



MEMORANDUM

PREPARED FOR: City Commission, City of Oregon City
SUBJECT: Ordinance No. 18-1008 *Continuing a Public Facilities Strategy for Hazelwood Drive Sewer System*

PLANNING FILE: L 14-03 Sanitary Sewer Moratorium
FROM: Aleta Froman-Goodrich, P.E., City Engineer
DATE: June 28, 2018

Background

The City of Oregon City (City) provides sanitary sewer collection services to nearly 33,000 people across an area of approximately 9.3 square miles. Currently there are over 10,400 service connections to the sanitary sewer collection system which includes approximately 9,740 residential, 520 commercial, and 130 industrial users. The City owns the following infrastructure: over 148 miles of gravity pipelines, ranging in size from approximately 2 to 36 inches in diameter; 3,700 manholes; 12 (major) pumping stations; and 6 miles of sanitary force mains. The City's buildout population is expected to reach 52,500 by the year 2035, with most of the growth occurring around the fringes of the existing city limits. In 2012, the City retained Brown and Caldwell to develop a new Sanitary Sewer Master Plan (SSMP) including a calibrated model of the City's sanitary sewer collection system. The new SSMP identified areas where capital improvement projects are needed to convey existing and future wastewater flows. Specifically, the master plan identified four flow-constrained areas, Linn Avenue, Hazelwood Drive, 12th Street, and 13th Street/Division Street, which had sewers that were undersized and currently operated beyond existing capacity during both the 1- in 5-year and 1- in 10-year storm events. Any additional flows introduced into these sewers prior to fixing the capacity problems will increase surcharging and the potential for sanitary sewer overflows (SSO) that could result in flooding and/or basement backups. The City of Oregon City's Comprehensive Land Use Plan requires that the rate of community growth and development may not exceed the community's ability to provide essential public services, including a sanitary sewer system. Policy 11.2.1 of the City's Comprehensive Plan requires that the City "plan, operate and maintain the wastewater collection system for all current and anticipated city residents;" Policy 11.2.3 requires that the City "...provide enough collection capacity to meet standards established by the Oregon Department of Environmental Quality (DEQ) to avoid discharging inadequately treated sewage into surface water."

In order to not exacerbate identified sewer capacity problems in the four aforementioned flow constrained areas, a 6-month moratorium on land development, building, and sewer permit approvals was adopted by the City Commission on August 6, 2014, through adoption of Ordinance 14-006. This moratorium was extended for three (3) six month periods. The third moratorium extension expired October 1, 2016. Because two of the moratorium areas were still flow constrained at that time (the Linn Avenue and Hazelwood Drive systems), the City Commission voted on August 17, 2016 to adopt the

SSMP as the Public Facilities Strategy for the remaining constrained areas, effective October 1, 2016 to October 1, 2018.

During the time since the original moratorium was declared, capital projects have been completed to remedy capacity shortcomings in the 12th Street and 13th Street / Division Street areas and the Linn Avenue area. The Hazelwood Drive moratorium area is still flow constricted based on the SSMP, and further development must be prohibited until capital improvement projects to remedy identified capacity shortcomings in the system are completed. It is anticipated that projects to remedy flow shortcomings in the Hazelwood Drive basin will be complete in 2019.

Continuation of a public facilities strategy under ORS 197.768 is required in order to prohibit development in the identified flow-constricted areas until the necessary capital improvement projects to remedy flow shortcomings are completed.

The City is required to adopt continued findings to address the standards for a public facilities strategy under ORS 197.768(4). The City finds the following:

- (a) There is a rapid increase in the rate or intensity of land development in a specific geographic area that was unanticipated at the time the original planning for that area was adopted or there has been a natural disaster or other catastrophic event in a specific geographic area;*

The sewer system in the constrained area –Hazelwood Drive – was constructed in the 1980s as part of a citywide sewer separation program, or longer ago. The sewer system was expected to meet the current and projected needs of the community when it was constructed, but is no longer able to meet the anticipated increase in the rate and intensity of land use development required to serve the needs of approximately 20,000 more residents City wide by 2035. Further, many existing manholes in the system are made of brick and have failing manhole walls and channels. Segments of pipe in the system are constructed from clay, asbestos, and other materials which crack and deteriorate over time. New manholes and pipes will be constructed using modern materials and construction techniques, specifically precast reinforced concrete manhole barrels and modern PVC sewer pipe, both of which have exceptional performance and service life compared to brick and clay construction. Both in terms of function and repair condition, portions of the sewer system are subject to catastrophic failure in their existing condition.

