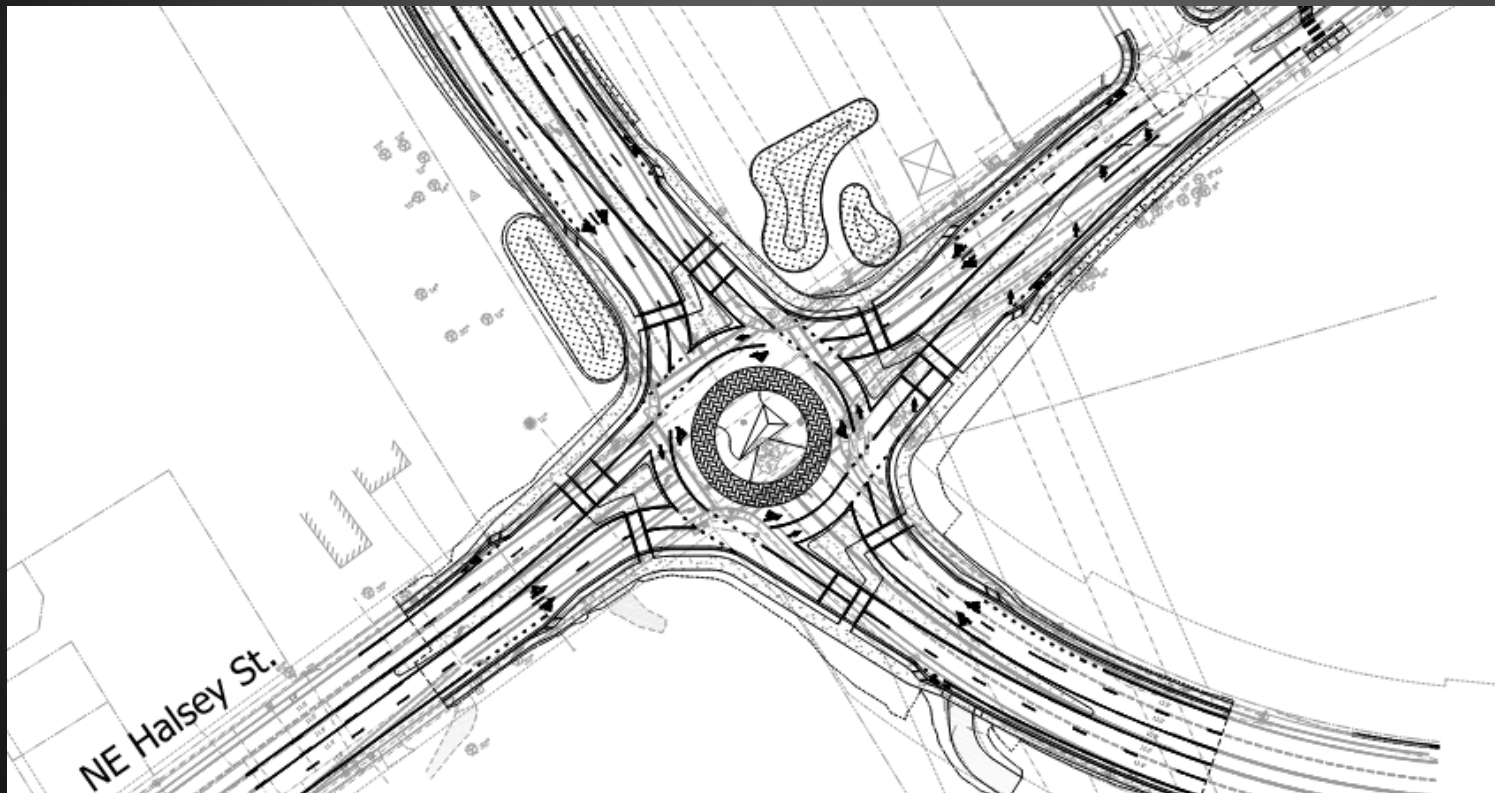


# EAST MULTNOMAH COUNTY FAIRVIEW PROJECTS

09/08/2021

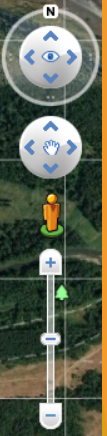


# Overview

- ▶ Fairview Projects
- ▶ Project Backgrounds
  - ▶ NE 223<sup>rd</sup> Undercrossing
  - ▶ NE Fairview Parkway/Halsey Roundabout
- ▶ Review of Designs
- ▶ Next Steps

