

March 31, 2023

Andy Peters Public Works Division Manager City of Molalla

Re: Colima Apartments

Statement of Capacity

Dear Andy:

In accordance with OAR 340-052-0015(3)(c), this letter serves as a statement concerning the impact of the proposed Colima Apartments, located at 12763 S. Comptons Lane, on the capacity and performance of the City of Molalla's (City) wastewater collection, Wastewater Treatment Plant (WWTP), and effluent disposal facilities. The proposed apartment complex development consists of the development of two parcels into apartment buildings, with a total of eighteen Equivalent Dwelling Units (EDUs). 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 Dyer Partnership previously evaluated and summarized the capacity of the existing WWTP in the April 19, 2022 Technical Memorandum, "Wastewater Treatment Plant Upgrades – WWTP Performance Evaluation." The Technical Memorandum concluded compliance with the National Pollutant Discharge Elimination System (NPDES) permit as modified by the Mutual Agreement and Order (MAO) with flow and load contributions from an additional 214 EDUs is attainable based on the following conditions:

- 1. Influent flows and loads remain consistent with 2018 through 2021 values;
- 2. City continues to implement collection system improvement projects to mitigate infiltration and inflow;
- 3. Proper operation and maintenance activities; and,
- 4. Ongoing solids removal from the lagoons.

This letter evaluates the impacts on the performance of the City's wastewater infrastructure relative to an additional 18 EDUs, and considering changed conditions at the WWTP since the capacity of the existing WWTP was evaluated in April 2019. In October 2022, the City was forced to bypass the Aeration Basin. The City is in the process of installing additional aerators in Lagoon No. 1, in an attempt to replace the treatment capacity lost due to bypassing of the Aeration Basin. The City intends to monitor the performance of the WWTP after the aerators are installed to understand and quantify the impacts. The City is committed to continuously monitoring the existing WWTP and evaluating interim upgrades necessary to achieve NPDES permit and MAO compliance while adding new connections until the new WWTP is constructed.

An evaluation of the proposed flows and loads from the Colima Apartment development was conducted. The eighteen EDUs will generate an average dry weather flow of approximately 5,500 gallons/day. The current average dry weather flow is approximately 600,000 to 700,000 gpd. The additional flow generated by the 18

EDUs represents an additional contribution of about 0.9 percent. The additional residential connections are insignificant in comparison to the current flows and loads.

The apartment complex will be served by a new public gravity sewer main. With contemporary materials and construction techniques, it is not anticipated that the new sewer will contribute significantly to infiltration and inflow rates.

Since 2018, the City has implemented several collection system improvement projects that have reduced the wet weather flows conveyed to the WWTP. Capacity that was previously trapped by infiltration and inflow has been made available by way of collection system improvement projects. In addition to recently constructed collection system improvement projects, the City has also made significant progress towards removing solids from the lagoons. Solids in the lagoons have historically occupied volume and treatment capacity. The City removed 1,461 dry tons of solids in 2022. The City has also optimized and addressed deficiencies with the tertiary treatment systems, and installed a second influent screen in 2019.

Based on 2018 through 2021 flows, and the 2007 WWTP Improvements design data, compliance with the NPDES permit as modified by the MAO, with flows and loads from an additional 18 EDUs, is attainable, with the understanding that periodic (seasonal) ammonia limit non-compliance and out-of-season discharges may occur. The City has violated the effluent ammonia limit periodically in the past, most recently in November and December of 2022. The City may continue to violate the ammonia limit, depending on influent flow rates, operation and maintenance tasks, solids removal activities, and based on the degree of aeration installed in Lagoon No. 1.

In the event that per capita flows exceed those recorded in 2018 through 2021, or should precipitation be above average during the months of May through October, the City may need to request an out-of-season discharge from Oregon Department of Environmental Quality (DEQ). Above average rainfall will contribute to rain induced infiltration and inflow, which could negatively impact storage requirements within the existing lagoons. In accordance with the City's MAO, any out of season discharge not authorized by the NPDES permit that occur during the months of May, June, or October will be addressed per DEQ's Enforcement Guidance Internal Management Directive.

The City is in the process of constructing a new WWTP, with construction scheduled to commence in late 2023, and commissioning of the new Sequencing Batch Reactor facility in early 2025. The above remarks are considered temporary and only valid as the City continues to operate the existing WWTP.

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

Sincerely,

Tyler J. Molatore, PE
THE DYER PARTNERSHIP

ENGINEERS AND PLANNERS, INC.