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100 GROVE ST | WORCESTER, MA 01605

September 30, 2016

Joseph Laydon
Town Planner
Grafton Municipal Center
30 Providence Road
Grafton, MA 01519

OCT - 4 2016

PLANNING BOARD
GRAFTON, MA

T 508-856-0321

F 508-856-0357

gravesengineering.com

**Subject: Grafton US-MA-5025, 104 Creeper Hill Road Cell Tower
Special Permit and Site Plan Review**

Dear Joe:

We received the following documents on September 28, 2016 via e-mail:

- Plans entitled Grafton, US-MA-5025, 104 Creeper Hill Road, Grafton, Massachusetts 01536 dated July 6, 2016 and last revised September 28, 2016, prepared by Advantage Engineers. (7 sheets)

Graves Engineering, Inc. (GEI) has been requested to review and comment on the plans' conformance with applicable "Grafton Zoning By-Law" amended through October 19, 2015; Massachusetts Department of Environmental Protection (MassDEP) Stormwater Handbook and standard engineering practices. As part of our initial review, GEI visited the site on August 23, 2016.

This letter is a follow-up to our previous review letter dated August 24, 2016. For clarity, comments from our previous letter are *italicized* and our comments to the Applicant's responses are depicted in **bold**. Previous comment numbering has been maintained.

Our comments follow:

Zoning By-Law

1. *The Locus Map must be shown at a scale of 1"=1,000', however, the plans provide a Locus Map at a scale of 1"=2,000'. We have no issue with the scale of the locus map as long as it is acceptable to the Planning Board. (§1.3.3.3.d.8)*
Acknowledged. The scale of the Locus Map was revised.
2. *The Title Block must contain the Assessor's Map/Lot Number, and the address, phone number, signature and seal of the professional architect or engineer preparing the plan. (§1.3.3.3.d.9)*
The electronic copy of the plans that we received did not bear a signature or seal; although space was allocated for such at the bottom-right corner of the plans sheets.
3. *Ownership of all abutting land and approximate location of buildings, driveways, and parking areas within 200' of the property lines must be shown on the plans. (§1.3.3.3.d.11)*
Acknowledged. The information was added to Sheets 2 and 3 of the new plan set.

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4. *Existing and proposed topography must be shown on the plans. The plans do show existing topography approximately 200 feet around the proposed cell tower. However, the plans show a proposed access road from Creeper Hill Road to the facility with no proposed grading. Currently there is a steep drop-off from Creeper Hill Road at the proposed access road entrance. It is our understanding that the access road may be proposed under a separate project on the property, however, GEI has not yet received plans which include the access road and its existing and proposed topography. (§1.3.3.3.d.12)*
Acknowledged. On the new Sheet 2, a leader note that points to the existing driveway states “Existing Right of Way, Book 2356, Page 284, to be Relocated, but Used Until New Drive is Built (by Others).” Per my discussion with you, the driveway relocation is to be designed and constructed as part of a yet-to-be-submitted application for a separate project on the subject property.
5. *Lot coverage calculations must be shown for percentage of pavement and percentage of open space/landscaped areas. (§1.3.3.3.d.15)*
I couldn't find such calculations on the revised plans. However, on Sheet 2 there is a table of zoning dimensional requirements (albeit the table inadvertently references “maximum” frontage instead of “minimum” frontage). It would be prudent for the lot coverage calculations to be presented with or near this table.
6. *Any principle part of the facility must be setback a distance of twice the height of the facility or a distance of 300 feet, whichever is greater. The plans show the monopole setback of 226.5 feet from the western property line. Also, although dimensions were not provided on the plans, the monopole will be setback approximately 280 feet and 190 feet from the northern and southern property lines along Flint Pond, respectively. However, these shoreline locations are unlikely to have persons or property present that could be impacted by falling ice or other debris. Nevertheless, we defer to the Planning Board how the applicant should address the setback requirement. (§5.8.6.1)*
Acknowledged. Per my discussion with you, I understand that a waiver request pertaining to the setback has been submitted to the Planning Board. Please note that the plans now show the monopole to be approximately 160 feet from the western property line.
7. *Landscaping must be provided around the base of the facility, adjacent to the fence, and consist of a planting strip at least 25' wide, with ground cover and/or grass, and include at least one row of 6' high evergreen trees and a row of deciduous trees at least 10' high and at least 1-1/2" caliper planted no more than 20' on center. Whereas the equipment compound would be located approximately 700 feet from Creeper Hill Road and would essentially be surrounded by existing trees, we defer to the Planning Board how landscaping should be addressed. (§5.8.6.13)*
Acknowledged. Per my discussion with you, I understand that a waiver request pertaining to landscaping has been submitted to the Planning Board.

Hydrology & MassDEP Stormwater Management

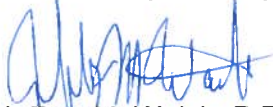
8. *General Note 2 on Sheet 2 of the plans indicates that the project will have only a “de minimus” increase in stormwater runoff. We don't dispute this position, but documentation regarding hydrology and proposed stormwater management was not submitted and we were therefore not able to confirm this position nor review the project's conformance with the MassDEP Stormwater Handbook and the MassDEP Stormwater Standards. Beyond the issue of peak rate attenuation (Standard 2), groundwater recharge (Standard 3) and*

stormwater quality (Standard 4), the project documents must address construction phase erosion controls (Standard 8) and long-term operation and maintenance (Standard 9, which should at least address site housekeeping as it relates to stormwater).

No further comment; supporting documentation was not submitted with the revised plans nor were the plans revised to address compliance with applicable MassDEP Stormwater Standards.

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,
Graves Engineering, Inc.



Jeffrey M. Walsh, P.E.
Vice President

Cc: Chris Hesse