

STAFF REPORT

PLAN COMMISSION

May 15, 2025

RE: RZ-2025-693

Applicant: Kansas LD, LLC
Diocese of KC & St. Joseph Real Estate Trust

Location: Section 17, Township 50, Range 31

Area: 117.00 ± acres

Request: Change of zoning from District AG (Agricultural) to District RU (Residential Urban-Planned)

Purpose: The purpose is to create a 208 single-family residential lots.

Current Land Use and Zoning in the Area:

The zoning in the area is Agricultural and Residential.
Land use is single family homes and agricultural tracts.

The Comprehensive Plan was adopted by the County Legislature in 2012.

This area is identified as an Urban Service Area in the County Development Plan (Building A Vision Together) and is an appropriate area for urban level growth.

Full services are required within the Urban Development Tier.

The City of Independence currently provides water and sanitary sewer service to this area. The City has provided a letter stating they will accept the role of serving and maintaining those services for this project. The Little Blue Valley Sewer District's Lazy Branch interceptor line runs across the East side of the property.

A revised Traffic Impact Study was submitted on March 24, 2025. The study is in compliance with Chapter 240 of the Jackson County Code.

A (conceptual) stormwater report was submitted. The formal stormwater review process will be part of the design construction submittal.

The Engineering Division will work with the City on the design and construction of the water and sanitary sewers improvements.

The Missouri Department of Natural Resources requires a land disturbance permit. This will be submitted with the design plans.

Once the County Legislature approves the preliminary plat, design construction plans will be submitted to the Public Works Engineering Division for review. Storm Water, Streets, Sanitary Sewer and Water Lines will be subject to the review process.

A 100 foot No Build Zone will be shown on each side of the creek. These areas are within the Open Space tracts.

Open space is shown in the amount of 43.63 ± acres.

District RU allows minimum lot size of 7,500 square feet. The proposed minimum (Lot 69) is 7,786 square feet.

The minimum frontage for District RU is 60 feet.

The original proposal illustrated several of lots with a width of 50 feet.

The revised plat removed the 50 foot wide lots and updated to the 60 foot minimum. The revision resulted in 19 fewer lots.

24006.8.b.5 Single Family Lots requires that the minimum yard requirements shall be increased to 30 feet from any lot or parcel that boundary which abuts an Arterial or Collector street along the side or rear property line. Salem Drive will be designed, constructed and function as a Collector street.

The setbacks have been updated on the revised plat.

Construction of the improvements can commence after the design plans are approved by Public Works and all permits secured.

The Engineering Division will issue the permits for construction and monitor progress with ongoing inspections.

The final plat can only be recorded after acceptance of the construction improvements by Public Works, and approval of the final plat by the Plan Commission.

Recommendation:

This request for rezoning is consistent with the intent and purpose of the County Plan.

Staff recommends APPROVAL of RZ-2025-693 and

The Preliminary Plat of Union Ridge

Respectfully submitted,

Jackson County Public Works
Development Division
Randy Diehl, Administrator

Schlagel & Associates submitted as they refer to Preliminary Stormwater Management Report for the Union Ridge Lots 1-230 subdivision on 12/9/2024. It is actually a Conceptual Stormwater Report describing some of the hydrology and hydraulics components of the stormwater going through the development. It covered the Conceptual Drainage Areas of the stormwater leading to the initial locations of the new 5 each Detention ponds and into the existing east creek. The stormwater from this existing creek heads to the north.

I informed Schlagel & Associates several times that the Hydrology and Hydraulic Report is request by JCPW Engineering during the Design Phase of the new residential development, **once JCMO Legislature approves the Preliminary Plat**. The reasons the Hydrology and Hydraulic Report(s) are requested during the Design Phase are due to several changes that impacts the following: the drainage and sub-drainage areas, the existing roadways, new roadway horizontal alignments, roadway locations, new and existing stormwater structures (RCP Pipes, Curb Inlets, Field Inlets, RCB, etc.), new and existing sanitary sewer lines, new and existing water lines, lots reconfiguration & sizes, locations of new detention and new retention ponds, drainage easements, utility easements, sanitary sewer easements, and water easements. These items can have extensive impacts to the new residential development during the Preliminary Plat Phase that is reviewed by JCPW.

Schlagel & Associates engineers have been informed by JCPW Engineering staff members to follow current edition of KCAPWA 5600 Storm Drainage Systems & Facilities during design and construction. JCPW Engineering follows the current editions of the KCAPWA Specifications, some of the Standard Details, some of the Erosion Control Details, see the following website: <https://kcmetro.apwa.org/resources/specifications/>. JCPW Engineering checks this website regularly for current updates. If updates change during the design or construction, then JCPW informs at any time the designers and contractors of the new updates to be followed for the new residential or commercial developments. The KCAPWA 5600 current edition is 2/16/2011 and Best Management Practices is 8/2017. They also need to follow the current edition of the JCMO Chapter 241 Erosion and Sediment Control Ordinance, JCPW Standard Details, and All JCMO Codes & Ordinances.

