

# **I-90 & Rainier Ave S**

## **Pedestrian Safety Improvements**

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2020/03/11

# Overview

## Active Transportation

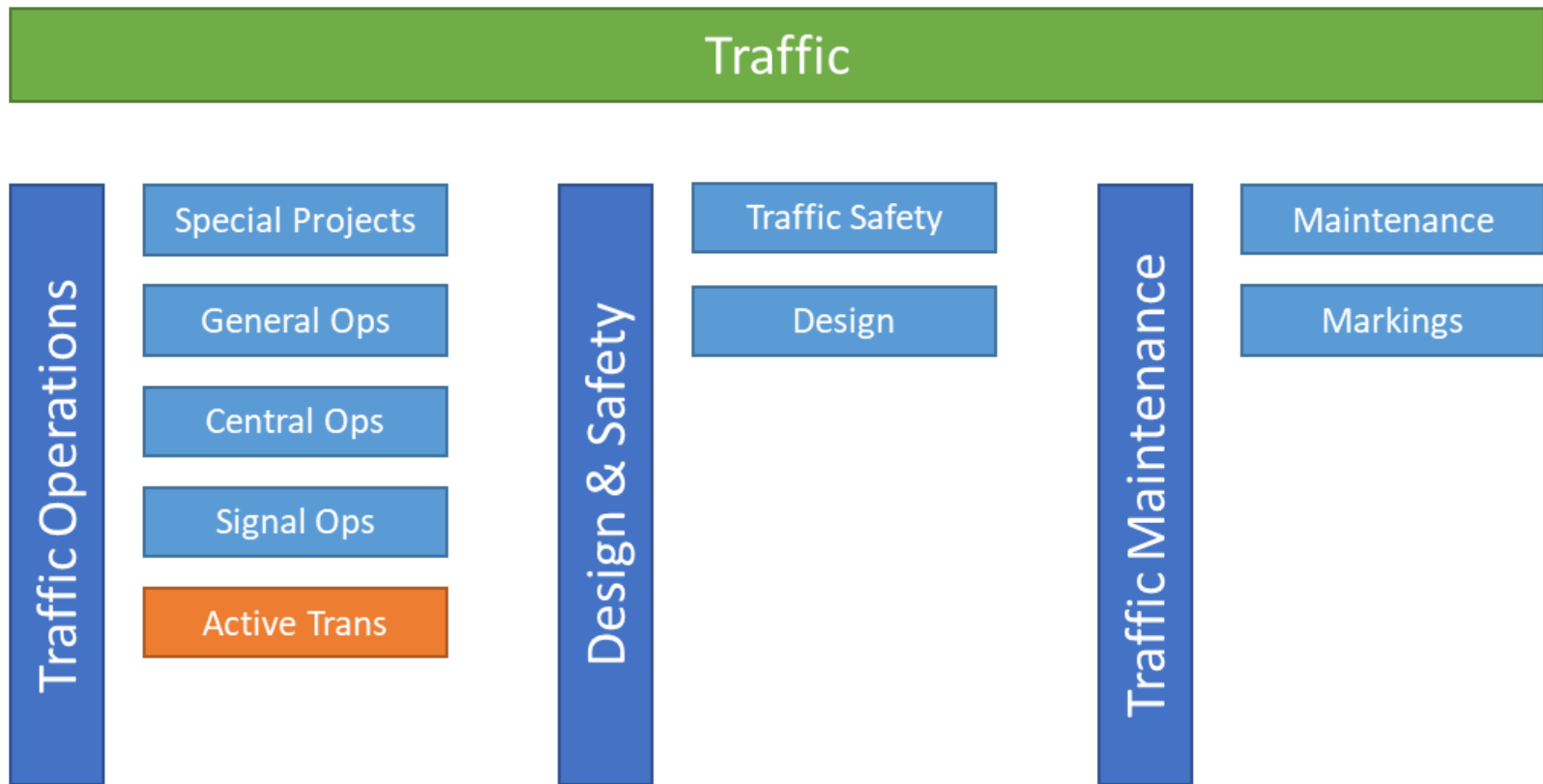
- Introduction to AT at WSDOT NWR
- I-90 & Rainier public interactions
- Practical solutions at WSDOT
- Site overview

## Traffic Operations (Engineering)

- Context
- Site characteristics
- Planned & proposed improvements
  - Interim improvements
  - Near-term improvements
  - Long-term improvements

