

*Nagog Pond Water Treatment Plant
Acton, Massachusetts
Notice of Intent*

*WPA Form 3
DEP Transmittal X268171*



*Prepared For:
Town of Concord
Public Works Department
November 2015*

Environmental  Partners
GROUP

A partnership for engineering solutions

Quincy Office:

1900 Crown Colony Drive, Suite 402, Quincy, MA 02169
TL 617.657.0200 • FX 617-657-0201

Hyannis Office:

396 North Street, Hyannis, MA 02601
TL 508.568.5103 • FX 508.568.5125

Woburn Office:

18 Commerce Way, Suite 2000, Woburn, MA 01801
TL 781.281.2542 • FX 781.281.2543

www.envpartners.com



Enter your transmittal number

X268171
Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

* **Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

WPA Form 3

Notice of Intent

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Nagog Pond Water Treatment Plant

3. Type of Project or Activity

B. Applicant Information – Firm or Individual

Concord Water and Sewer Division

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

135 Keyes Road

5. Street Address

Concord

MA

01742

978-318-3250

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Alan Cathcart

acathcart@concordma.gov

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Nagog Pond Water Treatment Plant

1. Name of Facility, Site Or Individual

180/182 Skyline Drive

2. Street Address

Acton

MA

01720

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

Environmental Partners Group, Inc.

1. Name of Firm Or Individual

1900 Crown Colony Drive

2. Address

Quincy

MA

02169

617-657-0200

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

Stephen C. Olson, P.E.

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? yes no
If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

November 18, 2015

Mr. Andrew Magee, Chairman
Conservation Commission
Town of Acton
472 Main Street
Acton, MA 01720

RE: Wetlands Protection Act: Notice of Intent
Nagog Pond Water Treatment Plant
Acton, Massachusetts
MassDEP Transmittal No. X268171

Dear Mr. Magee:

On behalf of the Town of Concord and its Water/Sewer Division of Concord Public Works, Environmental Partners Group, Inc. is submitting this Notice of Intent for the proposed Nagog Pond Water Treatment Plant project in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131 Section 40), the Massachusetts Wetlands Protection Regulations (310 CMR 10.00), and local wetland regulations. In addition to the WPA Form 3, this submittal includes the following attachments:

- Appendix A: WPA Form 3 – Notice of Intent
- Appendix B: Notice of Intent Figures
- Appendix C: Permitting Design Plans
- Appendix D: Stormwater Management Documents
- Appendix E: Wetlands Delineation Report
- Appendix F: Abutter Notification Letter

Project Description

The Town of Concord is proposing to make comprehensive improvements and upgrades to its existing public water supply system infrastructure located in Acton. The proposed project includes replacement of the existing 16-inch cast iron intake pipe into Nagog Pond with a new 16-inch high density polyethylene (HDPE) intake pipe, replacement of the existing Ozone Disinfection Facility with a new Water Treatment Plant for the production of potable water, and the construction of an accessory solar photovoltaic (PV) array field to power the new facilities.

Water from Nagog Pond is obtained by means of an existing 16-inch diameter cast iron intake pipe (circa 1909). The intake pipe extends approximately 1,800 feet into Nagog Pond from the gate house at the dam and is partially supported by wooden cribbing. Physical inspections of the intake pipe have indicated that it has significantly deteriorated, resulting in decreased hydraulic carrying capacity and risk of failure. Due to the condition of the existing intake pipe, the Town of Concord is proposing to replace it with a new 16-inch diameter HDPE pipe. The proposed

replacement pipe will include the ability to draw water from two different levels and include an automated “air burst” cleaning system for the intake drum screens.

The proposed Nagog Pond Water Treatment Plant (WTP) will have the same hydraulic design capacity as the existing facility, 1.5 MGD. The proposed Nagog Pond WTP will utilize state of the art drinking water treatment technologies for the consistent production of high quality drinking water for Concord’s water system customers in both Concord and Acton. Several physical and chemical water treatment processes will be incorporated, including: pre-oxidation with potassium permanganate; coagulation with polyaluminum chloride; two-stage, tapered flocculation; clarification using dissolved air flotation (DAF); primary disinfection using ozone; filtration using granular activated carbon (GAC) media; pH adjustment using potassium hydroxide; corrosion control using zinc polyphosphate; secondary disinfection using sodium hypochlorite; and fluoridation using sodium fluoride.

