

Project Identifier	CIP: PV-1
Detailed Location	Pleasant Valley Planning District (Kelley Creek Watershed)
Model File	Model ALT05.xp
Objective(s) Addressed	Future Trunk Line Sizing, Calculating System Development Charges

**Project Background**

The Pleasant Valley Planning District is an approximate 1,015-acre area located partially within City limits but entirely within the UGB. Current land use within the planning district consists primarily of undeveloped lands. Minimal stormwater infrastructure is located within the planning district, however as this area develops future infrastructure will be needed to adequately convey stormwater drainage. While future development is difficult to predict, zoning and transportation system plans were reviewed to help inform preliminary trunk line design. Trunk lines were placed along future arterial roadway alignments and sized based on future land use and drainage assumptions. These assumptions were refined and validated by the City during modeling discussion workshops and follow up correspondence.

**Project Description**

This project provides piped stormwater infrastructure as shown on the accompanying “Pleasant Valley Planning District Proposed System Map”. Required piping to adequately convey drainage to Kelley Creek is summarized in the table below:

Pleasant Valley Planning District HDPE Piping	
Diameter (in)	Length (LF)
12	800
18	4,220
24	4,905
30	6,160
36	3,555
42	1,140
48	535

All trunk lines were conceptually sized in accordance with the City’s current Public Works Standards for pipe design.

**Design Considerations**

Trunk lines are designed to convey the 10-year storm for infrastructure draining less than 250 acres and the 50-year storm for infrastructure draining greater than 250 acres. Based on the assumed drainage patterns of Kelley Creek subbasins within the Pleasant Valley Planning District, all trunk lines except for one downstream pipe segment along SE 172<sup>nd</sup> Avenue are draining less than 250 Ac. Should future drainage patterns change, trunk line design storm criteria should be reevaluated.

Preliminary calculations were performed to identify conceptual pipe sizing. Design should be conducted to verify pipe capacity needs and pipe alignment.

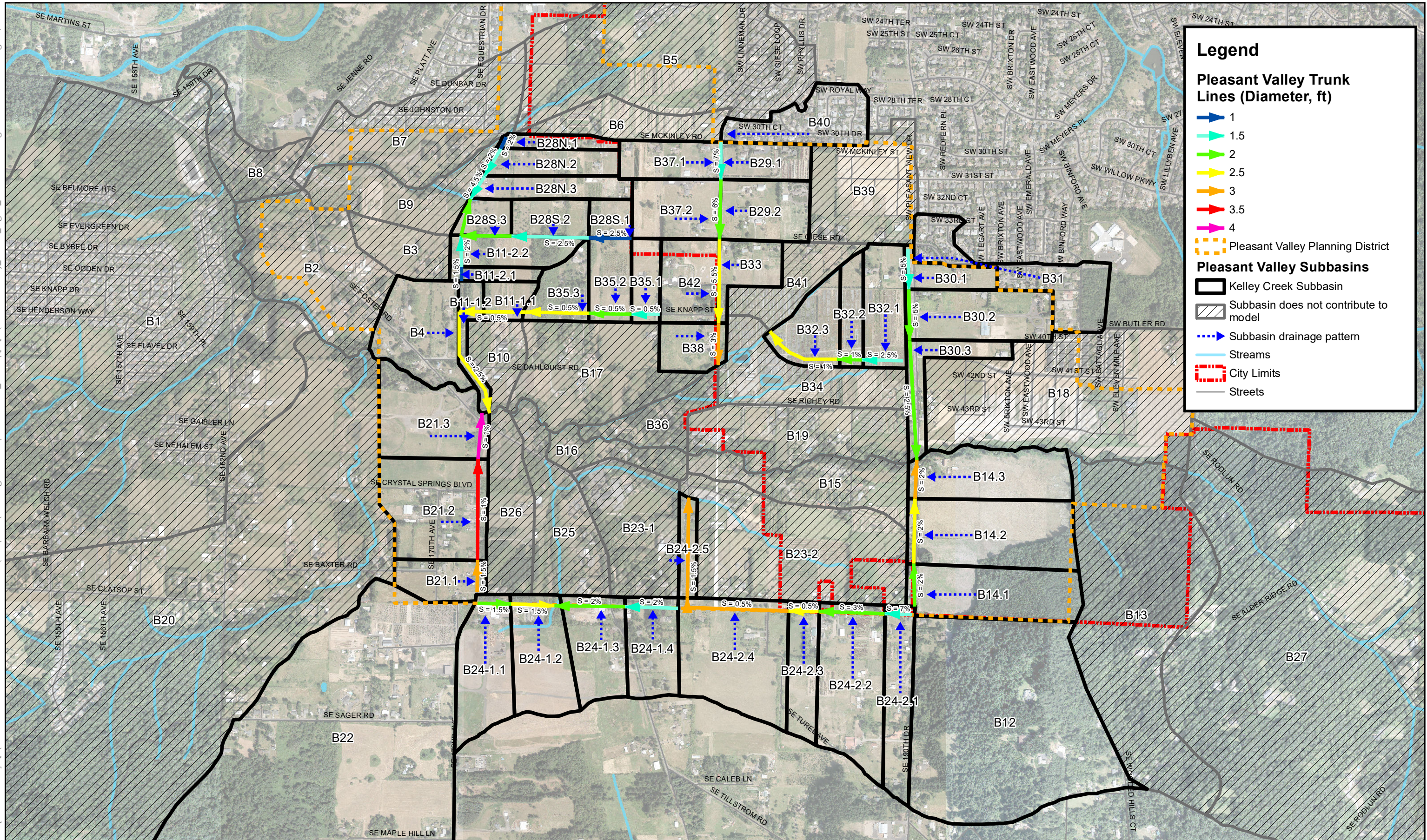
**Planning-level Cost Estimate**

Construction	\$6,600,000
Site Acquisition	N/A
Contingency (30%)	\$1,980,000

**Capital Project Fact Sheet****Project Name: Pleasant Valley Planning District Trunk Line Sizing**

Capital Expense Total (including contingency)	\$8,580,000
Design/Construction Administration (30%)	\$2,574,000
Permitting (5%)	\$429,000
Administration (14%)	\$1,201,200
<b>Capital Project Implementation Cost Total*</b>	<b>\$12,784,000</b>

*\*Planning level cost estimates estimated in 2019 dollars, rounded to the nearest thousand.*



### Legend

**Pleasant Valley Trunk Lines (Diameter, ft)**

- 1 (Blue arrow)
- 1.5 (Cyan arrow)
- 2 (Green arrow)
- 2.5 (Yellow arrow)
- 3 (Orange arrow)
- 3.5 (Red arrow)
- 4 (Pink arrow)

**Pleasant Valley Subbasins**

- Kelley Creek Subbasin (Black outline)
- Subbasin does not contribute to model (Hatched pattern)
- Subbasin drainage pattern (Dotted blue arrow)
- Streams (Blue line)
- City Limits (Red dashed line)
- Streets (Grey line)

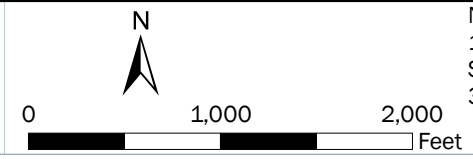
**Pleasant Valley Planning District**

- Pleasant Valley Planning District (Orange dashed line)



**City of Gresham**  
 Date: April 2022  
 Project: 151505

# City of Gresham Storm Water Master Plan



Notes:  
 1. Projection: NAD 1983 HARN  
 Stateplane Oregon North FIPS  
 3601 Intl. Feet

**Pleasant Valley Planning  
 District Proposed System Map**