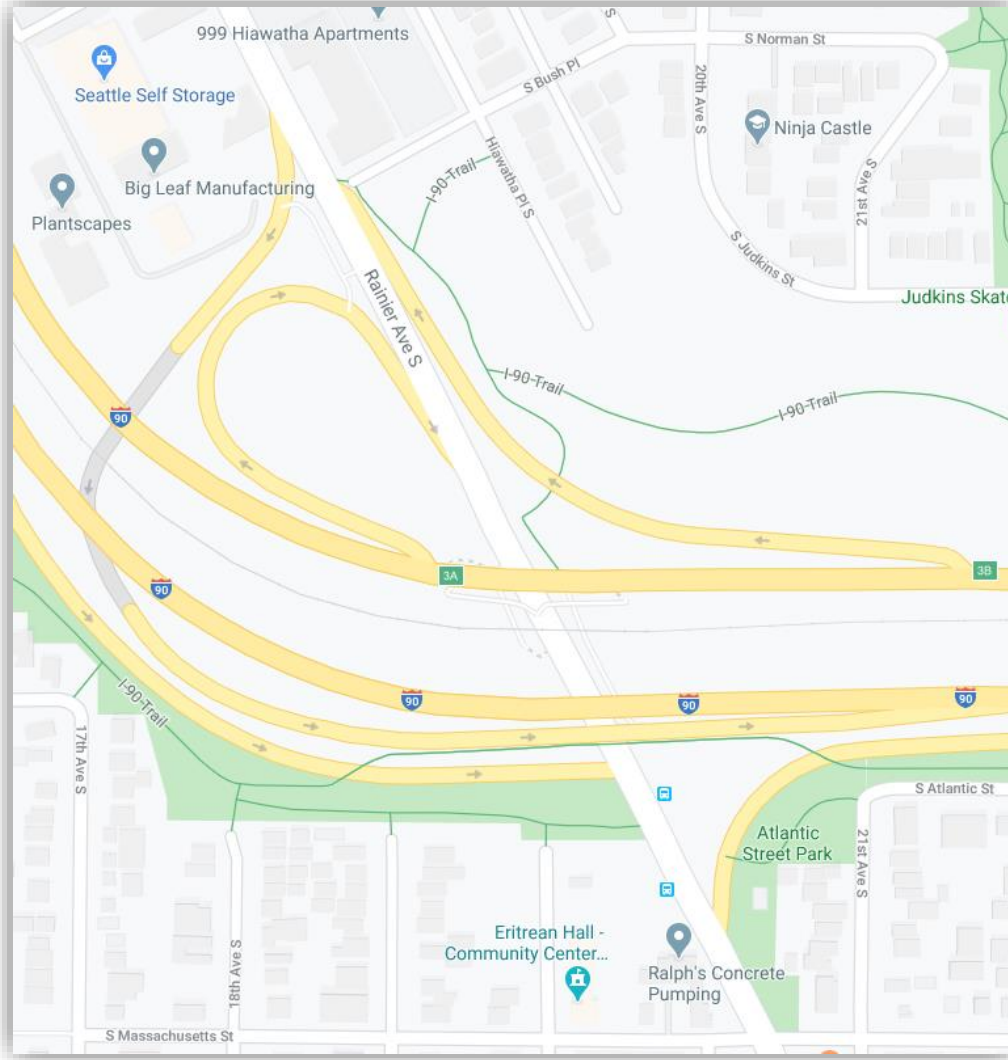
# Background (Active Transportation)

We aim to build and foster Active Transportation expertise within the NWR. We forward the multimodal goals of WSDOT with specific actions enacting positive change for active transportation at the region-wide and even statewide scale.



