

Date: Wednesday, June 12, 2019

To:

STREETS OF WEST PRYOR LLC

Email:

Fax #: <NO FAX NUMBER>

KAW VALLEY ENGINEERING INC

Email: LDO@KVENG.COM

Fax #: (913) 894-5977

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. Sheet C-1:
 - Update the month in the project title.
 - Include a Summary of Quantities table on this sheet or elsewhere within the plan set.
2. Sheets 10 & 11:
 - The specific details of the ADA-accessible sidewalk ramps must include, at a minimum, the design details specified in Section 5304.8 of the Design and Construction Manual. Elevation call-outs, although required, are not sufficient. Other design details specified in this section are required, including slope call-outs which comply with the criteria listed in Table LS-5, and section views specified in 5304.8.
 - Please revise the design parameters included in the Legend, they do not meet City requirements.
3. Prior to approval of this plan set, submit an Engineer's Estimate of Probable Construction Costs or the contract amount from the project contract documents. This must be an itemized list of unit prices and quantities, with quantities matching the approved plan set.

Traffic Review

1. Pavement Marking removals shall be done without scaring the pavement by grinding, sand blasting, or other method that minimizes pavement damage. Black out striping to cover existing markings in conflict is not an acceptable long term approach.
2. Use a 300' reverse curve taper (150' distance) for the left-turn lane entry taper.
3. 6" White lines shall be preformed thermoplastic material.
4. A 3rd right-turn arrow is needed in the southbound right-turn lane for the proposed right-in/right-out since the arrow spacing exceeds 80'.
5. The existing right-turn arrows on the westbound approach to Summit Woods Xing should be removed and consider a lane use sign for the 2 westbound left-turn lanes and shared thru/right lane. This change is necessary due to the permitted thru movement and lane alignment associated with the eastbound approach.
6. Signal Plans at Summit Woods Xing:
 1. Remove Existing Pole 5 (pedestal pole and base) in the SE corner and install pedestrian push buttons and pedestrian heads with countdown timer (relocation of good equipment on existing pole may be acceptable) onto proposed Pole 3. Extension arms up to 12" may be needed for the push buttons depending on pole location and proximity to sidewalk/ramp. Add notes for restoration and removal of or fill existing conduit no longer used to PB5 (plug conduit hole in PB 5).
 2. Revise the lane configuration and associated signal design plans (e.g. phasing, wiring, heads, etc.) to maintain 2 westbound left-turn lanes and 2 eastbound left-turn lanes. The existing right-turn lane will be shared thru/right. All dual left-turn lanes should have protected left-turn phasing.
 3. How will the conduit be installed from proposed PB1 to Existing Pole 2 through existing concrete pole base? Should this conduit be routed to Existing PB 3 instead and use existing conduit to Pole 2?
 4. Verify adequate space in existing conduits for new cables.
 5. Update schedule of quantities, verify equipment needs and note equipment specifications. The detection system shall match existing InSync Adaptive System (or upgrade as necessary per manufacturer recommendations), including all modifications and improvements to detection system processor, cards, etc. and compatible cables.
 6. Include necessary Opticom for Pryor Road, not necessary for private drive approaches.
 7. What is the 14' conduit extending north from PB1?

8. Are 2 4" conduits required between PB1 and Pole 1?

9. Add construction sequencing notes...Existing intersection to remain fully operational and new signal constructed, wired and ready for switch prior to demolition/removal of existing so as to minimize traffic disruptions. Coordinate notes with the removal sheet and the general notes sheet.

7. Signal Plans at Lowenstien:

1. Can the signal operate with concurrent east/west phasing? Split phasing is not desired. Update the phasing and sequence diagrams.

2. Update schedule of quantities, verify equipment needs and note equipment specifications. The detection system shall be InSync Adaptive System with detection system processor, cards, etc. and compatible cables. (partially described in the fiber plan note and general notes sheet)

3. Include necessary Opticom for Pryor Road and Lowenstien, not necessary for private drive approaches.

8. Signal Notes Sheet:

1. Project Specific Note 1 - Contractor/Developer to supply all equipment, poles, etc.; not City.

2. Update quantities table.

9. Signal Removal Sheet: Plans appear incomplete. Identify removals and provide construction/sequencing and coordination notes as appropriate.

10. Traffic Signal Interconnect Plans: Interconnect Plans and Details are incomplete. Show all conduits, fiber boxes, existing and proposed, connection notes, etc. Quantity tables should be included and completed. Amend Note 1 to include the existing intersection of Summit Woods Xing; not only connection to existing intersection at Chipman.

11. Add Street Lighting Plans for the relocated street lights (or replaced street lights as applicable) along Pryor Road.

12. Remove standard details related to span wire traffic signals. These Standard Details Not Applicable.

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,

Sue Pyles, P.E.
Senior Staff Engineer
(816) 969-1245
Sue.Pyles@cityofls.net

cc: Development Engineering Project File