



Planning Department

**TOWN OF ACTON**  
472 Main Street  
Acton, Massachusetts 01720  
Telephone (978) 929-6631  
Fax (978) 929-6340  
planning@acton-ma.gov

---

**MEMORANDUM**

**To:** Board of Selectmen

**Date:** January 11, 2016

**Updated: September 8, 2016**

**From:** Roland Bartl, AICP, Planning Director *R. B.*

**Subject:** Site Plan Special Permit/Use Special Permit Application #11/20/15 - 459

---

Location: 180-182 Skyline Drive  
Map/Parcel: C4-14 & 32  
Applicant: Town of Concord  
Owner: Town of Concord  
Engineer: Environmental Partners Group, Inc.  
Previous Site Plan & Use  
Special Permit: #08/25/94 - 346  
Zoning: Single Family Residential (R-8 & R-10/8)  
Groundwater Protection Districts Zone 4  
Lot Area: +/- 60 acres  
Proposed Net Floor Area: +/- 9,300 square feet  
Existing/Proposed Uses: Concord Municipal Water Treatment Plant, Nagog Pond  
**Hearing Date:** **01/25/16**  
**Continued Hearing Date:** **09/12/16**  
**Decision Due:** ~~04/24/16~~ **12/11/16**

---

Below are the Planning Department comments. They are based on plans and information provided to us in the November 2015 permit application and on revised plan information provided to us in January 2016. Please review comments from other departments, boards and agencies.

**Further revised plan and application were submitted on August 25, 2016 (with additional supplements in the days that followed) and distributed for department reviews and comments. Planning Department review updates are provided herein in red/bold/underline. Items that are no longer applicable are crossed out.**

**The application is for:**

- A site plan special permit under Zoning Bylaw (ZBL) section 10.4. The extent of work triggers the site plan review threshold. Site plan special permits are assumed to be grantable or grantable with conditions if the proposed site improvements meet generally acceptable

engineering and circulation and landscaping design standards. The proposed use or uses are not in question.

- A use special permit under ZBL section 3.4.7 (Other Public Use – Use of land, buildings and structures for a public purpose, other than educational use, by any Town or local agency, except the Town of Acton and the Water Supply District of Acton.) This is a discretionary special permit that may be denied if there is a good reason to do so. It could also be granted or granted with conditions.

## Project Summary

Concord operates a water treatment plant at Nagog Pond near the dam. Access is via a driveway from Skyline Drive. Concord proposes to replace the plant with a larger and improved facility, perform repairs and renovations at the water intake structure at the dam, widen the driveway to meet new fire code regulations, and install a ground-mounted solar PV field for the facility's power supply.

**The solar power facility is no longer proposed. In its place the applicant proposes three natural gas power generators to be located on the southwest side of the proposed building in the approximate location of the previously shown standby generator. Also, the revised proposal shows a much longer fence line around the treatment facility and parts of Nagog Pond. Otherwise, the scope and extent of the project has not changed in any significant way.**

## Comments

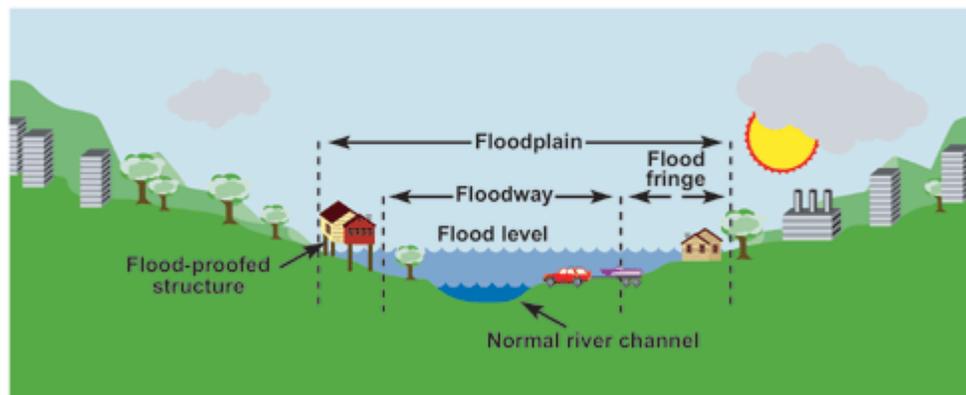
1. The proposed improvements comply in all respects with the dimensional requirements of the Acton Zoning Bylaw.
2. The use was granted a special permit in 1994. The proposed expansion of the use requires a new special permit.
3. The special permit if granted covers approvals under ZBL, section 4.1 for work in the flood zone and flood way (normally reserved to the Board of Appeals) – see footnote (54) of ZBL – Table of Principal Uses. I defer to the Engineering Department review for evaluation if the footnote 54 criteria apply here, and if so whether they are met.  
**See comments below regarding the proposed fence in the flood plain (par. 9 and subsections)**
4. ~~The PV panels are a by right accessory use to any principal land use pursuant to ZBL section 3.8.4.10.~~  
**No PV panels proposed.**
5. Waiver requests:
  - a. Traffic Study: none is needed.
  - b. Outdoor Lighting Plan: no plan would be needed except a details sheet showing the proposed luminaires to verify compliance with the ZBL, s. 10.6.
6. If granted, the permits should condition that prior to a building permit, the applicant must submit:
  - a. ~~A landscaping plan that meets the intent of ZBL section 10.4.~~