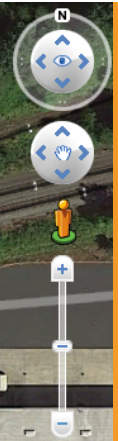
# NE 223<sup>rd</sup> Bike/Ped Undercrossing Project Background

- ▶ Goal of project to complete sidewalk gap under the UPRR bridge which has narrow lanes and no facilities for bikes or pedestrians.
- ▶ Partial grant funding through METRO
- ▶ City of Fairview in the lead. Multnomah County roadway and R/W
- ▶ UPRR undercrossing requires permit from railroad. Diagnostic prior to project starting in 2018. UPRR and ODOT Rail Div. engaged from kickoff.
- ▶ Project at 100% final design level. Final permit plans will be sent to UPRR for approval in Sept. 2021.



Google Earth

© 2021 Google



W122°25'56.64"

223rd Ave

NE 223rd Ave

NE Townsend Way

NE Townsend Way

NE Townsend Way

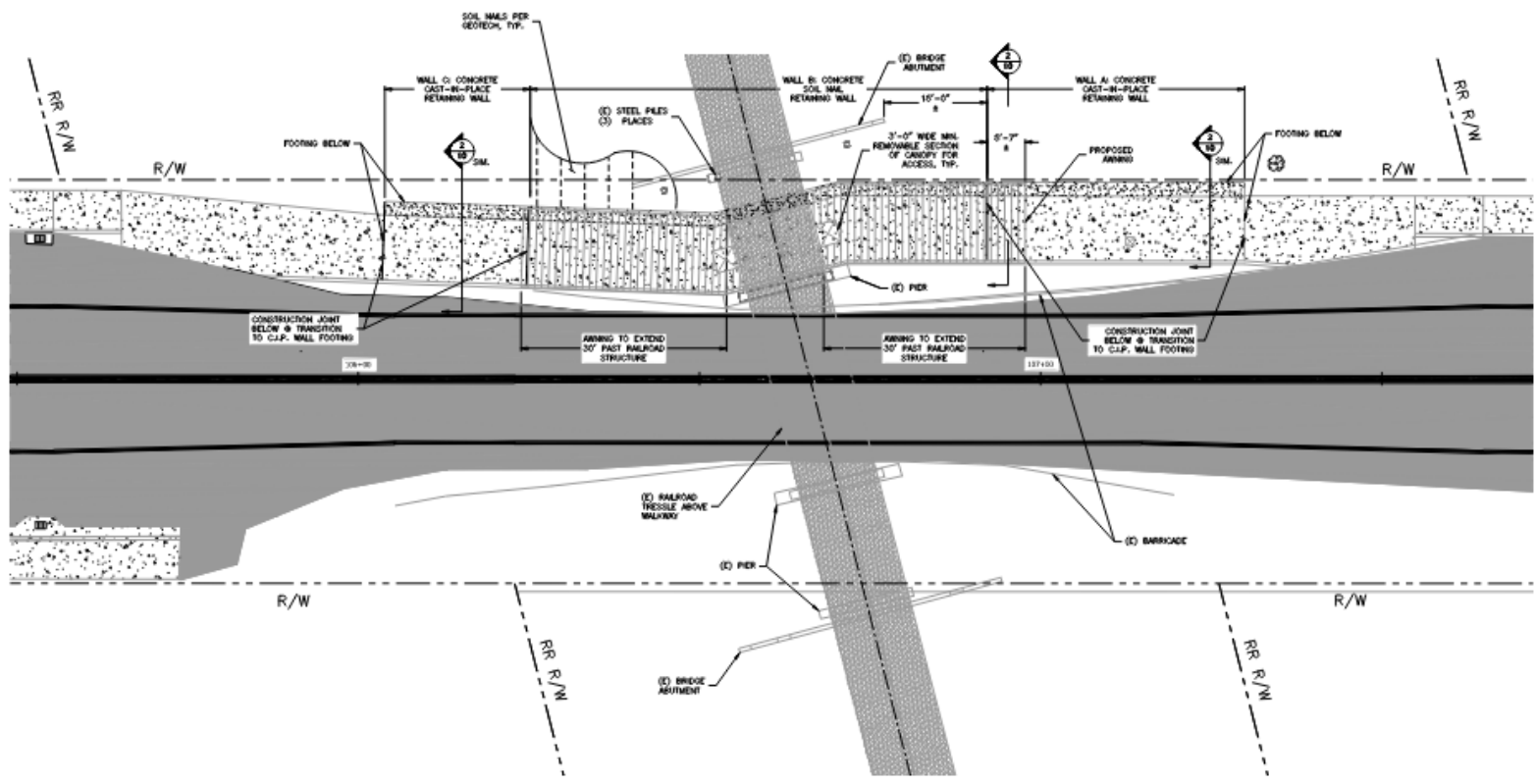
Blue Lake Village

© 2021 Google

CTDI

Google Earth

X:\2018\01-REV\1801-0251 to 1801-0275\1801-0257\1 - Project Data Files\2018\_01\_28 Final Drawings\2018\_01\_24 2224 Aerialy - 100% drawings\Combined 1801-0257.dwg



AREA OF WORK PLAN  
1/8" = 1'-0"

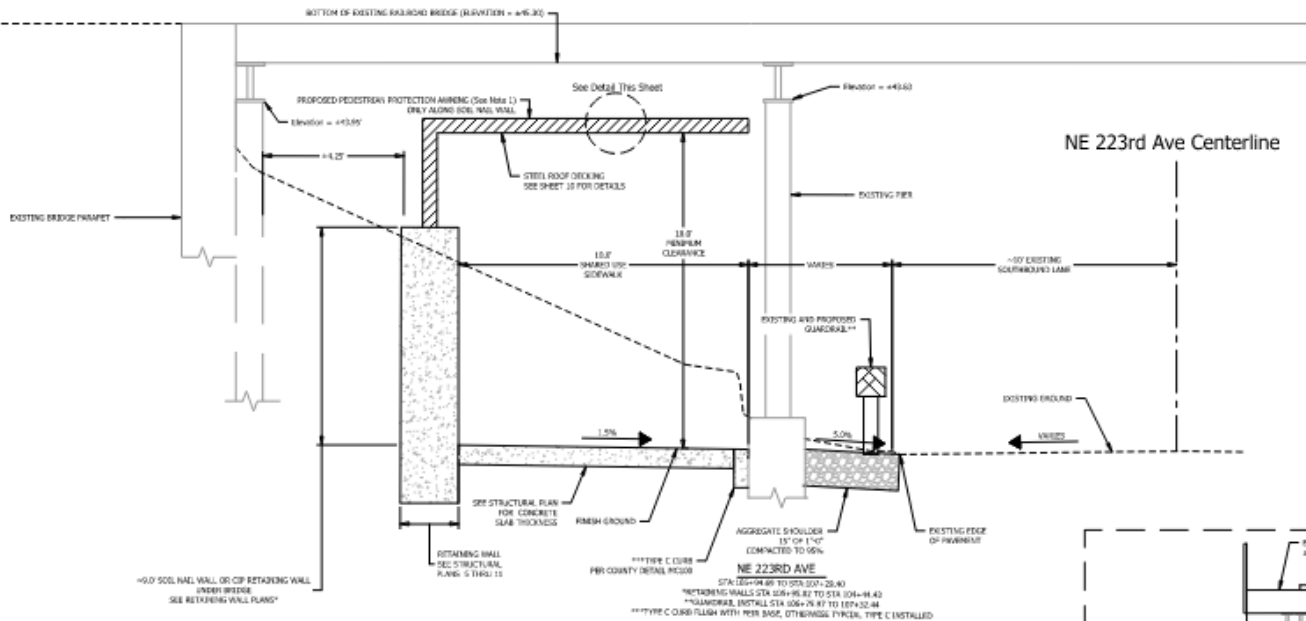


GENERAL WALL PLAN  
NE 223RD AVENUE  
RAILROAD BRIDGE  
BIKE-PED UNDERCROSSING  
DATE: 09/24/2021 SCALE: AS NOTED

MULTNOMAH COUNTY  
LAND USE AND TRANSPORTATION PROGRAM  
1100 S.E. 10th Ave. Portland, OR 97239-0999  
JON HENRICHSEN, PE COUNTY ENGINEER

