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MEMO

To: Rachel Vickers, City of La Pine, Oregon

From: Troy Baker, P.E.

Subject: Application Review: Foundation for Affordable Housing - Wickiup Station Site Plan

Date: December 11, 2024

Job/File No. 33-20-002

cc: Brent Bybee, City of La Pine, Oregon
Kelly West, City of La Pine, Oregon
Geoff Wullschlager, City of La Pine, Oregon

Per the City of La Pine, Oregon's request, Anderson Perry & Associates, Inc., has reviewed the site plan for the Wickiup Station multifamily development, located at 52695 Drafter Road on Tax Lot No. 211036AD00100, with respect to its potential impacts to City public utilities and roadways. The public improvements shown on the site plan were reviewed using the City of La Pine, Oregon, 2016 Standards and Specifications Design Standards (Design Standards). The comments are listed below by the corresponding public facility.

Street

1. Drafter Road is designated as a minor collector on the current Transportation System Plan and is incorrectly labeled as a local street on Sheets C101, C201, and C301.
2. The minor collector street design parameters shown on the site plan are met per the Design Standards, II. Design Parameters, A. Street, 1. General, for sidewalk width, planter strip width, and total paved width. Additionally, the 1-foot dedication meets the right-of-way width from the existing centerline.
3. The curb shown on the site plan is a 12-inch concrete curb with 6-inch curb exposure. Drafter Road is designated as a minor collector with a design speed of 35 miles per hour and requires a
16-inch concrete curb with 7-inch curb exposure per the Design Standards, II. Design Parameters, A. Street, 10. Curbs.
4. A proposed cluster postal delivery box per the Design Standards, II. Design Parameters, A. Street, 15. Cluster Postal Delivery Boxes, should be shown on the site plan and located an adequate distance from the driveway to minimize driveway turning movement conflicts.
5. Drafter Road is required to meet the collector pavement section shown per the Design Standards, II. Design Parameters, A. Street 17. Pavement Section.
6. The pavement taper shown is inadequate and is required to meet the Design Standards, II. Design Parameters, A. Street 19. Pavement Taper.
7. Submit design Drawings for Drafter Road meeting the requirements of the Design Standards, II. Design Parameters A. Street.

Stormwater

1. The three-chamber system proposed on Sheet C201 appears to be adequately sized from the provided stormwater model results to handle the 25-year/24-hour peak stormwater runoff for the site. The testing and engineer certification by the applicant's engineer will ensure adequate infiltration capacity. Provide testing results and engineer's certification to the City Public Works Department.
2. No stormwater facilities are shown for the Drafter Road improvements. Submit design drawings for Drafter Road meeting the requirements of the Design Standards, II. Design Parameters, B. Stormwater.

Sewer

1. Show 6-inch cleanouts at the beginning and at the end connection of the 4-inch gravity sanitary sewer line to the new 6-inch polyvinyl chloride (PVC) gravity sanitary sewer main across the site.
2. The anticipated peak wastewater flow from the proposed development is approximately 14 gallons per minute (gpm).
3. The design flow capacity for the existing 4-inch PVC sewer main flowing 80 percent full at 0.00125 feet per foot (ft/ft) slope is approximately 38 gpm. The peak wastewater flow from the proposed development represents approximately 37 percent of the existing 4-inch PVC gravity sewer main's flow capacity.
4. The 4-inch PVC gravity sewer main should be replaced with 6-inch PVC gravity sewer main across the site as shown. The off-site 6-inch PVC gravity sewer main replacement shown on Sheet C401 should be completed.
5. The City should continue to monitor the flow in 4-inch PVC gravity sewer mains serving developments along Highway 97 and Drafter Road for future replacement with a 6-inch PVC gravity sewer main to ensure adequate flow capacity for further development.
6. Erik Huffman, P.E., of BECON Civil Engineering & Land Surveying, provided Kelly West, City Public Works Director, with an analysis of the 6-inch PVC gravity sewer crossing under Highway 97. The design flow capacity for the 6-inch PVC gravity sewer main crossing flowing 80 percent full at 0.00125 ft/ft slope is approximately 113 gpm. The analysis concluded that the 6-inch PVC gravity sewer main could convey the flow for 224 equivalent dwelling units. Based on the results of BECON's flow capacity analysis, the existing 6-inch gravity sewer crossing under Highway 97 should provide adequate capacity to accommodate the proposed development and continue to serve existing developments in the affected service area. The City should continue to monitor flow in this sewer main to ensure adequate flow capacity continues to be available as development occurs upstream of the Highway 97 crossing.
7. Submit design Drawings for the 6-inch PVC gravity sewer main meeting the requirements of the Design Standards, II. Design Parameters C. Sewer.

Water

1. The 8-inch PVC water main on Drafter Road across the site's frontage is connected to a 12-inch PVC water line on Highway 97 at the north and along Rosland Road to the south, forming a loop. A 16-inch water transmission main was recently tied into the 8-inch water

mains on Drafter and Rosland Roads. No off-site water system improvements are needed. Test flows should be completed for the hydrants near the site to determine an available fire flow for the design of the fire sprinkler system by the applicant's engineer. Copies of the fire hydrant tests should be provided to the City Public Works Department.

TB/jg

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