- b. ~~A plan indicating measures for screening the PV solar arrays from nearby residential receptors. This could be accomplished with additional landscaping or other devices in the array designed to deflect solar glare.~~

*With the elimination of the PV power generation facility, the landscaping plan as proposed appears adequate given the wooded location.*

7. *The plan should show the location of the natural gas line for the power generators.*
8. *It might be helpful for better neighborly relation to install a sound barrier for the power generators.*
9. *The proposal now includes a fence for a long section of the property line (quotations below are excerpts from the Acton Zoning Bylaw).*
  - a. *The Acton zoning bylaw allows property line fences up to eight feet in height; if higher the fences must meet setback requirements for structures, here that is 20 feet.*
  - b. *A portion of the proposed fence would traverse a 100-year flood plain. The Acton zoning bylaw regulates uses and activities in the flood plain; some are allowed by right, others require a special permit.*
    - i. *The flood plain is defined as the area accompanying a river or stream having a 1 percent chance of being inundated by water in any given year. “The flood plain includes the floodway and the floodway fringe” (s. 4.1.1.2). Floodway and floodway fringe are defined separately, and some standards for work and construction also differ for them.*
    - ii. *The floodway is defined as “the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood without cumulatively increasing the water surface elevation more than one foot above the Base Flood elevation” (s. 4.1.1.3). This is the water channel where higher or very high stream velocity can be observed during a flood event; it is generally wider than the river channel under normal flow conditions.*
    - iii. *The floodway fringe is defined as “the area between the Floodway and the boundary of the Base Flood” (s. 4.1.1.4). This area typically accompanies the floodway on both sides to a varying width; during a flood water in the floodway fringe generally has a lower velocity or may appear as standing water.*

### The floodplain



- c. The zoning bylaw defines the proposed water treatment facility and its associated and related improvements as “Other Public Use” (Section 3 and Table of Principal Uses). Footnote 4 in the Table states:  
“If the proposed USE will be located in the Floodway Fringe, as defined in Section 4.1 (, or Zones 1, 2 or 3 of the Groundwater Protection District, as defined in Section 4.3), before granting a special permit under this Section the applicant shall submit the information required under Sections 4.1 (or 4.3) and the Board of Selectmen shall find that the proposed USE complies with the requirements of Sections 4.1.8.1 and 4.1.9 (, and 4.3.8 through 4.3.10 respectively).”  
Text in ( ) above does not apply in this location
- d. The Acton zoning bylaw designates the Board of Appeals as the special permit granting authority for certain regulated uses and activities in the flood plain. Footnote 4 if the Table of Principal Uses redirects this responsibility to the Board of Selectmen for purposes of “Other Public Uses” in an effort to streamline the permit process before one special permit granting authority.
- e. A portion of the fence traverses the Nagog Brook floodway. The Acton zoning bylaw prohibits most uses and activities in the floodway, including the construction of a fence, unless “(a) a technical evaluation by a Registered Professional Engineer demonstrates that the new construction or encroachment will not result in any increase in flood levels during the occurrence of the Base Flood discharge; (b) and it is otherwise allowed by a special permit from the Board of Appeals under Section 4.1.8” (s. 4.1.4).
- i. The applicant has not provided the PE evaluation under part (a).
- ii. Part (b) refers to special permit criteria and requirements within the floodway fringe for which footnote 4 of the Table of Principal Uses gives authority to the Board of Selectmen, for purposes of the subject application.
- iii. Sections 4.1.8 and 4.1.9 of the Acton zoning bylaw specify in numerous subsections the uses and activities that are allowed by special permit in the floodway fringe, set criteria and procedures for decision making, list information that is required to assist with decision making, and specify conditions in the event that special permit is granted. Many of the subsections are addressed with the information provided in the application. Some of the subsections are not applicable in the case of the proposed fence.
- iv. However, the application is missing the technical data back-up required under sections 4.1.4 (P.E. evaluation), 4.1.8 (maintain 98% flood storage volume, compensatory flood storage area, flood resistant materials and construction methods, etc.), and 4.1.9 (P.E calculations and certifications).
- f. A portion of the fence traverses the Nagog Brook floodway fringe. The Acton zoning bylaw allows certain uses and activities in the floodway fringe by right, including the “construction, maintenance and repair of municipal and private water supply structures” (s. 4.1.7.3). I deem the proposed fence to be such a structure.

**Recommendation:**

The department sees no particular reason for denying the requested special permits. If, granted, any outstanding items can be addressed through conditions in the permit decision to be resolved, addressed, and complied with prior to the issuance of a building permit. This approach would be consistent with standing Town of Acton practice when administering special permits. With

*respect to the required technical information related to the proposed fence in the flood plain, this approach would give space for consideration of this matter by the Conservation Commission for work in the wetlands resource area; once done the applicant can provide the technical data and information to demonstrate compliance with the zoning bylaw's technical data, engineering and certification requirements.*

cc: Fire Department  
Engineering Department  
Natural Resources Department