



LEE'S SUMMIT
MISSOURI
DEVELOPMENT REVIEW FORM
TRANSPORTATION IMPACT

DATE: August 12, 2016
SUBMITTAL DATE: August 9, 2016
APPLICATION #: PL2016114
PROJECT NAME: SUMMIT VILLAGE

CONDUCTED BY: Michael K Park, PE, PTOE
PHONE: 816.969.1800
EMAIL: Michael.Park@cityofls.net
PROJECT TYPE: Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (*Streets, Developments*)

The proposed preliminary development plan is located at the southeast corner of Blue Parkway and Colbern Road. The surrounding area includes existing multi-family residential and other undeveloped properties to the east, Unity Village to the north, undeveloped properties to the west (with an illustration of conceptual development shown on the Preliminary Development Plan) and various commercial/office/industrial developments towards the south.

ALLOWABLE ACCESS

The proposed development will be accessed from Blue Parkway with a future access from Colbern Road. Access from Blue Parkway includes a right-in/right-out driveway located just south of the existing roundabout and an unrestricted intersection south of this right-in/right-out driveway. The proposed full access from Blue Parkway may or may not be a public street or private street; to be determined at Final Development Plan. All of the proposed intersections will have adequate sight distance.

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

Blue Parkway is a four-lane median divided major arterial between I-470 and Colbern Road. Blue Parkway extends south of I-470 throughout Lee's Summit. Colbern Road is a two-lane undivided major arterial currently constructed to interim/unimproved road (e.g. rural) standard between Blue Parkway and Douglas Street. East of Douglas Street and West of Blue Parkway Colbern Road has an urban design with four or more lanes including medians along some divided roadway sections. Colbern Road extends east-west across Lee's Summit with major interchange access. Blue Parkway and Colbern Road have a 45 mph speed limit in the vicinity of the proposed development. The intersection of Colbern Road and Blue Parkway is controlled by a multi-lane roundabout.

ACCESS MANAGEMENT CODE COMPLIANCE?

Yes

No

The development plan lacks otherwise required northbound right-turns lane at each intersection serving the proposed development along Blue Parkway. These two right-turn lanes are a requirement of the Access Management Code. No justification for waiver and omission has been proposed in the applicant's traffic study. However, in consideration of recent design and construction of Blue Parkway, the limited amount of development proposed with the preliminary plan, current traffic volumes along Blue Parkway, intersection separation and sight distance; staff supports a waiver to the Access Management Code right-turn lane requirements for this

preliminary development plan at this time and under these conditions. The City Engineer (or designee) is authorized to grant such waivers. Staff may recommend such turn lanes upon continued development of the surrounding property served by the same driveways/roadways in the future from Blue Parkway (and similar turn lanes along Colbern Road when access from Colbern Road is proposed). All other driveway/intersection spacing conditions, driveway throat lengths, sight distance, connectivity and site circulation required by the Access Management Code have been satisfied.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	1,146	573	573
A.M. Peak Hour	101	85	16
P.M. Peak Hour	174	37	137

The trip generation above represents development of the preliminary development plan. Trip generation of the full conceptual development plan shown surrounding the preliminary plan is described in the applicants traffic impact study.

TRANSPORTATION IMPACT STUDY REQUIRED? Yes No

The proposed development will likely generate more than 100 vehicle trips to the surrounding street system during any given peak hour. A traffic impact study was completed by Priority Engineers, dated July 20, 2016. The traffic study analyzed the impact of the proposed development and a conceptual development plan for the surrounding undeveloped property during the AM and PM commuter peak hours at intersections along Blue Parkway and Colbern Road as well as at site access drives.

The traffic study assesses existing conditions and considers the impact of the proposed development in multiple phases of construction. Existing conditions did not include projected trips to/from approved, but unbuilt, development in the areas along Blue Parkway and Ward Road to the south of I-470 (e.g. the Missouri Innovation Campus, Summit Place, and Summit Orchards) as typically considered for nearby development to assess the compounding impact of concurrent projects and associated improvements for adequate levels of service.

The traffic study reports all of the existing intersections and traffic movements are operating at acceptable levels of service. Level of service (LOS) is an industry standard performance measure from A to F similar to a school grade card with A the best and F the worst representation of vehicle delay. The City has adopted a LOS C goal. All of the existing vehicle queues are contained within the existing turn lanes for all peak hours at all the study intersections. There are no additional improvements or signals warranted for existing conditions at the studied intersections and roadways.

The resulting traffic operations upon completion of the proposed preliminary development plan (excluding the surrounding conceptual plan) indicate continued adequate level of service and managed vehicle queues at all studied intersections without any additional improvements required.

A revised traffic impact study is likely required for consideration of any development within the conceptual development plan area due to alterations in the transportation network, land

use/density, available transportation capacities assumed in the referenced study and general lack of review and analysis of operations and conditions (e.g. unimproved/interim road policy, Access Management Code turn lane requirements, traffic signal warrant analysis, etc.) to sufficiently address the forecasted impact of such development. The aforementioned study did not adequately address some of these issues, nor consider previously approved developments or necessity/timing of improvements to the existing 2-lane, interim/unimproved road standards for Colbern Road east of Blue Parkway.

LIVABLE STREETS (*Resolution 10-17*)

COMPLIANT

EXCEPTIONS

The proposed preliminary 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, 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 development plan.
