

LEE'S SUMMIT

DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

DATE:	July 2, 2019	CONDUCTED BY:	Michael K Park, PE, PTOE	
SUBMITTAL DATE:	March 14, 2019	PHONE:	816.969.1800	
APPLICATION #:	PL2019020	EMAIL:	Michael.Park@cityofls.net	
PROJECT NAME:	Burton Townhomes		PROJECT TYPE: Prel Dev Plan (PDP)	

SURROUNDING ENVIRONMENT (Streets, Developments)

The proposed development project is located between the UPRR Corridor and Olive Street, near Orchard Street. The surrounding area includes a railroad to the west, a lumber yard to the northwest and residential properties to the south, east, and northeast.

ALLOWABLE ACCESS

The proposed development will be accessed from a driveway along Olive Street that aligns with Orchard Street.

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

Olive Street and Orchard Street are two lane residential streets with a 25 mph speed limit. These streets in the vicinity of the project have no curb, shoulder or sidewalk. The lanes are generally narrower than typical residential streets and range in width from 10 feet to 11 feet wide. These conditions are generally defined as unimproved based on the City Council Unimproved Road Policy. Olive Street dead-ends south of Orchard Street and extends north approximately 1,300 feet to Chipman Road where the intersection is traffic signal controlled. Orchard Street extends east from Olive Street about 1,400 feet to Douglas Street; then to Independence Avenue. The portion of Orchard Street east of Douglas Street, a residential collector, has been improved to urban standards with wide lanes, curb, enclosed storm sewer, sidewalks, etc. Orchard Street and Olive Street are identified as bike routes in the Bicycle Transportation Plan. Sight distances at the existing intersections and proposed driveway location are adequate.

ACCESS MANAGEMENT CODE COMPLIANCE?

Yes No

All criteria in the Access Management Code have been satisfied.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	232	116	116
A.M. Peak Hour	18	4	14
P.M. Peak Hour	24	15	9

YES

TRANSPORTATION IMPACT STUDY REQUIRED?

No 🖂

The proposed development will not likely generate more than 100 vehicle trips to the surrounding street system during any given peak hour as a minimum condition for a transportation impact

study. However, a transportation evaluation pertaining to this development and applicability of the Unimproved Road Policy, adopted by City Council (Resolution 16-22), was conducted by Priority Engineers, dated October 8, 2018. This evaluation included some analysis of traffic, trip generation and the development impact on Olive Street and Orchard Street.

Olive Street and Orchard Street, from Olive Street to Douglas Street, are defined according to the City Council adopted Unimproved Road Policy as built to unimproved road standards. Both roadways lack urban street design elements (e.g. curb, sidewalk) and shoulders present on interim standard roadways. The pavement width for Olive Street is approximately 20 feet to 22 feet wide between Orchard Street and Chipman Road (with exception of the curbed section of Olive Street from Chipman Road south about 270 feet). The pavement width of Orchard Street west of Douglas Street is about the same as the unimproved section of Olive Street. There are no known pavement sections of Olive Street or Orchard Street restricted to one-way traffic. Parking is allowed similar to most residential streets and parking regulation requires at least 10 feet of passable pavement at all times for thru traffic and passing vehicles. Typical lane widths range from 10 feet to 12 feet on roadways; 12 feet is the current standard in Lee's Summit for two lane local roads and 11 feet lane width for multi-lane roadways.

The proposed development is residential (i.e. four-plex or less). Based on the Unimproved Road Policy, residential development processed by a minor plat may be exempted from interim or urban road improvements with exception of mitigating one-way restrictions. The transportation evaluation submitted by the applicant's engineer wrongly characterized the development process and policy applicability. The proposed development is not a minor plat; it is a preliminary development plan and remains subject to the Unimproved Road Policy. The transportation evaluation then assessed conditions under the provisions of the Unimproved Road Policy that allows residential development on unimproved roads until approximately 50% of the capacity, or 5,000 vehicles per day, is reached. Again, the transportation evaluation submitted by the applicant's engineer wrongly ascertained the applicability of Policy to all roadways including local and collector streets like Olive Street and Orchard Street. The Unimproved Road Policy and associated traffic capacity thresholds referenced therein were pertinent to two-lane unimproved and interim standard arterial roads. The Unimproved Road Policy did not associate development activity with interim road standards on local or collector roadways and specifically requires local and collectors to be constructed to or improved to the urban standard for any development per the Policy. Though Olive Street and Orchard Street had a measured average daily traffic volume far below 5,000 vehicles per day, including projected trip generation from the residential development, the Policy requires improvements to urban standards on both roadways from the project to Chipman Road and Douglas Street, respectively, as neither roadway is an arterial. Since the transportation evaluation provided by the applicant's engineer dismissed the Policy or erred in its interpretations of applicability, there has been no justification for waivers nor road improvements recommended by the applicant's engineer or included in the applicant's development plans.

The Unimproved Road Policy is adopted by City Council; and City Council will consider its intentions and requirements in relation to this development on the adjacent unimproved residential streets in review of the development application. The Policy in this situation more so addresses acceptable community standards for development than roadway capacity. With regard to roadway capacity, Olive Street and Orchard Street have existing daily traffic volumes of less than 850 vehicles and 250 vehicles, respectively. This volume of traffic is low, even for residential streets, and the added trips generated by this proposed residential development are also minimal.

Furthermore, there are no known one-lane sections of roadway along Olive Street or Orchard Street. The existing 10-foot to 11-foot lanes are plenty capable of handling the existing traffic and projected trip generation from this residential project without creating poor operations, delay, etc. Staff is not aware of any existing crash concerns along Olive Street or Orchard Street. The intersections of Olive Street at Chipman Road and Orchard Street at Douglas Street should also have adequate level of service if this development were to proceed.

The absence of sidewalks along Olive Street and Orchard Street is concerning safety. However, the City's current development standards do not require development activity to extend sidewalk beyond the project area unless associated with off-site road improvements. If improvements to Olive Street and/or Orchard Street were required based on the Unimproved Road Policy, the road improvements should require sidewalks. Otherwise, sidewalks would be constructed if a capital roadway improvement project is done by the City or as a sidewalk gap project based on City Council directed priority for sidewalk gaps with limited resources.

LIVABLE STREETS (Resolution 10-17)	Compliant 🔀	
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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. Orchard Street and Olive Street are identified bike routes in the Bicycle Transportation Plan. The development would meet bikeway and sidewalk plan elements if the unimproved roads are improved according to the Unimproved Road Policy.

RECOMMENDATION:	Approval 🔀		N/A 🗌	
Recommendations for Ap	pproval refer only to the tra	ansportation impact a	ind do not constitute an	endorsement from
City Staff.				

Staff recommends approval of the proposed preliminary development plan subject to urban road improvements along Olive Street (from Orchard Street to Chipman Road) and Orchard Street (from Olive Street to Douglas Street) according to the Unimproved Road Policy, as directed by City Council.

There shall be at least 60 feet of right-of-way for Olive Street and any necessary right-of-way adjacent to the development shall be dedicated to the City to provide this minimum width as depicted on the preliminary development plans.