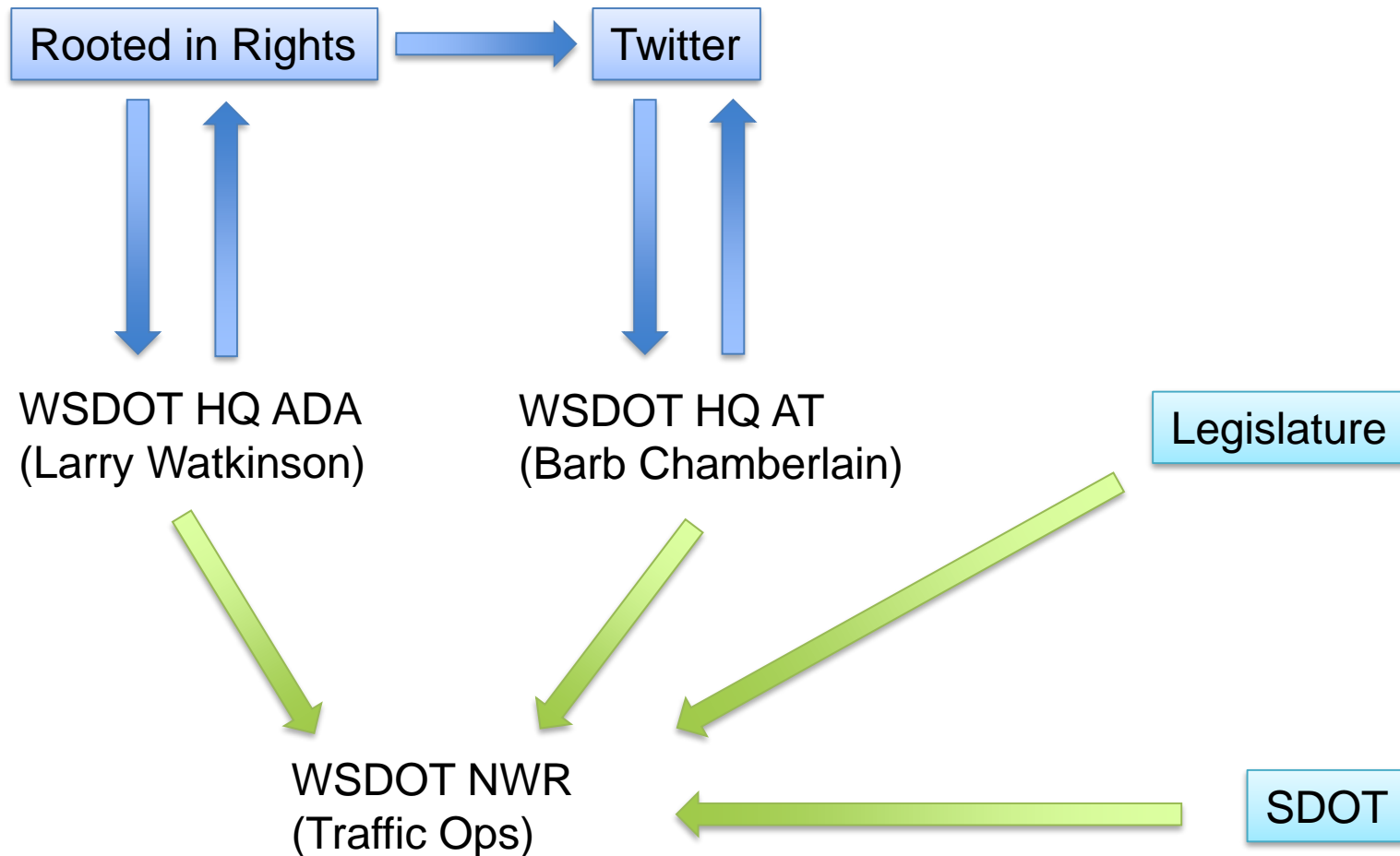
# Rainier Ave S

## Pedestrian Concerns



# Public Interaction

## Initial Input



# Public Interaction

## Active Transportation Input

**We encourage any input to be made directly to Northwest Region Traffic**



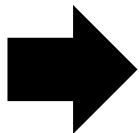
*Twitter:*

- @wsdot\_traffic (King, Snohomish counties)
- @wsdot\_north (Mount Baker Area)



*E-mail:*

- NWPublicAffairs@wsdot.wa.gov



*Active Transportation Direct:*

- nawrocj@wsdot.wa.gov



# Public Interaction

## Ongoing Coordination

- Field meetings
- Design coordination
  - Public
  - WSDOT internal
  - SDOT



# Practical Solutions

**Community engagement** is a key factor in helping to develop Practical Solutions. Practical Solutions are found when stakeholders work together to identify approaches that are sustainable and innovative.

Practical Solutions **builds on previous successes** in improving context-sensitive solutions, cost efficiencies, partnerships, and modal choice.

- How can we partner with the public and agencies?
- What can we do quickly to improve safety?
- What has worked well before?



# Site Overview







# Site 1 Characteristics



- Curb ramps are not ADA compliant.
- No marked crossing.
- Vegetation invading sidewalk.
- Vegetation covering pedestrian signs.
- Site distance constraint for both drivers and pedestrians around curve and building.
- Vehicles accelerating up to freeway speeds.
- Wide travel lanes.

# Site 2 Characteristics



- Curb ramps are not ADA compliant.
- No marked crossing.
- Site distance constraint for both drivers and pedestrians around curve and fence.
- Vehicles decelerating from freeway speeds.
- Wide travel lanes.
- Downhill grade for traveling vehicles.

# Site 3 Characteristics



- Curb ramps are not ADA compliant.
- Trees covering pedestrian warning signs.
- Poles and objects within sight distance path.
- Site distance constraint for both drivers and pedestrians around curve and fence.
- Vehicles accelerating up to freeway speeds.
- Two wide travel lanes.
- One metered lane and one HOV bypass lane.

# Moving Forward

## Interim Improvements

Quickly implement signing and striping improvements at Sites 1-3. To be completed by WSDOT crews.

## Near Term Improvements

Seek grant funding and other revenue sources for Site 3 redevelopment.

## Long Term Improvements

Work with local constituency and City of Seattle to advocate and fund redevelopment of Sites 1 and 2.



