

9. INFRASTRUCTURE

This section generally describes how new infrastructure will be developed in the NE Canby Concept Plan Area. Existing residents may continue to use existing wells and septic systems as long as it is feasible to do so.

9.1 Sanitary Sewer

The City of Canby Wastewater Collection System Concept Plan written in December of 1999 by Curran-McLeod indicates two collection basins located within the NE Canby Concept Plan area. These two basins include the Willow Creek Trunk Basin and the Redwood Pump Station Basin (Figure 9-1). The dividing point between these two basins is Mulino Road. The purpose of this evaluation is to determine natural flow patterns in the NE Canby Concept Plan project area and where they can tie into existing, or planned, sewer services.

Drainage patterns were evaluated using Delorme 3-D TopoQuads version 2.0 with maps dated from 1999. Final design of any new sewers should be based on accurate field survey data. Thus some minor changes should be expected. The 1999 Wastewater Master Plan indicates proposed trunk sewers for each of these basins based upon anticipated growth. It is anticipated that the City of Canby will follow standards established by Sanitary Sewer Master Plan.

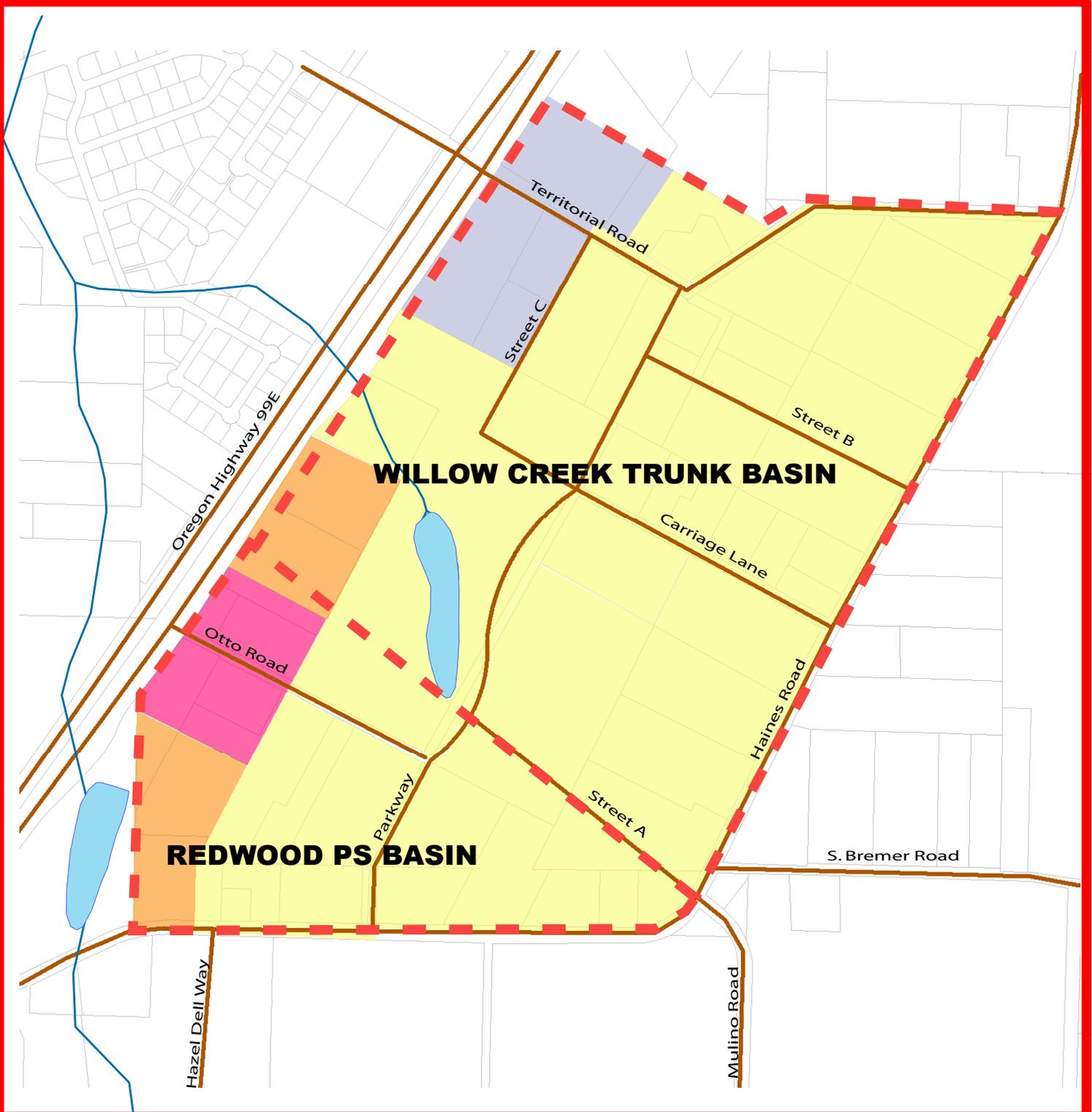
The Redwood Pump Station Basin is the smaller of the two drainage basins. The topography of this basin slopes naturally to the south west. The site layout proposed for this basin would allow for neighborhood sewers to flow in a southerly direction along the proposed neighborhood streets. They would discharge into the 8-inch sewer line on 1st Ave leading to the Redwood Pump Station. This 8-inch line would most likely be extended along 1st Ave to Mulino Road.

