

LEE'S SUMMIT

DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

DATE: October 3, 2018 CONDUCTED BY: Michael K Park, PE, PTOE

SUBMITTAL DATE: September 4, 2018 **PHONE:** 816.969.1800

APPLICATION #: PL2018101 EMAIL: Michael.Park@cityofls.net

PROJECT NAME: WOODLAND GLEN PROJECT TYPE: Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (Streets, Developments)

The proposed development is located along the east side of Ward Road, north of Scherer Road. The surrounding area generally includes existing residential subdivisions, large residential lots or undeveloped agricultural properties. The proposed development is within the existing Woodland Glen subdivision.

ALLOWABLE ACCESS

The proposed development will be accessed from existing residential streets and intersections. No new access has been proposed from Scherer Road or Ward Road.

EXISTING STREET CHARACTERISTICS (Lanes, Speed limits, Sight Distance, Medians)

Ward Road is a four-lane, 35 mph, major arterial in the vicinity of the proposed development. Portions of Ward Road are median divided and turn lanes are present at the principal intersection of Winthrop Drive which serves the subdivision at Ward Road. Scherer Road is a two-lane, unimproved, undivided, rural major arterial with a 35 mph speed limit in the vicinity of the proposed development. The intersection of Heartwood Drive and Scherer Road, which serves the subdivision at Scherer Road, has limited sight distance and consequently an undesirable all-way stop condition. Sight distances at the other intersections internal to the subdivision and along Ward Road are adequate. The intersection of Ward Road and Scherer Road is traffic signal controlled with various left-turn and right-turn lanes.

ACCESS MANAGEMENT CODE COMPLIANCE?	YES 🔀	No
ACCESS IVIANAGEIVIENT CODE COMPLIANCE:	163	INU

The proposed development does not create new intersections along Ward Road or Scherer Road. All roadways, intersections and access proposed within the subdivision comply with the Access Management Code.

With regard to the existing intersections along Ward Road and Scherer Road that provide access to the subdivision (i.e. Winthrop Drive, 14th Street and Heartwood Drive), several provisions of the Access Management Code (AMC) are not met and grandfathered. The existing left-turn lane at Winthrop Drive does not exhibit the minimum capacity required in the AMC. Though the turn lane capacity is less than minimum, the volume is low and no congestion issues are reported. The intersection of 14th Street is not properly separated from the adjacent intersection of 13th Terrace towards the north (approximately 365 feet of separation is provided and 660 feet is the minimum); though the intersection is adequately spaced from the signal controlled intersection of

Persels Road farther to the north and from Winthrop Drive to the south. The intersection of 14th Street also does not have left-turn lanes. However, left-turn movements at 14th Street may be limited in the future by extending the existing median along Ward Road to create better separation of full access when necessary or in association with future improvements to the intersection of Persels Road and Ward Road (e.g. realignment, turn lanes, permanent signal, etc.) rendering left-turn lanes at 14th Street unnecessary. There is currently no known crash concern at this location. The intersection of Heartwood Drive does not have left-turn lanes along Scherer Road as required in the AMC either. However, the intersection of Heartwood Drive requires significant improvements to mitigate existing sight distance limitations. Furthermore, the City has a planned capital improvement project for Scherer Road. These improvements to Scherer Road at Heartwood Drive are subject to staff's recommendation of approval as noted below. At the time of intersection improvement, whether by the City or developer as a condition of approval, a leftturn lane should be constructed. Right-turn lanes at each of these intersections may or may not be warranted under the provisions of the AMC, but this development will not likely generate enough traffic on its own to meet those conditions. The existing operations along Ward Road and Scherer Road at these intersections do not indicate the necessity of right-turn lanes at this time based on a lack of congestion, crash history and traffic volume. These are all existing conditions that serve a small amount of development (and associated traffic volume) with imminent future changes along Ward Road and Scherer Road. At this time and in relation to this development, particularly the phase of development which impacts Heartwood Drive, staff recommends improvements to the intersection of Scherer Road and Heartwood Drive.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	532	266	266
A.M. Peak Hour	50	11	39
P.M. Peak Hour	53	34	19

TRANSPORTATION IMPACT STUDY REQUI	RED? YES 🗌	No 🔀		
· · · · · · · · · · · · · · · · · · ·	ven peak hour as a minimum co	than 100 vehicle trips to the surrounding ondition for a transportation impact		
LIVABLE STREETS (Resolution 10-17)	COMPLIANT 🔀	EXCEPTIONS		
The proposed development plan includes all Livable Streets elements identified in the City's adopted Comprehensive Plan, associated Greenway Master Plan and Bicycle Transportation Plan attachments, and elements otherwise required by ordinances and standards, including but not limited to sidewalk, landscaping, and accessibility. No exceptions to the Livable Streets Policy adopted by Resolution 10-17 have been proposed.				
RECOMMENDATION: APPROVA Recommendations for Approval refer or City Staff.		N/A STIPULATIONS Mind do not constitute an endorsement from		

Staff recommends approval of the proposed preliminary development plan subject to the following conditions:

1. Prior to the issuance of building permits within any portion of the development adjacent to Heartwood Drive, or the connection of Heartwood Drive between the existing Heartwood Drive termini, improvements as generally described herein to the intersection of Heartwood Drive and Scherer Road shall be substantially completed. Road improvements to the intersection of Heartwood Drive and Scherer Road shall mitigate any areas of limited intersection sight distance such that Scherer Road at Heartwood Drive does not require stop signs and adequate visibility is provided for the existing speed limits. The improvements shall also include an eastbound left-turn lane along Scherer Road at Heartwood Drive with minimum dimensions described in the Access Management Code.