

DEVELOPMENT SERVICES

Date: Tuesday, April 30, 2019

To:

TOWNSEND SUMMIT LLC

Email:

Fax #: (410) 321-1901

ANDERSON ENGINEERING INC

Email:

Fax #: <NO FAX NUMBER>

From: Sue Pyles, P.E.

Senior Staff Engineer

Application Number: PL2019144

Application Type: Engineering Plan Review

Application Name: Summit Orchard Lot 4 - Public Infrastructure Improvements

The Development Services Department received plans for this project on April 12, 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. Submit an Engineer's Estimate of Probable Construction Costs.

Traffic Review

1. Call out type of curb and gutter on the plans (CG-1) for the right turn lane along Ward.
2. Add stationing/alignment detail and references to the plans (these were shown on the private improvements). Call out station/offsets, radii, and dimensions for each PC, PT, PI, curve, offset, width, etc.
3. Add a note to the plans that specifies all long line pavement markings shall be high build paint and all symbols, stop line, crosswalk lines and diagonals shall be preformed thermoplastic material in accordance with City specifications.
4. Southbound Left-turn Lane Design along Ward:

The south end of the left-turn lane on Ward should have a radius transition to the northbound edge of

pavement and the north end of the median between the turn lane and adjacent southbound traffic should be moved south to open the turn lane entry while using pavement markings (yellow lines and diagonals/chevron) to extend the lane delineation. The northbound left-turn lane with limited access along Pryor at the Village Care (between Chipman and Peace Pkwy) or westbound left-turn lane with limited access along Chipman at Jacob may be examples to reference.

The southbound left-turn lane on Ward should use a reverse curve radius taper in lieu of the straight taper (consider a 300' RC design due to the offset in median location).

5. Median Island Design along Ward:

Remove the tie bars in the curb from the concrete median island.

Specify the color and pattern for stamped concrete (e.g. Brick Dark Red Color and Running Bond Pattern).

Add Isolation Joints.

6. The street light in the southbound median along Ward where the turn lane is proposed will need relocation to the median on the east side of the southbound left turn lane.
7. Add signing for the southbound left-turn lane along Ward Road (object marker in the median for southbound traffic and symbolic No Left-turn, Do Not Enter and/or One Way signs for west facing traffic at the limited access southbound left turn lane opening.
8. Are the left-turn lane improvements/extension on Chipman at Donovan (westbound left) included in the Signal Plans for Donovan or do those improvements need to be added to these plans?
9. Review pending Traffic Signal Plans for Chipman and Donovan.
10. Sheet C501, Note 2 on Pavement Widening should refer to contraction joints, not construction, and spacing at 15' max, not 15'-20'.
11. Sheet C501, Transverse Construction Joint Detail should be Transverse Contraction Joint Detail. D/4 should be D/3 and 3/4" Dia Dowel should be 1 1/4" with a length of 18", not 15". Use Epoxy Coated Bars. remove note reference to Lubricate One End.
12. Sheet C501, Keyed Construction Joint should be Transverse Isolation Joint. #4 Bar should be dowels.
13. Sheet C501, Longitudinal Joint Detail D/4 should be D/3 and use a #5 bar in lieu of #4.

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