

January 19, 2023

Town of Grafton Planning Board
& Conservation Commission
30 Providence Road
Grafton, MA
Email: conservation@grafton-ma.gov; planning@grafton-ma.gov

**RE: Response to Peer Review of
Site Plan, Special Permit, Stormwater Regs, and Wetland Regs. Review
58 Follette Street Cell Tower
Grafton MA**

Dear Members of the Planning Board & Conservation Commission:

ProTerra Design Group, LLC (ProTerra) received the peer review letter from Graves Engineering, Inc. dated December 5, 2022. This letter is provided as a response to the comments of the review of the site located at 58 Follette Street in Grafton, Massachusetts. The numbered items below correspond to comments within the memo. The responses are in [blue](#).

Graves Engineering Comments:

Zoning By-Law

1. Pertaining to civil engineering, GEI has no issues relative to compliance with §1.3.3 or §5.8.6 of the Grafton Zoning By-Law except as noted in the two following comments.
2. The plans propose earth cuts and fills on hilly terrain to construct the driveway, compound, and stormwater infrastructure. An estimate of the net amount of earth material to be removed from or imported to the site should be provided on the plans. (§1.3.3.3.d.17)

[The net cut on the site is about 1,625 yards. Approximately 2,025 yards of gravel needs to be imported for the driveway and compound construction. The estimated values are added to sheet A-2 Overall Site Plan.](#)

3. The plans do not propose landscaping at the base of the facility. GEI recommends that the applicant discuss with the Planning Board how the project will meet the purposes of the landscaping subsection. (§5.8.6.13)

[The tower compound is located approximately 450 feet from the nearest property line to the North and South and over 1,000 feet to the East. The area is currently surrounded by mature vegetation. Screening was added along the Northern property line with Parcel 104-9 consisting of 17 evergreen species Arborvitae \(*Thuja occidentalis*\) and Eastern white pine \(*Pinus strobus*\) where it would be more effective in screening along the driveway.](#)

Regulations for the Administration of the Grafton Wetlands Protection Bylaw

4. GEI has no issues relative to compliance with these regulations.

No response necessary.

Conservation Commission Regulations Governing Stormwater Management

5. GEI has no issues relative to compliance with these regulations.

No response necessary.

Hydrology & MassDEP Stormwater Management

6. GEI reviewed the hydrology computations and found them to be in order.

No response necessary.

7. Compliance with MassDEP Stormwater Handbook is reasonable except as noted in the following comment.

See response to 8 below.

8. On Sheet D-6, in the Detention Basin-2 Plan inset the top of berm elevation is proposed to be 364.0 feet (by spot elevations), which is in order, but the 363 topographic contours on the berm are only seven feet apart. With the 3H:1V grading on the berm slopes, the top of the berm (at elevation 364.0 feet) will only be one foot wide. The top of the berm needs to be widened.

The top berm was regraded to provide a minimum of 4 feet in width at 364. Side slopes remain at 3:1.

General Engineering Comments

9. On Sheet P-1, the label for the twin driveway culverts needs to be revised so that the inlet end and the outlet end of the culverts are clearly identified. The culverts' inlet and outlet invert elevations were provided, but the end of the culverts to which they pertain were not identified. Also, the existing drainage pipe located near the end of the proposed twin culverts needs to be shown. Looking only at Sheet P-1, it is not clear whether the direction of flow should be into the wetland or out of the wetland.

The inlet and outlet invert elevations were clarified on the plans P-1. The flow is northerly from the wetlands offsite through an existing culvert that terminates in a roadside ditch just north of 56 Follette Street across from Southfield Court. We engaged Pipe Explorers, LLC video pipe inspection

services to review the condition of the existing 12" culvert. The video inspection revealed no clogs, debris, or structural deficiencies and appeared in good serviceable condition. Light staining inside the pipe indicated typical flows at 1/3rd the depth or below. No flow was observed at our time of visit and no erosion appeared at the channel downstream.

10. Based upon visual observations during my site visit, there appeared to be a drainage channel from the wetland that originates near wetland flag A-15. Please see Photo 1 on the following page. My review of Grafton GIS mapping (topography at two-foot contour intervals) and USGS topographic mapping further indicated that the drainage channel likely exists, and that the direction of flow is out of the wetland to the abutting property east of the project. Sheet P-1 of the plans proposes approximately 0.5 feet of fill at the drainage channel. This drainage flow path should not be interrupted unless accommodated in the site design.

We have only observed flow through the existing wetland to the existing culvert on the East side during the Spring. However, we added a 12" culvert on the West side of the wetland crossing near flag A-14/A-15 to preserve the existing flow path in that area based upon the survey contours and GEI's observation.

General Comments

11. On Sheet D-6, in the Detention Basin-1 Plan inset the spot elevation of "342.0" on the berm is a typographic error and needs to be corrected to "343.0" – the highest topographic contours that define the impoundment.

Detention Basin 1 has been modified to remove the typographical error and depict the 343 contour. The road was brought up 1 foot in this area to provide cover over the 12" culvert added in item 10 per your request and it has required the top of berm be raised to 344 to integrate with the surface.

If you have any questions or need further information, please do not hesitate to call.

Sincerely,
ProTerra Design Group, LLC



Jesse Moreno, PE
Managing Partner

Enclosure

cc: Verizon Wireless, Lucas Environmental, Robinson & Cole LLP