The Barn at Belmont Day School Construction Management Plan

May 12, 2017

Introduction:

Belmont Day School (BDS) proposes to construct a $25,000 \pm SF$ academic and athletic building within their 12.4-acre campus located at 55 Day School Lane. Access to this project will be via a 20-ft. wide driveway from Concord Ave.

Construction of this project will be managed to minimize impacts to the community, Highland Meadow Cemetery and Lone Tree Hill. As part of the construction process, BDS has developed a Construction Management Plan as a management guideline for all aspects of the development of this project.

This Construction Management Plan will provide guidance to all contractors working on the project. It will be the responsibility of the contractors to become familiar with these guidelines as well as the guidelines set forth in the Decision from the Planning Board relative to Design and Site Plan Review and Storm Water Pollution Prevention Plan (SWPPP) prepared by the contractor. BDS' Director of Operations (DOO), Corrado Paramithiotti and the general contractor will be responsible for overseeing all work on the project to control and mitigate impacts to the surrounding community from the construction activities. Prior to the start of the project, BDS will provide the names and contact information of the responsible individuals to the Office of Community Development, Cemetery Commission, Land Management Committee for Lone Tree Hill and community members.

As soon as all permits and approvals for the project are obtained, BDS will begin site preparation work for the project. This Construction Management Plan is intended to create guidelines and be a flexible document. As necessary, it will be reviewed and updated, based upon the applicable requirements of the permits and a detailed review of on-site conditions by all members of the BDS construction team, with input from appropriate Town officials and agencies. It is estimated that site work will begin the fall of 2017.

Pre-Construction Site Coordination:

Construction management issues that relate to the site scope of work will be addressed during the bidding phase of the project. Site visits will be conducted for the DOO, contractor, landscape architect and project engineer to review existing conditions and establish control measures dealing with tree protection and environmental considerations. A pre-construction meeting (one of the quarterly community outreach meetings) will be

organized by BDS. Interested parties will be invited and the responsible parties for construction activities will be identified and their contact information will be provided. This information will also be shared as part of the Community Outreach Plan.

Prior to site mobilization, an on-site meeting will be held with the BDS Director of Operations (DOO), general contractor, town officials, building architect, civil engineer, and landscape architect to review the scope of the Tree Protection Plan and the Temporary Construction Fencing Program.

After the project team is familiarized with the site and the construction program, the requirements for Tree Preservation and the Storm Water Pollution Prevention Plan (SWPPP) will be implemented. These documents provide controls to protect trees to be saved during site construction, establish erosion controls and provide temporary drainage structures for sedimentation and storm water management.

Initial Construction Activities

Project Access:

The primary access route for construction vehicles to the site will be from Route 2 onto Winter Street to Concord Avenue. Direct site access will be from the Concord Avenue entrance (BDS driveway). If necessary, a secondary access will be determined by the DOO and general contractor. Efforts will be made to establish truck routes and timing to avoid conflicts with school bus transportation including bus stops and major bus routes as identified by the school department.

General Standards

An orientation will take place with all employees to review safety, routes to and from the site, hours of operations, lunch trash disposal and noise controls.

Work Hours:

During construction, BDS and its contractor shall comply with Article 23 Belmont Noise By-Law within the Belmont General By-Laws. Work will generally begin at 7:00 AM.

Employee Parking:

Construction parking will be on site under the control of DOO and general contractor. Tradespersons are required to park on-site or in designated locations off-site where they will be shuttled to the jobsite. This location will not be on any neighborhood streets. No employees of the general contractor or the subcontractors will be permitted to park on Day School Lane, Concord Avenue or other neighborhood roadways surrounding the project.

Project Construction Controls:

BDS's DOO will be present during construction. He will be responsible for managing the general contractor, who, in tum oversees construction during the entire time of the project, from the initial pre-construction meeting to the final walk through with the owner. The DOO is also the liaison to the Town and the Hospital.

The DOO will provide quarterly updates to appropriate Town agencies and officials and neighbors according to the Belmont Day School Communication Plan.

Communication between the design team, consisting of the project architects, project site/civil engineers, project structural/geotechnical engineers, etc., the construction team, including the general contractor's staff, site contractor, sub-contractors, trades, etc., BDS, and town officials will be established early in the project timetable.

