



ENGINEERING

**SEPTIC TO SEWER CONVERSION
PROGRAM**
*SEPTEMBER 2021 COMMITTEE
MEETING*

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SCORING CRITERIA



COST

Cost of the sewer extension project, including design



PERCENT SIGNED

The percentage of property owners who would be served by the neighborhood sewer extension project who signed onto the application



NUMBER OF HOMES BENEFITTED

Total number of homes or properties to be connected to the public sewer system from the project



AGE & STATUS OF SEPTIC SYSTEMS

The age of existing septic systems that would be replaced by the proposed neighborhood sewer extension project and evidence of failing septic systems



PROXIMITY TO CITY PROJECTS

Whether other City construction projects are planned for the street identified in the application



OTHER FACTORS

Other factors established by the City Manager.

SEPTEMBER 2021 NEIGHBORHOOD EXTENSION APPLICATIONS

The City received a total of 17 Neighborhood Extension Project applications for review in September 2021. The location of each application is shown in Figure 1 below. Maps of the individual application areas are provided on the following pages.

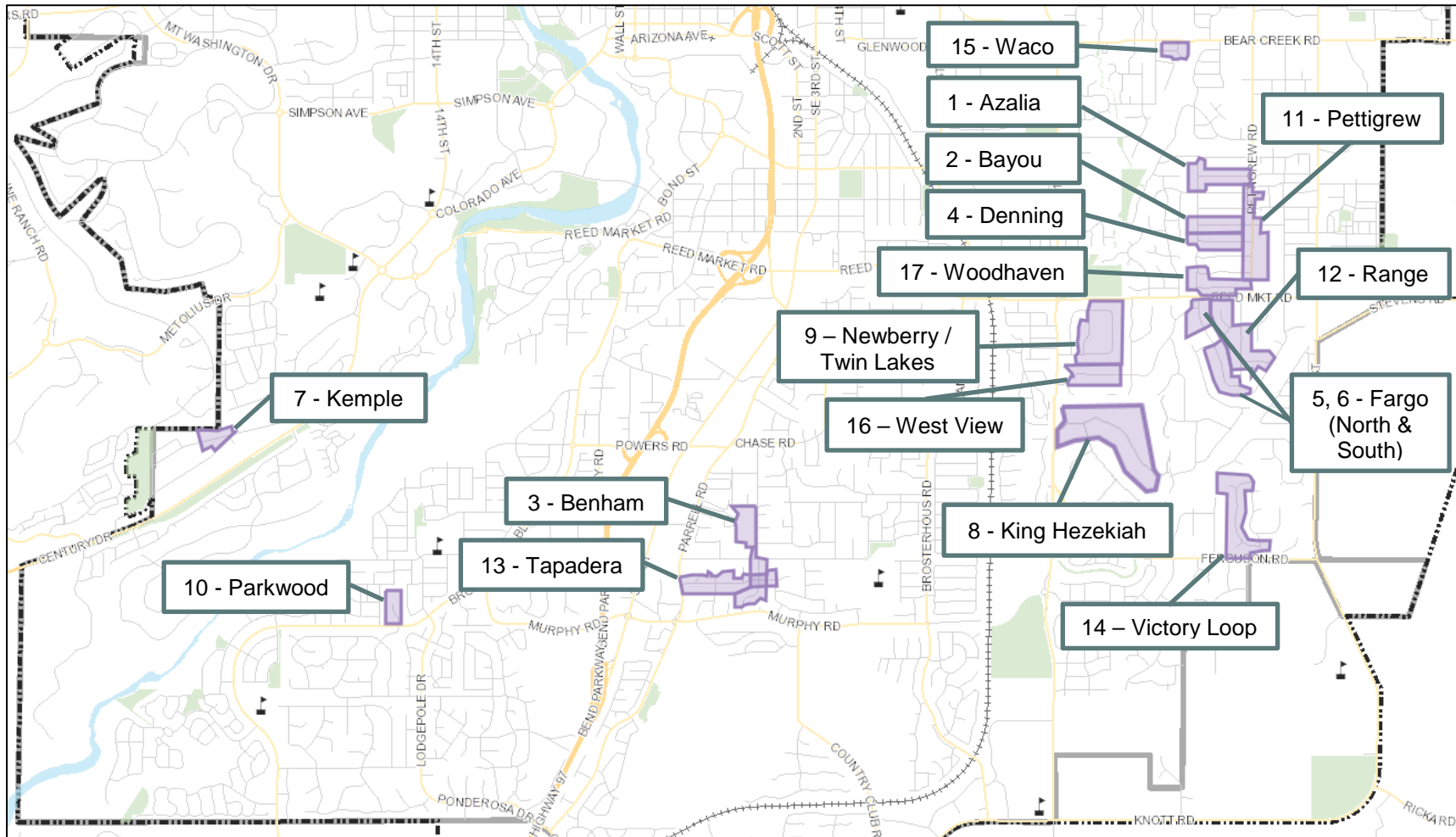
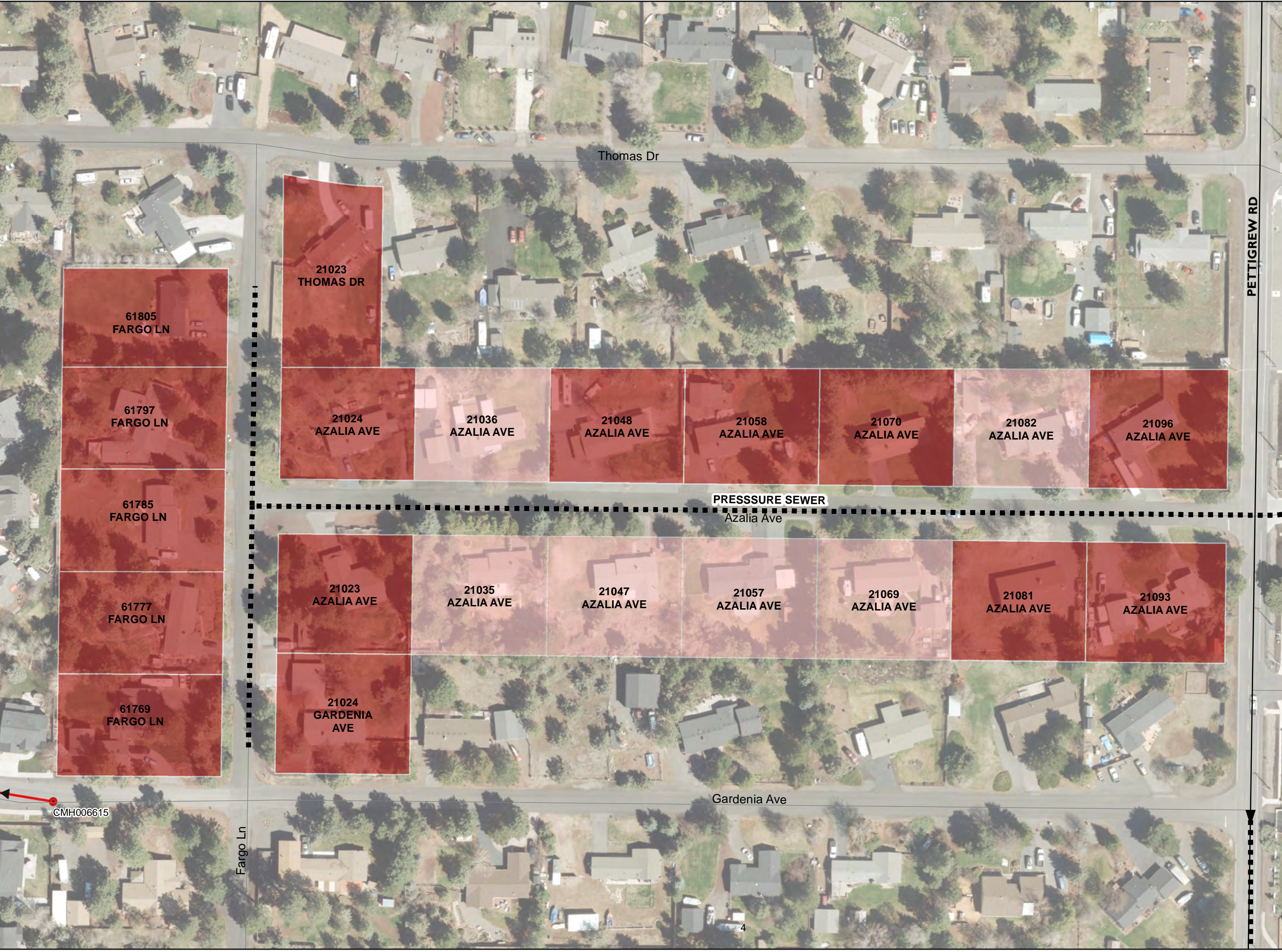


Figure 1: Location of September 2021 Neighborhood Extension Project Applications

NEIGHBORHOOD EXTENSION PROJECTS

Azalia

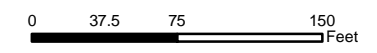


Streets

- Collector
- Local Street
- Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Active Gravity Main
- GravityManhole
- Urban Growth Boundary
- City Limits



Map prepared by S. Layne, City of Bend
 Print Date: Sep 21, 2021
 Sources: City of Bend, Deschutes County



