Wastewater Management District Commission

41 Cochituate Road• Wayland, MA 01778• Phone: 508 358 3674 •
E-Mail: wastewater@wayland.ma.us Web: http://www.wayland.ma.us/Pages/WaylandMA_BComm/Wastewater/index

Date: 2013 Sep 5

Kevin Brander, P.E.
Section Chief
Wastewater Management Section
DEP-NERO
205B Lowell Street
Wilmington, MA 01887

RE: Groundwater Discharge Permit – Town Building Field Site, Wayland, Massachusetts

Dear Kevin:

The Wayland Wastewater Management District Commission ("WWMDC") submits the enclosed application for an individual groundwater discharge permit for the Wayland Town Building leaching field site. By filing this application, the WWMDC hereby withdraws, without prejudice, its application for coverage under General Permit for a Small Publicly Owned Wastewater Treatment Facility, submitted on January 17, 2013, to discharge treated sanitary wastewater from an off-site wastewater treatment facility, to the ground at the Town Hall site at 41 Cochituate Road, Wayland, Massachusetts 01778.

The WWMDC hopes that DEP-NEOR will issue the requested permit as soon as possible.

Sincerely,

Fred Knight
Chair, WWMDC

Tighe&Bond
www.tighebond.com

W-1396
August 29, 2013

Mr. Kevin Brander
Massachusetts Department of Environmental Protections
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Re: **BRP WP 79 – Individual Permit for Small Wastewater Treatment Facility Wayland, Massachusetts**

Dear Mr. Kevin Brander

Tighe & Bond is submitting the following documents as part of the Individual Permit for Groundwater Discharge from a Sewage Treatment Plant application as part of the Town Offices groundwater discharge project in Wayland, MA on behalf of the Town of Wayland. Enclosed please find the BRP WP 79 application and required Engineering Design Report. The Engineering Design Report scope of work is based on email correspondence with MassDEP that are included in Attachment 8 of this application. The transmittal form (Transmittal No. X256936) for the permit application is also enclosed.

Please contact the undersigned if you have any questions or issues at (508) 471-9605 or IBCatlow@tighebond.com

Very truly yours,

TIGHE & BOND, INC.

Ian B. Catlow, P.E.
Project Manager

Enclosures: Transmittal Form
BRP WP 79 Application
Engineering Design Report

Copy (w/encl): John Moynihan, Town of Wayland
Fred Knight, Wayland Wastewater Management District Commission
Bill Murphy, R.S., Town of Wayland Health Agent
MassDEP Boston
Greg Tomaszewski, MassDEP NERO
David A. Murphy, P.E., Tighe & Bond
Karla L. King, P.E., Tighe & Bond
File W-1396/Correspondence

J:\W\W1396 Wayland\Hydrogeologic Report\Permit Application\BRP WP 79\Cover Letter Massdep.Doc

446 Main Street • Worcester, MA 01608 • Tel 508.754.2201 • Fax 508.795.1087

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Permits

BRP WP 79 Individual Permit for Sewage Treatment Plant
BRP WP 85 Individual Permit for Other Groundwater Discharges

Application Completeness Check List

☒ The MassDEP Transmittal Form is completed: http://mass.gov/dep/service/online/trasmfrm.shtml If the applicant is a municipality, "Fee Exempt" has been selected from among the Special Provisions under the Amount Due section of the Transmittal Form.

☒ The Groundwater Discharge Application Form is properly filled out by the applicant and the consultant engineer and signed in ink.

☒ Engineering Report is included with application.

☒ The Certification Statement for the engineering report, plans and specifications, and the hydrogeologic report is included with the application.

☒ Groundwater Monitoring Well Plan has been submitted

☒ Legal Ownership Documents have been submitted:

☐ Articles of Incorporation ☐ Master Deed ☐ Declaration of Trust ☐ Other

To submit the application package:

☒ Checklist items have been completed.

☒ Send original application along with one copy from the MassDEP Transmittal form to:

Department of Environmental Protection
Northeast Regional Office
Wastewater Management Program
*Find your region: http://mass.gov/dep/about/region/findyour.htm

☒ Send one copy of the application along with a photocopy of the MassDEP Transmittal page to:

Department of Environmental Protection
Wastewater Management Program
One Winter Street
Boston, MA 02108

☐ Send fee of:

$4,625 for BRP WP 79;
$2,285 for BRP WP 85:
in the form of a check or money order made payable to *Commonwealth of Massachusetts*, along with one copy from the MassDEP Transmittal Form to:
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

Enter your transmittal number → X256936
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

BRP WP 79
1. Permit Code: 7 or 8 character code from permit instructions

Individual Permit for Groundwater Discharge
2. Name of Permit Category

Groundwater Discharge for WWTF
3. Type of Project or Activity

B. Applicant Information – Firm or Individual

Wayland Wastewater Management District Commission, Fred Knight, Chairman
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

41 Cochituate Road
5. Street Address

Wayland
6. City/Town

MA
7. State

01778
8. Zip Code

508-358-3696
9. Telephone #

10. Ext. #

John Moynihan, Facilities Director
11. Contact Person

jmoynihan@wayland.ma.us
12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Town of Wayland Wastewater Treatment Plant
1. Name of Facility, Site Or Individual

30 Old Sudbury Road
2. Street Address

Wayland
3. City/Town

MA
4. State

01778
5. Zip Code

508-358-3696
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)*

Tighe & Bond
1. Name of Firm Or Individual

446 Main Street
2. Address

Worcester
3. City/Town

MA
4. State

01608
5. Zip Code

508-471-9605
6. Telephone #

7. Ext. #

Ian B. Catlow, 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

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

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).

Check Number | Dollar Amount | Date

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits

Groundwater Discharge Permits, Reclaimed Water Use Permit or Permit Renewal/Modification

X256936
Transmittal Number #

Facility ID/Permit # (if known)

Application for Permit to Discharge to Groundwaters of the Commonwealth or for Reclaimed Water Use

BRP WP 11 Individual Permit Renewal/Modification with Plan Approval
BRP WP 12 Individual Permit Renewal/Modification without Plan Approval
BRP WP 79 Individual Permit for Groundwater Discharge from a Sewage Treatment Plant
BRP WP 84 Individual Permit for Reclaimed Water Use
BRP WP 85 Individual Permit for Other Groundwater Discharges

A. General Information

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

1. Which permit category are you applying for?

- ☐ **BRP WP 11** Individual Permit Renewal/Modification with Plan Approval
- ☐ **BRP WP 12** Individual Permit Renewal/Modification without Plan Approval
- ☒ **BRP WP 79** Individual Permit for Groundwater Discharge from Sewage Treatment Plant
- ☐ **BRP WP 84** Individual Permit for Reclaimed Water Use
- ☐ **BRP WP 85** Individual Permit for Other Groundwater Discharge

*Please Note: In accordance with 314 CMR 5.09, these permit categories may require that a Hydrogeological Evaluation be submitted to the Department prior to the submittal of the permit application. Please see the application form and instructions for **BRP WP 83.***

2. Applicant Information:

Fred Knight, Chairman
Contact Name

Wayland Wastewater Management District Commission

41 Cochituate Road
Address

Wayland
City/Town

MA
State

01778
Zip Code

508-358-3696
Telephone

fred@knightway.org
Email

3. Applicant Contact Information (if different from above):

John Moynihan
Contact Name

Town of Wayland
Company Name (If applicable)

Facilities Director
Title

41 Cochituate Road
Address

Wayland
City/Town

MA
State

01778
Zip Code

508-358-3696
Telephone

jmoynihan@wayland.ma.us
Email address

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits
Groundwater Discharge Permits, Reclaimed Water Use Permit or Permit Renewal/Modification

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BRP WP 84 Individual Permit for Reclaimed Water Use
BRP WP 85 Individual Permit for Other Groundwater Discharges

A. General Information (cont.)

4. The legal entity which owns this facility is:

☐ Individual ☐ Private ☐ Corporation ☐ Federal

☐ State/County ☒ Municipality ☐ Other: _____

Please provide legal ownership documents with this application.

5. Facility Information:

Town of Wayland Wastewater Treatment Plant
Name of facility

30 Old Sudbury Road
Address

Wayland — City/Town
MA — State
01778 — Zip Code

508-358-3696 — Telephone
Email

6. Facility Operator Information:

Give the name, as it is legally referred to, of the person, firm, public organization or other entity which will operate the facility described in this application. If the facility owner is also the operator, write owner and list mailing address only if different from that listed in number 1 above.

Jeremiah Murphy — Operator Name
WhiteWater, Inc. — Operator Company

253B Worcester Road
Address

Charlton — City/Town
MA — State
01507 — Zip Code
888-377-7678 — Telephone

License #2791, Grade 6C — License Number and Operator Grade
jmurphy@rhwhite.com — Email address

B. Project Information

1. Does the project affect a site of historic or archeological significance, as defined in regulations of the Massachusetts Historical Commission, 950 CMR 71.00?

☐ Yes ☒ No

B. Project Information (cont.)

2. Does this project require a filing under 301 CMR 11.00, the Massachusetts Environmental Policy Act?

   ☐ Yes ☒ No

   If yes, has a filing been made? (Please indicate the EOEA File Number)

   ☐ Yes ☐ No _____ EOEA File Number

3. Is this a RCRA facility as defined in 314 CMR 8.03? ☐ Yes ☒ No

   If yes, submit the information on Form HW contained in 314 CMR 8.20 in accordance with the provisions of 314 CMR 8.08.

4. Is the discharge for this facility within:

   a. The Zone I, Zone A, Zone II, or Interim Wellhead Protection Area of a public water supply?

      ☐ Yes ☒ No

   b. A private water supply area?

      ☐ Yes ☒ No

   c. A sole source aquifer?

      ☐ Yes ☒ No

   d. 100 feet of an Outstanding Resource Water designated in 314 CMR 4.00, a Special Resource Water designated in 314 CMR 4.00, a cold-water fishery as defined in 314 CMR 9.02, a bathing beach as defined in 104 CMR 445.000, or a shellfish growing area as defined in 314 CMR 9.02?

      ☐ Yes ☒ No

   e. A nitrogen-sensitive area as designated by the Department in accordance with 310 CMR 15.215?

      ☐ Yes ☒ No

   f. An area where the Department has determined based on a Total Maximum Daily Load or other technical report that more stringent effluent limits than those set forth in the General Permit are required to achieve or maintain compliance with the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

      ☐ Yes ☒ No

B. Project Information (cont.)

5. Improvements - Are you required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☒ Yes ☐ No

If yes, answer the following:

Description of order or agreement (include enforcement document number, if applicable):

The proposed discharge will be used in conjunction with the facility's NPDES permit.

Identification No. of Affected Treatment Facility NPDES Permit No. MA0039853

Description of Project

See attached Engineering Design Report

TBD
Final Compliance Date

6. Has a hydrogeologic study been performed to determine the potential impact on the groundwater of the discharge or activity?