The proposed treatment plant building is two stories having a site footprint of 7,165 square feet and a net floor space of 9,338 square feet. The exterior façade is proposed to be cement masonry unit (CMU) architectural block with sufficient windows to provide natural lighting. The building will house all of the treatment processes and equipment and ancillary support spaces such as a control room, water quality laboratory, and meeting room. The new building is much larger than the existing building due to the advanced treatment systems to be employed. The plan is to demolish the existing disinfection facility and build the new WTP within the same site footprint. This is essential as it will allow the new facilities to make use of the existing subsurface spaces which have been blasted out of the ledge. The project also includes the installation of additional underground utilities (natural gas, water, and cable TV), fencing, parking areas, stormwater drainage and handling systems, and widening of the existing access road to meet Fire Department access requirements.

To power the new facilities a solar PV system is also being proposed. The PV system is an essential accessory use and public benefit for the facility and general public, including residential and commercial establishments in Acton. There are several commercial businesses (48) and residents (22) along Great Road (Rt 2A) which receive their water service from the Town of Concord. Installation of the PV system will require clearing up to the 25 foot wetland buffer and installation of PV arrays up to the 50 foot wetland buffer.

Wetland Resources and Impacts to Wetlands Resource Areas

The wetland resources in the vicinity of the project area include Bordering Vegetated Wetland and an Outstanding Resource Water as determined by information provided through MassGIS and a wetland delineation performed by Pinebrook Consulting. The locations of the wetland resource areas adjacent to the project are presented on the project plans.

Replacement of the existing intake line will take place within the Outstanding Resource Water (Nagog Pond). The proposed intake line will be a 16” HDPE pipe that will traverse the bottom of Nagog Pond for approximately 2,530 feet. Due to the buoyancy of HDPE, concrete collars 30” wide by 30” tall by 12” thick will be used to restrain the pipe. The concrete collars will be spaced approximately 10 feet apart along the entire length of the intake pipe, resulting in a total of approximately 253 concrete collars. These 253 concrete collars equates to an alteration of approximately 632.5 square feet of the pond bottom.

In addition to the concrete collars, there are areas along the proposed intake pipe route that may require dredging, approximately 1,080 feet. At a width of 4 feet, this represents an area of approximately 4,320 square feet and a potential volume of 425 cubic yards. These two proposed alterations of land under waterbodies represent a total alteration of less than 0.04% of the 12.27 million square feet of land under Nagog Pond. The installation of the intake pipe is an essential part of this project, as the existing intake line is significantly deteriorated and inhibiting the withdrawal capacity. If the intake pipe is not replaced, the Town of Concord would be at risk of not being able to meet their peak water demands, a situation that would be highly detrimental to public health.

The remainder of the project will take place in upland area, and a portion of the Vegetated Wetlands Buffer Zone. The total proposed alteration within the 100-ft buffer zone is approximately 46,602 square feet. This includes approximately 45,988 square feet for the proposed PV system. The Town of Concord is seeking a waiver from the 50-foot setback requirement for undisturbed vegetation and also a waiver from the 75-foot setback requirement for the edge of structures. The Town of Concord is proposing to clear the land within the PV area up to the 25-ft buffer, install a security fence no closer than 3 feet from the 25-ft buffer, and install the PV arrays no closer than the 50-ft buffer. The total area of PV arrays within the 75-ft buffer (and outside the 50-ft buffer) is approximately 5,347 square feet. A site plan showing the limits and extents of clearing, fencing, and the PV arrays are found in the design plans. The proposed fencing will include 6" of space underneath for wildlife passage.