DESIGNED BY: VRV  
DRAWN BY: VRV  
CHECKED BY: TSM

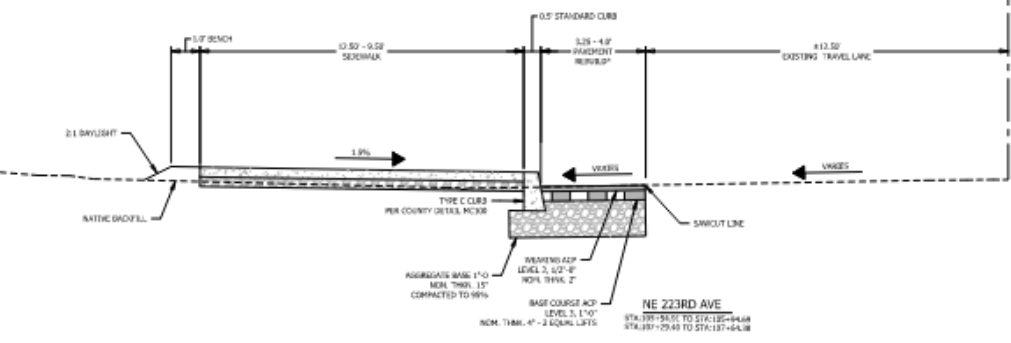
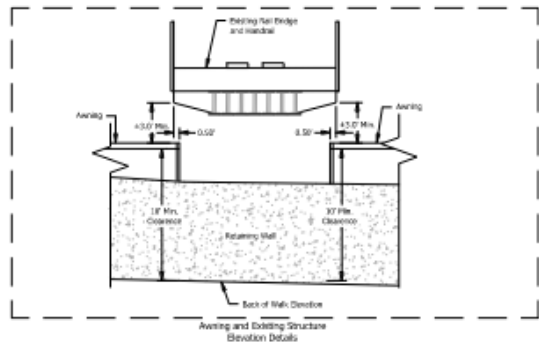
REVISIONS	DATE	SHEET NO.
		00



**GENERAL NOTES:**  
 1. THE EXISTING RAILROAD BRIDGE HAS A CLOSED END. THE PROPOSED PEDESTRIAN APRON EXTENDS 40 FEET FROM THE EDGE OF RAILROAD STRUCTURE NORTH AND SOUTH OF THE BRIDGE, BUT NOT UNDER THE BRIDGE.

NE 223rd Ave Centerline

NE 223rd Ave Centerline



NE 223RD AVE  
 STA. 139+85.02 TO STA. 139+44.58  
 STA. 139+29.49 TO STA. 137+64.58



**KITTELSON & ASSOCIATES**

TYPICAL SECTION  
 NE 223RD AVENUE  
 RAILROAD BRIDGE  
 BIKE-PED UNDERCROSSING  
 DATE: 06/25/2021

MULTNOMAH COUNTY  
 DEPARTMENT OF COMMUNITY SERVICES  
 LAND USE AND TRANSPORTATION PROGRAM  
 REG. SEC. 100A, AVE. PORTLAND, ORE 97233-0889  
 COUNTY ENGINEER  
 JON HENSCHSEL, PE

DESIGNED BY	JJK
DRAFTED BY	JJK
CHECKED BY	DAH
APPROVED	
DATE:	
SHEET NO.	3

# NE FAIREVIEW PKWY/HALSEY ROUNDABOUT

## Project Background

- ▶ City prepared draft roundabout layout and parking lot plan for Park n Ride
- ▶ Conducted traffic study to support intersection control evaluation (ICE)
- ▶ Updated roundabout and Park n Ride layouts by Kittelson
- ▶ Design contract for project design in two phases
  - ▶ Phase I – 30% Design
  - ▶ Phase II – Final PS&E





2°27'18"

W122°26'42"

N45°31'58.08"



Google Earth



# Traffic Analysis Summary

Traffic Operations Results for Fairview Pkwy & NE Halsey St				
Scenario	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
2018 Existing Signal	38.7	D	35.2	D
2018 Roundabout	16.5	C	14.4	B
2040 No Build	52.7	D	43.7	D
2040 Roundabout	24.7	C	25.9	C

# Council Meetings

- ▶ January 15, 2020; April 2021
- ▶ What is a roundabout?
- ▶ Why roundabouts
  - ▶ Safety, Lower Delay, Environmental Benefit, Access Management, Operations and Maintenance Costs, and Aesthetics
- ▶ More on Safety
  - ▶ 90-100% reduction in fatalities
  - ▶ 75% reduction in injuries
  - ▶ 35% reduction in total crashes
  - ▶ Very little reported pedestrian and bicycle crash experience