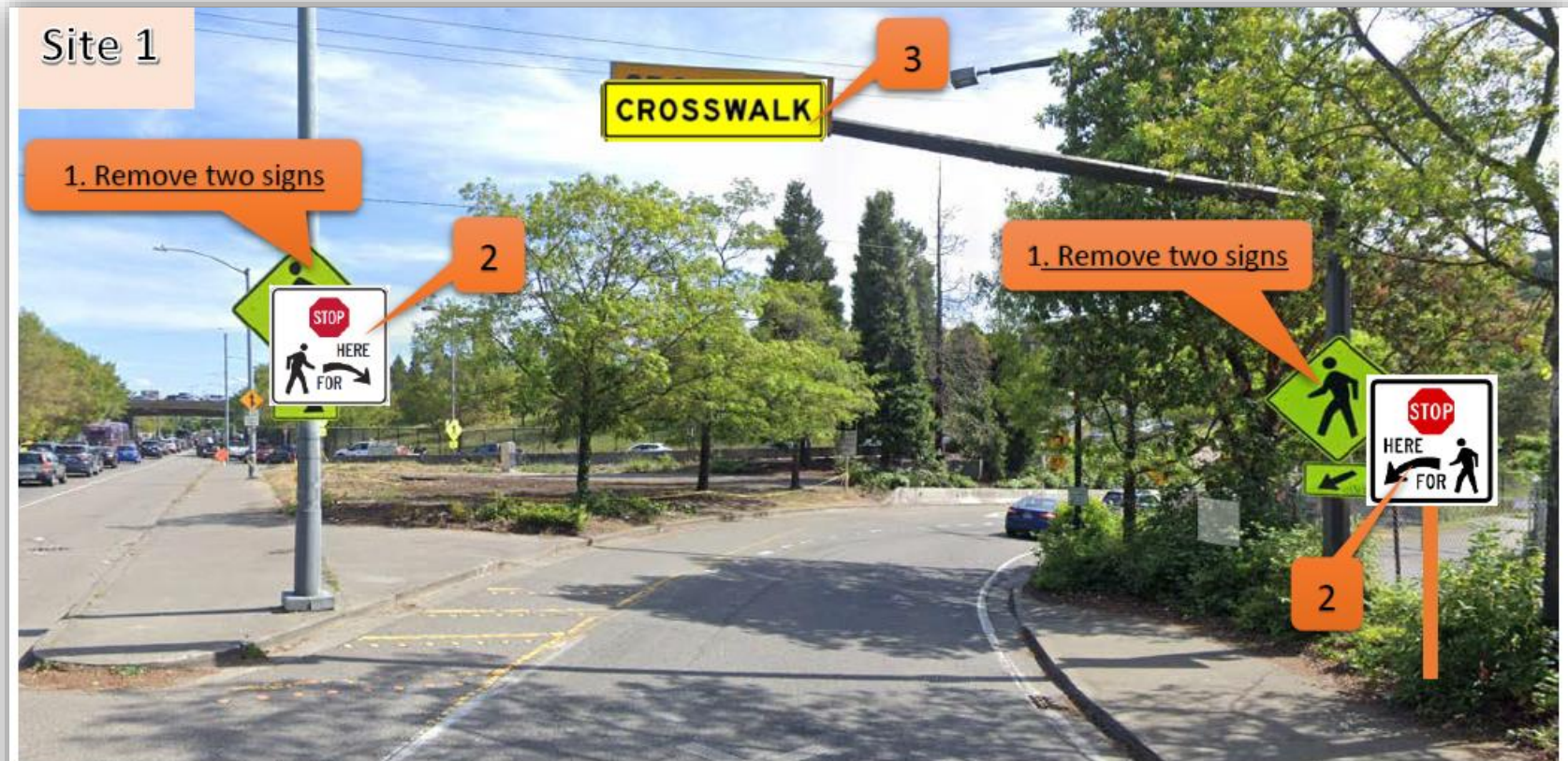
# Interim Improvements

## Sites 1-3





# Signing Plan



1. Remove signs (2 Pedestrian crossing and 2 diagonal arrow). Reuse them elsewhere if applicable. Sign ID# 183035, 183037
2. Install R1-5R on existing luminaire, and R1-5L on a new post, behind sidewalk. The two signs should be across from each other. Sign ID#277337, 277338
3. FYI: This sign will later be replaced with a static W11A-301 sign (Crosswalk) using FYG sheeting (by MA Signal). Sign ID# 149497



# Signing Plan

Site 1



4. Please raise pedestrian crossing sign up and place on top of "Ahead" plaque. This sign will later be replaced with LED flashing border sign (by MA Signal). Sign ID# unknown
5. Install W16-9P (Ahead) plaque on existing luminaire post, height=7' from base of post. Sign ID#277340.
  - Remove existing "No Parking Sign".