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Thomas Dr

PETTIGREW RD

PRESSURE SEWER
Azalia Ave

Gardenia Ave

Fargo Ln

61805
FARGO LN

61797
FARGO LN

61785
FARGO LN

61777
FARGO LN

61769
FARGO LN

21023
THOMAS DR

21024
AZALIA AVE

21023
AZALIA AVE

21024
GARDENIA AVE

21036
AZALIA AVE

21035
AZALIA AVE

21048
AZALIA AVE

21047
AZALIA AVE

21058
AZALIA AVE

21057
AZALIA AVE

21070
AZALIA AVE

21069
AZALIA AVE

21082
AZALIA AVE

21081
AZALIA AVE

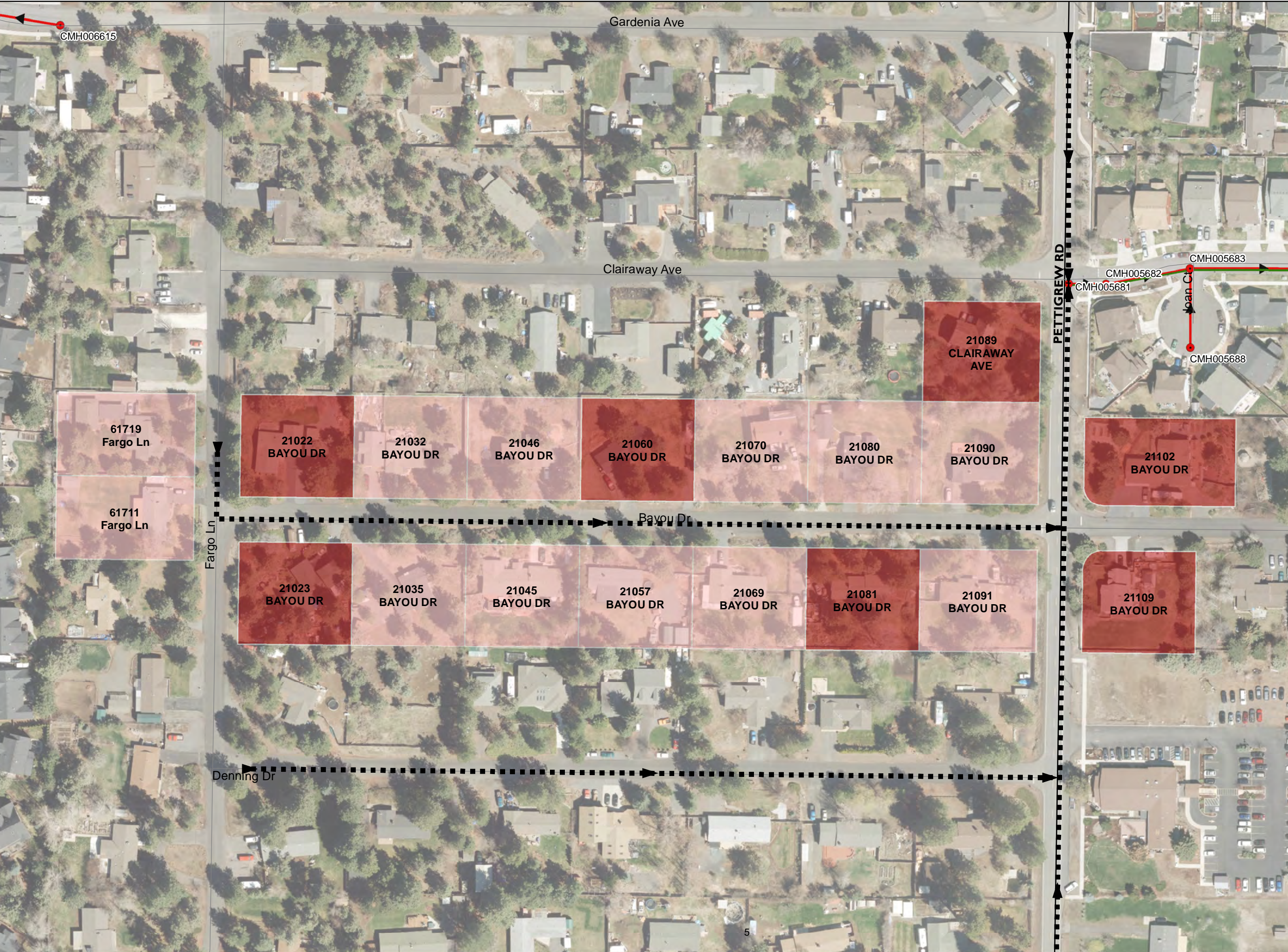
21096
AZALIA AVE

21093
AZALIA AVE

CMH006615

NEIGHBORHOOD EXTENSION PROJECTS

Bayou

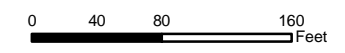


Streets

- Collector
- Local Street
- Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Pressurized Main
- Active Gravity Main
- GravityManhole
- Urban Growth Boundary
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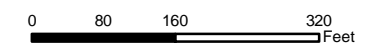
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NEIGHBORHOOD EXTENSION PROJECTS

Benham Rd

- Streets**
- Collector
 - Local Street
- NEP Taxlots**
- Not Signed
 - Signed
 - Pressurized Main
 - Force Main
 - Active Gravity Main
 - GravityManhole
 - PressureManhole
 - Urban Growth Boundary
 - City Limits

