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April 15, 2016

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

PLANNING BOARD  
GRAFTON, MA

T 508-856-0321  
F 508-856-0357  
gravesengineering.com

**Subject: Tufts University – Equine Arena  
Project Plan Review**

Dear Joe:

We received the following documents on April 1, 2016:

- Correspondence from the Cummings School of Veterinary Medicine at Tufts University to Grafton Planning Board dated March 30, 2016 re: Project Plan Submission – Hospital for Large Animals (HLA) Equine Sports Medicine Center, 53 Willard Street, with attachments.
- Plans entitled Project Plan for Proposed Equine Arena, The Cummings School of Veterinary Medicine at Tufts University in North Grafton, Massachusetts dated March 29, 2016, prepared by Waterman Design Associates, Inc. and Gorman Richardson Lewis Architects for Cummings School of Veterinary Medicine at Tufts University. (15 sheets)
- Bound document entitled Stormwater Management Report for Equine Arena Willard Road North Grafton, Massachusetts dated March 2016, prepared by Waterman Design Associates, Inc. for Cummings School of Veterinary Medicine.

Graves Engineering, Inc. (GEI) has been requested to review and comment on the plans' conformance with the Tufts 2014 Master Plan, Section 9 of the Grafton Zoning By-Law, Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Policy and standard engineering practices.

**Our comments follow:**

**Tufts 2014 Master Plan**

1. The proposed project appears to be consistent with Section 3 of the 2014 Master Plan relative to size and type of building. It is worth noting that the project's proposed location was revised slightly but is in the same general area as shown in the 2014 Master Plan. We have no issue with the proposed location.

**Grafton Zoning By-Law**

2. We have no issues relative to compliance with Section 9 of Grafton Zoning By-Law.

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**Hydrology Review & MassDEP Stormwater Management**

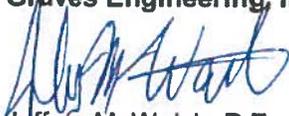
3. Soil testing will need to be performed at the locations of the proposed infiltration facilities To demonstrate that the soils are suitable for infiltration and that a minimum two-foot offset to groundwater can be achieved.
4. The Stormwater Report did not include Total Suspended Solids (TSS) calculations. The Stormwater Report must be revised to include Total Suspended Solids (TSS) calculations as required by MassDEP Stormwater Management Standard 4.
5. The Stormwater Report did not include an illicit discharge statement. The Stormwater Report must be revised to include an illicit discharge statement as required by MassDEP Stormwater Management Standard 10.

**General Engineering Comments**

6. The inlet pipe elevation needs to be identified for the proposed catch basin northeast of the isolation building (Sheet 5).
7. Based on the pipe slope and lengths, the invert out elevation of SIS-103 (Sheet 5) is incorrect. The information needs to be re-evaluated and revised as necessary.
8. There are no slopes shown for the 6" sch. 40 PVC pipes (roof drains) from the proposed building to SIS-103 or SIS-202 (Sheet 5). The plans need to include this information.
9. Sheet 5 does not show all of the inverts on the drain manhole on the north driveway entrance in which all stormwater exits the site. The plans must be revised to show all inverts at this location.

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: Michael J. Scott P.E; Waterman Design Associates, Inc.  
Jean S. Poteete, Tufts University