Source: *NCHRP Report 572: Roundabouts in the United States*

## Where Are We Now?

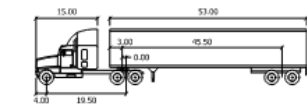
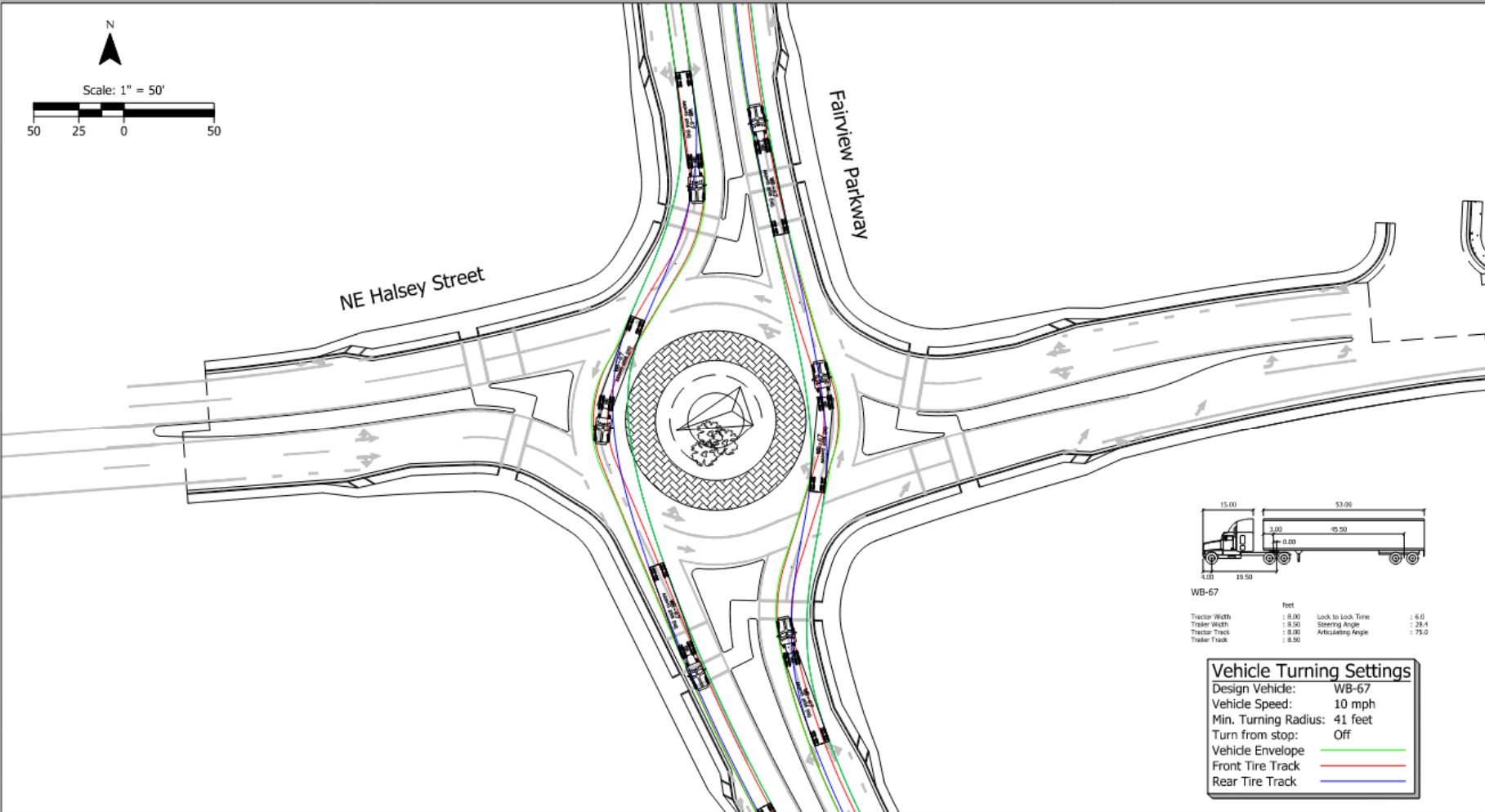
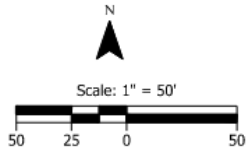
- ▶ 30% roundabout design
  - ▶ Geotechnical analysis
  - ▶ Hazardous Materials Assessment
  - ▶ Landscape concept update
  - ▶ Review of utility impact and coordination
  - ▶ Coordination with TriMet to enhance bus stops in project area
  - ▶ Roundabout design checks and documentation memorandum
  - ▶ Design drawing of proposed improvements





