



June 17, 2020

Brian A. Knapp, P.E., CPESC, CPSWQ
Summit County Engineer's Office
538 East South Street
Akron, OH 44311-1843

Re: Schulte Office Building
600 Cleveland-Massillon Road
Copley Township, Summit County

Mr. Knapp:

This letter is in response to your review email dated June 5, 2020 for the referenced project. Your comments have been addressed below.

Review Comments

Construction Plans

1. Sheet C3.0 – For Catch Basin #2, change the direction for the pipe from South to Southeast.

The pipe direction has been revised accordingly.

2. Sheet C4.0 – Add existing spot elevations to the edge to the existing concrete parking lot and the where the driveway meets the road.

Spot elevations have been added as requested.

3. Sheet C4.0 – The 1026 contour on the southwest side of the detention basin is tied into the wrong existing contour

The 1026 contour has been revised accordingly.

4. Sheet C4.0 – Is the retaining wall design a part of the architectural plans? The retaining wall should be reviewed and approved by the Building Dept.

The retaining wall designs are to be included in the architectural plans.

5. Sheet C4.0 – Show the 100-year flood route to show how the 100-year flood will get to the detention basin.

The 100 year flow route has been added to the plan.

6. Sheet C4.1 – The proposed spillway must be 4" thick concrete and extended to the top of the bank.

A concrete spillway has been added to the plan.

7. Sheet C4.1 – Specify if the 6" orifice is round or square.

The lower orifice is round and upper windows are rectangular as shown on the outlet structure detail.

8. Sheet C5.0 – We believe that the limits of disturbance will be greater than the 0.92 acres that is listed and also greater than 1.0 acres and therefore must be submitted to the SWCD for approval with a water quality design for the detention basin. An EPA NPDES permit will be required, and a Summit County Long Term Maintenance Agreement and Access Easement will be needed for the detention basin. The additional disturbed area is from the service lines for the sanitary sewer and water line, and from the additional parking area that was built within the last year for this development.

The additional area of disturbance from the sanitary sewer lateral and existing parking lot constructed in 2019 has been included in the limits of disturbance. The water service is to be directionally drilled. Therefore, the install will not create added disturbed area.

The site grading and detention basin has been modified to minimize the necessary disturbed area for the project. The modifications will result in a total disturbed area of 0.98 acres.

Drainage Calculations

1. Submit storm sewer design calculations for the 10-year design storm. If the storm sewer is to be used as the 100-year flood route, then it must be designed to handle the 100-year design storm.

Storm sewer calculations have been provided with this submittal.

2. The predevelopment and post-development drainage areas are bigger than they should be. Please refer to my marked up drainage map that is attached. Much of the off-site area and some of the existing parking lot will not drain to the detention basin based on this grading plan. Also, most of the proposed driveway will bypass the detention basin and must be counted as by-pass flow in the calculations, or the site grading could be re-designed to ensure that this area drains into the detention basin.

The drainage areas have been field verified and adjusted accordingly.

3. The slope of the outlet pipe does not match the construction plans.

The slope of the outlet pipe has been corrected.

4. It is unclear if the orifice for outlet structure B is round or square. Also, it is unclear if both orifices are horizontal or vertical in the detention modeling design.

The lower orifice is round and upper windows are rectangular as shown on the outlet structure detail.

Revised plans and storm water management report addressing the above comments are included herein.

If you have any questions or additional comments, please contact me.

Sincerely,

C. Brent Artman. P.E., C.P.E.S.C., C.P.S.W.Q.