# Signing Plan

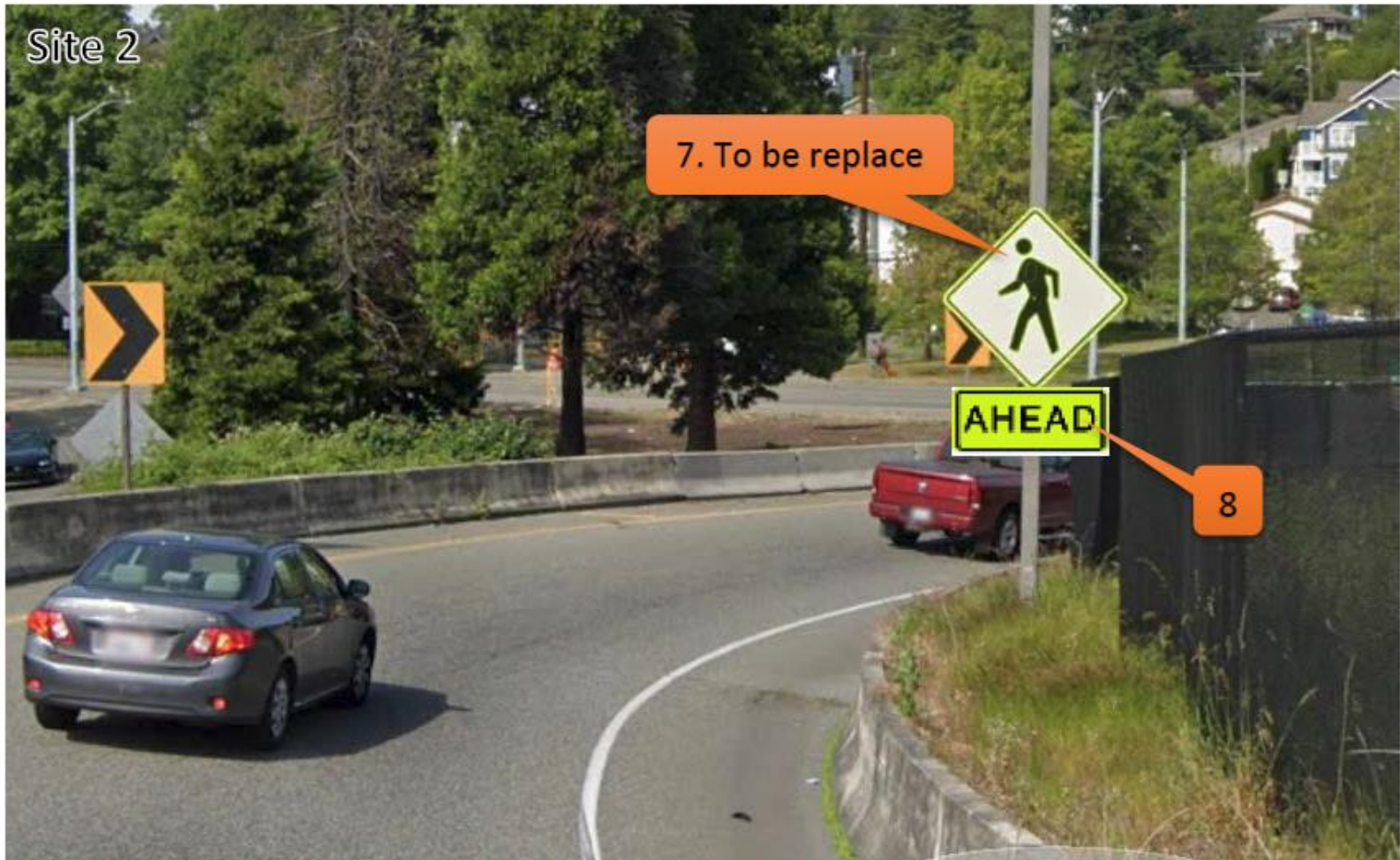
Site 2



6. Raise "Yield Ahead (symbol)" sign up, height ~ 9 feet from edge of paved shoulder. Please clean graffiti if applicable. Sign ID#149486



# Signing Plan



7. To be replace with LED flashing boarder sign (by Electrical team)
8. Install W16-9P (Ahead) plaque on luminaire post, height=7' from travel lane.

# Signing Plan



9. Move existing pedestrian warning sign and directional arrow up to meet the requirement height=7' from the base of post.

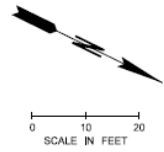
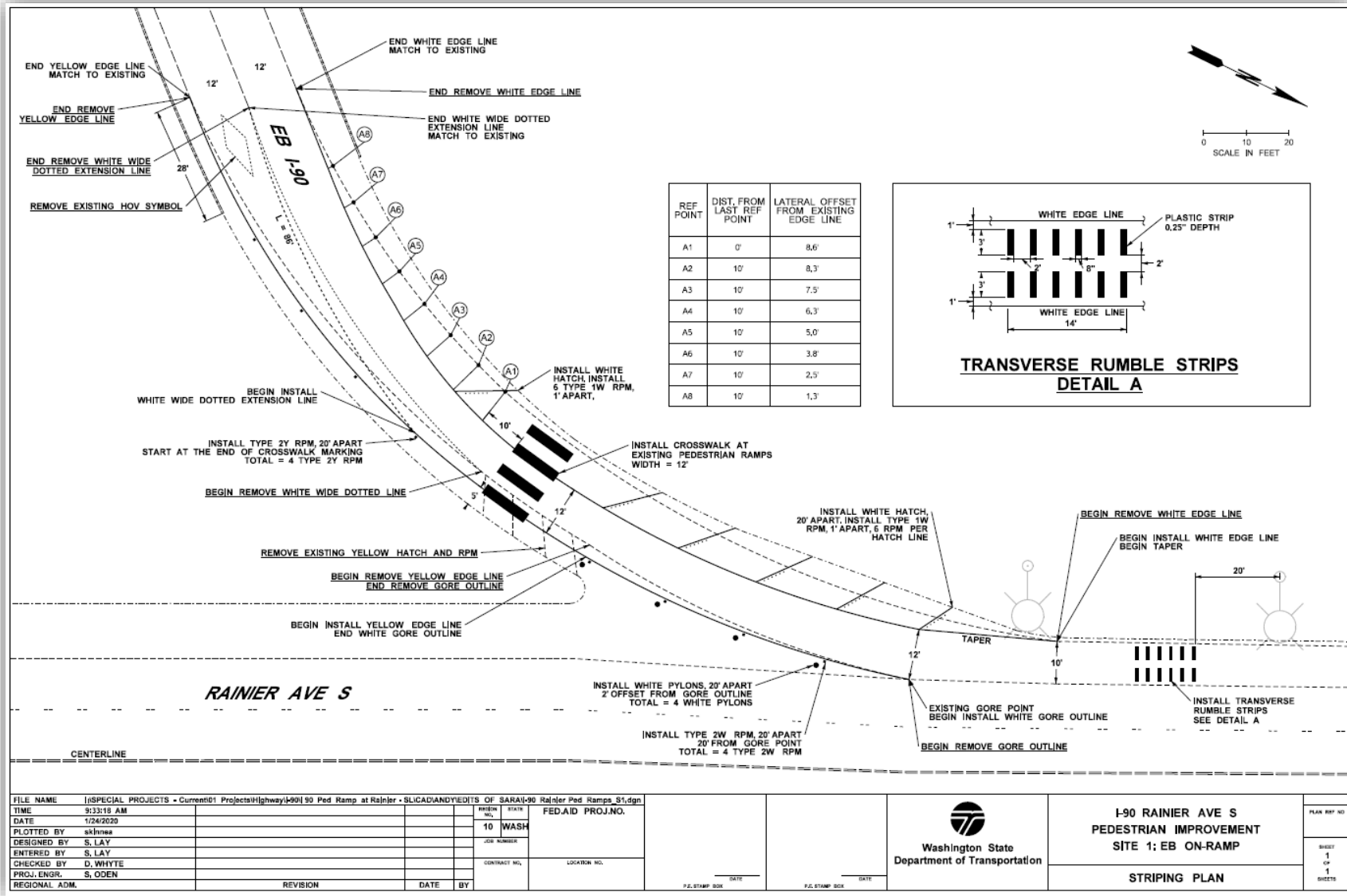


