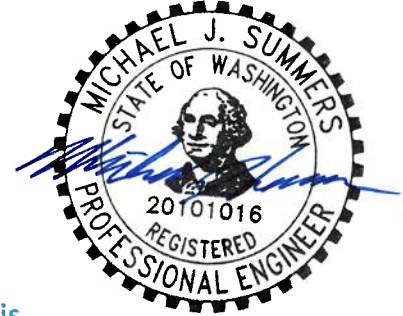


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Date: 11/12/2025
To: Rob Charles, City of Camas—Utility Manager
From: Michael Summers, PE
Project Name: Uhacz Subdivision
AKS Job No.: 12533
Project Site: 27429 SE 15th Street, Camas, Washington



Subject: Hills at Round Lake Sewer Pump Station Capacity Analysis

The purpose of this memorandum is to outline the existing capacity of the Hills at Round Lake Sewer Pump Station regarding the ability of the station to serve future development within the service basin at the property site of 27429 SE 15th Street, Camas, Washington.

The Hills at Round Lake Pump Station was constructed in 2011 as part of the Hills at Round Lake Subdivision project. This pump station was designed to be implemented in two phases of construction activity to serve the entire basin. The phase I served the Hills at Round Lake Subdivision, North Hills Subdivision, and Woodburn Elementary School. The initial flow demand for this pump station per the system design calculations was 201 gallons per minute peak flow demand. The station was installed with an initial pump capable system with a set design peak flow of 257 gallons per minute of peak flow. The remaining capacity of the station is 27 percent of the phase I to serve future development within the basin based on the proportional difference between the design peak flow and the installed pump. The remaining capacity is 56 gallons per minute of peak flow.

The peak flow demand consists of three flow components residential, institutional, inflow and infiltration (I&I). The following table lists the peak flow demand components for the current phase I of the pump station, in gallons per minute.

Table 1 – Design Peak Flow Demand (GPM)

Residential	Institutional	I&I
151	13	37

This pump station is able to serve additional residential units in the service area given the 27% additional peak flow demand capacity. There is no additional institutional or commercial zoned properties in the service area basin for the station. So, the remaining capacity can be served with additional residential development and I&I flows. I&I flows account for an approximate 18% proportion of the peak flow demand. The available peak flow capacity for residential flows is 46 gallons per minute. Using the calculations parameters from the initial design of 149 gallons per day/ERU and a peaking factor of 3.8; the additional 46 gallons per day can support a total of 116 additional ERUs based on peak flow demand.

A review of the recorded plats for the two subdivisions from the initial phases (Hills at Round Lake Subdivision, North Hills Subdivision) confirmed that total equivalent residential units (ERUs) for these two subdivisions were 376 ERUs, which is eight ERUs fewer than the phase I for the station. Given the two initial subdivisions had eight fewer lots than designed, the total additional ERUs able to be served by this station is approximately 124 ERUs.

In conclusion, the Hills at Round Lake Pump Station has capacity to serve an additional 124 ERUs within service basin.

References:

Hills at Round Lake Pump Station – Pump Station Calculations, Olson Engineering, Inc., December 22, 2010

Hills at Round Lake Pump Station – Pump Submittal, ITT Water & Wastewater Inc., November 22, 2010

Hills at Round Lake Plat

North Hills Plat