



Oregon

Kate Brown, Governor

Department of Environmental Quality

Northwest Region Portland Office/Water Quality

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Portland, OR 97232

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TTY 711

April 25, 2022

ANDY PETERS
PUBLIC WORKS DIRECTOR
PO BOX 248
MOLALLA, OR 97038

RE: City of Molalla STP
File No: 57613 / Permit No: 101514
Clackamas County

River Meadows Subdivision Sanitary Sewer Approval

Dear Mr. Peters:

The Oregon Department of Environmental Quality (DEQ) has approved sanitary sewer installation plans for the above project. Dan Symons P.E. (Symons Engineering Consultants LLC.) submitted plans and specifications April 8th for the City of Molalla (City), per Oregon Administrative Rule (OAR) Chapter 340, Division 052. A Land Use Compatibility Statement was approved by the City of Molalla and submitted with the project. A project description and DEQ's conditions of approval are listed below. The plans are for installing new sewer to serve a 30 lot subdivision. A review fee of \$268 was included in the submission.

DESCRIPTION:

- Tapping into two existing 8-inch stub on Rachel Lane;
- 6 standard 48-inch manholes;
- 1,132 LF of 8-inch diameter, ASTM D-3034 SDR-35 PVC sanitary sewer main;
- 1,029 LF of 4-inch ASTM D-3034 SDR-35 PVC pipe for service laterals to 32 dwelling units with 4-inch cleanouts at the property line;
- 235 LF of 4-inch ASTM C900 PVC pipe for service laterals to 8 dwelling units with 4-inch cleanouts at the property line;
- 1 8-inch cleanout.

CONDITIONS OF APPROVAL

1. **Sheets C18 and C20 were amended to add a second lateral to lot 17. The amended sheets are dated April 15, 2022 and will replace the March 24th versions.**
2. 8-inch attachment to Rachel Lane stub must maintain the existing slope.

3. Construction shall be inspected and certified in writing by the design engineer, Dan Symons PE (Symons Engineering Consultants Inc.) per OAR 340-052. Please use the attached "Inspection and Certification of Proper Construction" and "Manhole Testing" forms to certify the project.
4. The City shall not allow any sewer construction to be performed, except under active inspection. Sanitary taps to existing sewers must be inspected and approved by qualified City staff. Only APWA approved materials and methods shall be used.
5. All sanitary sewer materials, construction, and testing shall comply with the American Public Works Association (APWA), Oregon Chapter, Year-2021 and subsequent revisions (Part RD300 of Oregon Standard Drawings and Part 00400 of Oregon Standard Specifications for Construction 2021), and with the City of Molalla Construction Standards. *The more stringent requirements shall apply in each situation.* A copy of both APWA and City construction standards shall be kept at the construction site for reference at all times.
6. The PVC **sanitary sewer** main shall be **air tested** per APWA Part 00445.72, and **deflection tested** per Part 00445.73. A **TV acceptance inspection** is required for the newly constructed sanitary sewer, per APWA Part 00445.74.

CITY OF MOLALLA RESPONSIBILITIES

The City shall comply with these approval conditions and shall ensure that the following additional requirements are met:

1. Provide timely submittal of the engineer's certification;
2. Observe water quality regulations for all aspects of the project;
3. **Ensure that a 1200-C erosion control permit** is obtained, if applicable, when the project disturbs **one-acre** or more when all construction phases are considered;
4. Verify that all contractors install effective erosion controls; and
5. Verify that contractors and municipal staff adhere to ODEQ guidelines and procedures for proper flushing of water lines. See State dechlorination requirements at: <http://www.deq.state.or.us/wq/pubs/bmps/chlorwaterdisp.pdf>.

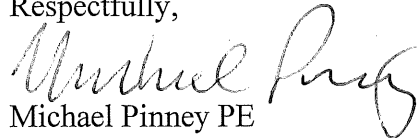
PROOF OF WASTEWATER CONVEYANCE AND TREATMENT CAPACITY

An adequate statement of capacity in the existing sanitary sewer system was included with this submission. Molalla's wastewater treatment system has diminishing capacity. It is anticipated development will overwhelm the existing capacity soon. The City has reclaimed some capacity by aggressively improving the integrity of their sanitary sewer and pump stations through infiltration and inflow (I/I) removal. The aggressive approach to I/I must continue. The capacity of the treatment plant in wet weather, not dry weather, is the measure of capacity. Upon completing its plan review, DEQ has authority to reject a plan for numerous reasons, including that the plan fails to provide for reliability to preclude violation of a permit or water quality standards (OAR 340-052-0035). Each subsequent development project must include a capacity statement.

This plan approval is valid for one year. If construction has not commenced within one year, plans must be resubmitted along with the appropriate fee for approval, unless waived by the Department.

INQUIRIES: Please contact me at (971) 227-1765 for additional information.

Respectfully,



Michael Pinney PE

Senior Environmental Engineer NWR-WQ

Enclosures:

(1) "Inspection and Certification of Proper Construction";(2) "Manhole Test Record"

CC (with): Dan Symons P.E., Symons Engineering Consultants LLC, 12805 SE Foster Rd.,
Portland OR 97236

eCC (w/o):Tiffany Yelton-Bram, Manager, Source Control Section, NWR-WQ



THE DYER PARTNERSHIP
ENGINEERS & PLANNERS, INC.