The Portland Metro Region has experienced a dramatic increase in new construction during the past 5 years. If construction and sewer hook-ups were allowed in the sewer-constrained areas of Hazelwood Drive, the City expects that a rapid rate of increased and intense land development would occur. For example, the City denied the land use application for a proposed dormitory facility to house 60 people in the Hazelwood Drive area. The City denied the application, in part, because of sewer capacity issues.

In addition to land development pressures, the City considers SSOs a public health and safety risk. Thus, the City treats SSOs as catastrophic events in the Linn Avenue and Hazelwood Drive sewer systems because of the potential for human exposure to sewage overflows, and because DEQ does not allow SSOs. Further, the City has obligations under the federal Clean Water Act to prevent unpermitted discharges from the sanitary sewer system to water of the United States. In recent years the City has experienced overflowing sewers in several locations during heavy rain events. During heavy rain events,

City staff has observed significant surcharging within the Hazelwood Drive sewer system along Warner Parrott Road and in the sewers that are located in Shenandoah Drive and Joyce Court. During two separate storm events, the first on January 2, 2009, and the second on January 19 and 20, 2012, SSOs were recorded. Basement flooding was experienced by the residents at five properties during the first event and at two of the same five properties during the second storm event. The risk of additional property damage, as well as public health and environmental concerns related to SSOs supports the City's decision to enact and continue the public facilities strategy.

New capital improvement projects outlined in the SSMP will protect public health and the environment. No further development that requires sewer hook-ups should be allowed in the constrained areas until the capital improvement projects identified in the SSMP, which is the City's public facilities strategy for the Hazelwood Drive sewer system, are completed.

(b) The total land development expected within the specific geographic area will exceed the planned or existing capacity of public facilities; and

Hydraulic modeling carried out as part of the SSMP revealed that segments of pipe in many areas of the City have insufficient capacity to serve existing system users during heavy rainfall. As continued new development and infill occurs, the shortcomings of the system will only be exacerbated. The SSMP Appendix K, Section 3.2, predicts surcharging and flooding during the 1- in 10-year storm event in the Hazelwood Drive area in the existing condition. This area has the potential for additional sewer connections if new development is not restricted, which would only exacerbate the current SSO risk.

(c) The public facilities strategy is structured to ensure that the necessary supply of housing and commercial and industrial facilities that will be impacted within the relevant geographic area is not unreasonably restricted by the adoption of the public facilities strategy.

The overall impact area of the moratorium and public facilities strategy is approximately 403 acres, 7% of the total acreage across City. The percentage of the impact area based on zoning districts includes approximately 87% residential, 12% institutional, and 1% mixed use. The area of developable lots located in the overall impact area is approximately 54.3 acres, less than 1% of the total developable acreage across City. The developable lots in the impact area are properties that are either vacant or have a high potential for redevelopment. The percentage of the developable area based on zoning districts includes approximately 97% residential (52.4 acres) and 3% mixed use (1.9 acres). The moratorium areas were identified with the goal of protecting public safety and wellbeing while minimizing disruption to economic development. Other areas outside of the impact area continue to be developed to serve residential, commercial and industrial facility uses.

CONCLUSION

Based on the foregoing, the City finds that the conditions of ORS 197.768(4) have been satisfied, and the current public facilities strategy should be continued to prohibit land development, building, and sewer permit approvals within the Hazelwood Drive area.

The existing public facilities strategy with regard to the Hazelwood Drive system will expire on October 1, 2018, and pursuant to ORS 197.768(6), the City Commission is authorized to extend a public facilities strategy upon a finding that (1) the problem giving rise to the public facility strategy still exists and (2) setting the duration for the public facility strategy for a period of no more than one year.

Under ORS 197.768(5), the public facilities strategy includes clear, objective and detailed descriptions of the actions that the City will engage in to control the time and sequence of development approvals in response to the identified deficiencies in public facilities. The City's public facilities strategy is set forth in the attached SSMP developed to remedy the sewer constrained areas for the Hazelwood Drive sewer system. See Figures 1A-1B.

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