



Civil Engineers, Surveyors & Land Development Consultants

February 10, 2021

Westtown Township
John Altshul, Township Manager
1039 Wilmington Pike
West Chester, PA 19395

**Re: Sawmill Court
Preliminary/Final Land Development
Response to Carrol Engineering Review letter dated December 29, 2020
Inland Design Project No. 11541**

Mr. Altshul:

We are in receipt of the review letter from Carrol Engineering dated December 29 2020, for the above referenced project. Based on the comments contained in that letter we have revised the plans and offer the following responses:

General

1. The plan proposes construction of 20 single family semi-detached homes on an existing 6.3-acre parcel (UPI 67-4-82). There are also 3 open space parcels to be created.

No response required.

2. The project is located 914-924 South Concord Road in the M-U Multi-use district.

No response required.

3. Sanitary sewer service will be provided by a gravity sewer extension extending from the site across a proposed sanitary sewer easement on the adjacent property at 611 Oakbourne Road to Oakbourne Road, and then in Oakbourne Road to the Township's existing sewer at the intersection of Oakbourne Road and Trellis Lane. Wastewater will be conveyed by the Wild Goose Pump Station to West Goshen Township for treatment

No response required.

4. It appears that sanitary sewer easements are proposed across the lots 10 and 11 from Sawmill Court to Open Space C. The easements should be labeled on the drawings.

The proposed sanitary sewer easement has been labelled on the plans.

5. Proposed sewers cross Open Space C. General Note I on the Cover Sheet states that open space will be owned by a Homeowners Association. A sanitary sewer easement across Open Space C should be provided. Since a proposed walking trail/path crosses the sewer, the easement agreement shall require the Homeowner's Association (or owner of the trails) to hold the Township harmless.

A sanitary sewer easement has been added in within the open space. The easement agreement will reflect the requirement that the Township will be held harmless for any damage to trails within the easement.

6. The Developer's Agreement/Homeowners Association documents should identify who is responsible for maintaining sewer easements outside of paved areas.

The Homeowners Association will be responsible for the maintenance of all sewer easements in the open space. This is noted on Sheet 15 and will be included in the Homeowners Association Documents.

7. Easement plans and legal descriptions for all sanitary sewer easements should be provided to this office for review.

Easement plans and legal descriptions for sanitary sewer easements will be provided to Carrol Engineering for their review.

Planning Exemption

1. The Applicant's Consultant should confirm that the project qualifies for a planning exemption. The development will connect to the Wild Goose Pump Station. The pump station has sufficient capacity for the proposed EDU's. However, if the total flow including the new EDU's exceeds the permitted capacity, a new permit will be required. If so, a full planning module may be required. The Township should provide this office with a copy of the pump station permit to confirm the permitted capacity.

The applicant is coordinating with Westtown Township and West Goshen Township to verify the sewage planning status of the project.

2. The proposed sewage flows under Item 5 should 5,000 GPD.

The sewage flows have been revised as required.

3. Under Item 6, the box for New (extension) should be checked. The box for Existing (connection only) should not be checked. The name of the existing system being extended is Westtown Township. The NPDES Permit No. is PA0028584.

Item 6 has been updated as required.

Sanitary Sewer

1. All sewers should be labeled as SDR 35 PVC.

The sewers have been labelled as SDR 35 PVC on the profiles.

2. Labeling of sewer laterals on sheet 5 does not match the legend.

The legend has been modified to reflect the sewer laterals as shown in the plan view.

3. Cleanouts are shown for all laterals. Since the distance between the houses and the sewer is less than 100', and all laterals are shown running straight to the sewer; cleanouts are not required unless Township Code Enforcement requires the cleanouts.

Cleanouts have been removed from the laterals.

4. We recommend greater clearance between the proposed sewers and water mains in Sawmill Court to facilitate construction and future maintenance.

The water main has been relocated to provide additional clearance.

5. The proposed sewer between the existing manhole and manhole 2 should be revised so that the angle between the sewers entering and existing the existing manhole and manhole 2 is 90°.

The alignment of the sewer system has been reconfigured to show 90 degree or greater at all bends. Due to the elevation of the 8" Low pressure force main, the proposed line has been modified to tie in directly to the wet well of the pump station.

6. The sewer slope between manholes 2 and 3 should be reduced to under 7% to avoid supercritical flow in the pipe. This can be accomplished by increasing the depth of manhole 3 to at least 6' deep.

The slope between manholes 2 and 3 has been reduced to be under 7% as requested.

7. The depth of the sewer between manholes 5 and 9 should be increased to provide greater clearance under the 18" RCP storm sewer.

The sanitary sewer has been lowered in this area to provide a minimum of 18" of clearance.

8. Details for sanitary sewer construction should be included in the drawings. We will provide copies of details to the Applicant's Consultant.

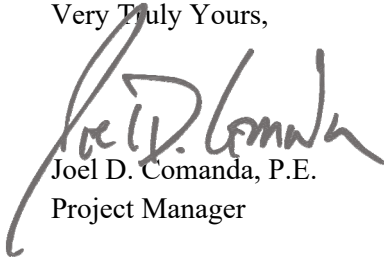
Sanitary sewer construction details are shown on the plans. The notes also require that construction of the sanitary sewer be performed according to the standards of Westtown Township.

9. Two groups of Eastern Red Cedar, and a Wolf Eyes Japanese Dogwood are proposed within 8' of the sewer in Open Space C, which would be within the requested sewer easement. The tree locations should be revised to be outside the easement.

Landscaping has been relocated to be outside of the proposed sanitary easement.

We trust that the plans adequately address the comments of the Township Consultants. Please feel free to contact me with any questions or comments regarding this matter.

Very Truly Yours,



Joel D. Comanda, P.E.
Project Manager

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