

Job No.: LCG-01

Date: August 6, 2021

To: Brian Vanneman, Leland Consulting Group

From: Ben Austin, P.E.
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Project/Subject: Wilsonville Affordable Housing TOD Strategy – Civil Engineering Sufficiency and Obstacles Analysis

Fax - Number: _____; Number of pages _____
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The purpose of this memorandum is to document the infrastructure available for development of the City owned parcel located at the Wilsonville Park and Ride on SW Barber Street, east of SW Kinsman Street. The assessment is part of the Wilsonville Affordable Housing TOD Strategy being prepared by Leland Consulting Group. The focus of this memorandum is the TOD site, however, discussion has been included related to the infrastructure available for the Kinsman site as well.

Municipal Utilities

The following is a summary of the available municipal utilities at the site.

Sanitary Sewer. A 15” sanitary sewer main, approximately 8’-10’ deep, is located in SW Barber Street, and is adequate to serve the TOD site. Sanitary sewer service to the Kinsman site would likely require a public sewer main extension, but there appears to be sufficient grade to serve the site.

Storm Conveyance. A 27” storm sewer main, approximately 8’-10’ deep, is located in SW Barber Street. An 18” storm lateral is stubbed at the right of way for the TOD site. The main is adequate to serve the TOD site. Storm drainage from the Kinsman site would likely be directed north toward the outfall of the existing swale for the Park and Ride site.

Water. An 18” water main is located in SW Barber Street. An existing fire hydrant is also located on the SW Barber Street frontage of the TOD site. There is a 2” water service located at the east end of the TOD side and an 8” water stub located at the west end of the TOD site. The water system appears to be adequate for the TOD site. Water service for the Kinsman site would likely require a public main extension to bring water service and fire hydrants to the site.

Stormwater Management. Stormwater management would need to be provided on-site for each development. Stormwater management for development on the TOD site would most likely be achieved through on-site low impact development stormwater management facilities. Using the BMP sizing tool, approximately 5,600 square feet of surface vegetated stormwater

facilities would need to be constructed on-site to achieve the stormwater management requirements.

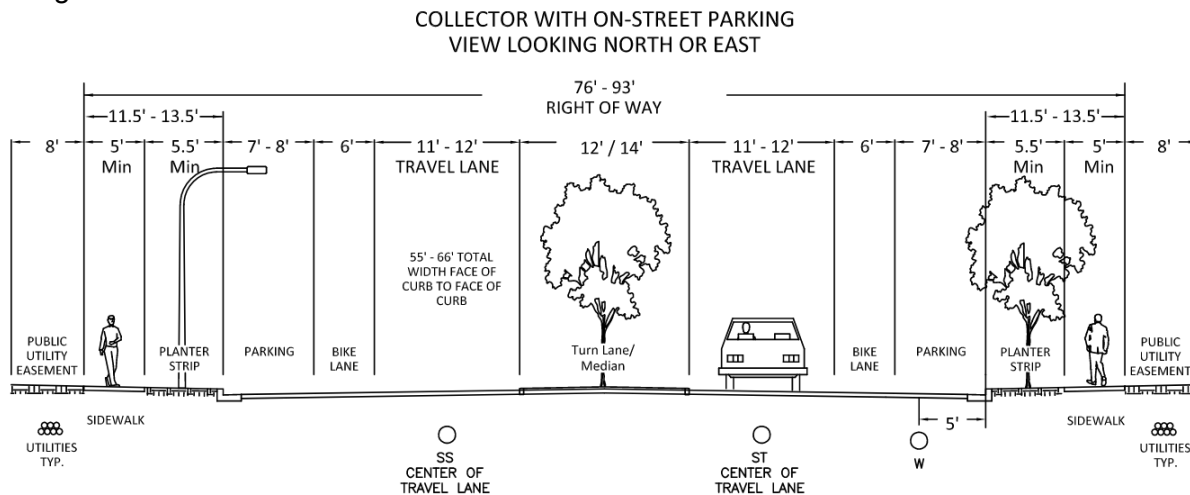
Franchise Utilities

There is a 6' public utility easement located along the SW Barber Street frontage of the TOD site. Based on above ground structures and as-built drawings, it appears there are power and communications facilities located within the joint trench. A 6" gas main is located on the TOD side of SW Barber Street within the roadway.

