



LEE'S SUMMIT MISSOURI

DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

DATE: October 3, 2019 **CONDUCTED BY:** Michael K Park, PE, PTOE
SUBMITTAL DATE: September 9, 2019 **PHONE:** 816.969.1800
APPLICATION #: PL2019246 **EMAIL:** Michael.Park@cityofls.net
PROJECT NAME: DCI LEE'S SUMMIT **PROJECT TYPE:** Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (*Streets, Developments*)

The proposed preliminary development plan is located along the west side Pryor Road, south of Shamrock Avenue within the approved West Village conceptual development area. The development is surrounded by residential to the south and east, Fire Station #3 to the west and the remainder of undeveloped commercial mixed-use development associated with the West Village conceptual development plan to the north.

ALLOWABLE ACCESS

Access to the site is proposed from a shared private driveway along Shamrock Avenue consistent with the approved West Village conceptual development plan and preliminary development plan for Fire Station #3.

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

Shamrock Avenue is a two-lane, 25 mph, non-divided commercial local roadway in the vicinity of the proposed development. Pryor Road is a four-lane, median divided, suburban major arterial with a 35 mph speed limit in the vicinity of the proposed development. The intersection of Shamrock Avenue is stop controlled at the intersection of Pryor Road. There are (or will be upon completed construction of Shamrock Avenue west of Pryor Road) left turn lanes along Pryor Road at Shamrock Avenue and along eastbound Shamrock Avenue at Pryor Road. There is adequate sight distance at the existing and proposed intersections along existing roadways.

ACCESS MANAGEMENT CODE COMPLIANCE? Yes No

All provisions of the Access Management Code (AMC) are fully satisfied as it pertains to new access associated with the proposed development.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	308	154	154
A.M. Peak Hour	30	23	7
P.M. Peak Hour	37	10	27

TRANSPORTATION IMPACT STUDY REQUIRED? Yes No

The proposed development will not likely generate more than 100 vehicle trips during a weekday peak hour; the minimum condition for traffic impact study requirements. A traffic impact study was completed by City Staff, dated September, 2018, for the West Village Conceptual Development Plan which included a similar proposed land use (medical office) at the same location as the subject preliminary development plan. This study considered AM and PM Peak Hour traffic operations along Pryor Road at the intersections of Chipman Road, O'Brien Road, Shamrock Avenue, 3rd Street, and proposed commercial driveways. Analysis scenarios were completed for existing conditions, existing plus approved development conditions and proposed development conditions. The proposed development conditions scenario for the study considered not only the subject site, but also all other commercial development along the west side of Pryor Road north of Shamrock Ave.

Level of service (LOS) is an industry accepted standard measure of performance (e.g. delay) for traffic operations rated A-F, similar to a grade card with A the best and F the worst condition. The City Council has adopted a LOS policy in which the acceptable condition is LOS C or better for traffic signal controlled intersections and where LOS D (or worse) may be acceptable for stop controlled minor street approaches at major intersections. The study reported the following conditions at intersection of Shamrock Avenue at Pryor Road:

The stop controlled movements at the intersection of Shamrock Avenue and Pryor Road will likely have very poor operations and experience excessive delay in both peak hours for the existing plus approved plus proposed development scenario. This intersection will likely meet a peak hour signal warrant in this scenario and a traffic signal would mitigate the delays associated with the development impact. A supplemental traffic analysis was completed to isolate the impact of the proposed development on the intersection. The analysis, dated September 10, 2019, indicates a LOS D and LOS F for the eastbound left turn movement during the AM and PM Peak Hours, respectively. All other movements meet or exceed acceptable LOS performance. The delay associated with this stop controlled left turn movement is less than 2 minutes and queues generally less than 4 vehicles during the worst peak periods. A traffic signal is not warranted based on the proposed preliminary development plan. The signal would likely be warranted as additional development occurs north of Shamrock Ave. as previously studied. The proposed development also does not generate sufficient traffic to warrant a southbound right turn lane along Pryor Road at Shamrock Ave. The right-turn lane would also be warranted as additional development occurs.

No traffic improvements are recommended in association with the proposed development that are not already under construction in support of Fire Station #3 along Shamrock Ave. and Pryor Road. Future improvements to the adjacent intersection (e.g. signal installation and right turn lane construction) at Shamrock Ave. and Pryor Road will likely be needed as the remainder of the conceptual development plan (West Village) progresses.

Staff concurs with the supplemental traffic analysis and its conclusions for the proposed development plan.

LIVABLE STREETS (*Resolution 10-17*)

COMPLIANT

EXCEPTIONS

The proposed development 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 in full compliance with the Livable Streets Policy adopted by Resolution 10-17.

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.