☒ Yes - Application Transmittal Number: X250635 Date of Approval: 10/26/12

Please attach copy of the DEP Hydrogeologic Report Approval Letter.

☐ No – ***STOP: Please Note:*** *In accordance with 314 CMR 5.09, these permit categories may require that a Hydrogeological Evaluation be submitted to the Department prior to the submittal of the permit application. Please see the application form and instructions for BRP WP 83.*

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits
Groundwater Discharge Permits, Reclaimed Water Use Permit or Permit Renewal/Modification

X256936
Transmittal Number #

Facility ID/Permit # (if known)

Application for Permit to Discharge to Groundwaters of the Commonwealth or for Reclaimed Water Use

BRP WP 11 Individual Permit Renewal/Modification with Plan Approval
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BRP WP 84 Individual Permit for Reclaimed Water Use
BRP WP 85 Individual Permit for Other Groundwater Discharges

B. Project Information (cont.)

7. Are there any groundwater monitoring wells currently in place in the vicinity of the discharge or proposed discharge?
   ☒ Yes **If yes, please attach information on the type and location of the wells and available monitoring data.**
   ☐ No
8. Have plans and specifications for the treatment works been approved (see instructions) by the Department or if approved prior to July 1975, by the Department of Public Health?
   ☒ Yes **If yes, please attach copy of plans and specifications and approval letter.**
   ☐ No
9. Is there a local regulation governing the construction of wastewater treatment facilities?
   ☐ Yes **If yes, please include a copy of the local approval.**
   ☒ No
10. Have opportunities for reclaimed water been evaluated? ☒ Yes ☐ No

C. Facility Information

1. Facility Status: ☒ Existing ☐ Proposed
2. When did or when will this discharge begin? 1961, reconstructed 2012
   Date of Startup
3. Check type of establishment producing or contributing to discharge:
   ☒ Residential:
   - ☒ Condominium
   - ☒ Apartment
   - ☐ Elderly Housing
   - ☐ Nursing Home
   - ☒ Other (specify): Mixed Use Commercial Development

   Total # of Bedrooms: _____

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits
Groundwater Discharge Permits, Reclaimed Water Use Permit or Permit Renewal/Modification

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BRP WP 85 Individual Permit for Other Groundwater Discharges

C. Facility Information (cont.)

☒ Municipality

☒ Business Nature of Business: Commercial, Office, Restaurant, and Supermarket

☐ School

☐ Other (specify): _____

4. Design Flow: 17,000 gpd Title 5 Flow Generation
Daily Maximum gpd

a) ☒ Check here if discharge occurs all year, or

b) List months discharge occurs _____

c) Number of days per week discharge occurs 7

5. Basis for design flow:

☐ The State Environmental Code – Title 5

☒ Other: 17,000 gpd is based on available groundwater discharge capacity. This is in addition to the plant's existing 52,000 gpd (12-month rolling average) surface water discharge.

6. Type of treatment and disposal system:

Membrane bioreactor treatment facility with discharge to leaching trench discharge system. See attached Engineering Design Report for additional detail.

7. Location and method of wastewater treatment solids disposal:

Solids hauled to regional facility (New Bedford) for thickening, dewatering, and incineration.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits
Groundwater Discharge Permits,
Reclaimed Water Use Permit or
Permit Renewal/Modification

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C. Facility Information (cont.)

8. If a commercial establishment:

   A. Are any types of wastewater other than sanitary sewage produced?

   ☐ Yes ☒ No

   If yes: _____
   Specify type of wastewater

   _____
   Quantity gpd

   _____
   Method and location of disposal

   B. Are any hazardous wastes generated?

   ☐ Yes ☒ No

9. Does or will the treatment/disposal facility receive industrial wastes?

   ☐ Yes ☒ No

10. Location of Facility:

   A. GPS Coordinates:

   1) Enter Latitude and Longitude to the nearest whole second for both the wastewater treatment facility and the effluent disposal area.

   Latitude: 42 d, 21 m, 38.01s N Longitude: 71 d, 21 m, 34.61 s W

   2) Provide a narrative description of the site and the feature to be permitted. As an example: "The site is on the west side of Main Street, the third building north of High Street. The disposal field lies 100 feet off the southwest corner of the building."

   3) Attach a site map based on the MassGIS Coordinate Information Tool that clearly indicates the site. The Coordinate Information Tool is available at http://maps.massgis.state.ma.us/images/dep/xyinfo/get_xy.html.

C. Facility Information (cont.)

B. Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:

1) The legal boundaries of the facility;
2) The location and serial number of each of your existing and proposed intake and discharge structures;
3) All hazardous waste management facilities;
4) All springs and surface water bodies in the area, plus all drinking water wells within one mile of the facility which are identified in the public record or otherwise known to you.
5) All Zone II's or IWPA's.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.

C. Please list any public or private drinking water supply wells within 2,500 feet of the discharge area:

Well Location	Type of Well (Public/Private)	Status (Active/Inactive)	Safe Yield
See Attachment 6			

11. Water Supply Data

A. List sources of water supply and annual water consumption for the past five years.

Water Sources	Year 1	Year 2.	Year 3.	Year 4.	Year 5.
See Attachment 7					
1.					
2.					
3.					
Total:					

B. Please show the location of your water sources on the map described in question 10.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits
Groundwater Discharge Permits, Reclaimed Water Use Permit or Permit Renewal/Modification

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BRP WP 85 Individual Permit for Other Groundwater Discharges

D. Additional Information for WP85 – Other Groundwater Discharges

1. Flows, Sources of Pollution and Treatment Technologies

   A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more defined descriptions in Item D.1.B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units and outfalls. If a water balance cannot be determined provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

   B. For each discharge, provide a description of:

      1) All operations contributing wastewater to the effluent, cooling water and runoff;
      2) The average flow contributed by each operation; and
      3) The treatment received by the wastewater. (Attach additional sheets if necessary.)
      4) With the exception of storm water runoff, leaks, or spills please note if any of the discharges described are intermittent or seasonal.

Operations Contributing to Flow:

Identification Number	Operations	Average Flow	Treatment

2. Effluent Limitations:

   A. List any pollutant you know or have reason to believe is discharged or may be discharged from the treatment facilities. For every pollutant you list, briefly describe the reason you believe it to be present, its approximate concentration in the discharge and any analytical data in your possession, which will support your statement. Additional wastewater analysis may be required as part of this application.

Pollutant	Concentration	Source	Available Data

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits
Groundwater Discharge Permits,
Reclaimed Water Use Permit or
Permit Renewal/Modification

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BRP WP 84 Individual Permit for Reclaimed Water Use
BRP WP 85 Individual Permit for Other Groundwater Discharges

D. Additional Information for WP85 – Other Groundwater Discharges

B. Are your operations such that your raw materials, processed, or products can reasonably be expected to vary so that your discharges of pollutants may during the next five years exceed three times the approximate concentrations reported in item 2A?

☐ Yes (please explain) ☐ No

C. Are you planning on adding any new processes over the next five years?

☐ Yes (please specify) ☐ No

D. Are organic compounds used at your facility?

☐ Yes (please explain) ☐ No

3. Were any of the analyses or testing reported in item D.2.A. performed by a contract laboratory or consulting firm?

☐ Yes (provide contact information) ☐ No

Name of Laboratory or Consulting Firm/Contact Person

Address

City/Town State Zip Code

Telephone Email Address

For Reclaimed Water System Permits and renewals of those permits, please complete and attach the Supplemental Application Form for Reclaimed Water System (BRP WP 84). For all other individual permits complete Section E on this form.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Individual Permits
Groundwater Discharge Permits,
Reclaimed Water Use Permit or
Permit Renewal/Modification

X256936
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BRP WP 79 Individual Permit for Groundwater Discharge from a Sewage Treatment Plant

BRP WP 84 Individual Permit for Reclaimed Water Use

BRP WP 85 Individual Permit for Other Groundwater Discharges

E. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my diligent inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I will be responsible for publication of public notice of the applicable permit proceedings identified under 314 CMR 2.06(1)(a) through (d)."

Signature of Applicant

Fred Knight, Chairman WWMDC
Printed Name of Applicant

30 Aug 2013
Date Signed

Ian B. Catlow, P.E.
Name of Preparer

508-471-9605
Telephone

Project Manager, Tighe & Bond
Title of Preparer

ibcatlow@tighebond.com
Email

Attachment 1
NPDES Permit

MODIFICATION OF
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Town of Wayland
Wastewater Management District Commission
41 Cochituate Road
Wayland, MA 01778

is authorized to discharge from the facility located at

Town of Wayland Wastewater Treatment Plant
430/440 Boston Post Road
Wayland, MA 01778

to receiving water named

Wetland adjacent to the Sudbury River (Concord River Watershed - MA 82)

or to receiving water named

Sudbury River (Concord River Watershed - MA82)

in accordance with effluent limitations, monitoring requirements and other conditions set in the permit issued September 30, 2008, except as set forth herein in bold italic and listed as follows:

page 1 - added clarification that the permit authorizes the discharge to the Sudbury River
page 2 - added more stringent total phosphorus limit, deleted orthophosphorus monitoring requirement
page 3 - corrected a typographical error in WET test frequency
page 6 - added more stringent total phosphorus limit
page 7 - deleted orthophosphorus monitoring requirement, added copper monitoring requirement
page 8 - corrected a typographical error in footnote 6
pages 9-10 - corrected typographical errors in numbering
page 10 - added instream monitoring requirement

This modifies the permit issued on September 30,2008 This permit modification only affects the permit conditions identified in the preceding paragraph.

This permit modification shall become effective on ***

This permit modification does not affect the expiration date of the September 30, 2008 permit . Therefore, this permit modification expires at the same time as the September 30, 2008 permit.

Signed this day of

Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

*** This permit modification will become effective on the date of signature if no comments are received during public notice. If comments are received, the effective date will be established no sooner than 30 days following signature.