The proposed PV system is considered to be a public benefit as it will provide a source of renewable energy both to power the proposed Nagog Pond WTP and the general public in Acton. As previously mentioned, the Concord water system serves numerous residences (22) and commercial businesses (48) in Acton, along the Great Road corridor. Although the buffer zone is proposed to be altered, the planned activities within the buffer zone are passive – solar photovoltaic arrays. The current area is wooded or forested, and after the PV system is installed the area will become meadow with PV arrays. The positive effects of clean, sustainable energy are of great importance and public benefit. The proposed project is being undertaken by the Town of Concord to conform with the principles of Envision™. Envision is a program and rating system for the measure of sustainability for public works projects. As energy demands rise and natural resources diminish, it is important now more than ever to seek out means for renewable energy. This is especially important for this proposed project since the enhanced treatment being employed at the Nagog Pond WTP is energy intensive, and will require a significant increase in electrical usage compared to the existing ozone disinfection facility.

The existing Nagog Pond Ozone Disinfection Facility does not conform with the setback requirements of the 75-ft wetland buffer for structures. At its closest point, the existing building is 70 feet from the wetland boundary. Due to significant site constraints, the new building is proposed to be 65 feet from the wetland boundary (closer than existing by 5 feet). A review of the enclosed design plans indicate that the proposed Nagog Pond WTP building is placed on the same footprint as the existing Ozone Disinfection Facility building. The northeast corners of the buildings are exactly the same, and the alignment on the site is exactly the same. This design feature is to make full use of the underground excavations which were completed by blasting the site in 1995 for the construction of the existing facility. Soil borings completed in 1994 and 2015 confirm that the entire site is underlain with bedrock, the top of which is between 1 ft and 4 ft below the surface. For this reason, and based on the principles of Envision, it is essential to re-

use the existing underground bedrock excavations to minimize the amount of blasting required and also benefit the project economics.

The 5-ft increase in the non-conforming setback of the structure is based on the required length of the proposed building. Alternative locations were assessed, but the options were limited due to presence of bedrock on the site. The size of the proposed Nagog Pond WTP has been reduced as much as possible without removing any key treatment processes, eliminating any ancillary functions, or violating building code requirements. In addition to the measures that were taken to reduce the building footprint, the new building will also be constructed on lands that are already developed, resulting in limited additional clearing required to erect the building.

For the reasons cited above, and based on the information provided herein, it is our opinion that these requested waivers are essential to the project and consistent with the intent and purpose of the wetlands by-law. All proposed disturbances and nonconformities have been reduced to the maximum extent possible. The benefits of clean drinking water and renewable energy are essential to quality of life and their importance is only going to increase with rising water and energy demands and fewer natural resources. All aspects of this project are essential to the greater good of society, the public benefit, and for setting the standard for the importance of sustainable infrastructure.

Proposed Environmental Protection Measures

In order to mitigate potential impacts to wetland resource areas during construction activities, the following environmental protection measures will be provided:

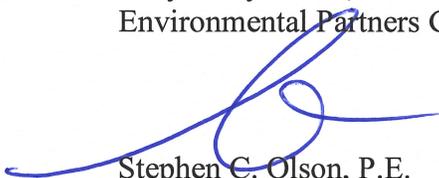
- Erosion and sedimentation control devices (i.e. filter sock) will be installed along the limits of work as shown on the design sheets and per the detail on Sheet CD-5. This measure will control sedimentation and erosion in the upland areas and also serve to define the upland limits of work. Erosion and sedimentation control devices will be inspected and maintained daily during the construction period.
- Silt sacks will be installed in all catch basins within and immediately adjacent to the work zone.
- Stockpiles of excavated material and aggregate materials (gravel, sand, and stone) are not anticipated to be maintained on-site. It is expected that these types of materials will be delivered on an as-needed basis. However, if stockpiling is required, then suitable erosion control measures will be employed including perimeter silt fencing.
- During construction, disturbed areas will be kept to a minimum, and all disturbed areas will be restored to pre-construction conditions with pavement or loamed and seeded after construction.
- Any trench dewatering required during construction shall pass through dewatering bags as shown on the design sheets.

