

**NEW HAVEN CITY PLAN COMMISSION INLAND WETLANDS REVIEW
NEW HAVEN CITY PLAN COMMISSION SITE PLAN REVIEW**

RE: 986 FOREST ROAD, Inland Wetlands Review and Site Plan Review for Football Field Reconstruction in a RS-2 Zone (Owner/Applicant: Hopkins School).

REPORT: 1470-01

WETLAND APPLICATION CLASSIFICATION: Class B

ACTION: Approval with Conditions

CONDITIONS OF APPROVAL

1. Pursuant to State Statute, this inland wetlands and site plan approval is valid for a period of five (5) years following the date of decision, until October 17, 2017. Upon petition of the applicant, the Commission may, at its discretion, grant extensions totaling no more than an additional five (5) years to complete all work connected to the original approval.
2. The applicant shall record on the City land records an original copy of this Inland Wetlands and Site Plan Review report (to be provided by the City Plan Department) and shall furnish written evidence that the document has been so recorded (showing volume and page number) to the City Plan Department, prior to City Plan signoff on final plans for Site Permit.
3. Signoff on final site plans by the City Engineer and City Plan Department in that order shall be obtained prior to initiation of site work.
4. Bond in an amount of 2% of the certified estimate of total project site cost, including grading, drainage, landscaping, and the like, will be required as a provision of this permit. Bond, or other such financial instrument, shall be provided to the City Plan Department, with a copy to accompany the final site plans, prior to City Plan final sign-off on plans, or initiation of site work.
5. Once the contractor is named, the applicant shall provide the name of an individual responsible for monitoring Soil Erosion and Sediment Control measures who will be on site on a day to day basis during the construction process, prior to initiation of site work.
6. As-built site plan shall be filed with City Plan Department, with a copy to the City Engineer, prior to return of site bond. Site Plan shall be submitted in both mylar and digital format [.DWG file based on the State Plane Coordinates (NAD1983)]. Note version of AutoCAD.

Submission: Development Permit application with Site, SESC and IW components dated 09/19/12 including List of drawings and Project Narrative; fee of \$270.00; Inland Wetlands and Watercourses Evaluation and Environmental Report (Fuss & O'Neill) 07/10/12; Stormwater Management Study (Fuss & O'Neill) 09/12.

Drawings package by SMRT, Inc, 09-20-12 Full size set and reduced set 11x17: Cover Sheet, Site Notes & Legends, Construction Logistics Plan, Survey & Topographic Plan, Existing Conditions & Removals Plan, Site Layout Plan, Enlarged Layout Plan, Layout Details, Seating Section, Grading Plan, SESC Plan, Enlarged grading Plan, Site Details, Utility Plan & Details, Legend, General Notes & Specs, Electrical Plan, Planting Plan & Details.

Previous Relevant CPC Actions: Site Plan Review for 2 new athletic fields (1364-05, 03/16/05), Inland Wetlands Review for 12 new Tennis Courts (1391-15, 09/20/06), Site Plan and Inland Wetlands Review for

reconstruction of existing tennis courts (CPC 1405-06, 07/18/07), Site Plan Review for new Girls' Field Hockey and Lacrosse Field (CPC 1423-05, 12/17/08).

PROJECT SUMMARY:

Project: Reconstruction & conversion of existing football field from natural to artificial turf. Replacement of seating
Address: 986 Forest Road
Site Size: 6,875,000 square feet (157.8 acres total campus)
Parcel Size: 385,506 SF minus 98,343 SF wetlands = 287,163 SF
Disturbance area: 3.0 acres (130,680 SF)
Zone: RS-2
Financing: Private
Owner: Hopkins School **Phone:** 203-397-1001
Contact: David Baxter **Phone:** 203-397-0001 x 225
Site Engineer: SMRT, Inc. Andover, MA **Phone:** 978-474-1742
Civil Engineer consultants: Fuss & O'Neill **Phone:** 860-646-2469
City Lead: City Plan Dept. **Phone:** 203-946-6379

BACKGROUND

Timetable: This application was received at the City Plan Commission meeting of October 17, 2012.

Zoning: No programmatic change to student enrollment or capacity is anticipated or planned with the proposed improvements. Athletic facilities are part of the school curriculum; a secondary school is a permitted use in the RS-2 zone. Parking related to the field is accommodated in the adjacent lot.

Proposed Activity: Hopkins School at 986 Forest Road proposes to reconstruct its football field on the west side of its campus by replacing the existing natural turf field with a new state of the art synthetic turf field. The field will become more of a multi-purpose field for both football and lacrosse. Conversion to turf will allow more aggressive scheduling of athletic events throughout the academic year.

