



LEE'S SUMMIT
MISSOURI

DEVELOPMENT REVIEW FORM
TRANSPORTATION IMPACT

DATE: December 22, 2025 **CONDUCTED BY:** Erin Ralovo, PE, PTOE
SUBMITTAL DATE: October 9, 2025 **PHONE:** 816.969.1800
APPLICATION #: PL2025079 **EMAIL:** Erin.Ralovo@cityofls.net
PROJECT NAME: LEGACY RIDGE **PROJECT TYPE:** Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (Streets, Developments)

The proposed development is located on the southeast corner of Ward Road and Hook Road. It is bordered by undeveloped property to the north and east and residential properties to the south and west. Ward Road is on the west side and Hook Road is on the north.

ALLOWABLE ACCESS

Phase 1 will be accessed from three access points. Access 1, Legacy Ridge Drive, will be a full access road on Ward Road approximately 1,750 feet south of Hook Road. Access 2, Legacy Commons Drive, will be a full access road on Hook Road approximately 715 feet east of Ward Road. Access 3 will be an extension of SW Windsong Dr connecting Legacy Ridge to the Meadows at Summit Ridge.

Phase 2 will be accessed from two additional access points. Access 4, Legion Drive, will be a right in right out access on Hook Road, approximately 400 feet east of Ward Road. Access 5, Reunion Drive, will be a right in right out access on Ward Road, approximately 720 feet south of Ward Road.

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

Ward Road is a 4-lane divided Major Arterial roadway with 12-foot lanes, curb and gutter, continuous lighting, a 6-foot sidewalk on the east side and a 10-foot shared use path on the west side. There are left turn lanes at Hook Road in both the north and south direction. The posted speed limit is 45 MPH. There are no areas of limited sight distance within the project area.

Hook Road is a 2-lane undivided Minor Arterial. It has 12-foot lanes and 6-foot paved shoulders. It is largely unimproved with no curb and gutter or sidewalks. The posted speed limit is 45 MPH. There is a slight vertical rise in the the roadway east of Ward Road that may cause some sight distance issues.

UNIMPROVED ROAD POLICY COMPLIANCE? YES NO

This development is subject to the Unimproved Road Policy (URP) considering the existing typical section and street classification of SW Hook Road. The URP adopted by City Council resolution provides guidance for staff to use in consideration of development that impacts adjacent roadways which are not constructed to "urban standards". Per the URP, an unimproved road is narrow in width (< 22' of pavement) and consistent with a rural character. Hook Road currently meets the interim road standards under the URP, with 12-foot lanes and 6-foot paved shoulders. Phase 1 improvements require that Hook Road maintain the interim standard with 12-foot through lanes, 12-foot turn lanes, and 6-foot shoulders. With the Phase 2 planned future commercial development on the corner of Hook and Ward, Hook Road will need to be brought up

to a full urban standard with 12-foot lanes, curb and gutter, 6-foot sidewalk on the north side, and a 10-foot shared use path on the south side.

ACCESS MANAGEMENT CODE COMPLIANCE?**YES** **No**

The Access Management Code includes requirements for minimum spacing between street connections depending on street classifications, turn lanes, volume/capacity and queuing, intersection functional area, and the type of access. Hook Road is classified as a Minor Arterial, requiring the spacing between intersections to be a minimum of 400 feet. However, the 400 foot minimum may require additional separation as previously noted and described in the Access Management Code. The access points along Hook Road meet this minimum spacing for a Minor Arterial, but not the minimum spacing required for other criteria, such as intersection functional area, turn lane design, and traffic signal separation. The Right- In-Right-Out access at Hook Road and Legion Drive is located 400 feet from the intersection of Ward Road. This location is within the functional area of the intersection and is not far enough away to construct the 200-foot right turn lane as required by the AMC. Applicant will be required to request a modification for this when the Phase 2 PDP is submitted.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	15430	7716	7714
A.M. Peak Hour	989	414	575
P.M. Peak Hour	1232	674	558

The values shown above are for the overall development, Phases 1 and 2. A breakdown of trips by phase is shown below.

Phase 1 Trip Generation:

Weekday Total: 3,669 vehicles per day (vpd)
AM Peak Hour: 258, 65 In, 193 Out
PM Peak Hour: 329, 201 In, 128 Out

Phase 2 Trip Generation:

Weekday Total: 11,761 vpd
AM Peak Hour: 731, 349 In, 382 Out
PM Peak Hour: 903, 473 In, 430 Out

Trips were generated using ITE Codes in the ITE Trip Generation Manual 11th Edition using ITE codes 210 -Single-Family Detached Housing, 215 - Single-Family Attached Housing, 220- Multi-Family Housing (Low Rise), 821- Shopping Plaza (w/o Supermarket), 934 - Fast-Food Restaurant with Drive-Through Window, 945 - Convenience Store/Gas Station. The total trips were determined based on the anticipated use for each pad site.

TRANSPORTATION IMPACT STUDY REQUIRED?**YES** **No**

The proposed development will likely generate more than 100 vehicle trips to the surrounding street system during a peak hour based on industry standard methods for trip generation estimates, a minimum requirement for a traffic impact study in the Access Management Code. A traffic impact study was prepared by McCurdy Engineers dated December 9, 2025. The traffic study was prepared to assess traffic impacts associated with the development and to provide

public improvement recommendations or waivers requested by the development that mitigate delay and/or meet minimum standards defined by City policies.