PART I

A.1. During the period beginning the effective date and lasting until the outfall is extended to the Sudbury River or permit expiration, the permittee is authorized to discharge from outfall serial number **001,** treated effluent to a wetland adjacent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge to Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
FLOW	***	***	0.052 MGD[2]	***	REPORT	CONTINUOUS	RECORDER[2]
FLOW[2]	***	***	Report (MGD)	***	REPORT	CONTINUOUS	RECORDER[2]
BOD_5 [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45 mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
TSS [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45 mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
pH RANGE[1]	6.5 - 8.3 SU SEE PERMIT PAGE 9 OF 14, PARAGRAPH I.A.1.b.					1/DAY	GRAB[3]
FECAL COLIFORM[1,6]	***	***	200 cfu/100 ml	***	400 cfu/100 ml	1/WEEK[6]	GRAB[3]
E. COLI[1,6]	***	***	126 cfu/100 ml	***	409 cfu/100 ml	1/WEEK[6]	GRAB[3]
OIL & GREASE	***	***	REPORT	***	***	1/MONTH	GRAB[3]
TOTAL PHOSPHORUS[13] ~~(April 1st – October 31st)~~	***	***	~~0.2~~1mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]
~~TOTAL PHOSPHORUS (November 1st – March 31st)~~	~~***~~	~~***~~	~~0.5 mg/l~~	~~***~~	~~***~~	~~1/WEEK~~	~~24-HOUR COMPOSITE[3,5]~~
~~ORTHO PHOSPHORUS (November 1st – March 31st)~~	***	***	~~Report mg/l~~	***	***	~~1/WEEK~~	~~24-HOUR COMPOSITE[3,5]~~
ALUMINUM[11, 13]	***	***	87 ug/l	***	750 ug/l	1/MONTH	24-HOUR COMPOSITE[3,5]

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001**, treated effluent to a wetland adjacent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge to Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
COPPER[13]	***	***	9.2 ug/l	***	13.7 ug/l	1/MONTH	24-HOUR COMPOSITE[3,5]
LEAD [12, 13]	***	***	3.1 ug/l	***	79.6 ug/l	1/MONTH	24-HOUR COMPOSITE[3,5]
TOTAL AMMONIA, AS N	***	***	Report (mg/l)	***	Report (mg/l)	1/WEEK	24-HOUR COMPOSITE[3,5]
WHOLE EFFLUENT TOXICITY Footnotes [7, 8, 9, 10]	Acute $LC_{50} \geq 100\%$ Chronic C-NOEC $\geq 100\%$					~~1~~4/YEAR	24-HOUR COMPOSITE[3,5]

Footnotes:

1. Required for State Certification.

2. For flow, report maximum and minimum daily rates and total flow for each operating date. This is an annual average limit, which shall be reported as a rolling average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's discharge monitoring report (DMR) will report the annual average flow for the previous 12 months.

3. Effluent samples shall be taken after appropriate treatment and prior to discharge to Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001 to the Sudbury River. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. In addition, all samples shall be analyzed using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

4. Sampling required for influent and effluent.

5. A 24-hour composite sample will consist of at least twenty four (24) grab samples, which are flow proportional, and taken during a 24 hour cycle (e.g. 0700 Monday to 0700 Tuesday).

6. Fecal coliform and *E. coli* limits are in effect year round. The monthly average limits for fecal coliform and *E. coli* are expressed as geometric means. The fecal coliform limits and monitoring shall end one year after the effective date of this permit. The *E. coli* limits shall go into effect one year after the effective date of this permit. The monitoring requirements for *E. coli* are one sample per month for the first year that the permit is in effect and one sample per week once the limits go into effect (one year following the effective date of the permit). This is a State certification requirement.

7. The permittee will conduct 7-day chronic (and modified acute) toxicity tests four times per year, and will test the daphnid, *Ceriodaphnia dubia* as the test species. Toxicity test samples will be collected during the second week in March, June, September and December. The test results will be submitted by the last day of the month following the completion of the test. The results are due April 30th, July 31st, October 31st, and January 31st, respectively. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Date Second Week in	**Submit Results By:**	**Test Species**	**Acute Limit** LC_{50}[8]	**Chronic Limit** C-NOEC[9]
March June September December	April 30th July 31st October 31st January 31st	*Ceriodaphnia dubia* See Attachment A	≥ 100%	≥ 100%

After submitting four consecutive sets of whole effluent toxicity (WET) test results, all of which demonstrate compliance with the WET permit limits, the permittee may request a reduction in the

WET testing requirements. The permittee is required to continue testing in accordance with the permit until notice is received by certified mail from the EPA that the WET testing requirements have been changed.

8. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

9. C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The "100% or greater" limit is defined as a sample which is composed of 100% effluent. This is a maximum daily limit derived as a percentage of the inverse of the dilution factor of 1.

10. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required **in Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

11. Aluminum sampling shall be conducted concurrently with phosphorus sampling.

12. The minimum level (ML) for lead is defined as 3 ug/l. This value is the minimum level for lead using the Furnace Atomic Absorption analytical method (Standard Method 3113B). This method, or a 40 CFR Part 136 method achieving an equal or lower ML must be used to determine total lead. For effluent limitations less than the ML, compliance/non-compliance will be determined based on the ML. Sample results less than the ML shall be reported as zero on the Discharge Monitoring Report.

13. The Permittee shall comply with the limits in accordance with the compliance schedule appearing in Section F. During the interim, a limit of 0.5 mg/l total phosphorus shall apply with monitoring once per week (1/Week) and there shall be no effluent limitations for aluminum, copper and lead, which shall be monitored once per month (1/Month) using 24 hour composite samples. These interim requirements are in effect until the actions required by the compliance schedule are completed.

A.2.

** During the period beginning with the completion of the outfall relocation to the Sudbury River, and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001**, treated effluent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge to Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
FLOW	***	***	0.052 MGD[2]	***	REPORT	CONTINUOUS	RECORDER[2]
FLOW[2]	***	***	Report (MGD)	***	REPORT	CONTINUOUS	RECORDER[2]
BOD_5 [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
TSS [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45 mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
pH RANGE[1]	6.5 - 8.3 SU SEE PERMIT PAGE 9 OF 14 PARAGRAPH I.A.1.b.					1/DAY	GRAB[3]
FECAL COLIFORM[1,6]	***	***	200 cfu/100 ml	***	400 cfu/100 ml	1/WEEK[6]	GRAB[3]
E. COLI[1,6]	***	***	126 cfu/100 ml	***	409 cfu/100 ml	1/WEEK[6]	GRAB[3]
OIL & GREASE	***	***	Report	***	***	1/MONTH	GRAB[3]
TOTAL PHOSPHORUS ~~(April 1st – October 31st)~~	***	***	~~0.2~~1 mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]
~~TOTAL PHOSPHORUS (November 1st – March 31st)~~	~~***~~	~~***~~	~~0.5 mg/l~~	~~***~~	~~***~~	~~1/WEEK~~	~~24-HOUR COMPOSITE[3,5]~~

****The Permittee shall notify both EPA and DEP 60 days prior to commencing the discharge to the Sudbury River. The limits found on Pages 6-7 this permit shall apply beginning with the first full calender month after commencing the discharge to the Sudbury River.**

A.2.** During the period beginning with the completion of the outfall relocation to the Sudbury River, and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001**, treated effluent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge to Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
~~***ORTHO PHOSPHORUS (November 1st – March 31st)***~~	~~***~~	~~***~~	~~***Report mg/l***~~	~~***~~	~~***~~	~~***1/WEEK***~~	~~***24-HOUR COMPOSITE[3,5]***~~
TOTAL AMMONIA, AS N	***	***	Report (mg/l)	***	Report (mg/l)	1/WEEK	24-HOUR COMPOSITE[3,5]
COPPER	***	***	***Report (mg/l)***	***	***Report (mg/l)***	***1/MONTH***	***24-HOUR COMPOSITE[3,5]***
ALUMINUM[10]	***	***	Report (mg/l)	***	***	1/MONTH	24-HOUR COMPOSITE[3,5]
WHOLE EFFLUENT TOXICITY Footnotes [7,8,9]	Acute $LC_{50} \geq 100\%$					1/YEAR	24-HOUR COMPOSITE[3,5]

****The Permittee shall notify both EPA and DEP 60 days prior commencing discharge to the Sudbury River. The limits found on Pages 6-7 this permit shall apply beginning with the first full calender month after commencing discharge to the Sudbury River.**

Footnotes:

1. Required for State Certification.

2. For flow, report maximum and minimum daily rates and total flow for each operating date. This is an annual average limit, which shall be reported as a rolling average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's discharge monitoring report will report the annual average flow for the previous 12 months.

3. Effluent samples shall be taken after appropriate treatment and prior to discharge to Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001 to the Sudbury River. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. In addition, all samples shall be analyzed using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

4. Sampling required for influent and effluent.

5. A 24-hour composite sample will consist of at least twenty four (24) grab samples, which are flow proportional, and taken during a 24 hour cycle (e.g. 0700 Monday to 0700 Tuesday).

6. Fecal coliform and *E. coli* limits are in effect year round. The monthly average limits for fecal coliform and *E. coli* are expressed as geometric means. The fecal coliform limits and monitoring shall end one year after the effective date of this permit. The *E. coli* limits shall go into effect one year after the effective date of this permit. The monitoring requirements for *E. coli* are one sample per month for the first year that the permit is in effect and one sample per week when the limits become effective ~~go into effect.~~ (one year following the effective date of the permit.) This is a State certification requirement.

7. The permitee shall conduct acute whole effluent toxicity (WET) testing for the effluent discharged through Outfall 001 once per year using *Ceriodaphnia dubia* and *Pimphales promelas* as test species. Toxicity test samples shall be collected during the second week of August, and the results shall be submitted by September 30th . The test must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Date Second Week in	**Submit Results By:**	**Test Species**	**Acute Limit** LC_{50} [8]
August	September 30th	*Ceriodaphnia dubia* *Pimphales promelas* See Attachment A	≥ 100%

8. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

9. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required **in Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

10. Aluminum sampling shall be conducted concurrently with phosphorus sampling.

Part I.A.~~1~~2. (Continued)

a. The discharge shall not cause an excursion of the water quality standards of the receiving waters.

b. The pH of the effluent shall not be less than 6.5 nor greater than 8.3 Standard Units(SU) at any time.

c. The discharge shall not cause objectionable discoloration of the receiving waters.

d. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

e. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.

f. The results of sampling for any parameter above its required frequency must also be reported.

~~2~~3. The permittee must provide adequate notice to the Director of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and

b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

c. For purposes of this paragraph, adequate notice shall include information on:

(1) the quantity and quality of effluent introduced into the POTW; and

(2) any anticipated impact of the change on the quantity or quality of effluent to be discharged

from the POTW.

~~3~~4. Prohibitions Concerning Interference and Pass-Through:

a. Pollutants introduced into the POTW by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.