# Signing Plan

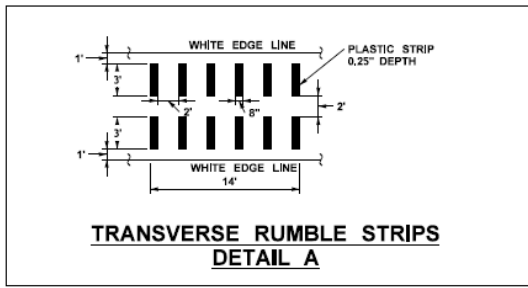


10. Install W11-501 signs on new posts near existing pedestrian ramps. 6' from face of curb. One facing north and one facing south. The maximum sign height = 5' from sign base. Sign ID# 277341, 277342.

# Striping Plan



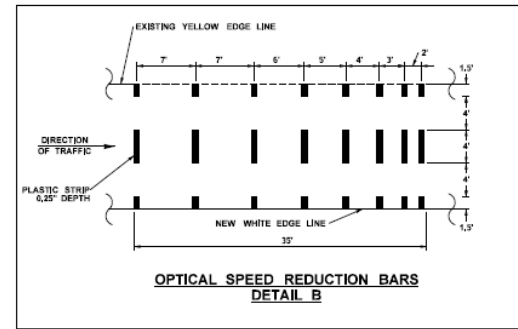
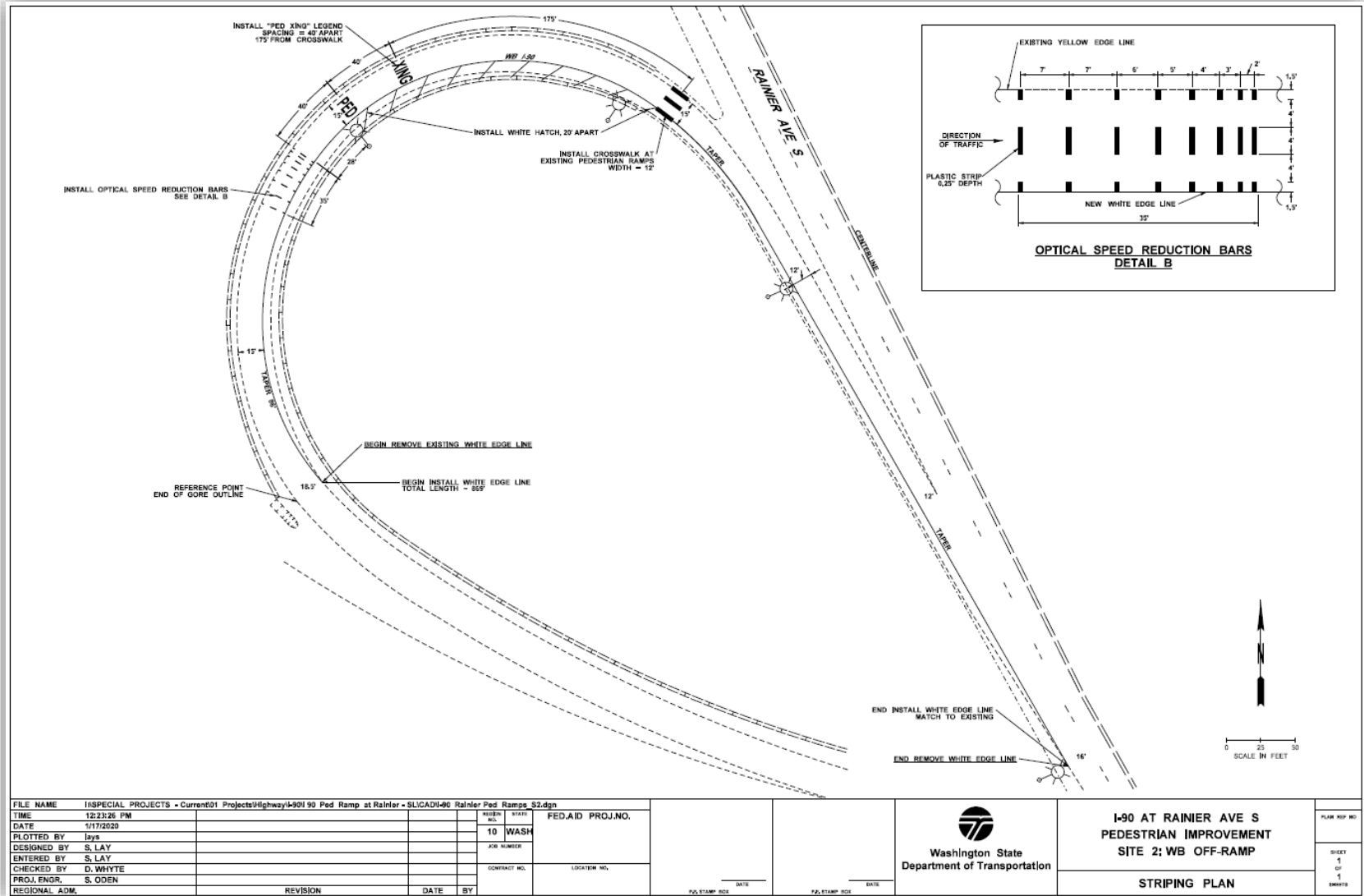
REF POINT	DIST. FROM LAST REF POINT	LATERAL OFFSET FROM EXISTING EDGE LINE
A1	0'	8.6'
A2	10'	8.3'
A3	10'	7.5'
A4	10'	6.3'
A5	10'	5.0'
A6	10'	3.8'
A7	10'	2.5'
A8	10'	1.3'