The traffic study evaluated existing conditions and proposed development conditions of the subject development. The traffic study looked at each intersection for turn lane requirements based on roadway classification, operational capacity/queues, projected turning movements, and minimum standards in the Access Management Code. The available space and storage lengths were reviewed in coordination with the required turn lane lengths to provide recommendations for the subject development. The study found that the following the following improvements would be required:

PHASE 1

1. Update signal timing as needed for the intersections of Hook and Ward and Titan Crossing and Ward.
2. Construct an eastbound right-turn lane with 150 feet of storage with appropriate taper at the intersection of Hook Road and Legacy Commons Drive.
3. Construct a westbound left-turn lane with 200 feet of storage with appropriate taper on Hook Road at Legacy Commons.
4. Construct a northbound approach with a shared left/right-turn lane at Hook Road and Legacy Commons Drive. This approach should be stop controlled.
5. Construct a northbound right-turn lane with 150 feet of storage with appropriate taper on Ward Road at Legacy Ridge Drive.
6. Construct a southbound left-turn lane with 200 feet of storage with appropriate taper on Ward Road at Legacy Ridge Drive.
7. Construct a westbound approach with a left-turn lane and a shared through/right-turn lane at Ward Road and Legacy Ridge Drive. This approach should be stop-controlled and the Right of Way should be reserved for a future traffic signal.

PHASE 2

1. Upgrade Hook Road from the interim standard to the applicant's requested modified urban standard.
2. Update signal timing as needed for the intersections of Hook and Ward and Titan Crossing and Ward.
3. Construct an eastbound right-turn lane with 150 feet of storage plus appropriate taper at Hook Road and Legion Drve.
4. Construct a northbound approach with a right-turn only lane at Hook Road and Legion Drive. This approach should be stop controlled.
5. Construct a northbound right-turn lane with 150 feet of storage with appropriate taper on Ward Road at Reunion Drive.
6. Construct a southbound left-turn lane with 200 feet of storage with appropriate taper on Ward at Reunion Drive.
7. Construct a westbound approach at Ward Road and Reunion Drive (3/4 access) with a right-turn lane only. This approach should be stop controlled.
8. Monitor traffic increases and signalize the intersection when warrants are met at Hook Road and Legacy Commons Drive.

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

The proposed development plan will provide required sidewalks, shared use path/trail, on-road bicycle accommodations and all elements otherwise required by ordinances and standards and comprehensive plan (i.e. Bicycle Transportation Plan and Greenway Master Plan) including but not limited to property landscaping, lighting, parking, and ADA accessibility. 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 development plan subject to the conditions noted below and any such public improvements shall be substantially completed prior to any issued occupancy permit associated with the phase of development described therein:

1. Construct all public improvements recommended in the Traffic Impact Study and other public improvements as stated above and shown on the plans, including but not limited to those restated below (in case of differing conditions the condition whichever has the most capacity shall apply):

PHASE 1 (Residential elements only)

1. Update signal timing as needed for the intersections of Hook and Ward and Titan Crossing and Ward.
2. Construct an eastbound right-turn lane with 150 feet of storage with appropriate taper at the intersection of Hook Road and Legacy Commons Drive.
3. Construct a westbound left-turn lane with 200 feet of storage with appropriate taper on Hook Road at Legacy Commons.
4. Construct a northbound approach with a shared left/right-turn lane at Hook Road and Legacy Commons Drive. This approach should be stop controlled.
5. Construct a northbound right-turn lane with 150 feet of storage with appropriate taper on Ward Road at Legacy Ridge Drive.
6. Construct a southbound left-turn lane with 200 feet of storage with appropriate taper on Ward Road at Legacy Ridge Drive.
7. Construct a westbound approach with a left-turn lane and a shared through/right-turn lane at Ward Road and Legacy Ridge Drive.
8. Construct the traffic signal at Ward Road and Legacy Ridge Drive as the study shows that the development's trip generation meets the peak hour warrant.
9. Since the development will warrant closing the median breaks through their turn lane improvements, additional accommodation may be needed for vehicles making U-turns at the new signal. Additional widening of the intersection or timing of the signal will be the responsibility of the developer.
10. Hook Road shall be maintained as an interim standard through Phase 1 of the development, including 12' lanes with paved 6' shoulders for the length of the development.

PHASE 2 (Future Commercial elements)

1. Upgrade Hook Road from the interim standard to the full urban standard. Staff is not supportive of the modified urban standard proposed by the developer and Hook Road should be brought up to full urban standard from Ward Road to the east project limits. This should include storm sewer, curb and gutter, 6-foot sidewalk on the north side, 10-foot shared-use path on the south side and appropriate widening at the intersection to assure alignment through the intersection.

2. Update signal timing as needed for the intersections of Hook and Ward and Titan Crossing and Ward.
3. Construct an eastbound right-turn lane with 150 feet of storage plus appropriate taper at Hook Road and Legion Drve.
4. Construct a northbound approach with a right-turn only lane at Hook Road and Legion Drive. This approach should be stop controlled.
5. Construct a northbound right-turn lane with 150 feet of storage with appropriate taper on Ward Road at Reunion Drive.
6. Construct a southbound left-turn lane with 200 feet of storage with appropriate taper on Ward at Reunion Drive.
7. Construct a westbound approach at Ward Road and Reunion Drive (3/4 access) with a right-turn lane only. This approach should be stop controlled.
8. A signal at Hook Road and Legacy Commons Drive will not be supported by staff. This intersection is too close to the intersection of Hook and Ward and does not meet the City's standards of the Access Management Code which allows for signals within 1/4 of a mile from an existing signal.