~~4~~5. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

~~5~~6. Numerical Effluent Limitations for Toxicants

EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

7. Instream Monitoring Program

Beginning in 2011, the permittee, either by itself, or in cooperation with the Town of Wayland ("Town") and/or another entity, shall conduct in-stream monitoring in the Sudbury River, as described below:

a. The permittee shall sample two locations, one location upstream and one downstream of the treatment plant outfall, once per month, including quality control sampling, from May to September as follows: The permittee will take in-situ measurements of pH, dissolved oxygen, water temperature, and conductivity and will submit water samples to a state-certified laboratory for analysis of chlorophyll a, total and ortho-phosphorus, nitrates, ammonia, and total suspended solids. All samples will be taken prior to 8:30 am. Monitoring results shall be attached to the monthly discharge monitoring report submitted for the month the samples were collected (see Part I.G. for discharge monitoring report schedule).

b. As an alternate method of compliance in lieu of Part I.A.7(a) above, in any calendar year the permittee may participate in the "Water Quality Monitoring in the Lower Sudbury River Project" ("WQM") monitoring program to fulfill its in-stream monitoring obligation. The WQM is described in Attachment C but may be revised from time to time, in accordance with the MassDEP approved amended QAPP WQM for the Lower Sudbury River, or otherwise with the prior written approval of MassDEP. If the permittee elects this option in a given calendar year, the permittee shall notify EPA and MassDEP of this election in writing by April 1st of that year.

c. If a QAPP for the Lower Sudbury River has been approved in writing by the MassDEP and EPA as part of the WQM, then, starting with the date of the latter such approval, for any calendar year in which the permittee elects to proceed pursuant to Part I.A.7(a), the permittee shall conduct the in-stream monitoring program consistent with the QAPP.

d. For any calendar year in which the permittee conducts monitoring pursuant to Part I.A.7(a), the permittee shall submit a report on May 15 of the following year, summarizing the instream monitoring data collected during the previous calendar year.

B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall listed in Parts I.A.1. and I.A.2. of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

C. INFILTRATION/INFLOW

The permittee shall control infiltration and inflow (I/I) to the separate sewer system to prevent infiltration/inflow-related effluent limit violations, and any unauthorized discharges of wastewater, including overflows and by-passes, due to excessive infiltration/inflow.

D. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

   The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventative Maintenance Program

   The permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Alternate Power Source

   In order to maintain compliance with the terms and conditions of this permit, the permittee shall provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR §122.2).

E. SLUDGE CONDITIONS

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.

2. The permittee shall comply with the more stringent of either the state or federal (40 CFR part 503), requirements.

3. The requirements and technical standards of 40 CFR part 503 apply to facilities which perform one or more of the following use or disposal practices:

a. Land application - the use of sewage sludge to condition or fertilize the soil

b. Surface disposal - the placement of sewage sludge in a sludge-only landfill

c. Sewage sludge incineration in a sludge-only incinerator

4. The 40 CFR part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g. lagoons- reed beds), or are otherwise excluded under 40 CFR 503.6.

5. The permittee shall use and comply with the attached compliance guidance document (Attachment B) to determine appropriate conditions. Appropriate conditions contain the following elements:

- General requirements
- Pollutant limitations
- Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
- Management practices
- Record keeping
- Monitoring
- Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year:

less than 290	1/ year
290 to less than1500	1 /quarter
1500 to less than 15000	6 /year
15000 +	1 /month

7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR 503.8.

8. The permittee shall submit an annual report containing the information specified in the guidance by **February 19.** Reports shall be submitted to the address contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge disposal. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. In such case, the permittee is required only to submit an annual report by **February 19** containing the following information:

- Name and address of contractor responsible for sludge disposal
- Quantity of sludge in dry metric tons removed from the facility by the sludge contractor

F. COMPLIANCE SCHEDULE

In order to comply with the permit limits for total phosphorus, copper, lead and aluminum, the permittee shall take the following actions:

1. Within twelve (12) months of the effective date of the permit, the permittee shall evaluate and select an options for;

   a) extending the outfall to the Sudbury River, or
   b) upgrading the Wayland WWTF , including, but not limited to, evaluating groundwater discharge and water conservation measures.

   The permittee shall document its evaluation and selection process in a report, which it shall be submitted to EPA and MassDEP no later than 30 days following completion of the evaluation of the option(s)..

2. Within twelve (12) months of completing this evaluation, the permittee shall complete the design for the selected option(s). The Permittee shall submit the design to MassDEP.

3. Within two (2) years of completing the design, the permittee shall complete construction of the selected option(s) and achieve the effluent limitations in the permit. Notification of construction completion shall be submitted to EPA and MassDEP.

G. MONITORING AND REPORTING

1. Reporting

   Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the following month.

   Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

   Environmental Protection Agency
   Water Technical Unit (SEW)
   P.O. Box 8127
   Boston, Massachusetts 02114

   The State Agency is (this office should receive all reports except toxicity test reports):

   Massachusetts Department of Environmental Protection
   Northeast Regional Office- Bureau of Resource Protection
   205b Lowell Street
   Wilmington, Massachusetts 01887

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management- Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

H. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, §43.

Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Town of Wayland
Wastewater Management District Commission
41 Cochituate Road
Wayland, MA 01778

is authorized to discharge from the facility located at

Town of Wayland Wastewater Treatment Plant
430/440 Boston Post Road
Wayland, MA 01778

to receiving water named

Wetland adjacent to the Sudbury River (Concord River Watershed -MA 82)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on December 1, 2008

This permit and the authorization to discharge expires at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on September 4, 1998.

This permit consists of 13 pages in Part I including effluent limitations, monitoring requirements, Attachments A (Whole Effluent Toxicity Procedure and Protocol) and B (Sludge Compliance Guidance), and 25 pages in Part II including General Conditions and Definitions.

Signed this 30th day of September, 2008

/s/ SIGNATURE ON FILE

Director Office of Ecosystem Protection Environmental Protection Agency Boston, MA	Director Division of Watershed Management Department of Environmental Protection Commonwealth of Massachusetts Boston, MA

PART I

A.1. During the period beginning the effective date and lasting until the outfall is extended to the Sudbury River or permit expiration, the permittee is authorized to discharge from outfall serial number **001,** treated effluent to a wetland adjacent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge to Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
FLOW	***	***	0.052 MGD[2]	***	REPORT	CONTINUOUS	RECORDER[2]
FLOW[2]	***	***	Report (MGD)	***	REPORT	CONTINUOUS	RECORDER[2]
BOD_5 [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45 mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
TSS [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45 mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
pH RANGE[1]	6.5 - 8.3 SU SEE PERMIT PAGE 9 OF 13, PARAGRAPH I.A.1.b.					1/DAY	GRAB[3]
FECAL COLIFORM[1,6]	***	***	200 cfu/100 ml	***	400 cfu/100 ml	1/WEEK[6]	GRAB[3]
E. COLI[1,6]	***	***	126 cfu/100 ml	***	409 cfu/100 ml	1/WEEK[6]	GRAB[3]
OIL & GREASE	***	***	REPORT	***	***	1/MONTH	GRAB[3]
TOTAL PHOSPHORUS[13] (April 1st - October 31st)	***	***	0.2 mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]
TOTAL PHOSPHORUS (November 1st - March 31st)	***	***	0.5 mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]
ORTHO PHOSPHORUS (November 1st - March 31st)	***	***	Report mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]
ALUMINUM[11, 13]	***	***	87 ug/l	***	750 ug/l	1/MONTH	24-HOUR COMPOSITE[3,5]

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001,** treated effluent to a wetland adjacent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge through Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
COPPER[13]	***	***	9.2 ug/l	***	13.7 ug/l	1/MONTH	24-HOUR COMPOSITE[3,5]
LEAD [12, 13]	***	***	3.1 ug/l	***	79.6 ug/l	1/MONTH	24-HOUR COMPOSITE[3,5]
TOTAL AMMONIA, AS N	***	***	Report (mg/l)	***	Report (mg/l)	1/WEEK	24-HOUR COMPOSITE[3,5]
WHOLE EFFLUENT TOXICITY Footnotes [7, 8, 9, 10]	Acute $LC_{50} \geq 100\%$ Chronic C-NOEC $\geq$ 100%					1/YEAR	24-HOUR COMPOSITE[3,5]

Footnotes:

1. Required for State Certification.

2. For flow, report maximum and minimum daily rates and total flow for each operating date. This is an annual average limit, which shall be reported as a rolling average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's discharge monitoring report (DMR) will report the annual average flow for the previous 12 months.

3. Effluent samples shall be taken after appropriate treatment and prior to discharge through Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001 to the Sudbury River. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. In addition, all samples shall be analyzed using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

4. Sampling required for influent and effluent.

5. A 24-hour composite sample will consist of at least twenty-four (24) grab samples, which are flow proportional, and taken during a 24-hour cycle (e.g. 0700 Monday to 0700 Tuesday).

6. Fecal coliform and *E. coli* limits are in effect year round. The monthly average limits for fecal coliform and *E. coli* are expressed as geometric means. The fecal coliform limits and monitoring shall end one year after the effective date of this permit. The *E. coli* limits shall go into effect one year after the effective date of this permit. The monitoring requirements for *E. coli* are one sample per month for the first year that the permit is in effect and one sample per week once the limits go into effect (one year following the effective date of the permit). This is a State certification requirement.

7. The permittee will conduct 7-day chronic (and modified acute) toxicity tests four times per year, and will test the daphnid, *Ceriodaphnia dubia* as the test species. Toxicity test samples will be collected during the second week in March, June, September and December. The test results will be submitted by the last day of the month following the completion of the test. The results are due April 30th, July 31st, October 31st, and January 31st, respectively. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Date Second Week in	**Submit Results By:**	**Test Species**	**Acute Limit LC_{50}[8]**	**Chronic Limit C-NOEC[9]**
March June September December	April 30th July 31st October 31st January 31st	*Ceriodaphnia dubia* See Attachment A	≥ 100%	≥ 100%

After submitting four consecutive sets of whole effluent toxicity (WET) test results, all of which demonstrate compliance with the WET permit limits, the permittee may request a reduction in the

WET testing requirements. The permittee is required to continue testing in accordance with the permit until notice is received by certified mail from the EPA that the WET testing requirements have been changed.

8. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

9. C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The "100% or greater" limit is defined as a sample which is composed of 100% effluent. This is a maximum daily limit derived as a percentage of the inverse of the dilution factor of 1.

10. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required **in Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation of this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

11. Aluminum sampling shall be conducted concurrently with phosphorus sampling.

12. The minimum level (ML) for lead is defined as 3 ug/l. This value is the minimum level for lead using the Furnace Atomic Absorption analytical method (Standard Method 3113B). This method, or a 40 CFR Part 136 method achieving an equal or lower ML must be used to determine total lead. For effluent limitations less than the ML, compliance/non-compliance will be determined based on the ML. Sample results less than the ML shall be reported as zero on the Discharge Monitoring Report.

13. The Permittee shall comply with the limits in accordance with the compliance schedule appearing in Section F. During the interim, a limit of 0.5 mg/l total phosphorus shall apply with monitoring once per week (1/Week) and there shall be no effluent limitations for aluminum, copper and lead, which shall be monitored once per month (1/Month) using 24 hour composite samples. These interim requirements are in effect until the actions required by the compliance schedule are completed.

