



# LEE'S SUMMIT

## MISSOURI

### DEVELOPMENT REVIEW FORM

#### TRANSPORTATION IMPACT

**DATE:** November 3, 2016      **CONDUCTED BY:** Michael K Park, PE, PTOE  
**SUBMITTAL DATE:** October 18, 2016      **PHONE:** 816.969.1800  
**APPLICATION #:** PL2016172      **EMAIL:** Michael.Park@cityofls.net  
**PROJECT NAME:** ARBORWALK NORTH      **PROJECT TYPE:** Prel Plat

#### **SURROUNDING ENVIRONMENT** (*Streets, Developments*)

The proposed residential subdivision plat is located along the south side of SW Hook Road, between SW Ward Road and SW Pryor Road. The surrounding area consists of undeveloped or large lot agricultural property to the north, east, and west and developing single-family residential subdivisions to the south.

#### **ALLOWABLE ACCESS**

The proposed plat will be accessed from SW Hook Road, SW Arborridge Drive, and several proposed residential collector and local streets. There will be no lot access to SW Hook Road and limited access to the proposed residential collector streets to the extent reasonably practical. The proposed residential collector and local streets will have two lanes and a 25 mph speed limit. The proposed local residential street intersections will have adequate sight distance.

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

SW Hook Road is a two lane undivided major arterial with a 35 mph speed limit currently constructed to an interim standard with turf shoulders. No additional improvements beyond the interim standard are necessary to support the proposed residential development according to the City's Unimproved Road Policy. However, the City has a planned paved shoulder improvement project along SW Hook Road and the public improvements associated with this proposed development along SW Hook Road discussed in this report should be coordinated with the City's planned project. SW Arborridge Drive is a two lane, 25 mph, residential collector that extends south to M-150 Highway. There shall be no unmitigated sight distance issues related to proposed intersections along SW Hook Road.

**ACCESS MANAGEMENT CODE COMPLIANCE?**      YES       NO

Waivers have been requested by the applicant to various Access Management Code provisions pertaining to residential lot access to/from residential collectors. The proposed residential collectors, SW Arborridge Drive and SW Buckthorn Street, will be designed to the extent reasonably practical with all other collector street standards except that lot access is requested as shown on the plat where no alternative is available due to limiting conditions described by the applicant's engineer and documented in the project files. In these considerations, staff supports the requested waiver. The City Engineer, or designee, is granted authority in the Access Management Code to waive such conditions.

Recommendations for approval of the proposed plat includes an eastbound right-turn lane at each proposed intersection along SW Hook Road and a westbound left-turn lane at each proposed intersection along SW Hook Road in compliance with the Access Management Code. All other intersections, turn lanes and spacing conditions required by the Access Management Code have also been satisfied.

**TRIP GENERATION**

Time Period	Total	In	Out
Weekday	2,024	1,012	1,012
A.M. Peak Hour	153	38	115
P.M. Peak Hour	200	126	74

**TRANSPORTATION IMPACT STUDY REQUIRED?**

YES

NO

The proposed plat will likely generate more than 100 vehicle trips to the surrounding street system during any given peak hour; a typical condition that requires traffic impact study. A traffic study was completed for the previously approved surrounding Arborwalk development. The Arborwalk development is currently under construction at various phases of completion. However, a preliminary plat is required due to the time lapse that has occurred between development phases. The referenced traffic study included a proposed subdivision represented in the same area bound by the proposed plat. The proposed plat is substantially the same as the previously studied Arborwalk land uses and density in the same area. There has not been substantial development surrounding the proposed plat impacting SW Hook Road that would significantly change previously studied assumptions and recommendations for approval. The proposed plat will comply with all improvement requirements previously conditioned on approval of Arborwalk as well as comply with all improvement conditions set forth in the Access Management Code. The applicant and staff concur with the validity of prior study, prior development approvals, and retained consistency between prior plans and currently proposed plat. Consequently, an updated traffic study has not been submitted. The previously submitted and approved traffic study should be sourced.

This proposed plat includes a network of collector roadways planned as part of the City's Thoroughfare Master Plan and M-150 Overlay District to support adjacent land use and long-range transportation system.

**LIVABLE STREETS (Resolution 10-17)**

COMPLIANT

EXCEPTIONS

The proposed preliminary plat 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, street connectivity and accessibility. No exceptions to the Livable Streets Policy adopted by Resolution 10-17 have been proposed.

**RECOMMENDATION:**

APPROVAL

DENIAL

N/A

STIPULATIONS

*Recommendations for Approval refer only to the transportation impact and do not constitute an endorsement from City Staff.*

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

1. Construct an eastbound right-turn lane along SW Hook Road at the proposed intersection of SW Arborridge Drive. The right-turn lane shall be at least 150 feet in length plus taper.
2. Construct an eastbound right-turn lane along SW Hook Road at the proposed intersection of SW Arbor Valley Terrace. The right-turn lane shall be at least 150 feet in length plus taper.
3. Construct a westbound left-turn lane along SW Hook Road at the proposed intersection of SW Arborridge Drive. The left-turn lane shall be at least 200 feet in length plus taper.
4. Construct a westbound left-turn lane along SW Hook Road at the proposed intersection of SW Arbor Valley Drive. The left-turn lane shall be at least 200 feet in length plus taper.

Improvements may be coordinated with the City's planned paved shoulder project.

All conditions shall be complete prior to the issuance of building permits for any lot within the proposed subdivision plat that includes the subject intersection where improvements are recommended.