Thank you,

Chris Jenkins
Civil Engineer I, Project Manager, Subdivision Reviewer
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Engineering Division
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Christopher C. Jenkins

From: Christopher C. Jenkins
Sent: Wednesday, April 16, 2025 6:29 PM
To: Daniel Foster (df@schlagelassociates.com)
Cc: Ryan McGinnis; Randy D. Diehl
Subject: JCPW approval 2nd Traffic Impact Study for ~~Heritage Farms 1st Plat~~

UNION RIDGE

Good evening Dan Foster with Schlagel Associates,

Thank you for resubmitting the Union Ridge Lots 1-230 2nd Traffic Impact Study (TIS) on 3/24/2025.

On page 5 of the TIS explains briefly about the SIGHT DISTANCE at the new N Salem Drive and E Union School Road T intersection and the East Drive and E Union School Road/E Yocum Rd intersection. At the Design Phase of the new residential subdivision development project, once JCMO Legislature approves the Preliminary Plat, JCPW Engineering will require Plans and Profiles of E Union School Road showing all the detailed design sight distances for both intersections. The sight distances shall be designed in accordance with 2018 AASHTO Geometric Design or current edition to assist on Turn Lane(s) configurations for entering and exiting the subdivision, especially at N Salem Drive and E Union School Road T intersection.

During the Design Phase, we will check with JCMO Sheriff's Office database regarding Crash Analysis history on E Union School Road and E Yocum Road at the existing intersections noted in the TIS and get copies of their database reports. Page 6 states within the CRASH ANALYSIS that "The N Union School Road and E Union School Road/Yocum Road and the Blue Mills Road and Yocum Road intersections had no crashes reported during the study period". The analysis as stated in the report was over a three-year period (2022-2024) from MO Highway Patrol database. A copy of this report will be requested from JCPW during the Design Phase of the project.

Page 6 and 7 explains the TRIP GENERATION. Table 2 – Doubled Trip Generation does incorporate JCPW Engineering request for a higher trip generation and to provide an additional level of confidence from the JCPW Preliminary Plat Review dated 1/31/2025 1st Traffic Impact Study review. JCPW Engineering checked the ITE generated trips of the 2nd TIS and noticed that the A.M. and P.M Existing and Future Peak Hour Trips have at minimum Doubled since the 1st TIS. The TRIP DISTRIBUTION on page 6 did change from the 1st TIS report to better percentages as request by JCPW Engineering.

Thank you for separating out the Existing A.M. and P.M. Existing Plus (Doubled) Site Volumes of the site generated traffic volumes within Figures 4 and 5. The Vehicles Per Hour for both the A.M. and P.M. for both Existing and Future did double or more at the various intersections from the 1st TIS report. Figures 4 (Existing A.M. Volumes), Figure 5 (Existing P.M. Volumes), and Figure 6 (Future AM and PM Volumes) showed the increases of Vehicles Per Hour as requested by JCPW.

Page 13 within RIGHT-TURN AND LEFT-TURN LANE WARRANTS states the following: "The developer plans to construct an eastbound right-turn lane at Salem Drive and E Union School Road/Yocum Road." This was requested by JCPW Engineering staff members on the 1st Traffic Impact Study review on 1/31/2025.

The Level of Service (LOS) of the CAPACITY sections was updated from the 1st TIS of the new development at all the intersections within Figures 7 (Existing AM LOS), Figure 8 (Existing PM LOS), Figure 9 (Existing plus (doubled) Site AM LOS), Figure 10 (Existing plus (doubled) Site PM LOS), Figure 11 (Future AM LOS), Figure 12 (Future PM LOS).

The RECOMMENDATION section on page 23 provided 4 general overviews from the SYNCHRO analysis, field analysis, and engineering judgement of the 2nd TIS report. The Civil Engineers for the developer will need to provide to JCPW Engineering during the Design Phase of the development detailed information relating to the full access and stop-controlled traffic turning movements entering and exiting E Union School Road from both the N Salem Drive and E Union School Road T intersection and the East Drive and E Union School Road/E Yocum Rd intersection, as stated above. The Recommendation for the Salem Road and US 24 Highway to optimize the traffic signal timings to account for the additional traffic will need to be coordinated with MODOT during the Design Phase of the development.

Thank you for the detailed traffic counts data for all the intersections from Gewalt Hamilton Associates, Inc. from November 2024. The following data was helpful with our review: Traffic Counts and Peak Hour Factors tables, Two-Way Stop Controlled (TWSC) intersections to analyze capacity and LOS based on the Highway Capacity Manual (HCM) 6th Edition, Signal Warrant Study data based on both HCM and 2023 MUTCD, Right-Turn and Left-Turn Lane Warrants graphs per MODOT Engineering Policy Guide, and Site Trip Generation from Synchro using ITE 11th Edition. These Appendix items started on PDF slide 27 and ended at 206. Several items were updated since the 1st TIS report.

The 3/24/2025 2ND submittal of the Traffic Impact Study Report dated 2/28/2025 from McCurdy Engineers is APPROVED ONLY AS TO COMPLIANCE WITH THE CURRENT EDITION OF THE 1995 UNIFIED DEVELOPMENT CODE OF JACKSON COUNTY, MISSOURI FOR GENERAL CONFORMITY TO PLANS AND SPECIFICATIONS. Also, the TIS is in general conformity to the 11th Edition of the Trip Generation Handbook published by the Institute of Transportation Engineers (ITE).

Thank you,

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