A.2.
** During the period beginning with the completion of the outfall relocation to the Sudbury River, and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001,** treated effluent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge through Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
FLOW	***	***	0.052 MGD[2]	***	REPORT	CONTINUOUS	RECORDER[2]
FLOW[2]	***	***	Report (MGD)	***	REPORT	CONTINUOUS	RECORDER[2]
BOD_5 [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
TSS [4]	13.0 lbs/Day 6.0 kgs/Day	20 lbs/Day 9 kgs/Day	30 mg/l	45 mg/l	REPORT	1/WEEK	24-HOUR COMPOSITE[3,5]
pH RANGE[1]	6.5 - 8.3 SU SEE PERMIT PAGE 9 OF 13 PARAGRAPH I.A.1.b.					1/DAY	GRAB[3]
FECAL COLIFORM[1,6]	***	***	200 cfu/100 ml	***	400 cfu/100 ml	1/WEEK[6]	GRAB[3]
E. COLI[1,6]	***	***	126 cfu/100 ml	***	409 cfu/ 100 ml	1/WEEK[6]	GRAB[3]
OIL & GREASE	***	***	Report	***	***	1/MONTH	GRAB[3]
TOTAL PHOSPHORUS (April 1st - October 31st)	***	***	0.2 mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]
TOTAL PHOSPHORUS (November 1st - March 31st)	***	***	0.5 mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]

****The Permittee shall notify both EPA and DEP 60 days prior to commencing the discharge to the Sudbury River. The limits found on Pages 6-7 this permit shall apply beginning with the first full calender month after commencing the discharge to the Sudbury River.**

A.2.** During the period beginning with the completion of the outfall relocation to the Sudbury River, and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001,** treated effluent to the Sudbury River. Such discharges shall be limited and monitored as specified below. Effluent samples shall be taken after appropriate treatment and prior to discharge through Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. Additionally, all samples shall be analyzed using the analytical methods found in 40 §CFR 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE TYPE**
ORTHO PHOSPHORUS (November 1st - March 31st)	***	***	Report mg/l	***	***	1/WEEK	24-HOUR COMPOSITE[3,5]
TOTAL AMMONIA, AS N	***	***	Report (mg/l)	***	Report (mg/l)	1/WEEK	24-HOUR COMPOSITE[3,5]
ALUMINUM[10]	***	***	Report (mg/l)	***	***	1/MONTH	24-HOUR COMPOSITE[3,5]
WHOLE EFFLUENT TOXICITY Footnotes [7, 8, 9]	Acute $LC_{50} \geq 100\%$					1/YEAR	24-HOUR COMPOSITE[3,5]

****The Permittee shall notify both EPA and DEP 60 days prior commencing discharge to the Sudbury River. The limits found on Pages 6-7 this permit shall apply beginning with the first full calender month after commencing discharge to the Sudbury River.**

Footnotes:

1. Required for State Certification.

2. For flow, report maximum and minimum daily rates and total flow for each operating date. This is an annual average limit, which shall be reported as a rolling average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's discharge monitoring report (DMR) will report the annual average flow for the previous 12 months.

3. Effluent samples shall be taken after appropriate treatment and prior to discharge through Outfall 001. All sampling shall be representative of the effluent that is discharged through Outfall 001 to the Sudbury River. A routine sampling program shall be developed in which samples are taken at the same location, same time and same day(s) of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA. In addition, all samples shall be analyzed using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.

4. Sampling required for influent and effluent.

5. A 24-hour composite sample will consist of at least-twenty four (24) grab samples, which are flow proportional, and taken during a 24-hour cycle (e.g. 0700 Monday to 0700 Tuesday).

6. Fecal coliform and *E. coli* limits are in effect year round. The monthly average limits for fecal coliform and *E. coli* are expressed as geometric means. The fecal coliform limits and monitoring shall end one year after the effective date of this permit. The *E. coli* limits shall go into effect one year after the effective date of this permit. The monitoring requirements for *E. coli* are one sample per month for the first year that the permit is in effect and one sample per week once the limits become effective go into effect (one year following the effective date of the permit). This is a State certification requirement.

7. The permitee shall conduct acute whole effluent toxicity (WET) testing for the effluent discharged through Outfall 001 once per year using *Ceriodaphnia dubia* and *Pimphales promelas* as test species. Toxicity test samples shall be collected during the second week of August, and the results shall be submitted by September 30th . The test must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Date Second Week in	**Submit Results By:**	**Test Species**	**Acute Limit LC_{50}**[8]
August	September 30th	*Ceriodaphnia dubia* *Pimphales promelas* See Attachment A	≥ 100%

8. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms.

Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

9. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required **in Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation of this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

10. Aluminum sampling shall be conducted concurrently with phosphorus sampling.

Part I.A.1. (Continued)

a. The discharge shall not cause an excursion of the water quality standards of the receiving waters.

b. The pH of the effluent shall not be less than 6.5 nor greater than 8.3 Standard Units (SU) at any time.

c. The discharge shall not cause objectionable discoloration of the receiving waters.

d. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

e. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.

f. The results of sampling for any parameter above its required frequency must also be reported.

2. The permittee must provide adequate notice to the Director of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and

b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

c. For purposes of this paragraph, adequate notice shall include information on:

(1) the quantity and quality of effluent introduced into the POTW; and

(2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

3. Prohibitions Concerning Interference and Pass-Through:

a. Pollutants introduced into the POTW by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.

4. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

5. Numerical Effluent Limitations for Toxicants

EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall listed in Parts I.A.1. and I.A.2. of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

C. INFILTRATION/INFLOW

The permittee shall control infiltration and inflow (I/I) to the separate sewer system to prevent infiltration/inflow-related effluent limit violations, and any unauthorized discharges of wastewater, including overflows and by-passes, due to excessive infiltration/inflow.

D. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventative Maintenance Program

The permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR §122.2).

E. SLUDGE CONDITIONS

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.

2. The permittee shall comply with the more stringent of either the state or federal (40 CFR part 503), requirements.

3. The requirements and technical standards of 40 CFR part 503 apply to facilities which perform one or more of the following use or disposal practices:

   a. Land application - the use of sewage sludge to condition or fertilize the soil

   b. Surface disposal - the placement of sewage sludge in a sludge-only landfill

   c. Sewage sludge incineration in a sludge-only incinerator

4. The 40 CFR part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g. lagoons- reed beds), or are otherwise excluded under 40 CFR § 503.6.

5. The permittee shall use and comply with the attached compliance guidance document (Attachment B) to determine appropriate conditions. Appropriate conditions contain the following elements:

   - General requirements
   - Pollutant limitations
   - Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
   - Management practices
   - Record keeping
   - Monitoring
   - Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year:

less than 290	1/ year
290 to less than1500	1 /quarter
1500 to less than 15000	6 /year
15000 +	1 /month

7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR § 503.8.

8. The permittee shall submit an annual report containing the information specified in the guidance by **February 19.** Reports shall be submitted to the address contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge disposal. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. In such case, the permittee is required only to submit an annual report by **February 19** containing the following information:

- Name and address of contractor responsible for sludge disposal
- Quantity of sludge in dry metric tons removed from the facility by the sludge contractor

F. COMPLIANCE SCHEDULE

In order to comply with the permit limits for total phosphorus, copper, lead and aluminum, the permittee shall take the following actions:

1. Within twelve (12) months of the effective date of the permit, the Permittee shall evaluate and select an option(s) for;

   a) extending the outfall to the Sudbury River, or
   b) upgrading the Wayland WWTF , including, but not limited to, evaluating groundwater discharge and water conservation measures.

   The permittee shall document its evaluation and selection process in a report, which shall be submitted to EPA and MassDEP no later than 30 days following completion of the evaluation of the option(s).

2. Within twelve (12) months of completing this evaluation, the permittee shall complete the design for the selected option(s). The permittee shall submit the design to MassDEP.

3. Within two (2) years of completing the design, the permittee shall complete construction of the selected option(s) and achieve the effluent limitations in the permit. Notification of construction completion shall be submitted to EPA and MassDEP.

G. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the following month.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency is (this office should receive all reports except toxicity test reports):

Massachusetts Department of Environmental Protection
Northeast Regional Office- Bureau of Resource Protection
205b Lowell Street
Wilmington, Massachusetts 01887

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management- Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

H. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, §43.

Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.

Attachment 2
Legal Ownership Documents

LOCATION MAP
N.T.S.

FOR REGISTRY USE ONLY

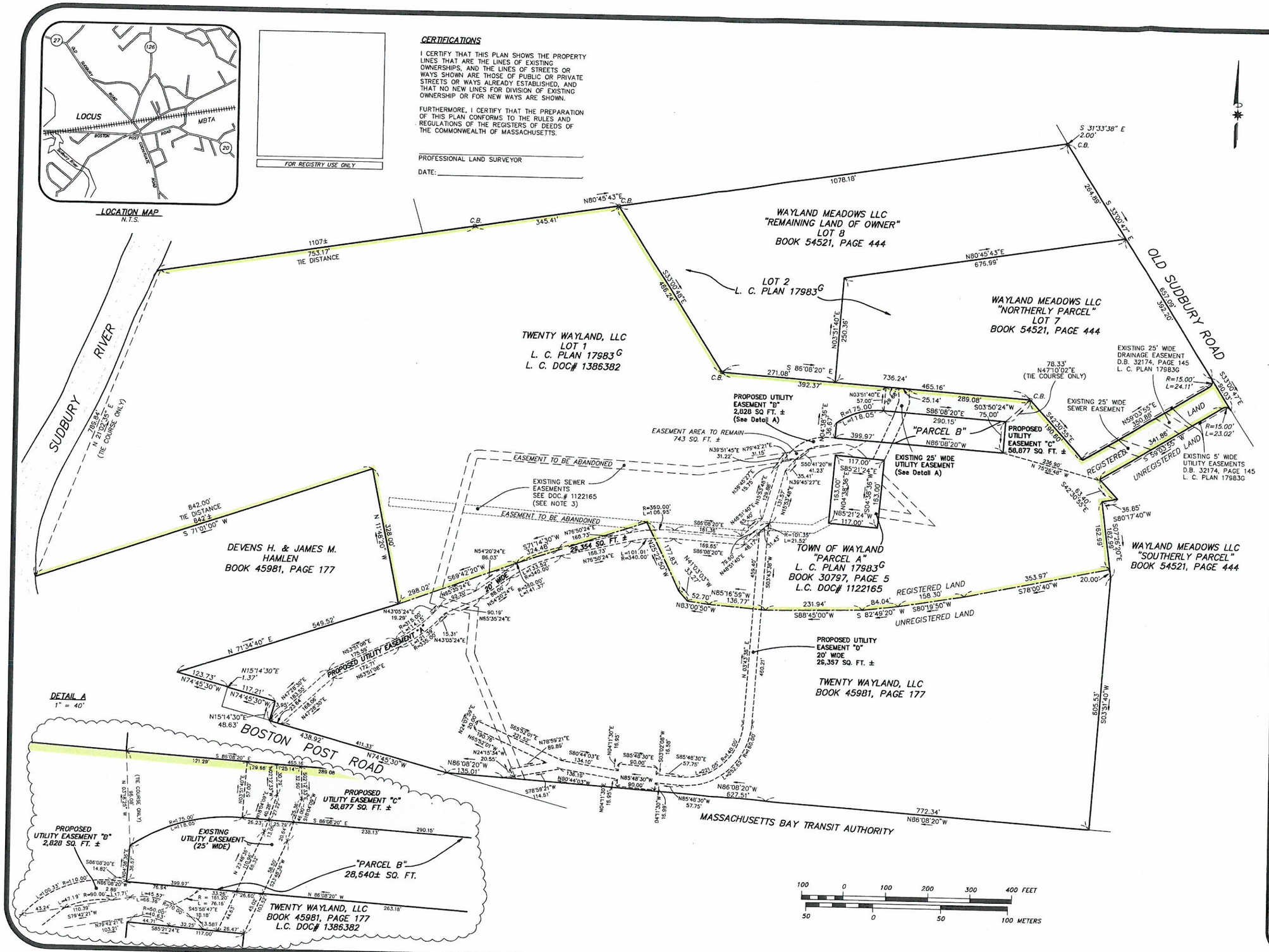
CERTIFICATIONS

I CERTIFY THAT THIS PLAN SHOWS THE PROPERTY LINES THAT ARE THE LINES OF EXISTING OWNERSHIPS, AND THE LINES OF STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

