
PUBLIC WORKS ENGINEERING DIVISION

Date: Thursday, April 02, 2015

To:

LUTJEN INC

Email: bheins@LUTJEN.COM

Fax #: (816) 587-1393

From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2015031

Application Type: Engineering Plan Review

Application Name: St. Michael the Archangel Right Turn Lane Engineering Plans

The Public Works Department received plans for this project on March 13, 2015. We have completed our review and offer the following comments:

Engineering Review

1. Does the pavement section for both alternate bid items match what is shown on the Lee's Summit Road project?
2. Please show the hydraulic grade line of the stormwater system on the profile view.
3. The proposed contours shown on Sheet C602 on the entrance do not appear to match the finish grade spot elevations shown on the Final Development Plan. Please reconcile.
4. Please be aware that the City of Kansas City water transmission main is located beneath the new driveway and portions of the transition. It is possible that this water line may need vertical adjustment to maintain adequate cover. Please check with the City of Kansas City to determine if adjustment/relocation is needed. Please ensure that the depth of cover is sufficient after installation of the entrance and turn lane.
5. An erosion and sediment control plan appeared to be missing from the plans.
6. Sheet C603: Please change the Legend note to read "1.5% maximum cross slope". The City of Lee's Summit has adopted a zero tolerance policy when sidewalk transverse slopes are greater than 2%, so this will hopefully provide some allowance for error.
7. An itemized and sealed Engineer's Estimate of Probable Construction Costs should accompany your final submittal drawings. The Engineering Plan Review and Inspection Fee is based on this estimate, and is calculated at 3% of the total cost. Items to include in the estimate include: 1) pavement, including commercial entrance, 2) subgrade preparation, including a minimum one (1) foot beyond the back of curb, 3) aggregate base, including a minimum of one (1) foot beyond the back of curb, 4) grading, 5) pavement marking, 6) curb and gutter, 7) sidewalk, 8) ADA-accessible ramps, 9) storm pipe greater than 6" in diameter, 10) curb inlets, 11) erosion and sediment control devices, and 12) sodding, seeding,

fertilizer, mulch and other restoration.

Traffic Review

1. There are two left-turn arrows included in the Lee's Summit Road Plans within or near the proposed left-turn lane among the other markings in conflict with the proposed plans. Suggestion: a note on the plans regarding "Work preceding or concurrent with the City's project will result in reduced quantities for those two left-turn arrows and any other markings in conflict with the proposed plans. If work follows the City's project, quantities for pavement marking removal and removal of turn arrows would be applicable but has not been included."
2. A standard taper rate is 12.5:1 for the right-turn lane in the Access Management Code.
3. Provide stations for each turn arrow at locations in accordance with the City's pavement marking standard details.
4. Provide stations for the start and end of each pavement marking line and dimension lane widths for reference.
5. The left-turn lane markings should not have a taper, but rather transition from the two-way left-turn lane markings to a dedicated left-turn lane. Refer to the City's pavement marking standard details for a layout.

If you have any questions or comments, please contact me, Gene Williams either at (816) 969-1800 or e-mail to Gene.Williams@cityofls.net.

Sincerely,

Original Signed

Gene Williams, P.E.
Senior Staff Engineer

cc: Development Engineering Project File