If modifications are made to the SW Barber Street frontage, adjustment or conversion of above ground pedestals to underground vaults may be required. In general, facilities appear to be available for development of the TOD site. Easements and extension of franchise utilities would be required to serve the Kinsman site.

Public Streets and Access

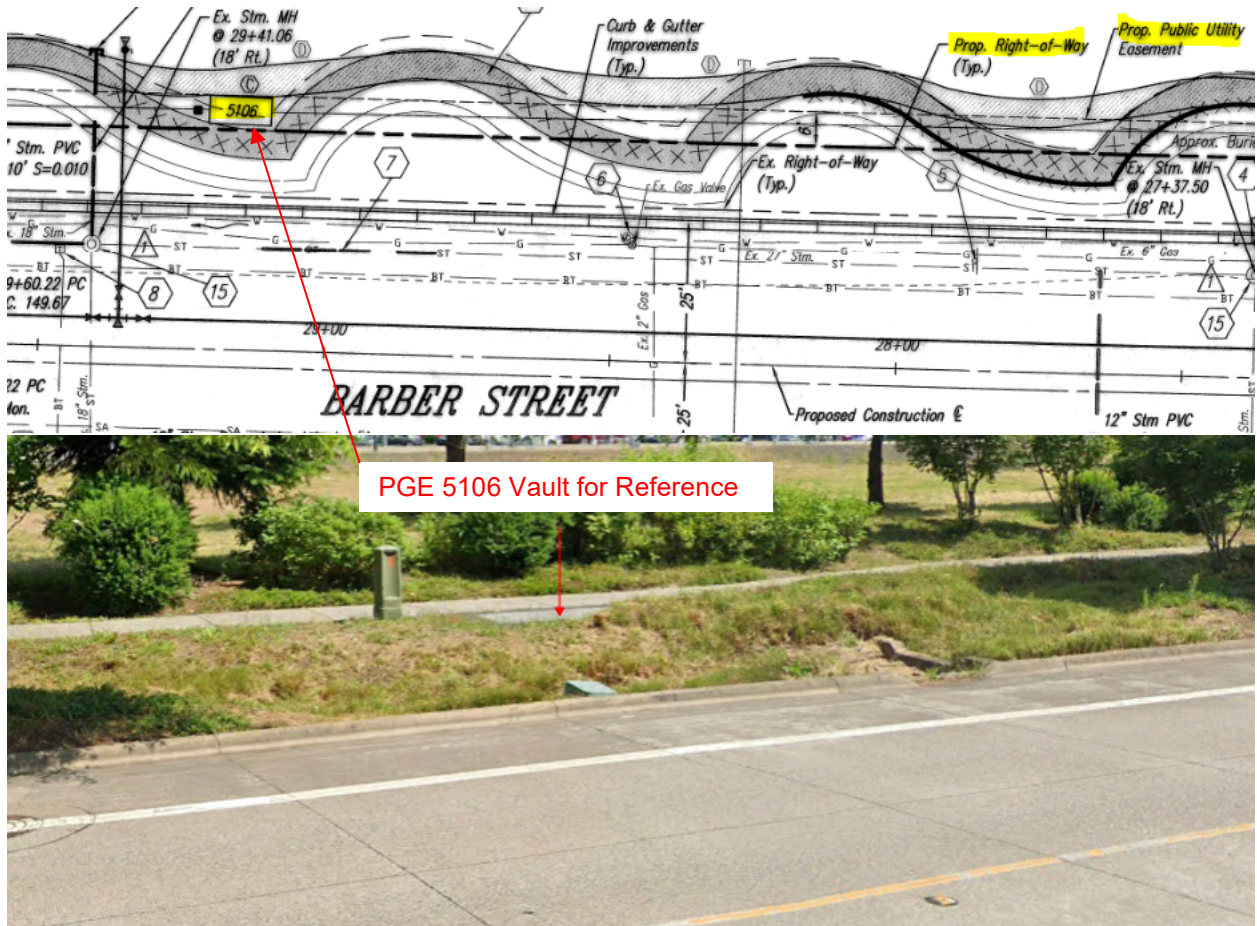
SW Barber Street. SW Barber Street is a collector roadway in the City's Transportation System Plan. The minimum access spacing for a collector roadway is 100', with a desired spacing of 300'. Per the Wilsonville Public Works Standards (2017), parallel parking is allowed on collector roadways. However, the team has received feedback from City staff that parallel parking is not preferred on collector roadways within industrial areas. The addition of parallel parking would require reconstruction of the TOD site frontage from the existing curb location. HHPR estimates that approximately 12-15 parking stalls could be located along the TOD site frontage.



