



LEE'S SUMMIT MISSOURI

DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

DATE: October 17, 2018 **CONDUCTED BY:** Michael K Park, PE, PTOE
SUBMITTAL DATE: September 18, 2018 **PHONE:** 816.969.1800
APPLICATION #: PL2018145 **EMAIL:** Michael.Park@cityofls.net
PROJECT NAME: EAST LEE'S SUMMIT BRANCH LIBRARY **PROJECT TYPE:** Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (*Streets, Developments*)

The proposed development is located along the north side of Blue Parkway, east of Battery Drive. The surrounding area includes commercial property/senior living to the west, multi-family residential to the north, and several churches immediately beyond undeveloped property to the east. A concept plan has been approved in regards to the surrounding undeveloped property. US 50 Highway is located south of Blue Parkway.

ALLOWABLE ACCESS

The proposed development will be accessed from two driveways; a proposed full access driveway along Battery Drive and a proposed full access driveway along Blue Parkway. Both driveways will share access with adjacent properties. The proposed driveway locations meet the Access Management Code criteria and have adequate sight distance.

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

Battery Drive, between Blue Parkway and Shenandoah Drive, is a two-lane undivided commercial local street owned and maintained by the City of Lee's Summit. Battery Drive has curb and gutter and a 25 mph speed limit. Blue Parkway is a two-lane undivided east-west commercial collector owned and maintained by MoDOT. Blue Parkway has shouldered edges, roadside ditch storm drainage and a 35 mph speed limit. The section of Blue Parkway near the proposed development will eventually be transferred from MoDOT to the City in accordance with agreements as those terms of agreement are satisfied in association with partnered improvements along US 50 Highway. Shenandoah Drive is a two-lane undivided east-west commercial collector owned and maintained by the City of Lee's Summit. Shenandoah Drive has a curb and gutter section with enclosed storm sewer and a 35 mph speed limit. There are left-turn lanes at the intersection of Shenandoah Drive and Battery Drive, but not at the intersection of Blue Parkway and Battery Drive. Sight distance is adequate all the aforementioned street intersections.

ACCESS MANAGEMENT CODE COMPLIANCE?

YES

NO

Though Shenandoah Drive, Battery Drive and proposed driveways along these City roadways associated with the proposed development fully comply with the Access Management Code, it should be noted that the conditions proposed along Blue Parkway (currently a MoDOT roadway) do not meet the City's requirements. However, the City's Access Management Code does not apply to MoDOT rights-of-way. The following information is only for reference in the event a transfer of Blue Parkway from MoDOT to City was completed as contemplated. In this situation, the Access Management Code requires left-turn lanes along collectors serving non-residential development, especially whenever the left-turn volume at such intersection of streets or driveways serving the development is 30 vehicles or more during a peak hour. There are no left-

turn lanes along Blue Parkway at Battery Drive or along Blue Parkway at the proposed driveway serving the site. The development traffic study projects a traffic volume (with existing and approved nearby development included) at each location along Blue Parkway, a collector, to warrant such left-turn lanes. Those left-turn volumes are not significantly above the minimum threshold for left-turn lanes and the volume of through traffic in conflict with left-turns is very low during peak periods. Furthermore, as undeveloped property adjacent to the site develops in the future, the warranting condition will be more certainly met and left-turn lanes provided for these shared driveways/intersections. If Blue Parkway were a City roadway at this time, staff would support a waiver to these left-turn lane requirements for this application considering the aforementioned traffic volumes and future development potential.

All other provisions of the Access Management Code are compliant.

TRIP GENERATION

| Time Period | Total | In | Out |
|----------------|-------|-----|-----|
| Weekday | 1,750 | 875 | 875 |
| A.M. Peak Hour | 30 | 22 | 8 |
| P.M. Peak Hour | 217 | 105 | 112 |

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 based on industry standard methods for trip generation estimates, a minimum requirement for traffic impact study in the Access Management Code. A traffic impact study was prepared by Olsson Associates, dated July 2018, for the proposed development.

The traffic study assessed existing conditions (which includes approved, but unbuilt projects nearby), proposed development conditions, and future conditions that considers development of the remaining conceptual plan consisting of surrounding undeveloped property in the immediate vicinity. The analysis included morning and evening commuter peak hours at the intersections of Blue Parkway at Battery Drive, Shenandoah Drive at Battery Drive, Blue Parkway at Todd George Parkway, and proposed site driveways. Any traffic distributed to towards the east was assumed to be accommodated with ample roadway capacity through the newly constructed Blackwell Interchange at US 50 Highway and associated parallel roadways. The traffic study reports adequate level of service in all scenarios at all intersections studied based on the adopted level of service goal for traffic operations without any off-site improvement recommendations. Level of service is a standardized measure of performance based on vehicle delay characterized similar to a grade card, with A representing free-flow movement, uncongested operations, and F representing failure or gridlock. The City's adopted goal for adequate performance is level of service C.

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, parking, 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.