FURTHERMORE, I CERTIFY THAT THE PREPARATION OF THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

PROFESSIONAL LAND SURVEYOR

DATE:



General Notes

REFERENCE PLANS

1.) PLAT ENTITLED "PLAN OF LAND IN WAYLAND, MASS."; DATED: APRIL 4, 1941; BY: C. B. HUMPHREY; REGISTERED LAND PLAN 17983A.

2.) PLAT ENTITLED "PLAN OF EASEMENTS IN WAYLAND, MASSACHUSETTS"; DATED: APRIL, 1999; SCALE: 1" = 100'; RECORDED AS PLAN 1206 OF 1999.

3.) PLAT ENTITLED "COMPILED PLAN OF LAND IN WAYLAND, MASSACHUSETTS, MASSACHUSETTS BAY TRANSPORTATION AUTHORITY TO WAYLAND WASTEWATER DISTRICT COMMISSION"; DATED: 1/16/2002; SCALE: 1" = 50'; RECORDED AS PLAN 1182 OF 2002.

4.) PLAT ENTITLED "SUBDIVISION PLAN OF LAND IN WAYLAND, VANASSE HANGEN BRUSTLIN, INC., SURVEYORS, MAY 28, 2000" RECORED AS LAND COURT PLAN NUMBER 17983G.

NOTES

1.) LOT 7 AND LOT 8 COMPRISE LOT 2 AS SHOWN ON LAND COURT PLAN 17983G WHICH ARE BEING VOLUNTARILY WITHDRAWN FROM THE LAND COURT REGISTRATION SYSTEM. THIS WITHDRAWAL IS CURRENTLY UNDER REVIEW BY THE LAND COURT.

2.) THE AREAS OF THE PROPOSED EASEMENTS AS SHOWN ARE AS FOLLOWS:

EASEMENT "A" 29,354 SQ. FT. ±
EASEMENT "B" 2,828 SQ. FT. ±
EASEMENT "C" 58,877 SQ. FT. ±
EASEMENT "D" 29,357 SQ. FT. ±

3.) EASEMENTS AS SHOWN, AND REFERRED TO IN LAND COURT DOCUMENT #1122165, ARE TO BE ABANDONED AFTER THE COMPLETION OF CONSTRUCTION OF THE NEW WASTEWATER FACILITY ON PARCEL "B" AND ASSOCIATED UTILITIES.

No.	Revision/Issue	Date

Town of Wayland Massachusetts

Town Surveyor's Office
41 Cochituate Road, Wayland, MA 01778

Compiled Plan of Easements in Wayland, Massachusetts Decentralized Wastewater Collection System Town Center Project

Project: PL Bldgs Ease Mod3	Sheet: 1
Date: 10/7/2011	
Scale: 1" = 100'	

Take

2011 01558125
Bk: 01307 Pg: 76 Cert#: 234881
Doc: TAKE 02/09/2011 11:32 AM

COMMONWEALTH OF MASSACHUSETTS
TOWN OF WAYLAND

MIDDLESEX, ss.

ORDER OF TAKING

LAND OFF BOSTON POST ROAD (ROUTE 20) AND OLD SUDBURY ROAD (ROUTE 27) FOR SEWER AND WASTEWATER SYSTEMS AND WORKS

WHEREAS, the Town of Wayland is a municipal corporation, duly organized and existing under the laws of the Commonwealth of Massachusetts, with offices at 41 Cochituate Road, Wayland, Middlesex County, Massachusetts 01778; and

WHEREAS, pursuant to M.G.L. c. 83, '1, the Board of Selectmen is authorized to take by eminent domain lands, rights of way or easements, for the construction, maintenance and operation of a system of common sewers and other works as may be required for a system or systems of sewerage and sewage treatment and disposal; and

WHEREAS, the Special Town Meeting of the Town of Wayland voted on April 15, 2009, to authorize the Board of Selectmen to take by eminent domain, the fee or any lesser interest, in the land described below for municipal wastewater purposes; and

WHEREAS, public health and convenience require that the Town of Wayland acquire the land described below for sewer and

234881

OV

wastewater purposes.

NOW THEREFORE, the Board of Selectmen of the Town of Wayland, duly elected, qualified, and acting as such, on behalf of the Town, and by virtue of and in accordance with the authority M.G.L. c. 83, §1 and the vote under Article 3 of the Warrant of the Wayland Special Town Meeting legally called and held on April 15, 2009, and of any and every other power and authority hereunto in any way enabling it, does hereby take by eminent domain, pursuant to Chapter 79 of the Massachusetts General laws, on behalf of the Town of Wayland, the fee in the following described land situated in said Town of Wayland:

the land located off Boston Post Road (Route 20) and Old Sudbury Road (Route 27) in said Wayland, Massachusetts shown as "'PARCEL B' PROPOSED WASTEWATER TREATMENT PARCEL" on a Exhibit A attached hereto, which land is a part of Lot 1 on Land Court Plan 17983G, to which exhibit reference may be had for a more particular description of said land hereby taken.

All trees located on said land are included in this taking.

Said land is taken for the purpose of constructing, operating and maintaining municipal sewer and wastewater systems and works and shall be held in the care, custody, management and control of the Wayland Wastewater Management District Commission or its successor.

Said land is taken subject to any activity and use limitations of record.

So much of any easements taken or otherwise acquired by the Town of Wayland for sewer or wastewater purposes as are located on the land hereby taken are hereby extinguished by merger of title.

AND IT IS FURTHER ORDERED, that damages are sustained by the

company whose property is taken by this Order as shown on Schedule A, annexed hereto and made part hereof, and we accordingly award said damages. We hereby reserve the right to amend this award at any time prior to payment for good cause shown.

AND IT IS FURTHER ORDERED, that Town Counsel shall cause this Order of Taking to be registered in the Middlesex South Registry District of the Land Court in East Cambridge, Massachusetts and shall notify the Town Treasurer-Collector of this taking in accordance with M.G.L. c. 79, '7F.

IN WITNESS WHEREOF, we, the duly elected and qualified Selectmen of the Town of Wayland, have hereunto set our hands this 7th day of February, 2011.

TOWN OF WAYLAND, by:

Steven J. Correia, Chairman

John Bladon

Thomas J. Fay

Joseph F. Nolan

Susan W. Pope

its Board of Selectmen

Approved as to form.

Mark J. Lanza, Town Counsel

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss. February 7, 2011

On this day, before me, the undersigned notary public, personally appeared Steven J. Correia, John Bladon, Thomas J. Fay, Joseph F. Nolan and Susan W. Pope and proved to me through satisfactory evidence of identification, which was personal recognition, to be the persons whose names are signed on the preceding document, and acknowledged to me that they signed it voluntarily for its stated purpose, as Selectmen of the Town of Wayland,

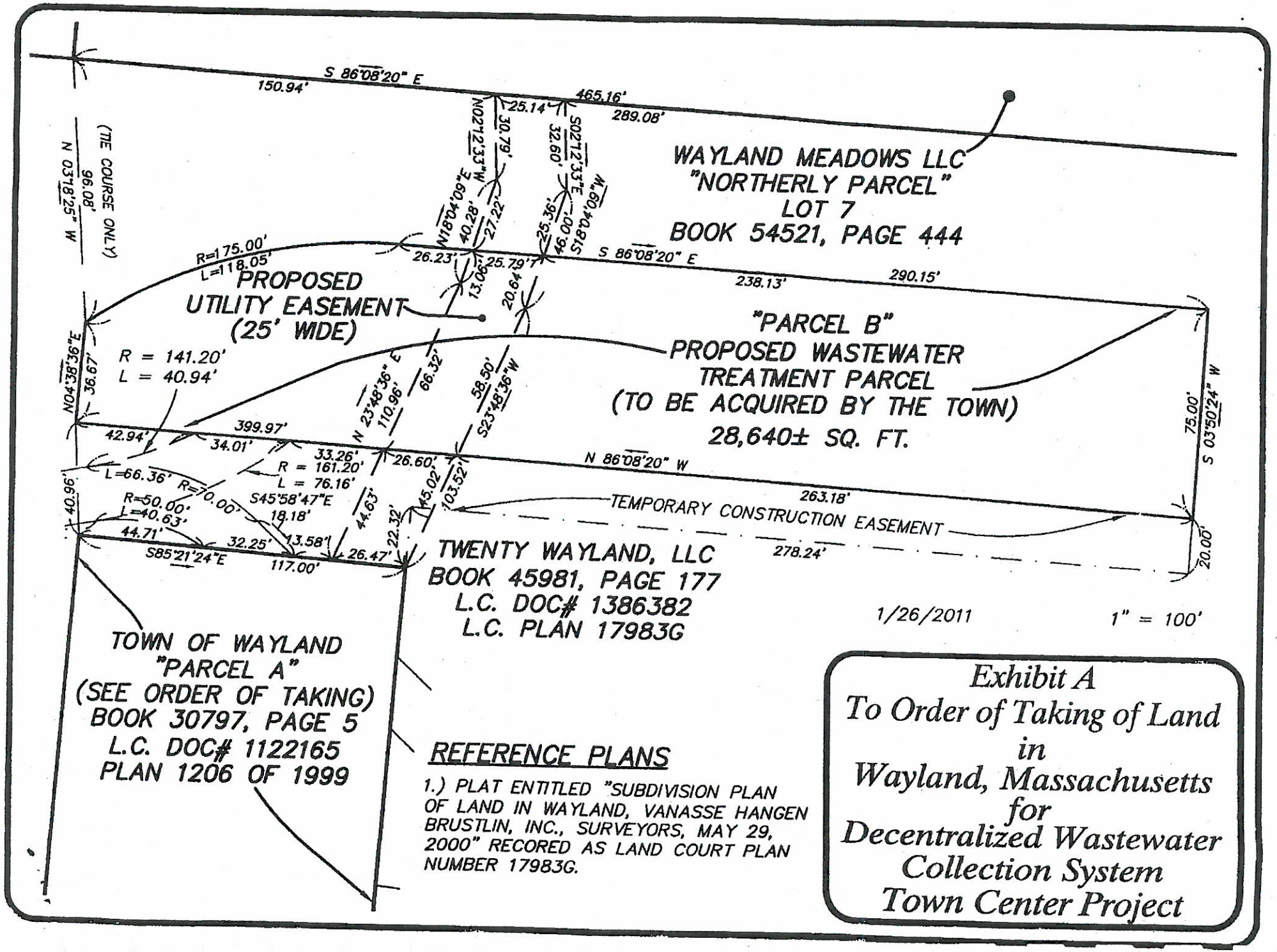
Marylnn L. DeNyak, Notary Public
My Commission Expires: OCTOBER 13, 2011