As the project develops in pre- construction, the DOO and the general contractor will be involved on a weekly basis along with the entire project team. The final construction documents and plans will be developed with input from the project team and, as approvals are obtained, the Bid process will be initiated with approved work packages.

This involves communications with the subcontractor market to identify all project specific issues as well as the scope of work. Just prior to the start of construction, a partnering meeting is conducted involving all members of the total project team. At this time, the project will be reviewed in its entirety and construction controls, including decorum standards, cemetery coordination and noise restrictions will be reviewed by the team and monitored throughout construction.

Tree Protection:

Protective fencing will be placed around trees to remain that are likely to be impacted by construction. A meeting will take place at the site with the project's Landscape Architect, Town officials and contractors to review and approve tree protection requirements.

Erosion Control:

Concurrent with implementation of Tree Protection, the DOO, the general contractor and the site contractor will review the Storm Water Pollution Prevention Plan (SWPPP) and prepare the NPDES permit application for submission to EPA. Prior to the beginning of any construction activities, erosion control will be installed, as shown on the plans and in accordance with the SWPPP. The erosion control barriers will be inspected on a regular basis and after periods of heavy rains of one half inch or more. During excavation and rough grading, siltation basins and temporary drainage swales will be constructed to direct runoff from disturbed areas and reduce the amount of runoff from the construction areas. Where water flow is concentrated, crushed stone check darns will be installed as

well as haybale check dams as required. Stockpiled materials will be properly stabilized as required in the SWPPP.

Construction Staging:

Once the Tree Protection and the SWPPP are in place, temporary construction staging areas will be established within the zone under active construction. Site clearing will be undertaken, with care given to maintain Tree Protection and consistency with the SWPPP.

Construction Phase:

Site Development Phase:

A construction access will be established at the beginning of construction. Rough grading and tree removal will be conducted in accordance with the SWPPP. As specified by the project's Landscape Architect, tree protection will be installed on trees likely to be impacted during the construction process. Protective fencing will be placed around the area of trees to remain in place during the construction activities, and may only be removed for final landscaping activities. This fencing will be inspected on a regular basis in order to insure maximum tree protection.

Blasting:

At the present time, based on the results of on-site test pits, blasting is not anticipated for this project.

Should blasting be required, the following procedure will be followed: A pre-blast survey will be conducted to determine ledge location and help to determine the amount of ledge to be removed. All ledge removal will be performed in accordance with a Blasting Plan for the Project (developed within the guidelines of the State regulations and the BFD Chief's requirements). The Blasting Plan will be developed after conferring with the project's Architect, the project structural/geotechnical engineers, BFD and the appropriate State authorities. This blasting plan will include a definite schedule of operations and protocol that will be communicated to the local Building Inspector and nearby residents including the Hospital. Blasting will be conducted under the direct supervision of the Belmont Fire Department per their requirements.

Earth/Ledge Removal:

Wherever practical earth and rock materials will be re-utilized on the site. All excess material that cannot be used on-site will be transported offsite. Efforts will be made to minimize the traffic impact of offsite material transportation.

Site Clearing:

Silt fencing, drainage controls and staked haybales will be installed as shown on the plans

to prevent sediment runoff. All stockpiled soil shall be stabilized. Permanent slopes with gradients in excess of three-foot horizontal to one-foot vertical will be stabilized with erosion control fabric.

Foundation:

Once a building permit has been obtained, the foundation will be started in accordance with the construction schedule as soon as the construction access road is in place and rough grading complete in and around the building footprint.

Stormwater:

Storm water runoff will be controlled in accordance with the SWPPP. Existing and proposed catch basins inlets shall be protected using sediment traps, silt sacks, and staked haybales. All stormwater control systems will be inspected and maintained routinely, per the SWPPP to ensure that the system is functioning correctly throughout the construction process.

Utilities:

The DOO and general contractor will coordinate the installation of all drainage, water and sewer installation as well as all private utility services (gas, telephone, cable, electric, etc.). Site Utilities including Storm Drainage, Sewer and Water will be constructed as the site development progresses.