

# LEE'S SUMMIT

# DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

DATE: September 15, 2022 CONDUCTED BY: Brad Cooley, PE
SUBMITTAL DATE: August 16, 2022 PHONE: 816.969.1800

APPLICATION #: 2022243 EMAIL: Brad.Cooley@cityofls.net

PROJECT NAME: DOUGLAS AND TUDOR APARTMENTS PROJECT TYPE: Prel Dev Plan (PDP)

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

The proposed development is generally located in the southwest quadrant of the NE Doulas Street and NW Tudor Road intersection. The proposed development is bound by Tudor Rd. to the north, Douglas St. to the east, undeveloped property to the south, and NW Commerce Drive to the west. The surrounding property is a mix of Planned Office, Planned Industrial and Residential.

#### **ALLOWABLE ACCESS**

The proposed development will primarily be accessed from Douglas and Tudor. The site is planned to be accessed by two driveways; one along Tudor Rd. and one along Commerce Dr. Driveway 1, along Tudor, is proposed approximately 365' east of Commerce Dr. and aligns with the police station entrance across Tudor. Driveway 2, along Commerce is proposed approximately 350' south of Tudor Rd.

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

Tudor Road is a four-lane, median-separated minor arterial with a 35-mph speed limit with several median breaks for turn lanes and full access. Tudor Rd. is built with sidewalk along both sides, curb and gutter.

Commerce Drive is a two-lane, undivided commercial collector with a 25-mph speed limit. Commerce Dr. is constructed with curb and gutter and sidewalk on both sides. Proposed development north of Tudor Road will reconstruct Main Street and will connect to Tudor Road across from Commerce. The intersection of Tudor and Commerce/Main is stop-controlled on the minor approaches.

Douglas Street is a four-lane major arterial with a 45-mph speed limit. Douglas is undivided south of Tudor and median-separated north of Tudor. Douglas has sidewalk on both sides, north of Tudor and along one side south of Tudor. The proposed development plans to construct sidewalk adjacent to their property along the south side of Tudor. The intersection of Douglas and Tudor is signal-controlled.

Ward Road is a four-lane median separated major arterial with a 35-mph speed limit built with curb and gutter. Sidewalk is constructed on both sides of Ward, north of Tudor. The intersection of Tudor and Ward is signal-controlled.

Sloan Street is a two-lane undivided commercial collector with a 25-mph speed limit.

_		_	
ACCESS	MANAGEMENT	CODE	COMPLIANCE?

YES |

No  $\bowtie$ 

Tudor Road is considered a minor arterial and access to a minor arterial is required to be separated by 400'. The proposed driveway is proposed 35' shy of this requirement but is planned to be constructed across from the driveway on the north side. Since the development has proven that adequate turn lanes can be provided and turning queue length are not anticipated to negatively impact the adjacent roadway, staff supports the design.

The proposed addition of this driveway meets the requirements for a left-turn lane to be added along Tudor Rd, as identified with the submitted transportation impact study.

All other Access Management Code requirements are met.

### **TRIP GENERATION**

Time Period	Total In		Out
Weekday	1661	831	830
A.M. Peak Hour	146	34	112
P.M. Peak Hour	140	85	55

Trip generation shown was estimated for the proposed development based on the 11th edition of the ITE Trip Generation Manual. The proposed development was estimated based on the ITE Code 221 - "Multifamily Housing Mid-Rise" (358 DU).

### TRANSPORTATION IMPACT STUDY REQUIRED?

YES 🔀

No 🗌

A transportation impact study was completed for the preliminary plat by Merge Midwest Engineering, dated August 8, 2022. The traffic study considered the traffic impact of the proposed development, during the A.M. and P.M. peak hour of adjacent street traffic at each intersection surrounding the development and accessing the development.

The traffic study identified a few individual movements around the development that resulted in a poor level of service. However, all the identified movements provide sufficient storage and the site-generated traffic did not significantly degrade the movements.

The traffic study identified that a left-turn lane would be required at the proposed driveway along Tudor to comply with the City's access management code.

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

COMPLIANT 🔀

EXCEPTIONS

The proposed development plan will provide all required sidewalks and bikeways, where shown in the Bicycle Transportation Plan, along adjacent roads and reconstructed Main Street. All elements otherwise required by ordinances and standards, including but not limited to property landscaping, lighting, parking, and ADA accessibility have been proposed. No exceptions to the Livable Streets Policy adopted by Resolution 10-17 are requested.

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:

Prior to the issuance of occupancy for any building within the development these improvements shall be substantially completed:

1. Construct a 200' left-turn lane plus taper at Driveway 1 for westbound traffic on Tudor.