Aside from the new field, construction activities will consist of reconstructed site improvements, including new masonry walls, pavement and walkways, curbs and fencing; spectator seating for 325 persons; pedestrian entry stairs, paved maintenance & emergency vehicular access to the east end of the field area; overall grading & reconstruction of the existing east slope; utility improvements to support the specific project components; and landscape development of the sloped and disturbed areas. It also will include a filming platform and guest player seating on the west side of the field.

No lighting is added to the field, nor is there an audio system. The existing scoreboard will remain in the southwest corner of the field.

Soil Erosion and Sediment Control Plan: Approximately 1,600 cubic yards of material will be moved, 2,900 CY will be added for a total of 4500 CY. Silt fencing will be installed along the limits of construction with the hay bale reinforcement in downgradient areas. Inlets will be protected with haybales and or silt sacks. An anti-tracking pad will be installed on campus at the entry to the project area along the south side of the field. At completion of grading work all exposed areas shall be loamed and seeded. The eastern slope will be vegetated and all slopes equal to or greater than 3:1 will have erosion control matting.

Robert Hart of Hopkins School is named as the individual responsible for monitoring the site to assure there is no soil or runoff entering the City storm sewer system, running into the public

right of way or onto other private property. He is also responsible for assuring there is no dust gravitation off site by controlling dust generated by vehicles and equipment, both during the demolition and reconstruction phases. Soil stockpiles if necessary shall be protected from dust gravitation and soil erosion. All SESC measures are required to be designed and constructed in accordance with the latest Standards and Specifications of the *Connecticut Guidelines for Soil Erosion and Sediment Control (2002)* and the *2004 Stormwater Quality Manual*.

Mr. Hart shall be responsible for determining the appropriate response, should unforeseen erosion or sedimentation problems arise. He is fully responsible for insuring that SESC measures are properly installed, maintained and inspected according to the SESC Plan. Should soil erosion problems develop (either by wind or water) following issuance of permits for site work, the contractor is responsible for notifying the City Engineer within twenty-four hours of any such situation with a plan for immediate corrective action.

The Commission will require that the contractor appoint an individual who is on the project site on a daily basis during construction to report to Mr. Hart on the status of the soil erosion and sediment control plan.

Project Timeline: The project is intended to be initiated in March 2013, and to be complete by August 1, 2013.

Stormwater system: The underdrain system to be installed around and under the new field will promote infiltration and treat the first flush of a storm which will discharge to existing level spreaders. Peak runoff will be reduced.

Construction Operations Plan: A haul route using the Forest Road main driveway has been identified. Work hours shall commence no earlier than 7: AM, and all work shall be in compliance with the City's noise ordinance.

SITE PLAN REVIEW: The plans have been reviewed by the Site Plan Review Team, comprised of representatives of the City Engineer, Department of Traffic and Parking, LCI Building and the City Plan Department and have been found to meet the requirements of City ordinances and regulations.

INLAND WETLANDS REVIEW

As there are flagged wetlands within and within 50' of the project area, an Inland Wetland application has been filed in conjunction with the Development Permit application.

A wetlands assessment was conducted on June 12, 2012 by Fuss and O'Neill where two areas of wetlands were identified and delineated on the site:

Wetland A is a small wet area (slope seep) which has formed as a result of ground water seepage at the foot of the slope to the east of the existing field, to the west of Thompson Hall.

Wetland B is a sizable wetland is associated with an unmapped perennial stream that flows from north to south through the lowest part of the Hopkins campus, to the west of the football field and to the rear of residences fronting on Kohary Drive.

Activity within the wetlands: A total of .0179 acres of wetlands will be altered primarily due to filling of Wetland A on the east side of the field. A total of 780 SF of wetlands soils will be removed and replaced with granular backfill materials approved for wall construction, minor amounts of general fill, and screened topsoil as part of the overall slope landscape development. A total of 18, 008 SF of upland review area will be impacted in the area of Wetland A.

No wetlands are impacted directly within Wetland B. However 184 SF of upland review area in the area of the relocated service drive, and 1159 SF of upland review area in the construction of a

small filming tower (16' in height) and players' area to the west of the field and temporary construction activities will be impacted as part of the construction.

Determination of Classification: The Commission has reviewed the options for classification, as stated in Sections 4 and 5 of the Regulations and accepts the determination by staff that the wetland application qualifies as a Class B Application. The activity proposed will not have substantial adverse effect on the regulated area or any other part of the inland wetlands and watercourses system. The current Inland Wetlands application was deemed complete and is formally received by the Commission at its meeting of October 17, 2012.