FILE NAME: [SPECIAL PROJECTS - Current] Projects\Highway\99\90 Ped Ramp at Rainier - SLICAD\ANDY\EDITS OF SARAI\90 Rainier Ped Ramps S1.dgn				DATE: 1/24/2020		REVISION: BY		DATE		DATE		DATE		 Washington State Department of Transportation	I-90 RAINIER AVE S PEDESTRIAN IMPROVEMENT SITE 1: EB ON-RAMP  STRIPING PLAN	PLAN REF NO.	SHEET
TIME: 9:33:18 AM	DATE: 1/24/2020	DESIGNED BY: S. LAY	ENTERED BY: S. LAY	CHECKED BY: D. WHYTE	PROJ. ENGR.: S. ODEN	REGIONAL ADM.	CONTRACT NO.	LOCATION NO.	P.L. STAMP BOX	P.L. STAMP BOX	P.L. STAMP BOX	P.L. STAMP BOX	1 OF 1			1 SHEETS	

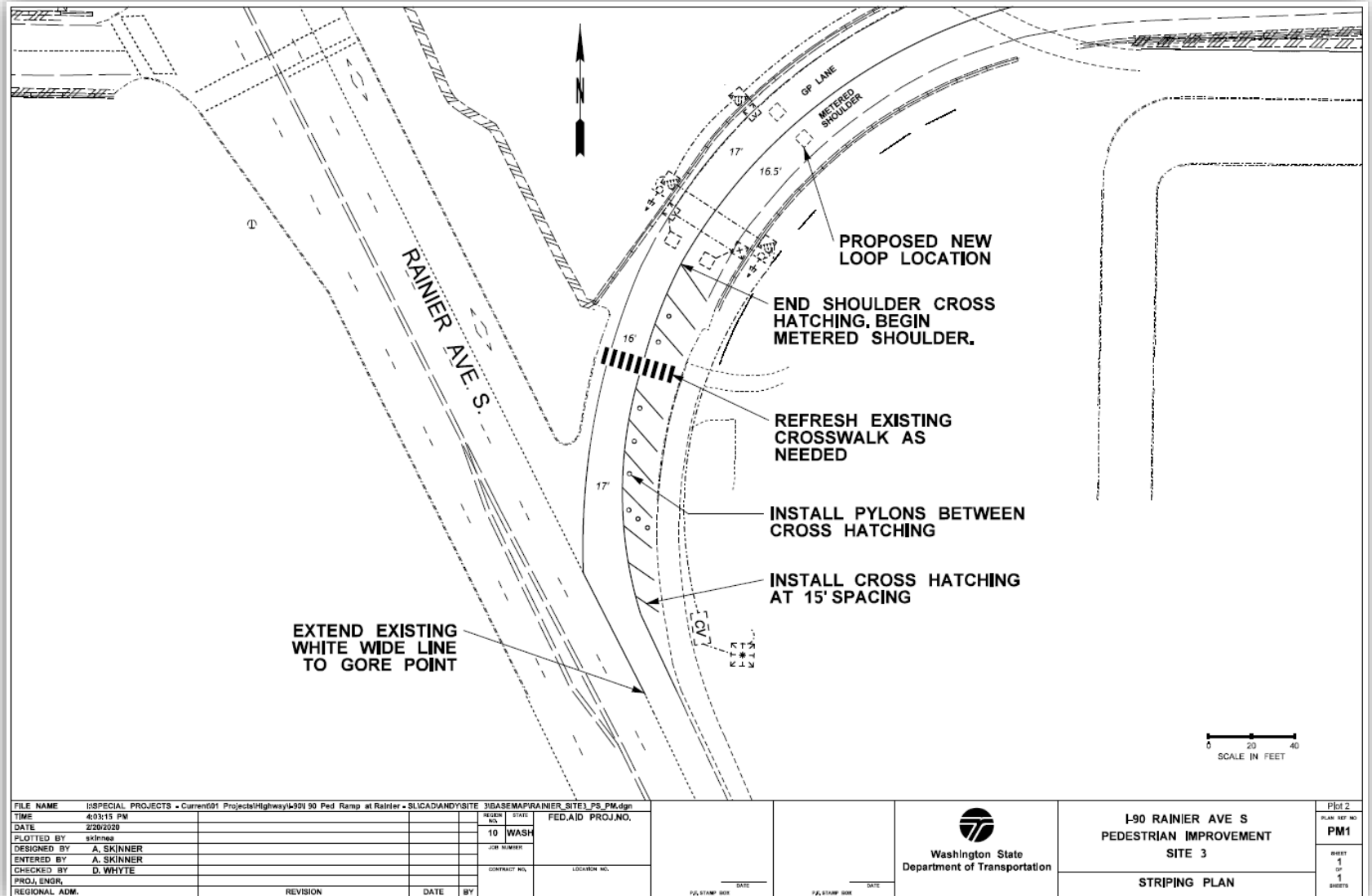