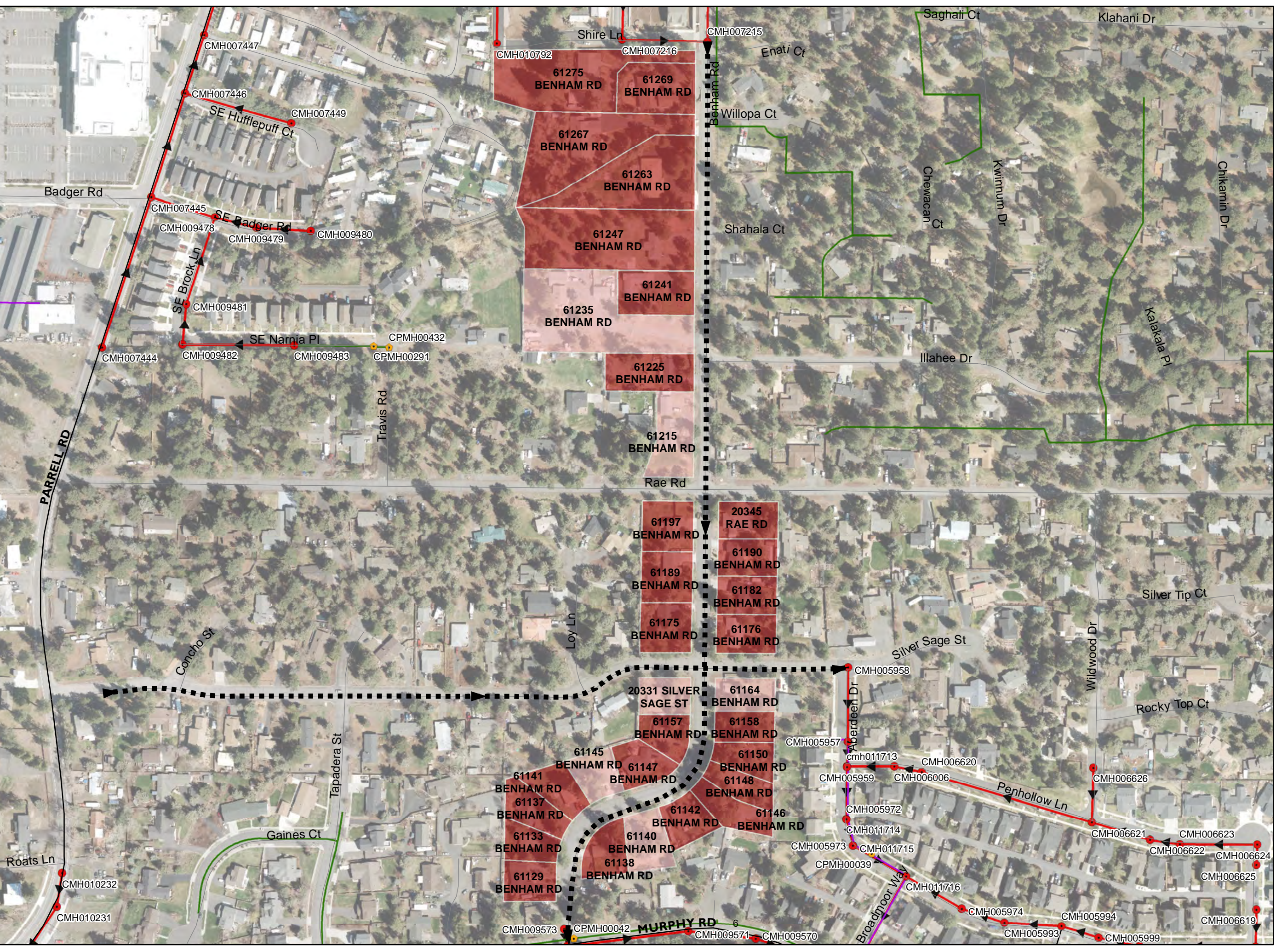


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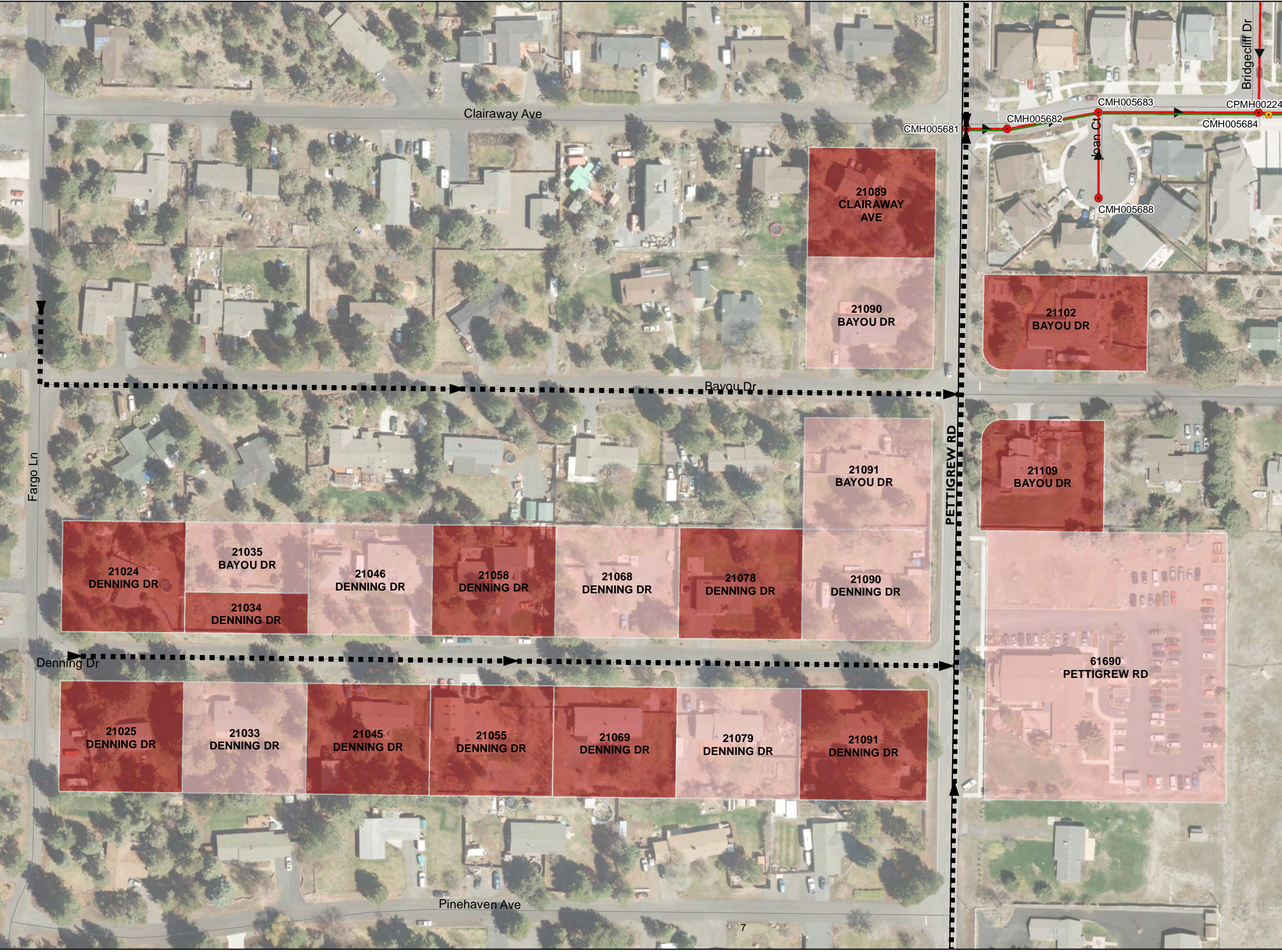
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NEIGHBORHOOD EXTENSION PROJECTS

Denning

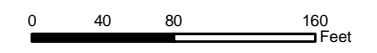


Streets

- Collector
- Local Street
- Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Pressurized Main
- Active Gravity Main
- GravityManhole
- PressureManhole
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NEIGHBORHOOD EXTENSION PROJECTS

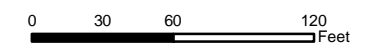
Fargo (North)

Streets

- Arterial
- Local Street
- ■ ■ Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Force Main
- ▶ Active Gravity Main
- GravityManhole
- ◆ PressureManhole
- ⬢ Urban Growth Boundary
- City Limits

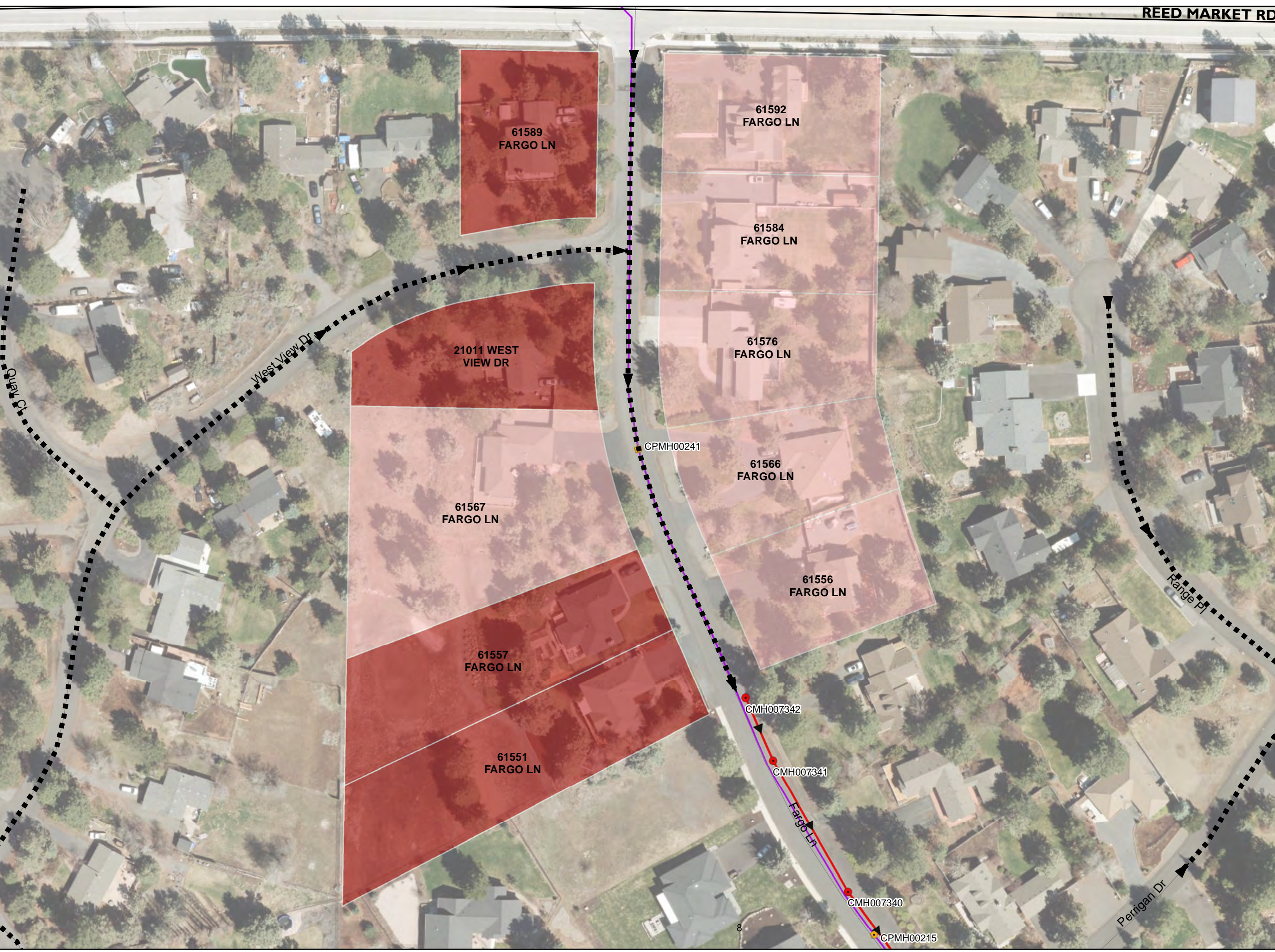


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NEIGHBORHOOD EXTENSION PROJECTS

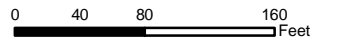
Fargo (South)

Streets

- Local Street
- Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Pressurized Main
- Force Main
- Active Gravity Main
- Proposed Gravity Main
- GravityManhole
- PressureManhole
- Urban Growth Boundary
- City Limits