Application Evaluation Criteria:

In reviewing a Class B or C Application, the Commission must consider the following environmental impact criteria in its evaluation, as stated in Sections 7.2 and 7.3 of the City's Inland Wetlands and Watercourses Regulations:

- The ability of the regulated area to continue to absorb, store or purify water or to prevent flooding.
- Increased erosion problems resulting from changes in grades, ground cover, or drainage features.
- The extent of additional siltation or leaching and its effect on water quality and aquatic life.
- Changes in the volume, temperature, or course of a waterway and their resulting effects on plant, animal and aquatic life.
- Natural, historic, or economic features that might be destroyed, rendered inaccessible or otherwise affected by the proposed activity.
- Changes in suitability of the area for recreational and aesthetic enjoyment.
- Existing encroachment lines, flood plain and stream belt zoning and requirements for dam construction.
- Any change in the water affecting aquatic organisms or other wildlife, water supply and quality, or recreational and aesthetic enjoyment.
- The existing and desired quality and use of the water in and near the affected area.
- Reports from other City agencies and commissions not limited to the Environmental Advisory Council, Building Official, and City Engineer.
- The importance of the regulated area as a potential surface or ground water supply, a recharge area or purifier or surface or ground waters, a part of the natural drainage system for the watershed, a natural wildlife feeding or breeding area, its existing and potential use for recreational purposes, existence of rare or unusual concentrations of botanical species, availability of other open spaces in the surrounding area, or its value for flood control.

The Commission must consider the following **additional** criteria:

- Alternatives which might enhance environmental quality or have a less detrimental effect, without increasing basic project costs.
- Short versus long term impacts.
- Potential loss of irrevocable resources or property impairment.
- Suitability of action for area.
- Mitigation measures which may be imposed as conditions.

Required Findings for a Class B Application:

The Commission must make the following findings for a Class B Application:

1. There is no preferable location on the subject parcel or no other available location could reasonably be required;
2. No further technical improvements in the plan or safeguards for its implementation are possible, or taking into account the resources of the applicant, could reasonably be required; and
3. The activity and its conduct will result in little if any reduction of the natural capacity of the wetlands or watercourses to support desirable biological life, prevent flooding, supply water, facilitate drainage, and provide recreation and open space.

INLAND WETLAND CONSIDERATIONS

Wetland A contains no mapped wetlands soils, but based upon field observations, the soil types were classified as *Aquents*, poorly to very poorly drained soils formed in human transported material or on excavated or cut slopes, as in this case. The bank adjacent to the football field was created as an amphitheater area for spectators resulting in the seepage at the bottom of the slope adjacent to the field. An existing catch basin currently captures the seepage to prevent it from interfering with athletic endeavors. The proposed drainage plan shows a new perforated underdrain at the toe of the slope to capture any seepage. The underdrain and stormwater from the new seating area in the hillside will be captured in a manhole and piped along the north end of the field to a storm manhole control outlet at the northwest corner to overflow onto an existing drainage outlet area with concrete spillway for the tennis courts and football field.

Wetland B contains mapped portions of Wilbraham soils, which area poorly drained loamy soils formed in glacial till. They are nearly level to gently sloping soils in drainage ways and low-lying positions in the landscape. Soils in this area were also consistent with the poorly drained Leicester series. The vegetation in this wetland is consistent with a forested wetland community, including red maple, white ash, tear-thumb, skunk cabbage and lurid sedge. This wetland B offers moderate to high ecological functions and values. Its positioning, size and association with the perennial watercourse allow it to provide groundwater recharge/discharge, flood flow alteration, sediment and nutrient retention and renovation, production export and wildlife habitat. None of Wetland B is impacted by the project although there are some temporary activities within the 50' buffer area. With proper soil erosion and sediment control measures in place, the temporary activities will have minimal impact.

INLAND WETLANDS FINDING

The Commission has reviewed the application in context with the evaluation criteria and required findings and believes that there is no preferable location of the proposed activity on the site, nor are there further technical improvements required in the plans. Reconstruction of the field will result in little if any reduction of the capacity of the site to support desirable biological life, prevent flooding, supply water, and facilitate drainage. The loss of Wetland A, a slope seep generated by the existing manmade amphitheater, is insignificant. Wetland B will continue to function as it does now and several temporary activities will occur within the 50' buffer area. No permanent impact will be experienced in Wetland B.

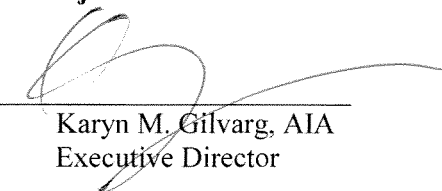
Additionally, the Commission finds there is no reasonable likelihood of unreasonable pollution because of the project, and therefore no further alternatives need to be considered.

All of the required findings have been satisfied. The Inland Wetland application is hereby approved, in accord with the submitted plans.

SITE PLAN ACTION

The City Plan Commission adopts the submitted Site Plans subject to the standard conditions on Page 1.

ADOPTED: October 17, 2012
Edward Mattison
Chair

ATTEST: 
Karyn M. Gilvarg, AIA
Executive Director