Public Notification

In accordance with the Acton Conservation Commission filing requirements, all certified abutters will be notified of this application. The conservation commission hearing date will also be published in the Acton Beacon. A copy of the proposed abutter notification letter is presented in Appendix F. We are seeking the Commission's confirmation of the date, time, and location of the hearing prior to notifying abutters and publishing the advertisement.

If you should have any questions or require additional information, please do not hesitate to contact me at (617) 657-0255. I can also be reached via e-mail at sco@envpartners.com.

Very Truly Yours,
Environmental Partners Group, Inc.



Stephen C. Olson, P.E.
Sr. Project Manager

- Appendix A: WPA Form 3 – Notice of Intent
- Appendix B: Notice of Intent Figures
- Appendix C: Permitting Design Plans
- Appendix D: Stormwater Management Documents
- Appendix E: Wetlands Delineation Report
- Appendix F: Abutter Notification Letter

CC: Department of Environmental Protection – Central Region
Alan Cathcart, Concord Water/Sewer Division, Superintendent
File

APPENDIX A
WPA FORM 3 – NOTICE OF INTENT



WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Acton
City/Town

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

<u>180 Skyline Drive/182 Skyline Drive</u>	<u>Acton</u>	<u>01720</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:		
<u>C4/C4</u>	<u>14/32</u>	<u></u>
f. Assessors Map/Plat Number	g. Parcel /Lot Number	e. Longitude
d. Latitude		

2. Applicant:

<u>Alan</u>	<u>Cathcart</u>	
a. First Name	b. Last Name	
<u>Concord Water and Sewer Division</u>		
c. Organization		
<u>135 Keyes Road</u>		
d. Street Address		
<u>Concord</u>	<u>MA</u>	<u>01742</u>
e. City/Town	f. State	g. Zip Code
<u>978-318-3250</u>	<u>acathcart@concordma.gov</u>	
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

<u></u>	<u></u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Street Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Stephen</u>	<u>Olson</u>	
a. First Name	b. Last Name	
<u>Environmental Partners Group, Inc.</u>		
c. Company		
<u>1900 Crown Colony Drive, Suite 402</u>		
d. Street Address		
<u>Quincy</u>	<u>MA</u>	<u>02169</u>
e. City/Town	f. State	g. Zip Code
<u>617-657-0200</u>	<u>617-657-0201</u>	<u>sco@envpartners.com</u>
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

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City/Town

A. General Information (continued)

6. General Project Description:

The project includes demolition of the existing 1.5 MGD Nagog Pond Ozone Disinfection Facility, construction of a new 1.5 MGD state of the art Water Treatment Plant, replacement of the Nagog Pond intake pipe, installation of a solar photovoltaic system, new underground utilities, fencing, clearing & grubbing, grading, paving, and widening of the existing facility access road.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Middlesex

a. County

64577

c. Book

b. Certificate # (if registered land)

571

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Row 1: Bank, 1. linear feet, 2. linear feet. Row 2: Bordering Vegetated Wetland, 1. square feet, 2. square feet. Row 3: Land Under Waterbodies and Waterways (checked), 4,952, 1. square feet, 2. square feet, 3. cubic yards dredged, 425.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Row 4: Bordering Land Subject to Flooding, 1. square feet, 2. square feet, 3. cubic feet of flood storage lost, 4. cubic feet replaced. Row 5: Isolated Land Subject to Flooding, 1. square feet, 2. cubic feet of flood storage lost, 3. cubic feet replaced.

- f. Riverfront Area
1. Name of Waterway (if available) - specify coastal or inland
2. Width of Riverfront Area (check one):
- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: square feet

4. Proposed alteration of the Riverfront Area:
a. total square feet b. square feet within 100 ft. c. square feet between 100 ft. and 200 ft.

