

5 April 2024

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 AKS Engineering & Forestry
 12965 SW Herman Road
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Subject: Water System Improvement Plan Concurrence (Revised)
 Holt Homes Aerts Addition Development
 KJ 2376017*00

Dear Paul:

Kennedy/Jenks has reviewed the Water System Improvement Plan memorandum dated 12 December 2023 by Summit Water Resources (Memorandum). The Memorandum was prepared to support Holt Homes (Holt) in planning and implementation of a planned unit development (“Aerts Addition”) at the current Quail Valley Golf Course property. This memorandum summarizes comments on the basis for planning provided in the Memorandum, and the Holt Team’s plan to move forward with the demands as a partial basis of design for water supply to the proposed development.

Based on the demands presented and population projection in the Memorandum, the following design estimates were developed, and compared in the table below to Kennedy/Jenks’ estimated demands presented in our review of the draft Memorandum:

Design Condition	Summit Estimated Demand		KJ Estimated Demand ⁽²⁾
	MGD ⁽¹⁾	gpcd	gpcd
ADD	0.20	84	91
Peak Season ADD	0.28	118	--
MDD	0.39	165	180
Peaking factor (MDD/ADD)	1.98		

Legend: gpcd = gallons per capita per day
 ADD = Average Day Demand MDD = Maximum Day Demand
 (1) Quail Valley Water System Improvement Plan, Summit Water Resources, 12 December 2023
 (2) Banks East Side (Quail Valley) Development Water Considerations, Kennedy/Jenks, 20 October 2023.

The assumed basis of the values presented is provided in detail in the Memorandum, including occupancy rates, unit rates for residential irrigation, commercial demand, industrial demand, and pond/wetland replenishment. The basis of estimates also includes the assumption that open space will be irrigated with water furnished through another source, such as Tualatin Valley Irrigation District. To calculate demand, the Memorandum summarizes the number of projected residential units, industrial building area, commercial building areas, and population.

These projections and assumptions will need to be revisited and validated as design of the proposed development proceeds. As a starting point for agreement of a design basis, the per capita water demands presented above are similar and the City can accept them as the basis of planning. The

actual production of water sources, actual occupancy of industrial and commercial properties, and the irrigation and pond/wetland makeup water will be reviewed at the time the development plans are finalized and the more variable water demands from the commercial and industrial properties are better understood.

Developer Agreement Terms Related to Water Supply

While the Memorandum documents the basis of water demands for planning and design purposes, the Developer Agreement separately establishes the intended sources of water (groundwater) and approach to securing, treating, storing, and distributing water to the proposed new connections. This may include more than one groundwater well, and the potential for long term use of groundwater as a source of municipal water will be assessed after the first well is drilled.

Based on the City's experience operating the two existing wells (Wells 1 and 2), prolonged pumping of groundwater from wells in the area can cause prolonged drawdown of the groundwater table, pushing the maximum allowed under the City's water rights. Therefore, the City's long-term water strategy outlined in the Water Master Plan Amendment (Kennedy Jenks, 2023) includes the use of non-groundwater sources. The use of exclusively groundwater supply for long-term use will require supplemental water from other sources. As a result, the City intends to test Aquifer Storage and Recovery (ASR) using a surface water supply. If successful, the wells proposed in the Developer Agreement can be implemented for long-term use in conjunction with an ASR program.

Applicable Requirements and Standards

The terms in the Developer Agreement include participation from Holt and the City, as well as standards and codes under which the development of water supply for the benefit of the new connections will be made. Water shall be provided to the new development including, but not limited to the following:

- City of Banks Code of Ordinance
- City of Banks Public Works Design Standards
- State of Oregon Administrative Rules Chapter 333, Division 61, Drinking Water
- State of Oregon Water System Construction Standards (OAR 333-061-0050)
- Oregon Department of Water Resources Rules (OAR Chapter 690)

Other engineering, planning, and hydrogeologic standards and requirements may apply, depending on the focus of planning and design, and depending on the results of well construction and testing. Standards for design of municipal wells, pumping, treatment, transmission, and distribution may be supplemented by the recommendations of the City's Hydrogeologist and the City Engineer.

Conclusion and City of Banks Municipal Code 152.003(D)

The City concurs with the demands stated in the Memorandum and Section 8 of the Aerts Addition Development Agreement approved by Banks City Council on 13 February 2024 meet the requirements of City of Banks Municipal Code 152.003(D). We will review the Development Application upon or after the approved Development Agreement is executed.

Paul Sellke, PE, GE
AKS Engineering & Forestry
5 April 2024
Page 3

Please contact me if you have any questions at 503-423-4019.

Very truly yours,

Kennedy/Jenks Consultants, Inc.



Robert Peacock, PE
City Engineer

cc: Jolynn Becker, City Manager, City of Banks