

# MEMORANDUM

# FOCUS ENGINEERING, inc.

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Date: September 3, 2019

To: Ken Roberts, Planner Director	Re: Applewood Pointe at Lake Elmo (United Properties)
Cc: Chad Isakson, Assistant City Engineer	Concept Site Plan Review
From: Jack Griffin, P.E., City Engineer	

We have reviewed the Applewood Pointe Concept PUD Plans. The Concept Site Plans consisted of the following documentation received on August 12, 2019:

- Narrative dated August 1, 2019, prepared by United Properties.
- Concept Site Plan dated July 31, 2019.
- Site Survey Analysis dated July 31, 2019.
- Certificate of Survey dated July 17, 2019.
- Wetland Delineations, not dated.

Engineering has the following review comments:

## STREETS AND TRANSPORTATION

- Eagle Point Boulevard Improvements. A Traffic Impact Study should be required to review the traffic impacts that would be placed on the adjacent local roadway system from the higher density use of the property. This review should include, but not be limited to:
  - Consideration for extending the right-turn lane on Eagle Point Boulevard (at Hudson Boulevard) for an additional 300-400 feet. It has been reported that the peak hour traffic currently exceeds the turn lane capacity.
  - Consideration for left and right turn lanes at the Applepointe Subdivision access locations.
- Eagle Point Boulevard Right-of-way Dedication. Additional right-of-way may need to be dedicated to the City along Eagle Point Boulevard to accommodate any proposed or potential future improvements for the roadway corridor.
- Hudson Boulevard Improvements. Hudson Boulevard Improvements should be required as part of the Subdivision in accordance with the Hudson Boulevard Design Standards, with an Urban section along the north boulevard and bituminous trail.
- Hudson Boulevard Right-of-Way Dedication. Additional right-of-way dedication to the City along Hudson Boulevard may be required to accommodate the Hudson Boulevard Improvements.
- Site Access. The concept plan proposes two access locations along Eagle Point Boulevard, approximately 200 feet apart. The north access is proposed only 80 feet from the existing Eagle Point business condominiums. These access locations do not meet City access spacing guidelines along Collector Roadways and are not recommended as presented. A transportation review should be completed to determine better Subdivision Access.
- Pedestrian Connectivity. The City should review the site plan to determine pedestrian connectivity surrounding the proposed Subdivision.
- Private Streets. The streets interior to the development are proposed to remain privately owned and maintained. Interior street design may require revisions to provide adequate fire lanes and safety access.

## MUNICIPAL SANITARY SEWER

- The proposed site is guided in the City's Comprehensive Plan for Phase I of the Regional Sewer Staging Plan and would discharge to the MCES WONE Interceptor.
- Sanitary sewer service is available to the site. The applicant will be responsible to connect to the City sanitary sewer system and extend sanitary sewer into the property at applicant's sole cost.
- The concept plan does not include a sanitary sewer utility plan for review but is proposing 100 REC units plus additional potential facilities and amenities. The site was originally planned for up to 50 REC units.
- The applicant will be required to connect to the existing sanitary sewer along Hudson Boulevard, connecting to an existing 8-inch sanitary sewer pipe extending northwest from the I94 Lift Station site. Capacity is not available for this facility to connect to the existing 15-inch sanitary main extending southeast of this manhole.
- A review of the impacts to the sanitary sewer system and adjacent I94 Lift Station will be required to identify any improvements necessary to accommodate the added sewer flows.
- Existing Utility Easements. The existing sanitary sewer utility easements along Hudson Boulevard and the new commercial street corridor must be shown with any preliminary plan submittal and plan revisions must be made to avoid encroachments/conflicts with these easements.
- Any sanitary sewer main lines placed within the development will require minimum 30-foot easements centered over the pipe (or wider dependent upon the sewer depths) dedicated to the City and in the form of the City's Utility Easement Agreement.

## MUNICIPAL WATER SUPPLY

- The concept plan does not include a watermain utility plan for review but is proposing 100 REC units plus additional potential facilities and amenities. The site was originally planned for up to 50 REC units. A review of the impacts to the water system will be required to identify any improvements necessary to accommodate the added water demands.
- Municipal Water service is available to the site. The applicant will be responsible to extend municipal water into the development at its cost and will be required to construct a looped watermain network internal to the site with, at least, a second City watermain connection point.
- Watermain is available to be extended to the property from an existing 12-inch trunk watermain located along three sides of the proposed site, including Hudson Boulevard, Eagle Point Boulevard and the commercial driveway to the adjacent property.
- The existing water system will need to be reviewed to determine if sufficient capacity for the proposed high-density development is available without additional improvements to the water system. During preliminary planning the applicant must provide domestic and fire suppression demands for the facility so that staff may verify adequate water system capacity.
- No watermain pipe oversizing is anticipated at this time. Further review will be completed as the application moves forward through the process.
- The applicant will be responsible to place hydrants throughout the property at the direction of the Fire Department. All fire hydrants shall be owned and maintained by the City.
- Any watermain lines and hydrants placed within the development will require minimum 30-foot easements centered over the pipe. Easements must be dedicated to the City and be provided in the City's standard form of easement agreement.

## STORMWATER MANAGEMENT

- The concept plan does not address storm water management. The proposed development is subject to a storm water management plan meeting State, South Washington Watershed District (SWWD) and City rules. A permit will be required from the Minnesota Pollution Control Agency and SWWD.
- Storm water facilities proposed as part of the site plan to meet State and SWWD permitting requirements must be constructed in accordance with the City Engineering Design Standards Manual.

- Permitting requirements will require rate control from all points of discharge from the site and will require volume control (or infiltration). Overland emergency overflows or outlets are required as part of the site plan for flood protection. The site plan will likely require additional storm water ponding or infiltration to satisfy all storm water regulations.
- If storm water ponds (detention) and infiltration basins are proposed, the 100-year high water flood level (HWL) for each basin must be fully contained within private property.
- The storm water facilities constructed for this development should remain privately owned and maintained. The applicant will be required to execute and record a Stormwater Maintenance and Easement Agreement in the City's standard form of agreement.
- Even as privately owned and maintain facilities, maintenance access roads meeting the City engineering design standards must be provided for all storm water facilities.