The Willow Creek Trunk Basin is the larger of the two basins and the topography analysis indicates that natural flow would be to the Northwest. It is possible that a good portion of flow from the southern portion of this basin could be diverted to the Redwood PS, but for the purposes of this study it will be assumed that all flow will be diverted into the basins assigned in the Curran-McLeod Master Plan. Carriage Lane goes through the center of the basin and intersects with the 8-inch sewer laid out in the Master Plan. An 8-inch extension of this sewer could be run along Carriage Lane to Haines Road. Neighborhood sewers would feed this extension from Territorial Road to Carriage Lane from the North and Mulino Road to Carriage Lane from the South.

Private developers will be responsible for implementation of sanitary sewer infrastructure, on an as-needed basis. Prior to any construction or development a detailed survey by a licensed survey firm should be performed and the location, size, and capacity of existing sewer service should be verified with the City of Canby.

9.2 Potable Water

Potable water will be provided to the area by connecting to existing Canby Utility facilities which currently terminate at the intersections of Sequoia Road/SE 1st Avenue and at Territorial Road/Oregon Highway 99E. Eight-inch pressurized water mains will be utilized to provide water service to the area. Private developers will be responsible for implementation of water infrastructure, on an as-needed basis.





 BASIN BOUNDARY



 1":600'

NE CANBY MASTER PLAN

FIGURE 9-1: SANITARY SEWER BASINS

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9.3 Storm Sewer

Stormwater collection systems will be designed, paid for, and constructed by private parties as the Concept Plan Area is developed. Stormwater discharge is not anticipated to cause any significant problems in developing the area. Stormwater discharge facilities must be compliant with the City of Canby Storm Drainage Master Plan, and the terms of the National Pollutant Discharge Elimination System (NPDES) waste discharge permit.

There are several options for stormwater discharge in the Concept Plan area:

- On-site detention and discharge (*recommended*) – This stormwater disposal option is preferred by the City of Canby. Soils in the area generally have been found to be sufficiently porous and permeable to accommodate rainfall during 100-year storm events.
- Discharge into the ponds – Stormwater can be discharged into pond features if an adequate treatment train is used to ensure water quality is sufficient per the requirements established by the Storm Sewer Master Plan.
- Some Phase III, or low priority, improvements have been programmed in the City of Canby Storm Drainage Master Plan capital program.

Private developers will be responsible for implementation of storm sewer infrastructure, on an as-needed basis. Developers will implement the Best Management Practices adopted by the City in the Storm Drainage Master Plan during design and construction of stormwater facilities.

9.4 Electric

Electric utility infrastructure will be provided by Canby Utility on an as-needed basis. Existing PGE electric infrastructure will be annexed by Canby Utility as the Concept Plan area is annexed by the City of Canby.

9.5 Private Utilities

Private utility services, including cable television, internet, and telephone, will be provided by private utility companies on an as-needed basis.