# Design Vehicle: WB-67 NBT and SBT

Preliminary Design Subject to Change  
Date: February 19, 2021



WB-67

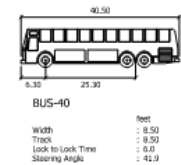
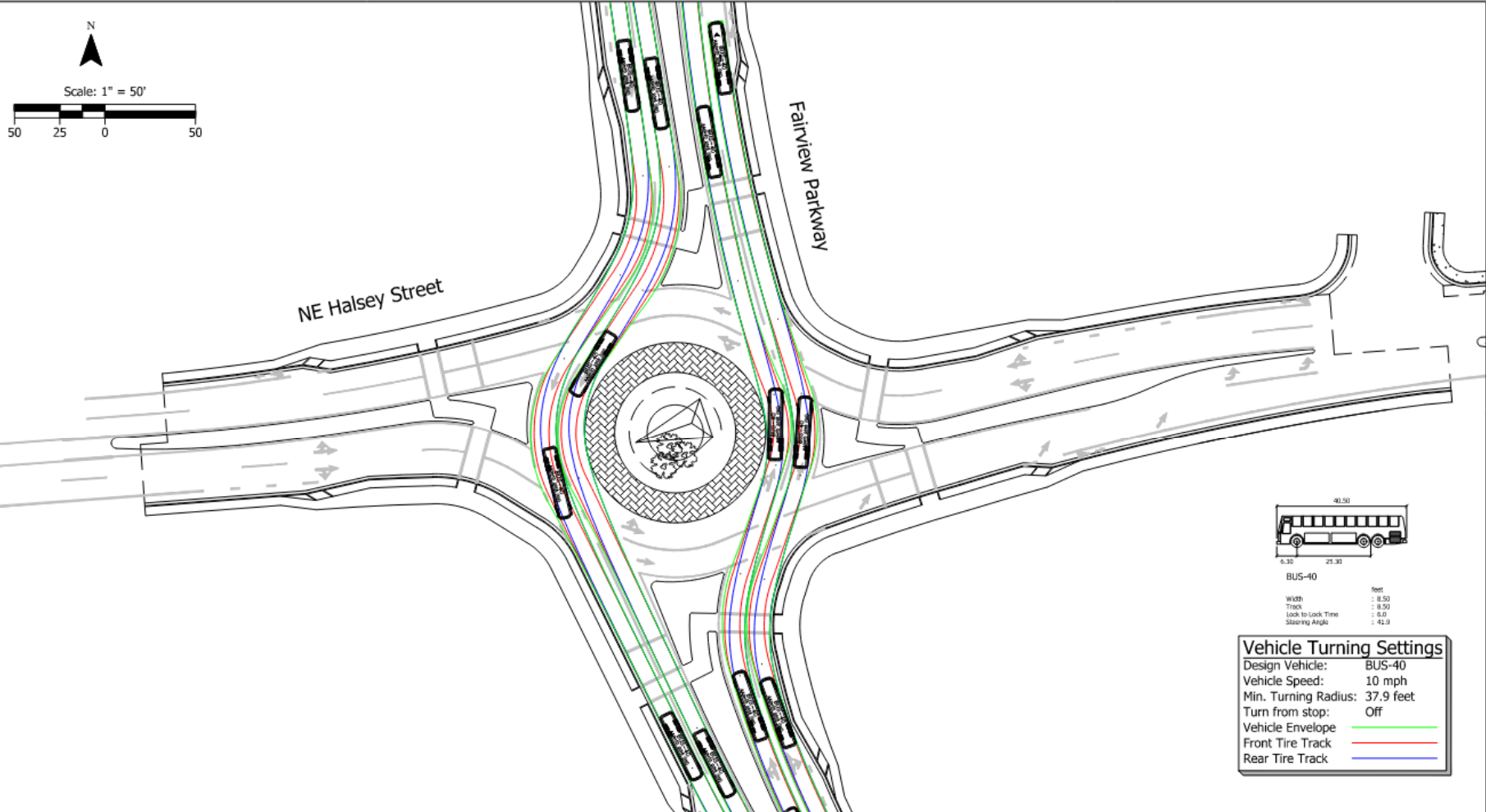
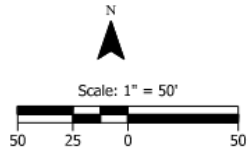
	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