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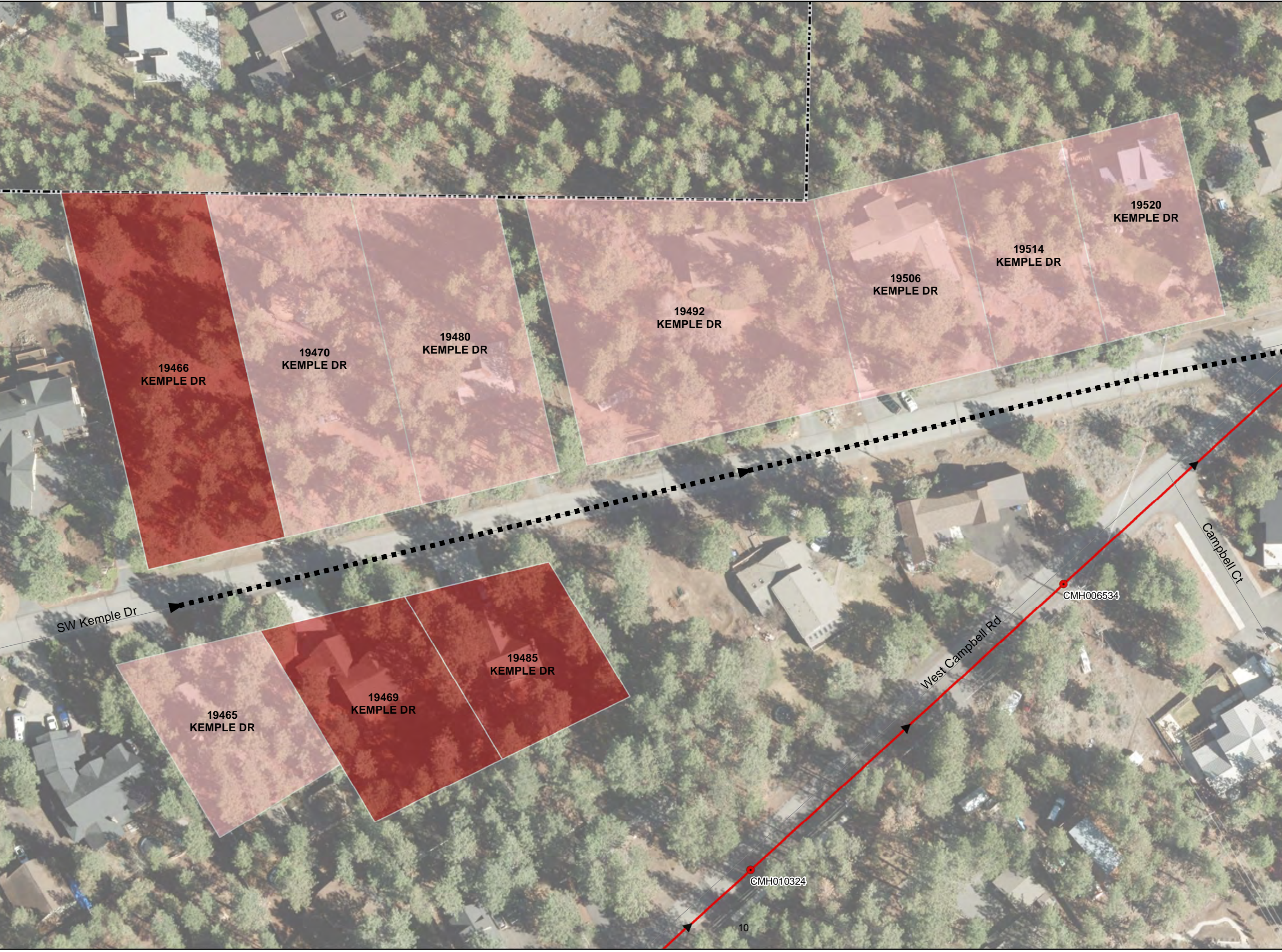
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NEIGHBORHOOD EXTENSION PROJECTS

Kemple Dr

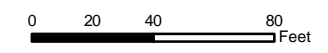


Streets

- Local Street
- ■ ■ Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
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NEIGHBORHOOD EXTENSION PROJECTS

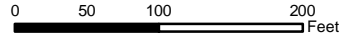
King Hezekiah

Streets

- Arterial
- Collector
- Local Street
- ■ ■ Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Pressurized Main
- Proposed Gravity Main
- GravityManhole
- ⋯ Urban Growth Boundary
- City Limits

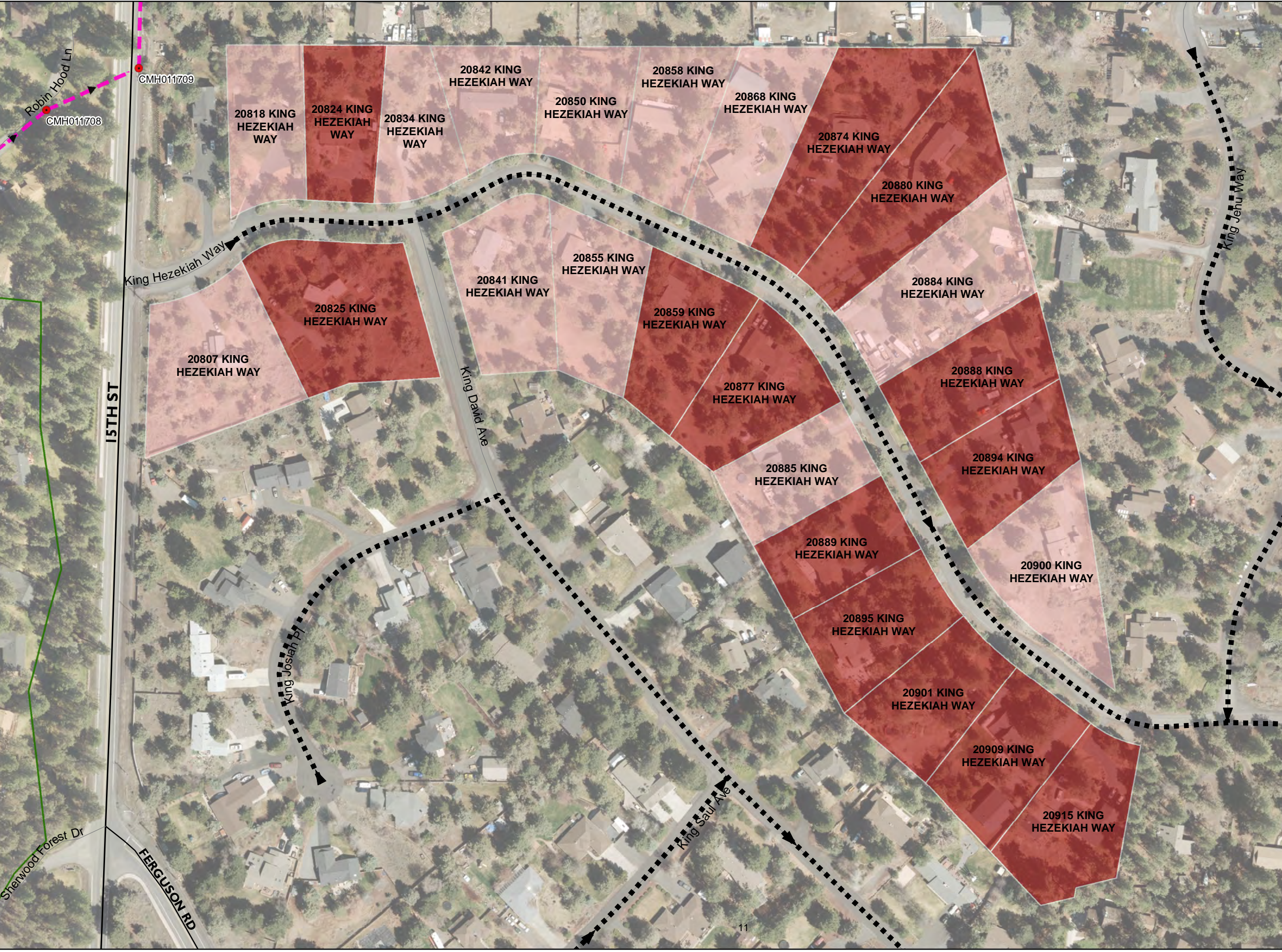


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REED MARKET RD

NEIGHBORHOOD EXTENSION PROJECTS

Newberry/Twin Lakes

Streets

- Arterial
- Local Street
- Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Pressurized Main
- Force Main
- Active Gravity Main
- Proposed Gravity Main
- GravityManhole
- PressureManhole
- Urban Growth Boundary
- City Limits



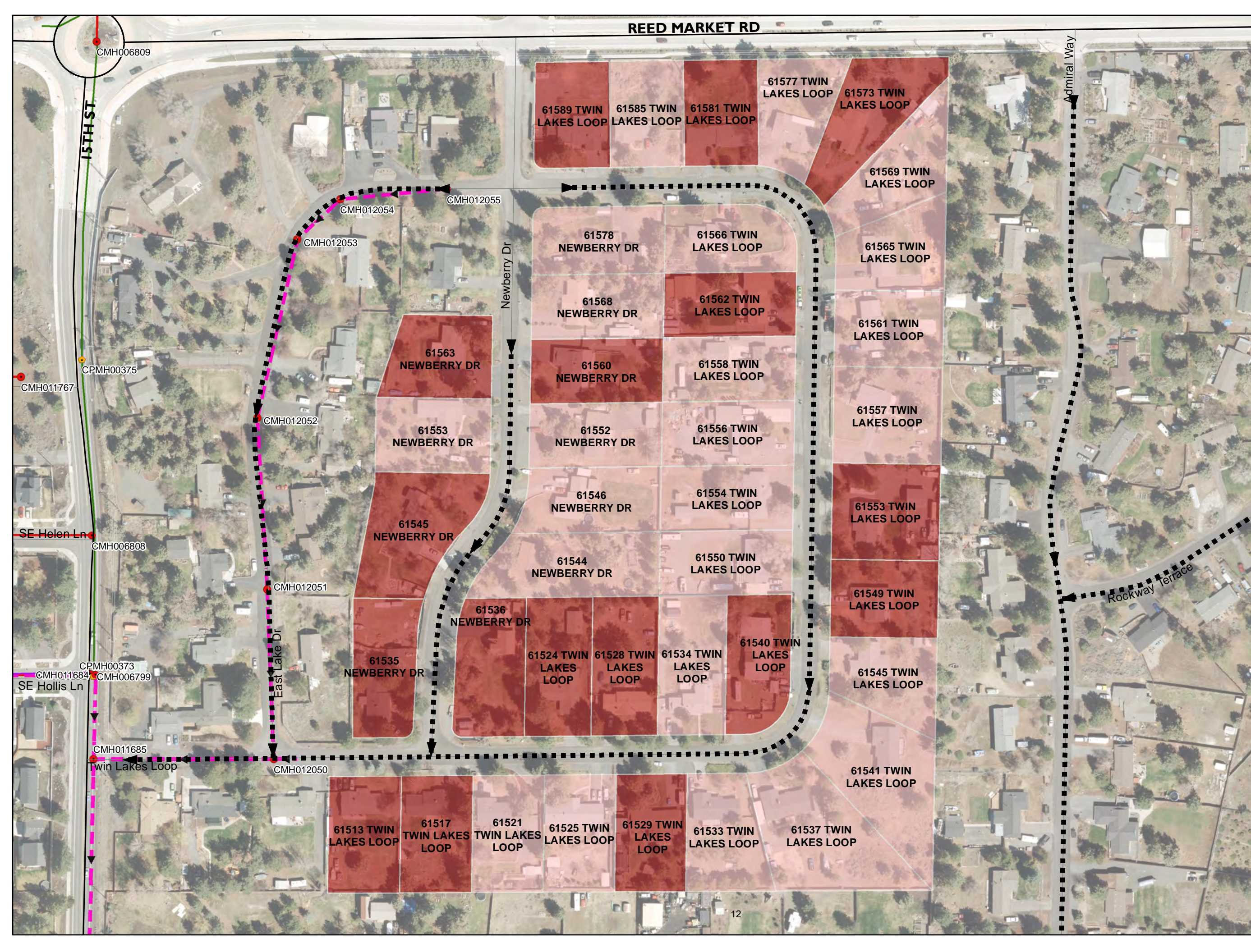
0 50 100 200 Feet

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NEIGHBORHOOD EXTENSION PROJECTS