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete Section B.2.f. above.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment

	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	

4. Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings



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C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Notice of Intent – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

- 1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

- b. Date of map _____

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

- 1. Percentage/acreage of property to be altered:

(a) within wetland Resource Area _____ percentage/acreage

(b) outside Resource Area _____ percentage/acreage

- 2. Assessor's Map or right-of-way plan of site

- 2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

- (a) Project description (including description of impacts outside of wetland resource area & buffer zone)

- (b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/ mesa/ mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site
- (e) Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following

- 1. Project is exempt from MESA review. Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/ mesa/ mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)
- 2. Separate MESA review ongoing. _____ a. NHESP Tracking # _____ b. Date submitted to NHESP
- 3. Separate MESA review completed. Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

- 3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?
 - a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694
Email: DMF.EnvReview-South@state.ma.us

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.



WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Acton

City/Town

C. Other Applicable Standards and Requirements (cont'd)

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
 a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
 b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
 a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
 a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
 a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
 1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 2. A portion of the site constitutes redevelopment
 3. Proprietary BMPs are included in the Stormwater Management System.
 b. No. Check why the project is exempt:
 1. Single-family house
 2. Emergency road repair
 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

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D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

Nagog Pond Water Treatment Plant

a. Plan Title

Environmental Partners Group, Inc.

b. Prepared By

Stephen C. Olson, P.E.

c. Signed and Stamped by

November 2015

d. Final Revision Date

As Shown

e. Scale

See Cover Letter for Appendices

f. Additional Plan or Document Title

November 2015

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

N/A

2. Municipal Check Number

3. Check date

N/A

4. State Check Number

5. Check date

N/A

6. Payor name on check: First Name

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

 MassDEP File Number

 Document Transaction Number

Acton

 City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

 1. Signature of Applicant

November 18, 2015

 2. Date

 3. Signature of Property Owner (if different)

 4. Date

November 18, 2015

 5. Signature of Representative (if any)

 6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

<u>180 Skyline Drive/182 Skyline Drive</u>	<u>Acton</u>
a. Street Address	b. City/Town
<u>N/A</u>	<u>N/A</u>
c. Check number	d. Fee amount

2. Applicant Mailing Address:

<u>Alan</u>	<u>Cathcart</u>	
a. First Name	b. Last Name	
<u>Concord Water and Sewer Division</u>		
c. Organization		
<u>135 Keyes Road</u>		
d. Mailing Address		
<u>Concord</u>	<u>MA</u>	<u>01742</u>
e. City/Town	f. State	g. Zip Code
<u>978-318-3250</u>	<u>acathcart@concordma.gov</u>	
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

<u></u>	<u></u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Mailing Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
N/A			

Step 5/Total Project Fee: N/A

Step 6/Fee Payments:

Total Project Fee: N/A
 a. Total Fee from Step 5

State share of filing Fee: N/A
 b. 1/2 Total Fee **less** \$12.50

City/Town share of filing Fee: N/A
 c. 1/2 Total Fee **plus** \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