SCHEDULE A

ORDER OF TAKING OF LAND OFF BOSTON POST ROAD (ROUTE 20) AND OLD SUDBURY ROAD (ROUTE 27) FOR SEWER AND WASTEWATER SYSTEMS AND WORKS

APPROX. AREA OF LAND TAKEN	OWNER & PROP. INTEREST(S)	*TITLE REF.	*DAMAGES
28,640 sq. ft.	Twenty Wayland, LLC - Owner 10 Memorial Blvd. Suite 901 Providence, RI 02903	Certificate of Title No. 234881; Registration Book 1307, Page 76	$1.00 and Parcel A - Land Court Doc. #1122165

***All title references are to the Middlesex South Registry District of the Land Court.**


S 86°08'20" E
150.94'
465.16'
289.08'
25.14'
N02°12'33"W
30.79'
S02°12'33"E
32.60'
N18°04'09"E
40.28'
27.22'
25.36'
46.00'
S18°04'09"E
WAYLAND MEADOWS LLC
"NORTHERLY PARCEL"
LOT 7
BOOK 54521, PAGE 444
(TIE COURSE ONLY)
N 03°18'25" W
96.08'
R=175.00'
L=118.05'
26.23'
25.79'
13.06'
20.64'
S 86°08'20" E
238.13'
290.15'
PROPOSED
UTILITY EASEMENT
(25' WIDE)
R = 141.20'
L = 40.94'
N04°38'36"E
36.67'
"PARCEL B"
PROPOSED WASTEWATER
TREATMENT PARCEL
(TO BE ACQUIRED BY THE TOWN)
28,640± SQ. FT.
N 23°48'36" E
110.96'
66.32'
58.50'
S23°48'36"W
42.94'
399.97'
34.01'
33.26'
26.60'
N 86°08'20" W
263.18'
75.00'
S 03°50'24" W
L=66.36'
R=70.00'
R = 161.20'
L = 76.16'
S45°58'47"E
18.18'
40.96'
R=50.00'
L=40.63'
44.71'
32.25'
13.58'
44.63'
22.32'
45.02'
103.52'
26.47'
S85°21'24"E
117.00'
TEMPORARY CONSTRUCTION EASEMENT
278.24'
20.00'
TWENTY WAYLAND, LLC
BOOK 45981, PAGE 177
L.C. DOC# 1386382
L.C. PLAN 17983G
1/26/2011
1" = 100'
TOWN OF WAYLAND
"PARCEL A"
(SEE ORDER OF TAKING)
BOOK 30797, PAGE 5
L.C. DOC# 1122165
PLAN 1206 OF 1999
REFERENCE PLANS
1.) PLAT ENTITLED "SUBDIVISION PLAN OF LAND IN WAYLAND, VANASSE HANGEN BRUSTLIN, INC., SURVEYORS, MAY 29, 2000" RECORED AS LAND COURT PLAN NUMBER 17983G.
Exhibit A
To Order of Taking of Land
in
Wayland, Massachusetts
for
Decentralized Wastewater
Collection System
Town Center Project

With
1158270
P R

(1)

Doc 01558125

Southern Middlesex LAND COURT
Registry District

RECEIVED FOR REGISTRATION

On: Feb 09,2011 at 11:32A

Document Fee 75.00

Receipt Total: $75.00

NOTED ON: CERT 234881 BK 01307 PG 76

ALSO NOTED ON:

Mark J Lanza
9 Dryden Mill Rd
Concord MA 01742
978-369-9100

COMMONWEALTH OF MASSACHUSETTS
TOWN OF WAYLAND

MIDDLESEX, ss.

ORDER OF TAKING - WAYLAND BUSINESS CENTER SEWAGE TREATMENT PLANT AND APPURTENANT EASEMENTS 400-440 BOSTON POST ROAD, WAYLAND, MASSACHUSETTS

WHEREAS, the Town of Wayland is a municipal corporation, duly organized and existing under the laws of the Commonwealth of Massachusetts, with offices at 41 Cochituate Road, Wayland, Middlesex County, Massachusetts; and

WHEREAS, the Wayland Wastewater Management District Commission was established by Chapter 461 of the Acts of 1996 in order to enable the Town to establish an economical and efficient wastewater management system, as needed, and where appropriate; and

WHEREAS, Wayland Business Center LLC owns the property located at 400-440 Boston Post Road in the Town of Wayland, formerly occupied by the Raytheon Company upon which is located a wastewater treatment plant used to serve the buildings located on said property and which discharges to a wetland leading to the Sudbury River; and

WHEREAS, on June 4, 1998, the Town voted at a Special Town Meeting to adopt Article 5 of the 1998 Special Town Meeting Warrant authorizing the Board of Selectmen to acquire by purchase, eminent domain, gift or otherwise, the property and appurtenant easements for access and other purposes, as amended by the Town's vote under Article 22 of the 1999 Annual Town Meeting Warrant, as more fully

210249-1181-99

1-23

described below.

WHEREAS, the Board of Selectmen is empowered and authorized by the provisions of Chapter 83, Sections 1 and 6 of the Massachusetts General Laws, as amended, to take by eminent domain land, easements and facilities for sewer purposes.

WHEREAS, public health, necessity and convenience require that the Town of Wayland acquire the land, with the improvements thereon and therein and the appurtenant easements described below for sewer purposes.

NOW, THEREFORE, the Board of Selectmen of the Town of Wayland, duly elected, qualified, and acting as such, on behalf of the Town, and by virtue of and in accordance with the authority of the vote under Article 5 of the Warrant for the Wayland Special Town Meeting legally called and held on June 4, 1998, and the vote under Article 22 of the Warrant for the 1999 Annual Town Meeting legally called and held on April 29, 1999 and of the provisions of Chapter 83, Sections 1 and 6 of the Massachusetts General Laws, as amended, and of the provisions of Chapter 40, Section 14 of the Massachusetts General Laws, as amended, and of any and every other power and authority hereunto in any way enabling it, does hereby take by eminent domain, pursuant Chapter 79 of the Massachusetts General Laws, on behalf of the Town of Wayland:

DESCRIPTION OF LAND

Registered Land

the fee in the parcel of land, with the buildings, improvements and sewer facilities thereon and therein, situated off Boston Post

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Road in Wayland in the County of Middlesex and said Commonwealth, bounded and described as follows:

Beginning at the Southeasterly corner of the herein described parcel of land of Wayland Business Center LLC, running thence,

Along said land of Wayland Business Center LLC the following four (4) courses:

1.	N85° 21′ 24"	W	117.00 Feet
2.	N04° 38′ 36"	E	163.00 Feet
3.	S85° 21′ 24"	E	117.00 Feet
4.	S04° 38′ 36"	W	163.00 Feet

to the point or place of beginning.

Said parcel of land is shown as Parcel A on the Plan described below, a copy of which is attached hereto as Exhibit A.

Containing within said bounds 19,071 Square Feet.

All trees located on said Parcel A are included in this taking.

DESCRIPTION OF EASEMENTS

Temporary Sewer Easement 23-52-T1 Unregistered Land

A non-exclusive temporary sewer easement in, on, under, across and through the area of land shown as 23-52-T1 on a plan entitled "Plan of Easements in Wayland, Massachusetts" dated April, 1999, prepared by Richard F. Kaminski and Associates, Inc. and recorded with the Middlesex South Registry of Deeds herewith, ("the Plan") which temporary easement is more particularly bounded and described as follows:

Beginning at a point on the Northerly sideline of land now or

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formerly Massachusetts Bay Transit Authority at the Southeasterly corner of the herein described easement; running thence,

Through land of Wayland Business Center LLC the following three (3) courses:

1. N22° 46′ 02" W 319.54 Feet
2. N04° 03′ 34" E 115.39 Feet
3. N76° 14′ 13" W 103.36 Feet

to permanent easement 23-52-P1 as shown on the Plan; thence, along said permanent easement the following four (4) courses:

1. S13° 45′ 47" W 10.00 Feet
2. S76° 14′ 13" E 94.93 Feet
3. S04° 03′ 34" W 109.34 Feet
4. S22° 46′ 02" E 318.42 Feet

to land now or formerly Massachusetts Bay Transit Authority; thence along said land N86° 33′ 50" E 10.60 Feet to the point of beginning.

Containing within said bounds 5,304 Square Feet.

Said temporary easement shall expire on October 25, 2000.