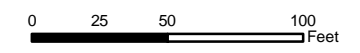
Parkwood

Streets

- Arterial
- Local Street
- ■ ■ Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- ➔ Active Gravity Main
- GravityManhole
- ⋯ Urban Growth Boundary
- City Limits

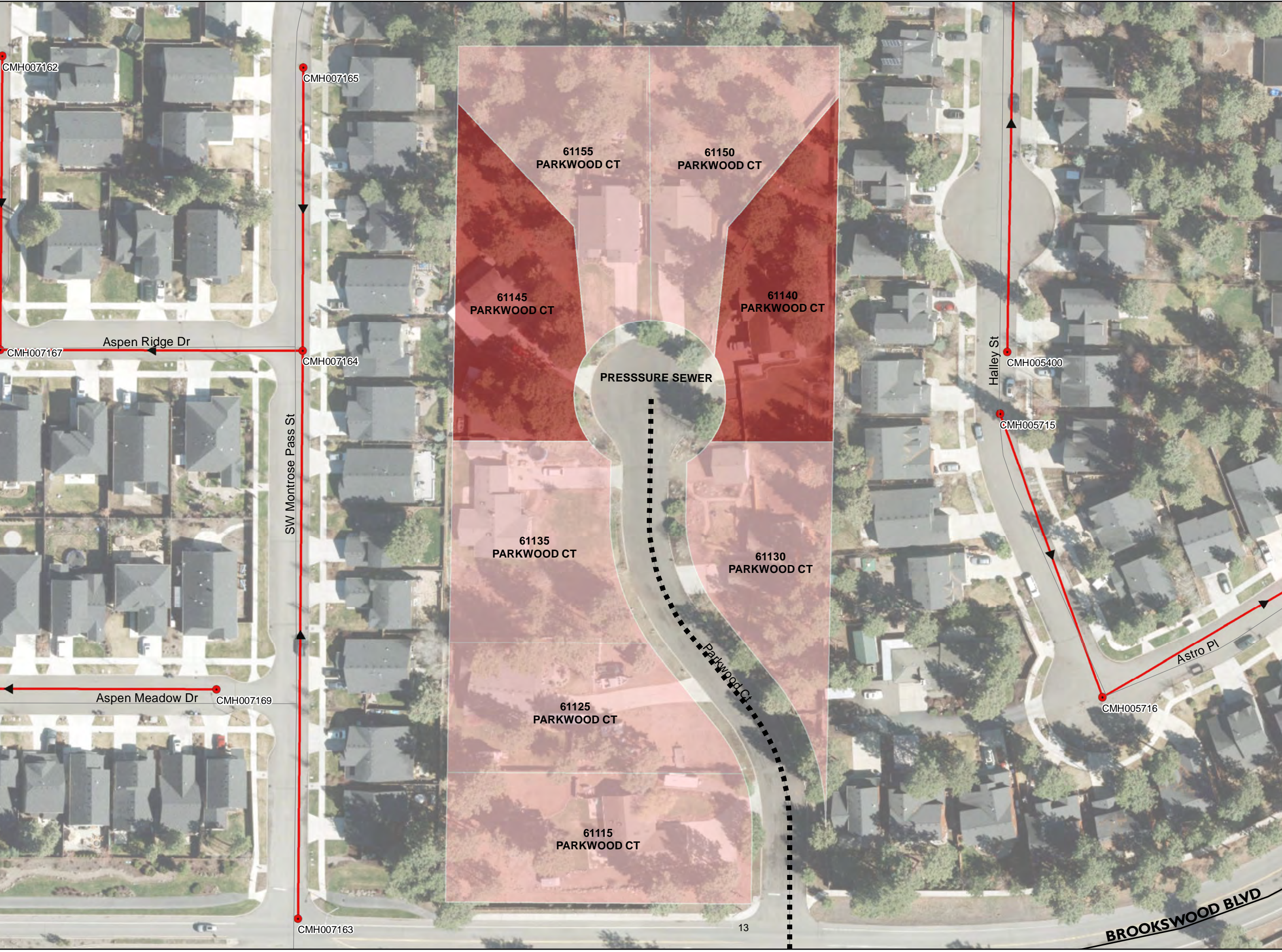


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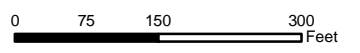
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NEIGHBORHOOD EXTENSION PROJECTS

Pettigrew

- Streets**
- Arterial
 - Collector
 - Local Street
 - Proposed Sanitary Pipe
- NEP Taxlots**
- Not Signed
 - Signed
 - Pressurized Main
 - Force Main
 - Active Gravity Main
 - Proposed Gravity Main
 - GravityManhole
 - PressureManhole
 - Urban Growth Boundary
 - City Limits

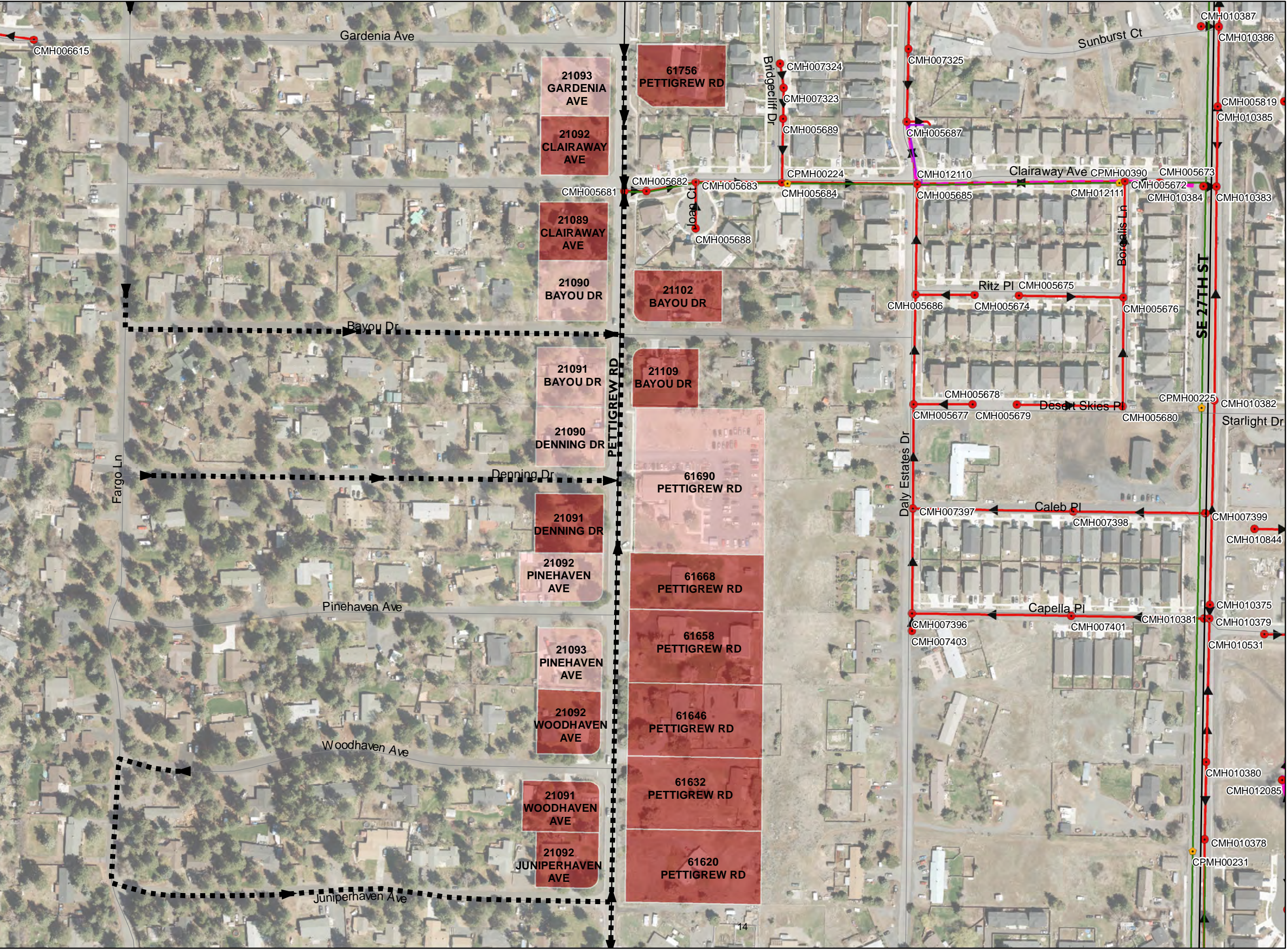


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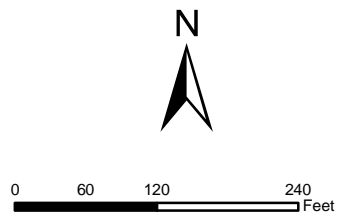
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NEIGHBORHOOD EXTENSION PROJECTS