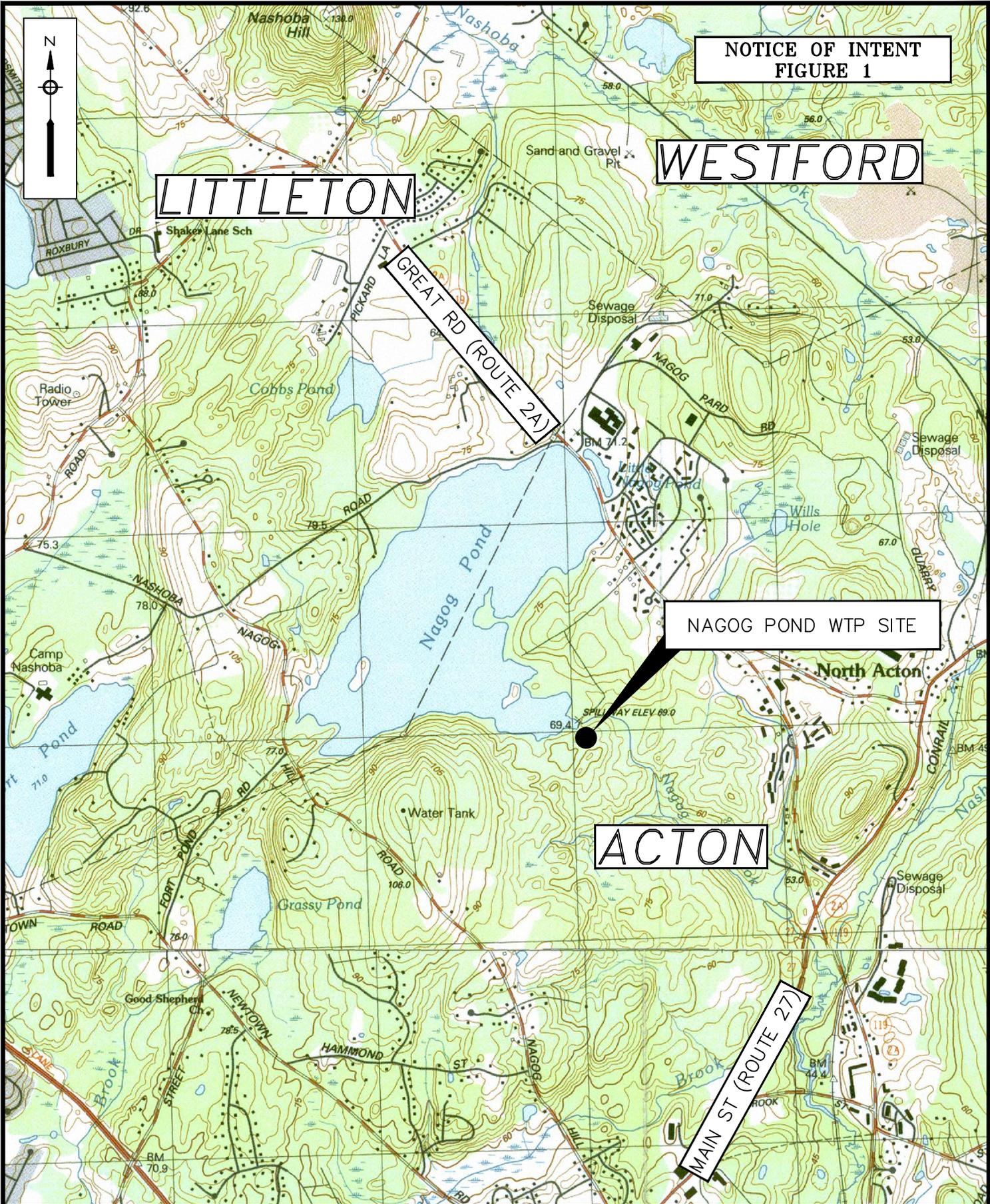
To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

APPENDIX B
NOTICE OF INTENT FIGURES

FIGURE 1: LOCUS PLAN

FIGURE 2: WETLANDS BUFFER ZONE

NOTICE OF INTENT
FIGURE 1



I:\CONCORD\200200-1501 NAGOG POND WTP CONCEPTUAL DESIGN\PERMITTING\NOI\APPENDIX B-SITE LOCUS PLAN\LOCUS MAP.DWG

 <p>Environmental Partners GROUP A partnership for engineering solutions Quincy, MA Hyannis, MA Woburn, MA TL 617-657-0200 www.envpartners.com</p>	NOVEMBER 2015	APPLICANT: TOWN OF CONCORD
	200-1501	NAGOG POND WATER TREATMENT PLANT
	1" = 2,000'	USGS QUADS LOCUS MAP

