the only traffic control device that complies with MUTCD standards for these intersections is an all way stop.

The yield signs on the crossbuck assemblies at Olympia Ave approaching Adams St and on Thurston Ave approaching Franklin St should be immediately replaced with stop signs. No further evaluation of all way stop warrants are needed.

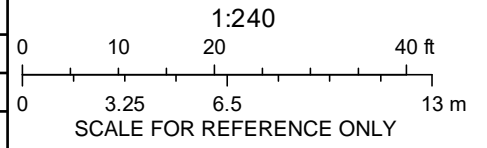
FIGURE 1: EXISTING LAYOUT OF OLYMPIA AVE AND ADAMS ST INTERSECTION



**NOTE:
FOR MUTCD COMPLIANCE
UPDATE R1-2 "YIELD" SIGNS
TO R1-1 "STOP" SIGNS.**

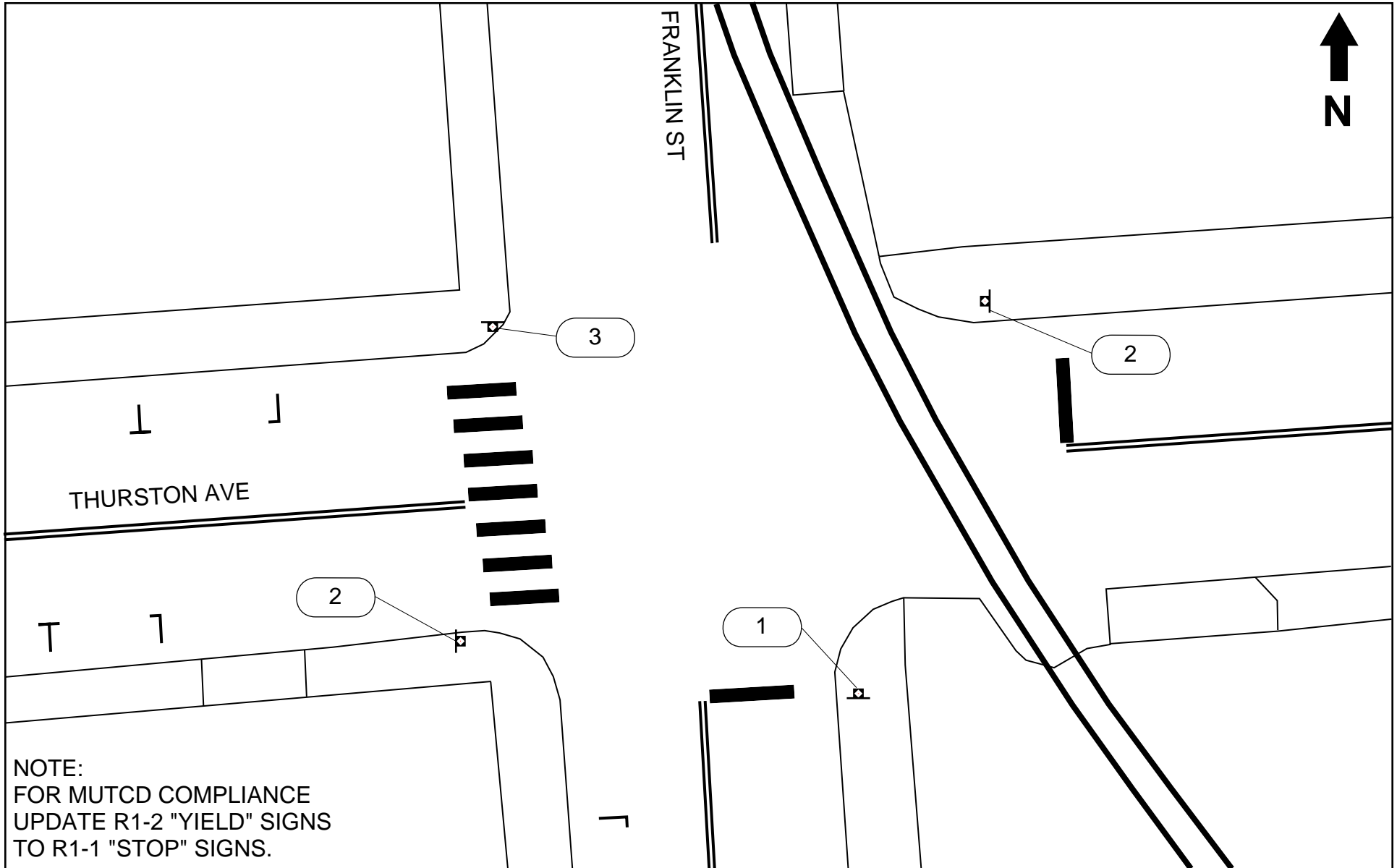
SIGN LOCATION	TYPE	DESCRIPTION
1 (SEE NOTE)	R1-2	YIELD
	R15-1	GRADE CROSSING
2	R1-1	STOP

SIGN LOCATION	TYPE	DESCRIPTION
3	R15-1	GRADE CROSSING



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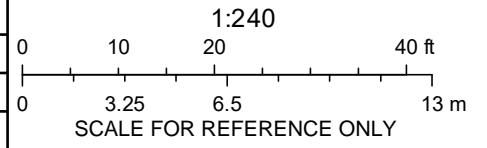
FIGURE 2: EXISTING LAYOUT OF THURSTON AVE AND FRANKLIN ST INTERSECTION



NOTE:
FOR MUTCD COMPLIANCE
UPDATE R1-2 "YIELD" SIGNS
TO R1-1 "STOP" SIGNS.

SIGN LOCATION	TYPE	DESCRIPTION
1	R1-1	STOP
	R15-1	GRADE CROSSING
	R15-2P	NUMBER OF TRACKS

SIGN LOCATION	TYPE	DESCRIPTION
2 (SEE NOTE)	R1-2	YIELD
	R15-1	GRADE CROSSING
3	R1-1	STOP



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FIGURE 3: PHOTOS OF OLYMPIA AVE AND ADAMS ST INTERSECTION



**FIGURE 4:
PHOTOS OF THURSTON AVE AND
FRANKLIN ST INTERSECTION**