Access Locations. Access appears to be available and meets spacing standards from the Park and Ride driveway. HHPR does not recommend access from the TOD site to the bus access road. A new driveway along SW Barber Street could be considered, based on the minimum access spacing of 100'. However, the current access spacing between the Park and Ride access and the bus access road is currently closer to the City's preferred spacing. The Kinsman site would most likely be accessed through the Park and Ride site, owned by Tri-Met. Access easements would need to be established for this use.

SW Barber Street Frontage Improvements. The existing frontage includes a stormwater management swale that is approximately 17' wide, and a meandering 5' sidewalk. A stormwater planter with a more compact footprint could meet current stormwater management requirements for SW Barber Street. Per the 2008 record drawings for the SW Barber Street

frontage improvements and the 2008 partition plat for the property, it appears that the sidewalk was constructed along the TOD site frontage and outside of the dedicated right of way and public utility easement (see below image - the sidewalk is shown in light grey). A sidewalk easement should be obtained prior to sale of the property.



Environmental

Wetlands. No known wetlands are located on the TOD site. However, per Soil Survey mapping, there are hydric soils present in the northeast corner of the TOD site. The Kinsman site has wetlands, delineated as part of the Kinsman Road extension project. This wetland may include a 50' buffer along the Kinsman site.

Flood Plain. The 100-year flood plain is located west of Kinsman Street. GIS mapping indicates there could be flood plain on the Kinsman site, but the 100-year flood plain has been clarified through a FEMA Letter of Map Revision (LOMR).

Oak Habitat. An Oak Habitat Enhancement area is located west of the Park and Ride access driveway, but does not appear to impact either the TOD or Kinsman sites.

Significant Resource Overlay Zone (SROZ). There is a SROZ designation with a boundary located near Kinsman Road. It does not appear to impact either the TOD or Kinsman sites, with the exception of the wetland buffer noted above.

There do not appear to be any environmental constraints on the TOD site. However, there are mitigation areas and resource overlays in the vicinity, and wetlands located on the Kinsman site.

Grading

Site Elevations. The west half of the TOD site is approximately 1' below adjacent sidewalk grades, and the east half of the TOD site is approximately 4' below adjacent sidewalk grades.

Geotechnical Considerations. Based on geotechnical explorations in the vicinity, depth to groundwater is 10 or more feet. Infiltration rates are variable in the area. On-site soils should be suitable for slab-on-grade construction. A geotechnical report should be completed for design of the site improvements.

Land Division

The TOD site is located on parcel 3 of the partition plat completed as part of the TriMet Park and Ride improvements. Parcel 3 includes both the TOD site and the Park and Ride Bus Access Road. The TOD site should be separated from the bus access road so that the site can be sold independently. Additionally, a sidewalk easement should be dedicated along the SW Barber Street frontage to cover the portion of the public sidewalk that currently extends beyond the existing right of way and the easements into the TOD site.



Since the parcel was created as part of a plat, any modification to the lot line would require a replat by the Clackamas County Surveyor to document any changes. The property line

adjustment could be processed as a lot line adjustment within the City. Generally, there are two options for separating the TOD site from the bus access road:

1. Complete a lot line adjustment to remove the bus access road from the TOD site (parcel 2) and add the bus access road to the Park and Ride site (parcel 3). This would be the simplest option, requiring a Type 1 land use review and then replat through the county. However, HHPR has not investigated the initial reasoning for including the bus access road with the TOD site.
2. Partition the TOD site (parcel 2) to separate the bus access road from the TOD site through a minor land partition. This would require a type 2 land use review. Additional investigation is needed to confirm that the lot sizes meet the dimensional requirements of the underlying zoning and any frontage requirements associated with the land division.