**NOTICE OF INTENT
FIGURE 2**



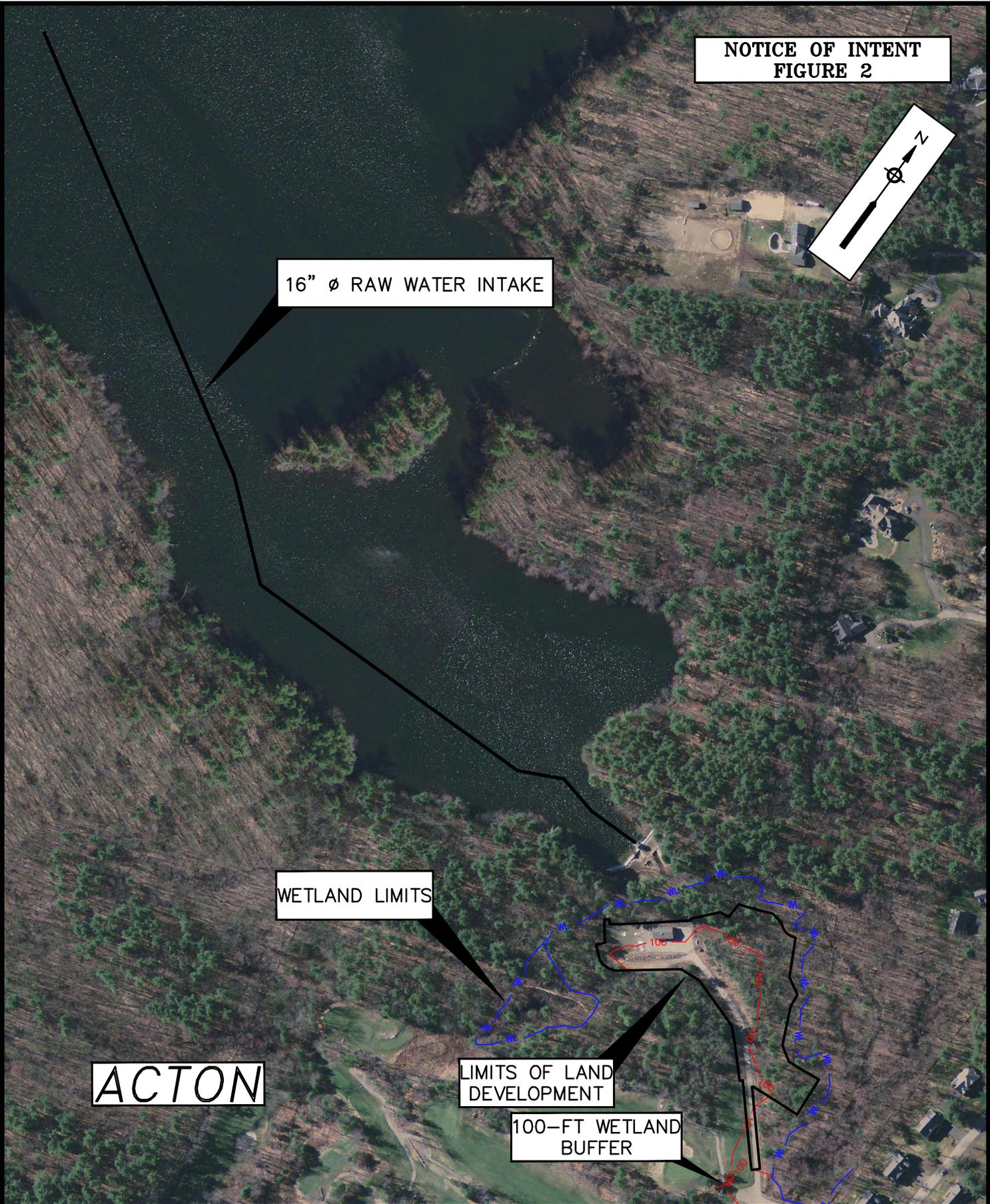
16" ø RAW WATER INTAKE

WETLAND LIMITS

ACTON

**LIMITS OF LAND
DEVELOPMENT**

**100-FEET
WETLAND
BUFFER**



I:\CONCORD\200\200-1501 NAGOG POND WTP CONCEPTUAL DESIGN\PERMITTING\APPENDIX B-SITE LOCUS PLAN\BOUNDARY LOCATIONS.DWG

 <p>Environmental Partners A partnership for engineering solutions. Quincy, MA Hyannis, MA Webum, MA Tel. 617-667-0200 www.envpartners.com</p>	NOVEMBER 2015	APPLICANT: TOWN OF CONCORD
	200-1501	NAGOG POND WATER TREATMENT PLANT
	1" = 300'	WETLAND BUFFER ZONE