# Striping Plan



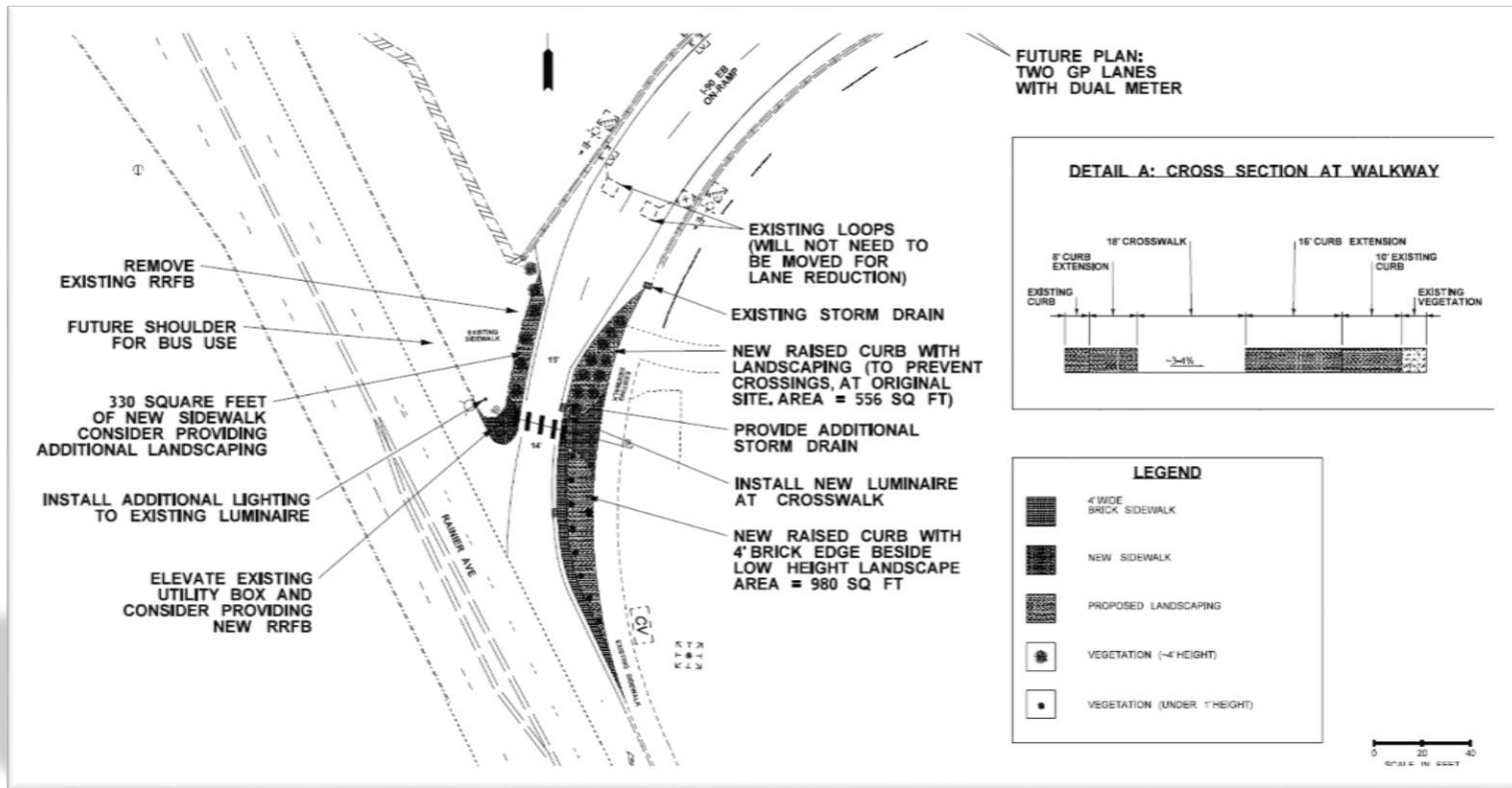
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REVISION				DATE	BY	STRIPING PLAN		EMPHYS

# Striping Plan



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REVISION	DATE	BY	CONTRACT NO.	LOCATION NO.	DATE	DATE	SHEET 1 OF 1 SHEETS
Washington State Department of Transportation				I-90 RAINIER AVE S PEDESTRIAN IMPROVEMENT SITE 3		STRIPING PLAN	

# Near Term Improvements Site 3



- Coordination w/ WSDOT ramp metering project.
- WSDOT working with City of Seattle on a Highway Safety Improvement Grant. March 2020 submittal. 2023 construction.





## Questions and Answers