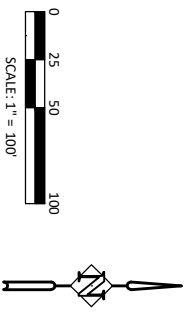
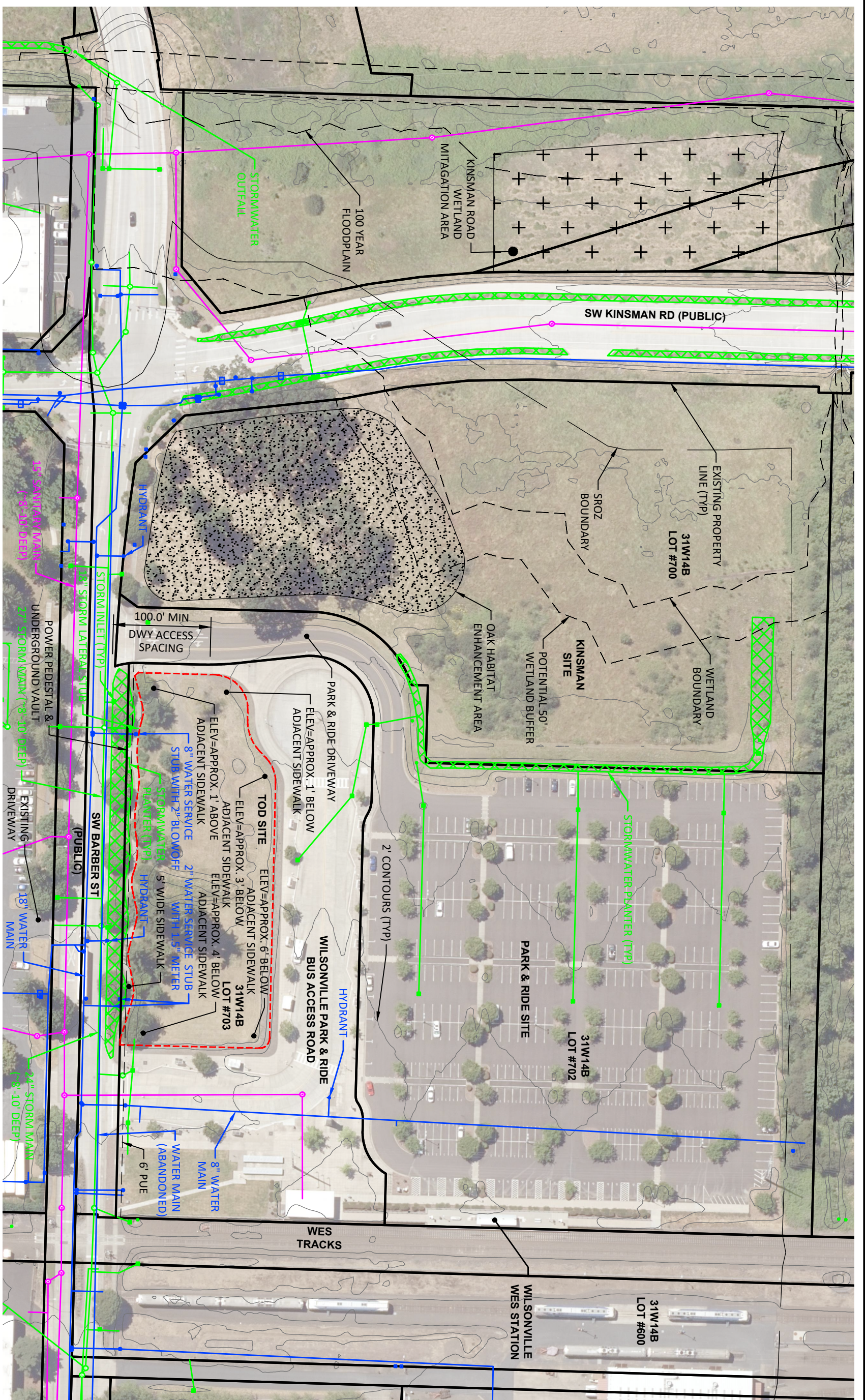
Recommendations and Next Steps

Site Survey. HHPR recommends obtaining a site topographic and boundary survey of the property to help identify the appropriate point to divide the TOD site from the bus access road and to establish the location of the sidewalk easements. Preparing an ALTA survey would provide a useful document during the property sale.

Land Division. Obtain land use approval and replat the property to separate the TOD site from the rest of the parcel and correct the sidewalk encroachments with easements.

Attachments

Existing Conditions Exhibit



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		CHECKED:	HHPR				
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EXISTING SITE CONDITIONS
WILSONVILLE TOD STUDY
 PORTLAND, OREGON