Vehicle Turning Settings	
Design Vehicle:	WB-67
Vehicle Speed:	10 mph
Min. Turning Radius:	41 feet
Turn from stop:	Off
Vehicle Envelope	— Green
Front Tire Track	— Red
Rear Tire Track	— Blue



# Design Vehicle: 40-foot Bus NBT and SBT

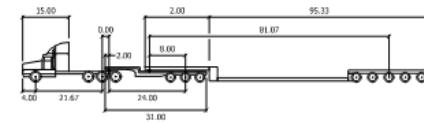
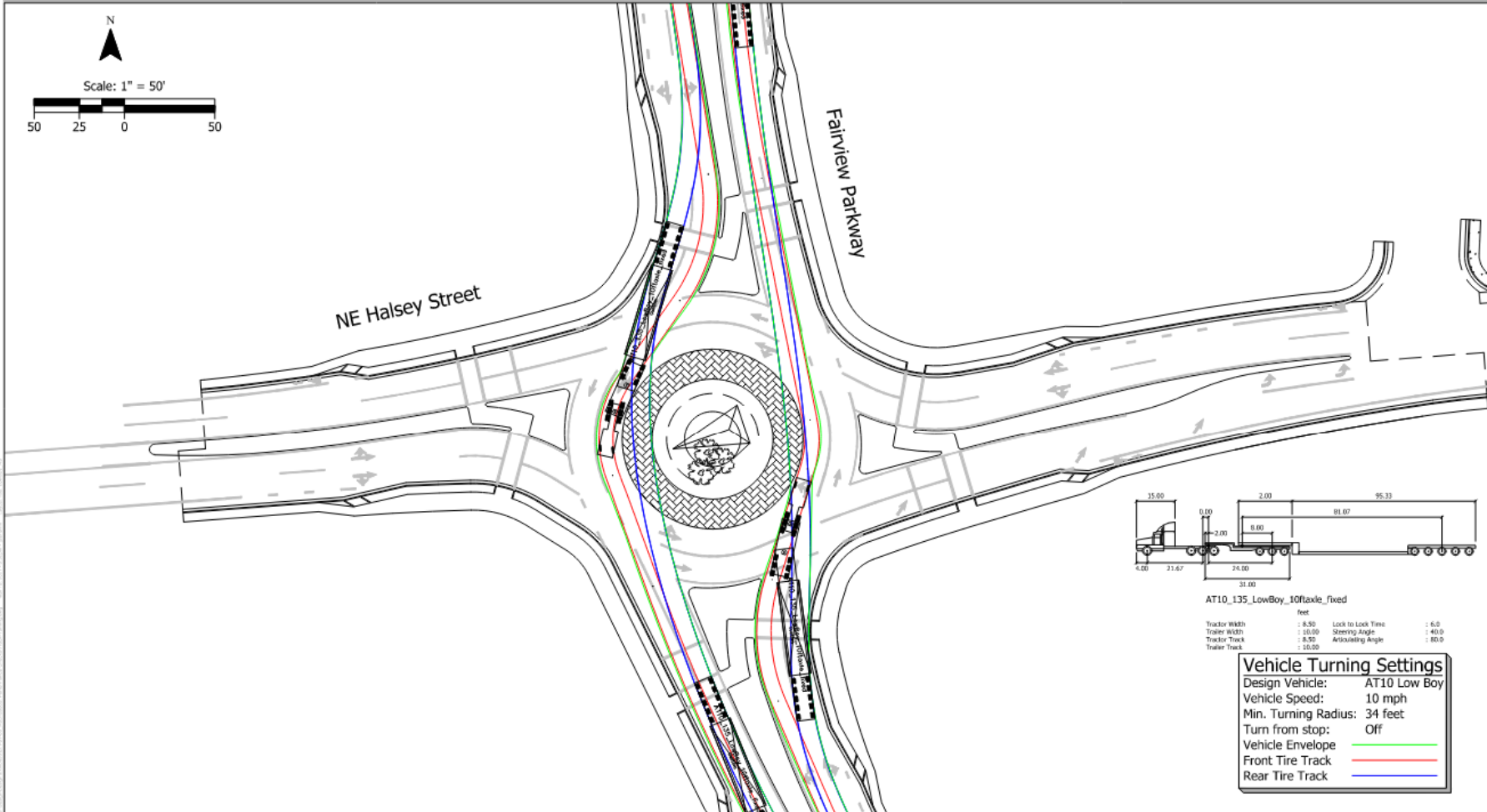
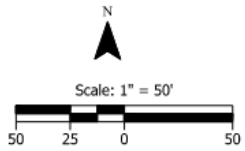
Preliminary Design Subject to Change  
Date: February 19, 2021