March 30, 2021

Gerald Fisher, PE
Public Works Director
City of Molalla

Re: River Meadows Subdivision
Statement of Capacity

Dear Gerald:

In accordance with OAR 340-052-0015(3)(c), this letter serves as a statement concerning the impact of the proposed River Meadows Subdivision, located at the north end of Rachel Lane, on the capacity and performance of the collection, Wastewater Treatment Plant (WWTP), and effluent disposal facilities.

OAR 340-052-0015(3)(c) states, "Plans for a common sewer or a sewerage system submitted by a person other than the owner or joint owner of the treatment works must be accompanied by a statement from the treatment works owner that he agrees to provide sewer service and has sewerage system and treatment capacity to do so."

The proposed development consists of the division of Tax Lot 2002 (5S2E05) into thirty, single family residential lots. The new lots will be served by a new public sanitary sewer main to be installed in the extension of Rachel Lane. The new sewer main will connect to an existing sanitary sewer manhole at the intersection of Rachel Lane and Eric Dr.

Flows and loads resulting from the additional residential connections within the River Meadows Subdivision will be insignificant in comparison to the current population and the peak flows reduced due to recently executed collection system improvement projects. The River Meadows Subdivision consists of thirty additional residential units, an additional contribution of less than 1% of the current population of 9,885, assuming 2.5 persons per dwelling unit. Using a base sewage flow of 90 gallons per capita per day (gpcd), per the City's 2018 Wastewater Facility and Collection System Master Plan, we can assume a monthly flow of 202,500 gallons generated by the new subdivision.

Sanitary sewer system capacity that was previously consumed by Inflow and Infiltration (I/I) and biosolids accumulated in the WWTP lagoons, has been made available by way of collection system and WWTP improvement projects. From 2018 to 2020, the City of Molalla implemented the following collection and WWTP improvement projects, all of which outweigh the additional residential sewage flow contributions from the River Meadows Subdivision.

- **Collection System Improvement Projects**

- Smoke Testing Deficiencies: Smoke testing was performed by Dyer Partnership Engineers and Planners from October 16 through October 18, 2017. The smoke testing identified 208

deficiencies, all of which are potential sources of I/I. The City has made significant progress in resolving deficiencies identified during smoke testing, and has corrected 105 of the 208 deficiencies.

- The City replaced approximately 1,209 linear feet of sewer main on Fenton Avenue in 2019. The replacement work on Fenton Ave. was identified as part of the Phase I collection system improvement projects listed in the 2018 Wastewater Facilities and Collection System Master Plan.
- The City replaced approximately 1,350 linear feet of sewer main on Patrol St. in 2020. The replacement work on Patrol St. was identified as part of the Phase I collection system improvement projects listed in the 2018 Wastewater Facilities and Collection System Master Plan.
- In 2019, the City repaired four main line leaks, four sanitary sewer laterals, and grouted several existing manholes.
- In 2020, the City cleaned 9,727 linear feet of sanitary sewer line, replaced 9 failed sewer laterals and brought the number of grouted sewer manholes to 105.
- The City is continuing to execute collection system improvement projects, but the work accomplished to date will have an impact on mitigating I/I flows.

- **WWTP Improvement Projects**

- Lagoon Biosolids Removal: Sludge has accumulated in Aerated Lagoon and Facultative Lagoon #1 and #2 for decades. The sludge occupies treatment capacity and negatively impacts recycled water storage capacity. The City removed the majority of sludge from the Aerated Lagoon, and approximately 1,100 dry tons of the sludge from Facultative Lagoons in 2018 and 2019. In 2020, the City removed 411.5 dry tons of sludge from the Facultative Lagoons.
- Secondary and Tertiary System Improvements: Improvements have been made to the DAF units and the gravity sand filters. This has improved the performance and capacity of secondary and tertiary treatment systems.
- A second headworks influent screen was added in December, 2019, increasing available screening capacity of influent flow.
- The City installed three surface aerators in Lagoon #1 to improve treatment efficiency and capacity.

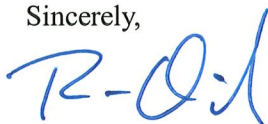
As evidence in corroborating the impact of collection system improvements, the South Molalla Pump Station was recently evaluated, comparing the months of January, 2020 and December, 2020. January and December had comparable rainfall totals of 5.99 inches and 6.04 inches, respectively. The monthly total of wastewater pumped, however, dropped by approximately 383,160 gallons, a reduction of 31%. This reduction exceeds the monthly base amount assumed for the new thirty lot subdivision of 202,500 gallons.

Similarly, the influent flows to the WWTP have dropped from 2018, the start of the City's I/I reduction efforts, to 2020. In 2018 the total influent flow at the WWTP was 429 Million Gallons (MG) and in 2020 the flow was 317 MG. The rainfall totals for 2018 and 2020 were 28.6 inches and 28.4 inches, respectively.

In summary, based on historical performance of the WWTP and the projected flows associated with the River Meadows Subdivision project in comparison to current flows, the recently implemented collection and WWTP improvement projects will provide the capacity needed for Mutual Agreement and Order (NO. WQ/M-NWR-2016-246) compliance.

Feel free to contact us if you should have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "R-Quigley". The signature is stylized and written in a cursive-like font.

Ryan Quigley, P.E.
Project Manager