Range Place

- Streets**
- Arterial
 - Collector
 - Local Street
 - Proposed Sanitary Pipe
- NEP Taxlots**
- Not Signed
 - Signed
 - Pressurized Main
 - Force Main
 - Active Gravity Main
 - Proposed Gravity Main
 - GravityManhole
 - PressureManhole
 - Urban Growth Boundary
 - City Limits

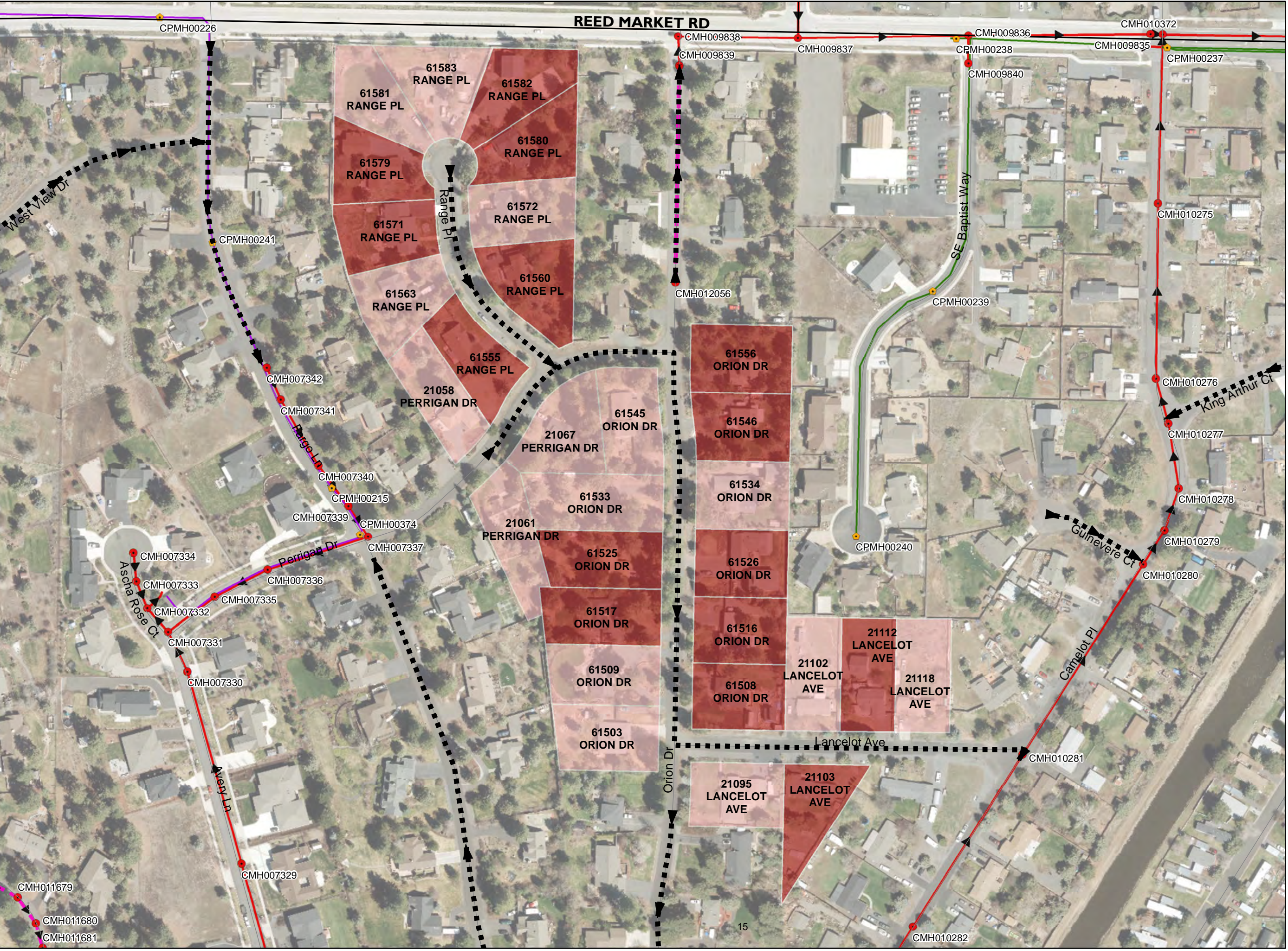


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NEIGHBORHOOD EXTENSION PROJECTS

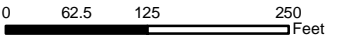
Victory Loop

Streets

-  Collector
-  Local Street
-  Proposed Sanitary Pipe

NEP Taxlots

-  Not Signed
-  Signed
-  Pressurized Main
-  Force Main
-  Active Gravity Main
-  GravityManhole
-  PressureManhole
-  Urban Growth Boundary
-  City Limits

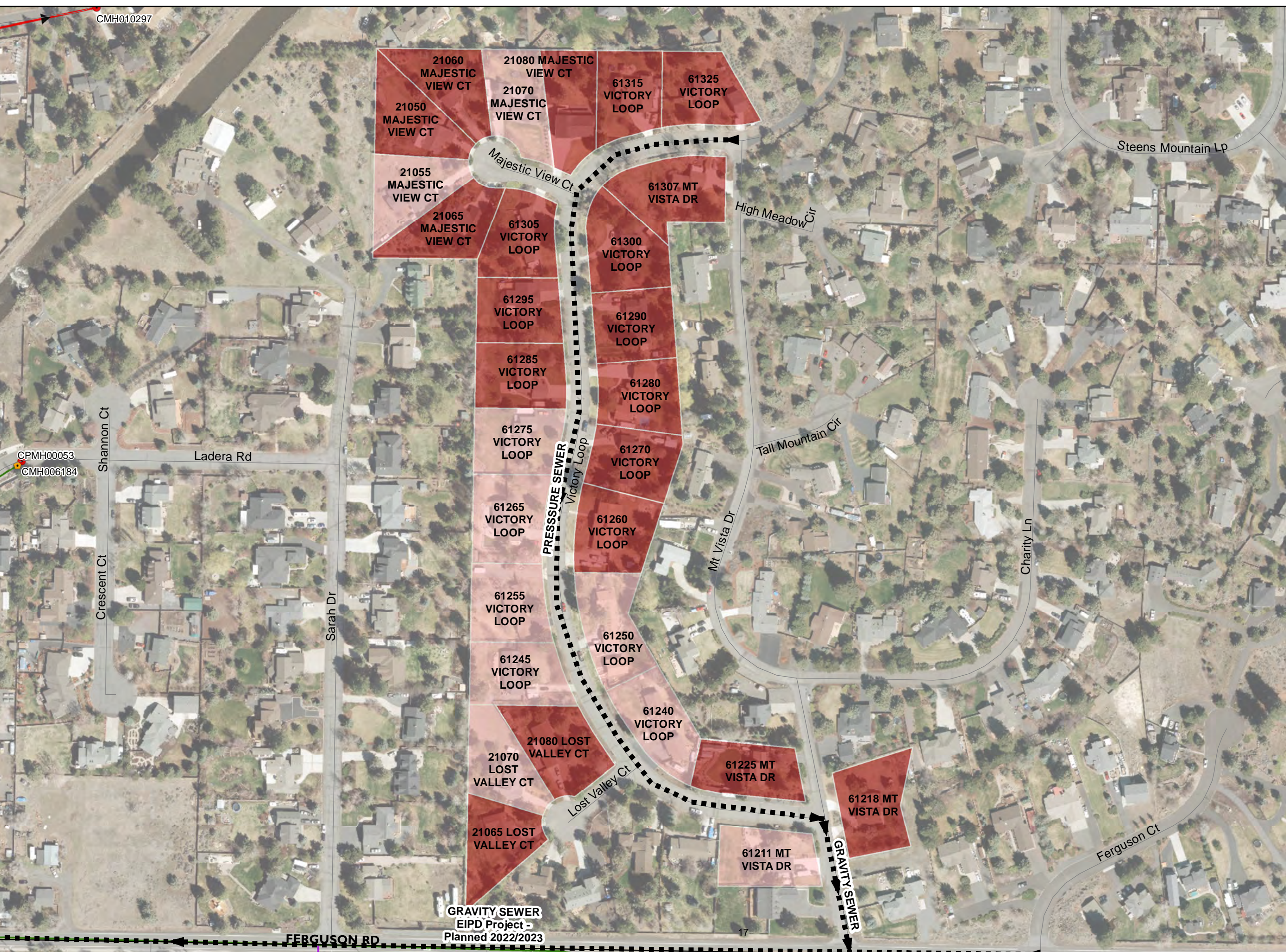


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CMH010297

CPMH00053




CMH006184

GRAVITY SEWER
 EIPD Project -
 Planned 2022/2023








NEIGHBORHOOD EXTENSION PROJECTS

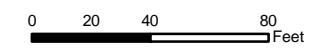
Waco

Streets

-  Arterial
-  Local Street
-  Proposed Sanitary Pipe

NEP Taxlots

-  Not Signed
-  Signed
-  Pressurized Main
-  Active Gravity Main
-  Gravity Manhole
-  Urban Growth Boundary
-  City Limits



