

Town of Hamden

Engineering Department

To: Chairman, Planning and Zoning Commission

From: Mark Austin, PE, Town Engineer

Subject: Special Permit / Site Plan 19-1329
Site Plan for Mediation Studio
10 Hamden Hills Drive

Date: January 4, 2020

The Engineering Department reviewed the plans dated 3/30/2016 and revised through 11/27/2020 submitted with this application and have the following comments:

1. Storm Drainage:

a. Drywell systems

i. Show on the plans how the various drywell systems will be interconnected. Comments on the large system for the main parking lot in ii will provide guidance on the plastic but will need interconnections and inspection points for the concrete chambers.

ii. Drainage system and other system details

1. Page 5 of 11: Strongly recommend an inspection port for each end of each row of chambers.
2. Page 5 and 11 of 11: The outlet pipe for the Cultec system is shown as 4". The minimum detail is 6". Please reconsider 6" as the minimum outlet because it is the manufacturer's standard smallest pipe size as well as being much less prone to crushing or clogging.
3. Page 5 and 11 of 11: Feed connector(s) are optional and need to be specified. Please indicate on plans how often they are placed. The manufacturer's page does not show a spacing.
4. Page 9 of 11: Outlet Detail for Cultec: for long term maintenance, consider changing the top elbow to a tee and extending the pipe to the surface with a cap for a clean out and inspection point.
5. Page 11 of 11: 1000 gal Grease Trap: The detail is incomplete. The detail is missing the necessary baffling to actually catch the grease and any potential solids that would be expected to normally accumulate.

iii. How will the driveway systems be baffled to assure full system usage and prevent erosion in the first row?

1. On CB#4: When the 2x4 system was raised due to the previous test pit comment, the baffling effects of the difference in the pipe inlets was negated. Consider reexamination of this for baffles or changing of the pipe elevations.
 - a. The inverts will continuously hold a significant amount of water in the catch basins rather than utilizing the underground detention system. The catch basin outlet is 137.00. The inlet to the 2x2 drainage system is 138.33 which is 15" of water that will not leave the catch basins creating a maintenance problem.
 - b. The pipe leaving this catch basin system will not have enough clearance to put on a standard type C catch basin. The invert plus the 15" pipe leaves 13" which is the depth of the standard catch basin top. The system is the pipe wall too high at least.

iv. O&M plan for the detention systems.

1. The program is prefaced with soil removal. This plan needs to be revised to indicate this is an ongoing program that will need to be included into the owner's long term maintenance plans. It could be confused and considered to only be effective during construction when the intent is for the life of the system.
 2. The system should also be inspected and cleaned in the fall after leaf fall.
- b. Reconsider the landscaping plan for the center island. The proposed cypress trees are very fast growing with a 60' to 70' mature height with a spread up to 25'. <https://www.arboday.org/trees/treeguide/TreeDetail.cfm?ItemID=828>

With such a fast growing tree, there may be conflicts with the drainage and sanitary as well as the four trees overwhelming the relatively small planting area. Consider installing rain garden type plantings which are low growing and will further clean the water before entering the system.

2. Utilities

- a. Will the site be lighted? The lights and conduits need to be shown. A waiver of lighting must be approved by P&Z.