Vehicle Turning Settings	
Design Vehicle:	BUS-40
Vehicle Speed:	10 mph
Min. Turning Radius:	37.9 feet
Turn from stop:	Off
Vehicle Envelope	Green
Front Tire Track	Red
Rear Tire Track	Blue

# Oversized Vehicle: AT10 Low Boy

Preliminary Design Subject to Change  
Date: February 19, 2021



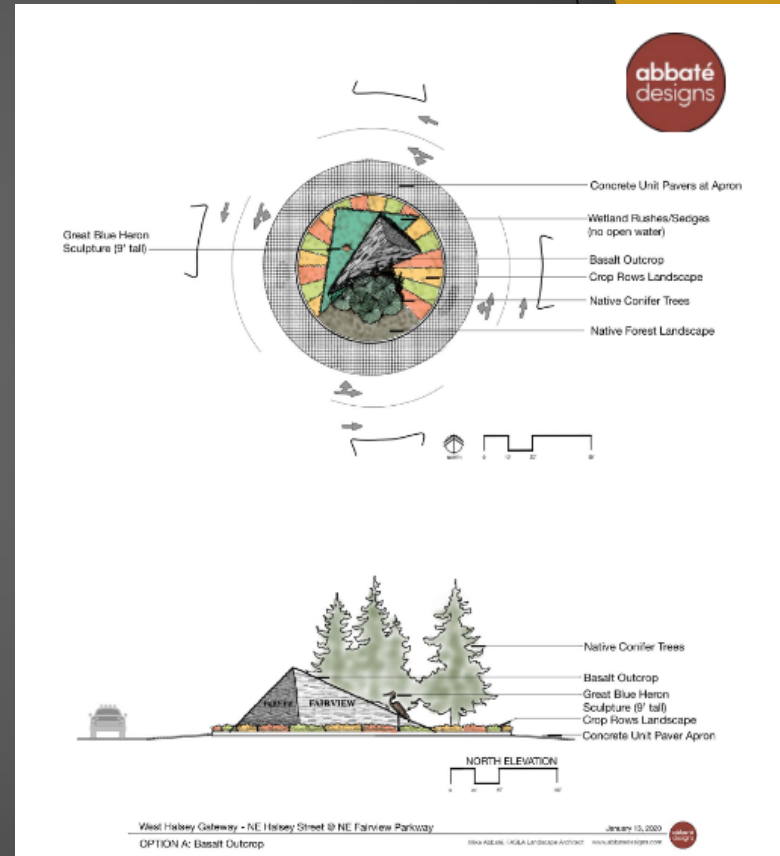
AT10\_L35\_LowBoy\_10Axle\_fixed

feet	
Tractor Width	: 8.50
Trailer Width	: 10.00
Tractor Track	: 8.50
Trailer Track	: 10.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0
Articulating Angle	: 80.0

Vehicle Turning Settings	
Design Vehicle:	AT10 Low Boy
Vehicle Speed:	10 mph
Min. Turning Radius:	34 feet
Turn from stop:	Off
Vehicle Envelope	Green Line
Front Tire Track	Red Line
Rear Tire Track	Blue Line



# How will it look?



# Next Steps

- ▶ Fairview Parkway Roundabout
  - ▶ TSP update (both City and County) to get Roundabout in to TSP. Helps position project for grant funding. Timeline 3 months minimum.
  - ▶ Design team moves forward to prepare final design plans.
- ▶ NE 223<sup>rd</sup> Undercrossing
  - ▶ UPRR permit and C&M Agreement
  - ▶ Issue project for construction bids
  - ▶ Construction in 2022 anticipated

# Questions?