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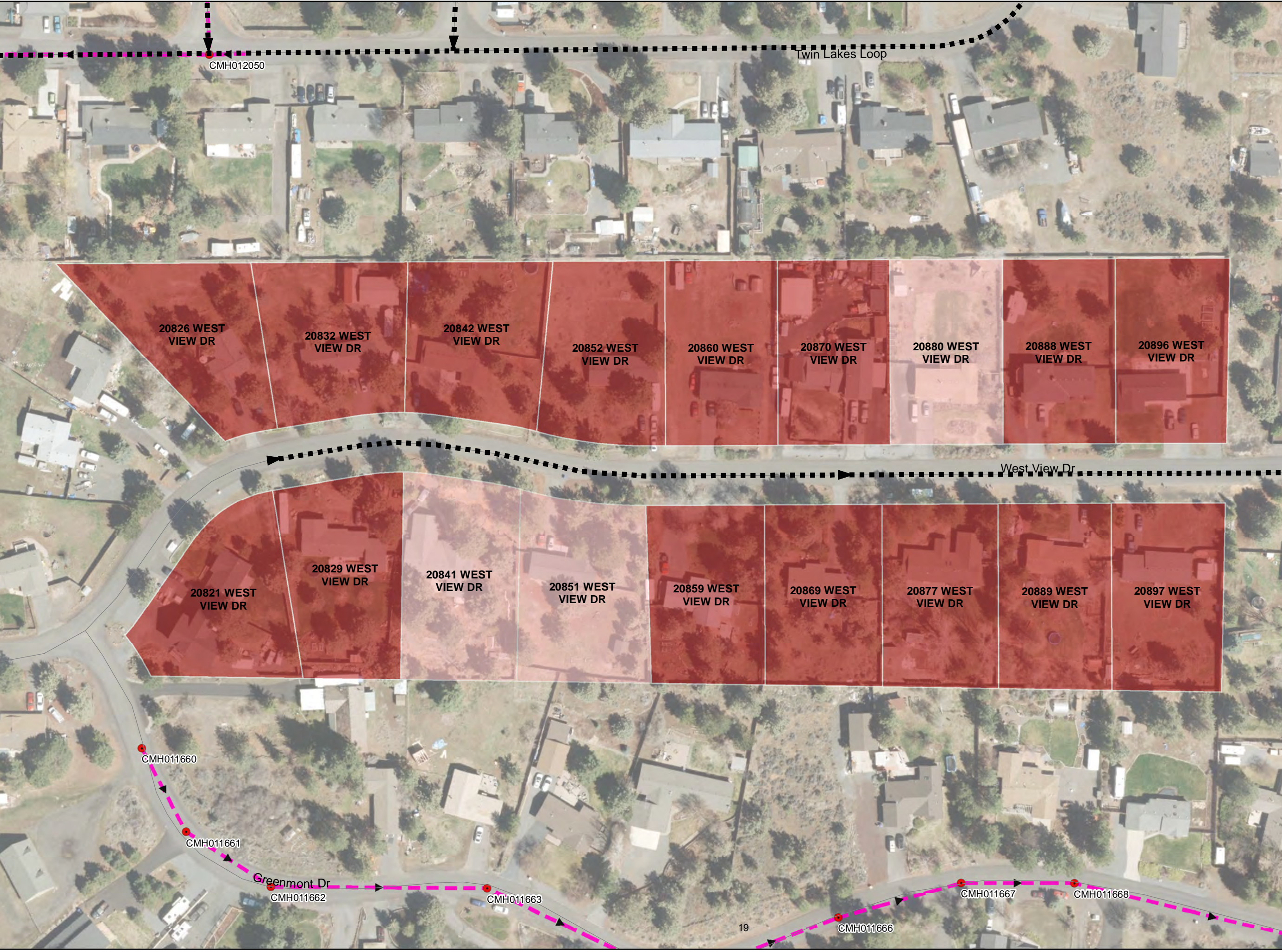
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NEIGHBORHOOD EXTENSION PROJECTS

West View

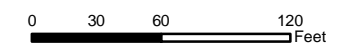


Streets

- Local Street
- ■ ■ Proposed Sanitary Pipe

NEP Taxlots

- Not Signed
- Signed
- Proposed Gravity Main
- GravityManhole
- Urban Growth Boundary
- City Limits



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NEIGHBORHOOD EXTENSION PROJECTS

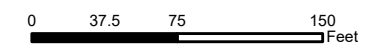
Woodhaven

Streets

-  Arterial
-  Collector
-  Local Street
-  Proposed Sanitary Pipe

NEP Taxlots

-  Not Signed
-  Signed
-  Force Main
-  Active Gravity Main
-  Proposed Gravity Main
-  GravityManhole
-  PressureManhole
-  Urban Growth Boundary
-  City Limits

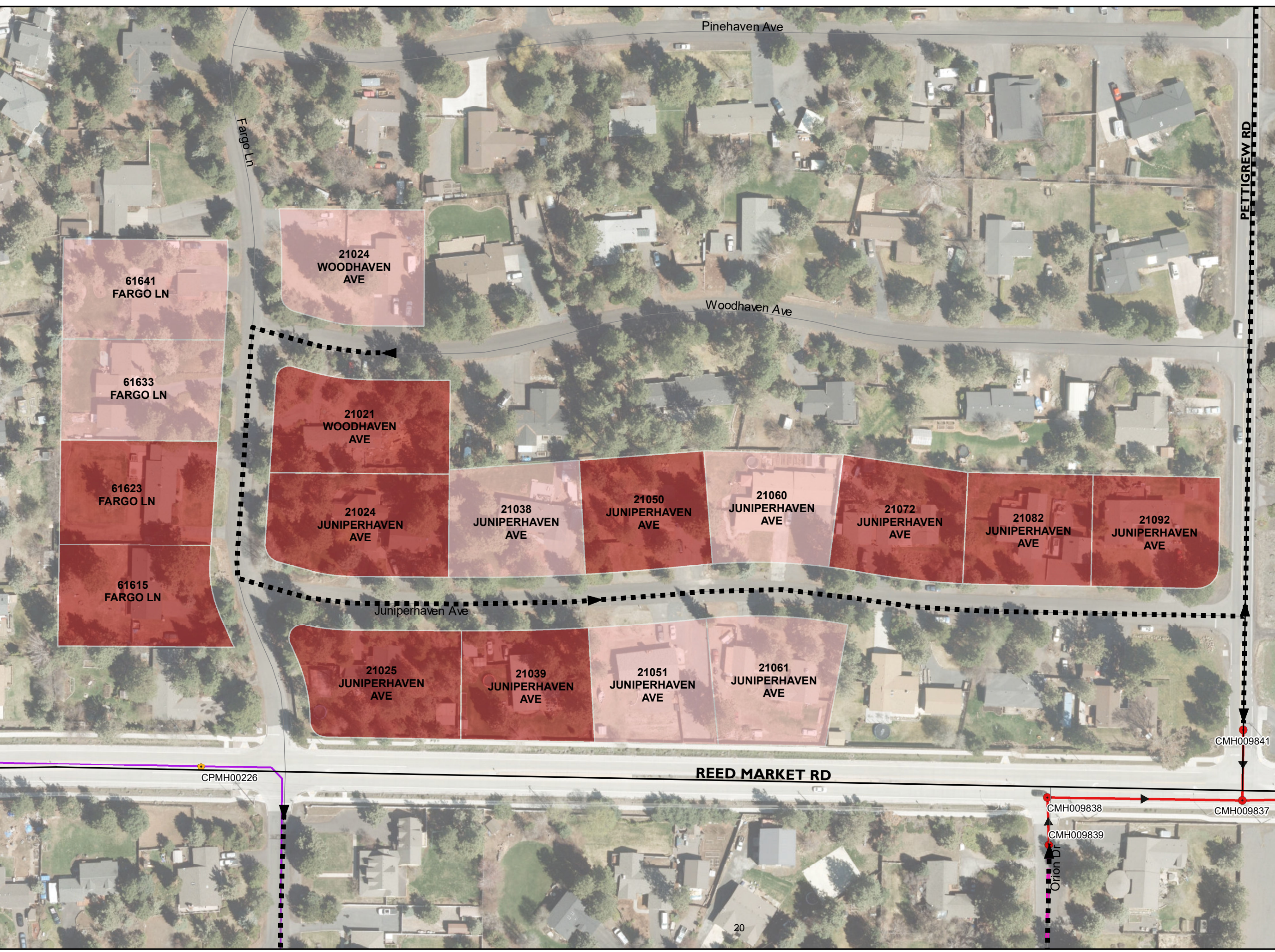


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Sept 2021 Neighborhood Extension Applications

