



Planning Review Request

Potential Zoning Changes

Date Submitted: 11/29/2022

Date Required: 01/09/23

Requested By: Bill Cunningham (BPS) 503-823-4203

Quarter Section: 3636, 3637,
3638, 3736, 3737, 3738, 3836,
3837, 3838

Subject: Potential Zoning Changes – Lower SE Rising Project

Location: Bound by SE 52nd Ave and SE 92nd Ave and the City Limits (See attached map for more info)

Description: BPS is leading a planning effort that will change zoning in parts of Lower SE Portland

Instructions: Determine if the potential rezoning would trigger the need for any water system improvements.

Analyst: Ryan Nelson

Date Received: 11/29/2022

Date Completed: 01/09/2023

Planning Review #: 2022.069

Pressure Zone: Kelly Butte 427 Tank

Max Static Pressure: 90 psi

Planning Review:

Water Demand Impacts (Fire Flows):

The proposed rezoning associated with the Lower SE Rising Project will increase the allowable housing density of many zones. *Table No. 1 Fire Flow Availability* provides information on the affected areas, including the existing zoning designation, the proposed new zoning designation, the Standard Fire Flow for the current and proposed zoning, and the modeled fire flow availability from the existing system. The ID Numbers in Table 1 are shown on the attached map. The results of Table 1 show that Standard Fire Flow can be met for all of the proposed zoning changes without any system modifications.

Table 1 -- Fire Flow Availability ¹

ID No.	Existing Zone/Standard Fire Flow(gpm)	Proposed Zone/Standard Fire Flow (gpm)	Available Fire Flow(gpm) ²	Comments
1	RM1/3,000	RM2/3,000	5,900	
2	CM1/3,000	CM2/3,000	5,200	
3	R5/1,250	RM1/3,000	4,800	Increased Fire Demand
	R2.5/2,250	RM1/3,000	4,800	Increased Fire Demand
	CM1/3,000	CM2/3,000	4,800	
4	CM1/3,000	CM2/3,000	4,300	
	RM1/3,000	RM2/3,000	4,300	
	R2.5/2,250	RM1/3,000	4,300	Increased Fire Demand
5	R2.5/2,250	RM/3,000	4,700	Increased Fire Demand
	R2.5/2,250	CR/3,000	4,700	Increased Fire Demand
	R2.5/2,250	CM1/3,000	4,700	Increased Fire Demand
	R2.5/2,250	RM1/3,000	4,700	Increased Fire Demand
6	CM1/3,000	CM2/3,000	4,400	
	R2.5/2,250	CM1/3,000	4,400	Increased Fire Demand
7	CM1/3,000	CM2/3,000	7,500	
	RM1/3,000	RM2/3,000	7,500	
8	RM1/3,000	RM2/3,000	6,500	
	RM1/3,000	CM2/3,000	6,500	
	R2.5/2,250	CM2/3,000	6,500	Increased Fire Demand
9	RM1/3,000	RM2/3,000	6,100	
10	R2.5/2,250	RM1/3,000	7,200	Increased Fire Demand
	RM1/3,000	RM2/3,000	7,200	
11	R5/1,250	RM1/3,000	5,700	Increased Fire Demand
12	Varies/≤3,000	Varies/≤3,000	4,700	
13	R2.5/2,250	RM1/3,000	3,200	See figure on page 5 of 5 for water mains.

Notes:

Fire Flow Availability during Peak Day Demand (PDD) while maintaining a minimum 20 psi system pressure. Refer to *Appendix A – Proposed Zoning Overlaid on Existing Zoning Map* to reference ID location.

Water Main Sizing:

Table 2 states the service level goals for new water main sizing according to the 2007 Distribution System Master Plan (DSMP):

Table 2 – New Min. Water Main Sizing	
Minimum Size Main in short cul-de-sacs or dead ends	4-inch
Minimum Size Main in low and medium-density residential areas	6-inch
Minimum Size Main in high-density residential, commercial, and industrial areas	8-inch
Minimum Size Main for connection to a fire hydrant	6-inch

In general, minimum main sizes exist for most of the areas where zoning is changing, except for ID Number 13. The map on Page 5 shows that 4-inch main supplies much of this area. These mains would need to be replaced with 6 or 8-inch mains if impacted by development.

Water Main Location:

Water mains in these areas include pipes of an age and material, or in a non-standard location that may require replacement driven by changes to the street and right-of-way improvements (i.e. new curb and sidewalk locations). These conflicts may not be identifiable until the development of adjacent property or the right-of-way is initiated. If the new street right-of-way sections are proposed that differ from existing conditions, please share them with the WB so we may review them and identify potential conflicts.

Planning Conclusion:

No water system modifications are needed to meet water demands for any of the proposed zoning modifications. Future development could require existing mains to be upsized depending on water service sizes needed for new customers.

Approved:  Date: 1/5/23

Copies: Mike Saling, Keith Walker, Kevin Larson, Ken Ackerman, Jodie Inman, Dave Evonuk

Existing Zoning and Concepts for Zone Changes

October 2022

The blue numbered callouts correspond to the ID numbers in Table 1 of the Planning Review.



