

DEVELOPMENT SERVICES

Date: Wednesday, July 17, 2019

To: KAW VALLEY ENGINEERING INC
14700 W 114TH TERR
LENEXA, KS 67554

From: Sue Pyles, P.E.
Senior Staff Engineer

Application Number: PL2019186

Application Type: Engineering Plan Review

Application Name: STREETS OF WEST PRYOR - NW PRYOR ROAD SIGNAL IMPROVEMENTS & LANE
WIDENING

The Development Services Department received plans for this project on May 28, 2019. We have completed our review and offer the following comments listed below.

- Resubmit three (3) full size sets of plans (no larger than 24"x36") folded to 8-½"x11", one (1) comment response letter, and one (1) digital copy following the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within five (5) business days of the date received.

Engineering Review

1. Include a Summary of Quantities table that includes quantity information. Only include items that are a part of this plan set in the table.

Traffic Review

1. Mast Arms that exceed 54' require structural engineering plans. Recommend alternate pole locations that result in mast arms less than 54' long. Two, possibly three locations of this proposed condition exist at the intersection of Lowenstien/Pryor Road (Poles #2, #3 and possibly #4). For example, can Pole #3 be moved to the NE corner of proposed ADA ramp with a pedestal pole for the crosswalk then located at the SE corner of the same ADA ramp to shorten the mast arm to approx. 46'? Likewise, can Pole #2 be moved to the NE corner of proposed ADA ramp with a pedestal pole then located at the SE corner of the same ADA ramp to shorten the mast arm to approx. 48".
2. The proposed Right Lane Must Turn Right and Left Lane Must Turn Left signs along Pryor Road should be removed. Since these turn lanes are "pocketed", these signs are not used per City.
3. Existing Lane Use Signs (2) located along the private drive within Summit Woods across from Lowenstien Drive, approaching Pryor Road should be removed (conflicting the proposed lane use).
4. Add "Right Turn Yield to U Turn" signs on Poles #1 and #5 at Summit Woods Xing/Pryor Intersection. The

U-Turn movements on Pryor Road should have the right-of-way. The east and westbound right-turns onto Pryor Road should yield. There won't likely be U-turns east-west; so the signs are not needed on Poles #2 and #4 which would be in conflict with the overlap protected right turns.

5. The quantity tables need to be updated, specifically the signal quantities to include mast arm dimensions, head locations, etc. for reference on shop drawings reviews.
6. Project Specific Note #1 on the signal plans should indicate Contractor furnished, not City supplied, materials for traffic signal installation including controller, cabinet, signal poles, mast arms, etc. All components, equipment, hardware and software required for installation of the traffic signal shall be supplied by Contractor.
7. The R10-12 sign(s) should be positioned to the left of the 5-Section signal head. Adjust Mast Arms as needed.
8. Remove the protected westbound right-turn movement (change head K to head A) on Pole #1 at Lowenstien/Pryor signal. The protected movement conflicts with Pryor Road U turns and shared through/right lane movement. Add a right-turn yield to u turn sign on Pole #1. No such sign is necessary on Pole #3 at this time since U-turns northbound on Pryor Road at Lowenstien are not likely (no access between Lowenstien and Chipman along Pryor. Revise quantities, phasing, etc. accordingly.
9. Provide a plan for the street light relocation that includes construction notes and information related to pull box(s), conduit placement, wiring, base installation, etc. and summary of quantities. A new base will be required and removal of existing base. Re-use of existing light pole is okay. This information may be shown on a separate plan sheet, or added to the signal plans, roadway improvement plan sheet, or other sheet already in the plans.
10. Fiber Optic cable, tracer wire, and conduit should be included in a summary of quantities table; may be added to either table of quantities associated with the signals.

In order to calculate the Engineering Plan Review and Inspection Fee, a sealed Engineer's Opinion of Probable Construction Costs shall accompany your final submittal copies. The itemized estimate (material and installation) shall be sufficiently broken down and shall include the following items, as applicable.

- Public infrastructure, both onsite and offsite.
- Private street construction, including parking lots and driveways.
- Sidewalks located within the right-of-way.
- ADA accessible ramps.
- Sanitary sewer manholes and piping between manholes, including private mains.
- Connection of the building sanitary sewer stub to the public main.
- Waterlines larger than 2 inches in diameter, valves, hydrants, and backflow preventer with vault, if outside the building.

- Stormwater piping greater than 6 inches in diameter, structures, and detention / retention facilities - public or private.
- Water quality features installed to meet the 40-hour extended duration detention requirements.
- Grading for detention / retention ponds.
- Grading to establish proper site drainage.
- Utility infrastructure adjustments to finished grade (i.e. manhole lids, water valves, etc.).
- Erosion and sediment control devices required for construction.
- Re-vegetation and other post-construction erosion and sediment control activities.

Electronic Plans for Resubmittal

All Planning application and development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies.

Electronic copies shall be provided in the following formats

- Plats – All plats shall be provided in multi-page Portable Document Format (PDF).
- Engineered Civil Plans – All engineered civil plans shall be provided in multi-page Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).

Please contact me if you have any questions or comments.

Sincerely,

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cc: Development Engineering Project File