Summary of Scoring Criteria

No.	Application Name	A Cost Including Design	B Length (Linear Feet)	C No. of Properties Benefitted	D Total Cost Per Property (A/C)*	E No. Properties Signed	F Percent Signed (E/C)*	G Fees to City within 2 Years of NOC (E*\$10,000)*	H Adjusted Cost Per Property ((A-G)/C)*	I Avg. Age of Septic	J No. Failing Septic	K Percent of Failing Septic (J/C)*	Notes
1	Azalia Drive	\$ 1,072,950	1,555	21	\$ 51,093	6	29%	\$ 60,000.00	\$ 48,235.71	20	1	5%	Pressure sewer required
2	Bayou Drive	\$ 1,588,725	1,535	19	\$ 83,617	12	63%	\$ 120,000.00	\$ 77,301.32	35	2	11%	Discharges to Southeast Interceptor
3	Benham Rd	\$ 2,411,550	2,330	32	\$ 75,361	6	19%	\$ 60,000.00	\$ 73,485.94	32	1	3%	Discharges to Southeast Interceptor; Facilitates future development on adjacent local roadways
4	Denning Drive	\$ 1,707,750	1,650	21	\$ 81,321	9	43%	\$ 90,000.00	\$ 77,035.71	28	2	10%	Discharges to Southeast Interceptor
5	Fargo Lane (North)	\$ 931,500	900	10	\$ 93,150	6	60%	\$ 60,000.00	\$ 87,150.00	25	0	0%	Discharges to Southeast Interceptor
6	Fargo Lane (South)	\$ 1,086,750	1,050	17	\$ 63,926	9	53%	\$ 90,000.00	\$ 58,632.35	26	1	6%	Discharges to existing gravity sewer main and pump station
7	Kemple Drive	\$ 811,440	784	10	\$ 81,144	7	70%	\$ 70,000.00	\$ 74,144.00	27	0	0%	Includes one vacant lot
8	King Hezekiah	\$ 2,142,450	2,070	25	\$ 85,698	12	48%	\$ 120,000.00	\$ 80,898.00	20	1	4%	Discharges to Southeast Interceptor
9	Newberry/Twin Lakes	\$ 3,053,250	2,950	41	\$ 74,470	24	59%	\$ 240,000.00	\$ 68,615.85	30	1	2%	Discharges to Southeast Interceptor
10	Parkwood Court	\$ 483,000	700	8	\$ 60,375	6	75%	\$ 60,000.00	\$ 52,875.00	24	0	0%	Gravity not cost effective; pressure sewer would be required to connect to Romaine Village area
11	Pettigrew Rd	\$ 2,146,590	2,074	21	\$ 102,219	7	33%	\$ 70,000.00	\$ 98,885.24	34	2	10%	Discharges to Southeast Interceptor; made possible by Pump Station Decommissioning Phase 3; Facilitates future development on adjacent local roadways
12	Range Place	\$ 2,484,000	2,400	30	\$ 82,800	15	50%	\$ 150,000.00	\$ 77,800.00	28	1	3%	Discharges to Southeast Interceptor
13	Tapadera Drive	\$ 1,905,435	1,841	32	\$ 59,545	12	38%	\$ 120,000.00	\$ 55,794.84	26	1	3%	Discharges to Southeast Interceptor; Gravity from Murphy not feasible for this application area west of Tapadera
13.1	Tapadera Subproject	\$ 1,283,400	1,240	19	\$ 67,547	9	47%	\$ 90,000.00	\$ 62,810.53	19	1	5%	Discharges to Southeast Interceptor
14	Victory Loop	\$ 1,777,440	2,445	29	\$ 61,291	10	34%	\$ 100,000.00	\$ 57,842.76	23	0	0%	Pressure and gravity sewer required; dependent on Ferguson Extension Project scheduled for construction in 2023
15	Waco Drive	\$ 538,200	520	8	\$ 67,275	3	38%	\$ 30,000.00	\$ 63,525.00	19	1	13%	Discharges to Cessna Rd
16	West View Dr	\$ 1,435,545	1,387	18	\$ 79,753	3	17%	\$ 30,000.00	\$ 78,085.83	20	0	0%	Discharges to Southeast Interceptor
17	Woodhaven Drive	\$ 1,800,900	1,740	18	\$ 100,050	7	39%	\$ 70,000.00	\$ 96,161.11	25	2	11%	Discharges to Southeast Interceptor; Gravity sewer not feasible on Reed Market
Total**		\$ 27,377,475											

*Formula in parenthesis indicates column letters

**Does not include subproject 13.1 since the cost is included in the parent application (13).

2021 Neighborhood Extension Applications
Staff Scoring

No.	Application Name	Cost Per Property	Percent Signed	Average Age of Septic Systems	Failing Septic Systems	Capital Improvement Projects (CIP)	Score	Funding Required
1	Azalia Drive	9.0	3.8	5.0	3.8	6.0	27.6	\$ 1,072,950
2	Bayou Drive	3.0	8.4	10.0	8.4	6.0	35.8	\$ 1,588,725
3	Benham Rd	4.0	2.5	10.0	2.5	10.0	29.0	\$ 2,411,550
4	Denning Drive	3.0	5.7	7.0	7.6	6.0	29.3	\$ 1,707,750
5	Fargo Lane (North)	1.0	8.0	5.0	0.0	6.0	20.0	\$ 838,350
6	Fargo Lane (South)	8.0	7.1	7.0	4.7	6.0	32.8	\$ 978,075
7	Kemple Drive	4.0	9.3	7.0	0.0	10.0	30.3	\$ 811,440
8	King Hezekiah Way	2.0	6.4	3.0	3.2	6.0	20.6	\$ 1,928,205
9	Newberry Dr/Twin Lakes Loop	5.0	7.8	10.0	2.0	6.0	30.8	\$ 2,747,925
10	Parkwood Court	7.0	10.0	5.0	0.0	6.0	28.0	\$ 483,000
11	Pettigrew Rd	1.0	4.4	10.0	7.6	10.0	33.1	\$ 2,146,590
12	Range Place	3.0	6.7	7.0	2.7	10.0	29.3	\$ 2,235,600
13	Tapadera Drive	8.0	5.0	7.0	2.5	6.0	28.5	\$ 1,905,435
13.1	Tapadera Subproject	6.0	6.3	3.0	4.2	10.0	29.5	\$ 1,283,400
14	Victory Loop	8.0	4.6	5.0	0.0	3.0	20.6	\$ 1,777,440
15	Waco Drive	6.0	5.0	3.0	10.0	6.0	30.0	\$ 538,200
16	West View Drive	3.0	2.2	5.0	0.0	6.0	16.2	\$ 1,291,991
17	Woodhaven Drive	1.0	5.2	5.0	8.9	6.0	26.1	\$ 1,800,900

*Funds required to accept the project. Applications in the King's Forest Study Area (5, 6, 8, 9, 12, 16) are at 95% design and require less funding than the cost including design.

Scoring Criteria

1) Cost per property: $[(\text{Cost Including Design} - \text{Fees to City within 2 Years of NOC}) / \text{No. Properties Benefitted}]$

- <\$45,000 = 10 pts;
- \$45,001-50,000 = 9 pts;
- \$50,001-55,000 = 8 pts;
- \$55,001-60,000 = 7 pts;
- \$60,001-65,000 = 6 pts;
- \$65,001-70,000 = 5 pts;
- \$70,001-75,000 = 4 pts;
- \$75,001-80,000 = 3 pts;
- \$80,001-85,000 = 2 pts;
- >\$85,001 = 1 pts

2) Percent Signed: Percent of benefitted property owners who signed the application multiplied by 13.33 to weight to a maximum score of 10.

3) Average Age of Septic Systems:

- <20 yr = 3 pts;
- 20-24 yr = 5 pts;
- 25-29 yr = 7 pts;
- >30 = 10 pts

4) Failing Septic Systems: Percent of failing septic systems of the project multiplied by 80 to weight to a maximum score of 10.

5) CIP Projects:

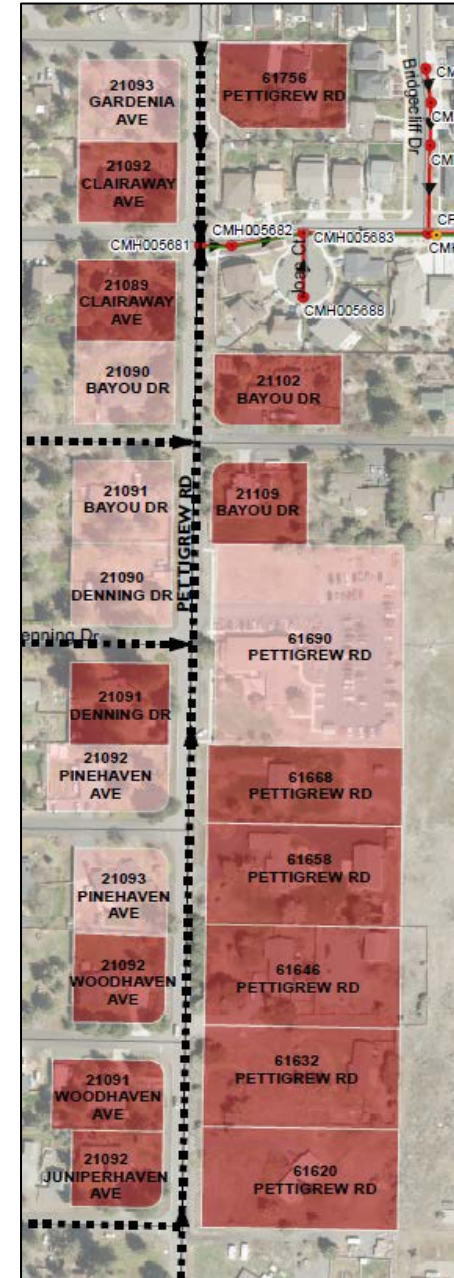
- Project may be addressed by a future capital improvement project = 3 points;
- Project is isolated and does not facilitate construction of sewer in other areas = 6 points;
- Project facilitates construction of sewer in other areas = 10 points

September 2021 Neighborhood Extension Applications
Budget and Staff Recommendation

Program Budget		
Total Budget 2021 Budget		\$ 3,293,000.00
Staff Recommendation		
2	Bayou Drive	\$ 1,588,725.00
11	Pettigrew Road	\$ 2,146,590.00
Total		\$ 3,735,315.00
Total Reduced by Bayou / Pettigrew Overlap		\$ 3,367,315.00
Budget Deficit*		
		\$ (74,315.00)

Notes:

*The budget deficit is projected to be covered with savings from the recently completed Via Sandia, East Lake, and Orion Sewer Project and planned Admiral and King Jehu Sewer Project.



PETTIGREW ROAD



BAYOU DRIVE