Permanent Sewer Easement 23-52-P1 — Unregistered Land and Registered Land

A non-exclusive permanent sewer easement in, on, under, across and through the area of land shown as 23-52-P1 on the Plan and on the copy of the Plan attached hereto as Exhibit A which easement is more particularly bounded and described as follows:

Beginning at a point on the Northerly sideline of land now or formerly of Massachusetts Bay Transit Authority at the Southwesterly corner of the herein described easement; running thence,

4-23

Through land of Wayland Business Center LLC the following thirty-three (33) courses:

1. N22° 46′ 02" W 316.17 Feet
2. N04° 03′ 34" E 97.24 Feet
3. N76° 14′ 13" W 98.06 Feet
4. N13° 45′ 47" E 26.58 Feet to land Registered as Land Court Case No. 17983; thence, continuing, through said Registered Land
   N13° 45′ 47" E 198.26 Feet
5. N85° 56′ 26" W 155.72 Feet
6. N04° 03′ 34" E 20.00 Feet
7. S85° 56′ 26" E 159.14 Feet
8. N13° 45′ 47" E 113.65 Feet
9. Northeasterly along the arc of a circular curve of radius 25.00 Feet a length of 34.59 Feet
10. S86° 57′ 40" E 524.21 Feet
11. N79° 42′ 21" E 332.97 Feet
12. Southeasterly along the arc of a circular curve of radius 70.00 Feet a length of 66.36 Feet
13. S45° 58′ 47" E 18.18 Feet
14. N85° 21′ 24" W 32.25 Feet
15. Northwesterly along the arc of a circular curve of radius 50.00 Feet a length of 40.63 Feet
16. S79° 42′ 21" W 335.31 Feet
17. N86° 57′ 40" W 526.55 Feet
18. Southwesterly along the arc of a circular curve of radius 5.00 Feet a length of 6.92 Feet
19. S13° 45′ 47" W 110.23 Feet
20. S85° 56′ 26" E 678.10 Feet
21. N03° 20′ 03" W 24.69 Feet
22. S87° 30′ 24" E 153.50 Feet
23. N61° 12′ 21" E 46.68 Feet
24. S04° 38′ 36" W 17.36 Feet
25. S85° 21′ 24" E 10.00 Feet
26. S61° 12′ 21" W 51.06 Feet
27. N87° 30′ 24" E 136.96 Feet
28. S03° 20′ 03" E 25.31 Feet
29. N85° 56′ 26" W 255.03 Feet to Non-Registered Land; thence, continuing through said Non-Registered Land
    N85° 56′ 26" W 53.18 Feet to land Registered as Land Court Case No. 17983; thence continuing through said Registered Land
    N85° 56′ 26" W 396.05 Feet
30. S13° 45′ 47" W 208.26 Feet
31. S76° 14′ 13" E 94.93 Feet
32. S04° 03′ 34" W 109.34 Feet
33. S22° 46′ 02" E 318.42 Feet

to land now or formerly Massachusetts Bay Transit Authority; thence

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along said land S86° 33′ 50" W 21.19 Feet to the point of beginning.

Containing within said bounds 58,053 Square Feet.

Permanent Sewer Easement 23-52-P2 Registered Land

A non-exclusive permanent sewer easement in, on, under, across and through the area of land shown as 23-52-P2 on Exhibit A attached hereto and more particularly described as follows:

Beginning at the Southeasterly corner of the herein described easement; running thence,

N82° 23′ 41" W 135.46 Feet to Parcel A as shown on Exhibit A attached hereto thence,

along said parcel N04° 38′ 36" E 20.03 Feet, thence,

through land of Wayland Business Center LLC the following two (2) courses:

1. S82° 23′ 41" E 75.69 Feet
2. N45° 58′ 47" W 97.79 Feet

to the aforementioned Parcel A thence,

along said Parcel A N04° 38′ 36" E 25.87 Feet; thence,

through land of Wayland Business Center LLC S45° 58′ 47" E 175.01 Feet to the point or place of beginning.

Containing within said bounds 4,839 Square Feet.

All sewer pipelines, facilities, manholes, conduits, fixtures and headwalls located in said permanent sewer easements are included in this taking.

6-23

The taking of said Parcel A and easements also includes the non-exclusive appurtenant right of access to and egress from said Parcel A and easements in vehicles, equipment and on foot over, across and through such portions of the parcel of land shown as Lot 23-52 on the Plan, a copy which is attached hereto as Exhibit A, as the owner of said Lot 23-52 shall designate from time to time in writing, provided that the Town of Wayland shall (a) exercise such rights with minimum disruption of the owner's use of its property; and (b) indemnify and hold harmless the owner and those claiming by through or under the owner from and against all cost, claim, loss, liability, damage or expense arising from the exercise of any such rights.

The permanent and temporary sewer easements hereby taken do not include the surface of the land area encumbered by said easements and shall include the right (i) to construct, install, improve, operate and maintain underground sewer pipelines and facilities therein and (ii) to remove so much vegetation, pavement, topsoil, gravel and other materials as may reasonably be necessary for the construction installation improvement, operation and maintenance of such pipelines and facilities therein; provided that the Wayland Wastewater Management District Commission shall (a) give not less than thirty (30) days prior written notice of any such construction, installation, improvement, maintenance, or removal to the owner of the land encumbered by said easements, except in emergencies, in which cases the Wayland Wastewater

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Management District Commission shall give such notice as is practical; (b) exercise such rights with minimum disruption of the owner's use of its property; (c) indemnify and hold harmless the owner and those claiming by through or under the owner from and against all cost, claim, loss, liability, damage or expense arising from the exercise of any such rights and (d) restore said easement areas to substantially their former condition immediately thereafter.

Said land, easements, rights, improvements, facilities, pipelines, manholes, conduits, fixtures and headwalls shall be held in the care, custody, management and control of the Wayland Wastewater Management District Commission for sewer and wastewater management purposes.

The taking of said land, easement, rights, improvements, facilities, pipelines, manholes, conduits, fixtures and headwalls is subject to:

1. All existing utility easements of record;
2. The provisions of Paragraph 14.03 of the Purchase and Sale Agreement between Wayland Meadows Corporation and Congress Group Ventures, Inc. dated August 22, 1997, as amended, to the extent that such provisions are in force and applicable to Congress Group Ventures, Inc., Wayland Business Center LLC, or their assignees; a copy of which provisions is attached hereto as Exhibit B.

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3. The right of the owner of the land underlying said easement areas and its successors and assigns to use all existing pipes, equipment and installations and any replacements or substitutes therefor now or in the future employed or intended to carry treated effluent away from the sewage treatment plant located on said Parcel A for stormwater drainage from the owner's land and present or future buildings and improvements on said Lot 23-52 within the storm drainage capacity currently so provided and permitted under applicable regulatory requirements as of the date of this order of taking (the "Original Capacity"), which Original Capacity shall be maintained in good operating condition and duly permitted under applicable regulatory requirements by the Town of Wayland and the Wayland Wastewater Management District Commission; provided that if the owner of said Lot 23-52 alters its property so as to require storm drainage capacity in excess of the Original Capacity, then the owner's use of said existing pipes equipment and installations for such excess shall (i) be approved by the Massachusetts Department of Environmental Protection and the United States Environmental Protection Agency, to the extent that such approvals are necessary; and (ii) not exceed the Original Capacity or any increased capacity later provided;

4. The right of the Owner of the land underlying said

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easement areas and its successors and assigns, at any time, and from time to time to relocate all or any portion of such easement areas and the pipes, equipment and installations located therein and thereunder and/or to replace such pipes, equipment and installations with replacements of equal or better quality and performance, all at the owner's sole expense, cost and risk provided that: (i) the owner obtains all necessary federal, state and local permits and approvals to do said work; (ii) the relocated easements and all relocated or replaced items shall not reduce the operating performance or increase the operating cost of such sewage treatment plant (iii) prior to the commencement of any relocation work, the Owner shall provide the Wayland Wastewater Management District Commission with the plans therefor, which shall be prepared and stamped by a duly licensed engineer, and upon completion of any such work shall provide as-build plans so prepared and stamped, (iv) if said Commission determines that the relocation work set forth in the plans provided to it does not conform to the requirements of clause (ii) above, construction may not commence until the matter has been resolved by agreement of the Owner and said Commission or a court of competent jurisdiction allows the same; (v) all work shall conform to the plans provided to said commission, (vi) if said commission requests, the owner shall provide payment and performance

10-23

bonds for the total cost of such work; (vii) the service of the Town of Wayland sewer system is not interrupted except for such time as is necessary to make connections, which shall be scheduled for a time reasonably acceptable to said commission and; (viii) the owner indemnifies and holds harmless the Town of Wayland and those claiming by, through or under it from and against all cost, claim, loss, liability, damage or expense arising from the owner's work. In the event such right to relocate is exercised, the owner and the Town of Wayland shall execute, deliver and acknowledge such instruments as shall be reasonably necessary to document the relocation of easements as a matter of record title.

No provisions of the Memorandum of Agreement dated August 30, 1999, or of the Supplemental Agreement dated September 24, 1999, among Wayland Business Center LLC, the Town of Wayland and the Wayland Wastewater Management District Commission are extinguished or rendered ineffective by this order of taking, and all such provisions shall survive the recording and registration of this order of taking.

11-23

AND IT IS FURTHER ORDERED, that damages are sustained by the person whose property is taken by this Order as shown on Schedule A, annexed hereto and made part hereof, and we accordingly award said damages. We hereby reserve the right to amend this award at any time prior to payment for good cause shown.

AND IT IS FURTHER ORDERED, that Town Counsel shall cause this Order of Taking to be registered in the Land Registration Office at the Middlesex South Registry of Deeds in East Cambridge, Massachusetts and to be recorded with said registry of deeds, and shall notify the Town Treasurer/Collector of this taking in accordance with M.G.L. c.79, §7F.

IN WITNESS WHEREOF, we, the duly elected and qualified selectmen of the Town of Wayland, have hereunto set our hands this 25th day of October, 1999.

BOARD OF SELECTMEN OF THE TOWN OF WAYLAND

Mary M. Antes, Chair

Patricia Abramson

Susan W. Pope

Brian T. O'Herlihy

Susan Weinstein

12-23

Approved as to Form:

Mark J. Lanza, Town Counsel

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss.

October 25, 1999

Then personally appeared the above-named Susan Weinstein, Patricia Abramson, Susan W. Pope, Brian O'Herlihy, and Mary M. Antes, Selectmen of the Town of Wayland, and acknowledged the foregoing instrument to be their free act and deed of the Town of Wayland, before me,

Mark J. Lanza, Notary Public
My Commission Expires: 3/3/2000

13-23

SCHEDULE A

ORDER OF TAKING - WAYLAND BUSINESS CENTER SEWAGE TREATMENT PLANT AND APPURTENANT EASEMENTS 400-440 BOSTON POST ROAD, WAYLAND, MASSACHUSETTS

LOT # ON REF'D PLAN	OWNERS & PROP. INTEREST(S)	TITLE REF.	DAMAGES
23-52	Wayland Business Center, LLC--Owner c/o Congress Group Ventures, Inc. Wayland Business Center, Inc. One Memorial Drive, Cambridge, MA 02141	*Certificate of Title No. 210249 Registration Book 1181 Page 99 and **Book 27977, Page 52,	$250,000.00
23-52	AMREIT I, Inc. Mortgagee & U.C.C. Security Interest Holders 235 Peachtree Street Atlanta, Georgia 30303	*Document No's. 1069674 and 1069675 and ** Book 28735, Pages 431 and 458.	$0

* This title reference is to the Land Registration Office at the Middlesex South Registry of Deeds.

** This title reference is the Middlesex South Registry of Deeds.

14-23

EXHIBIT A

WAYLAND BUSINESS CENTER, LLC SEWAGE TREATMENT PLANT AND APPURTENANT EASEMENTS - 400 - 440 BOSTON POST ROAD, WAYLAND, MASSACHUSETTS

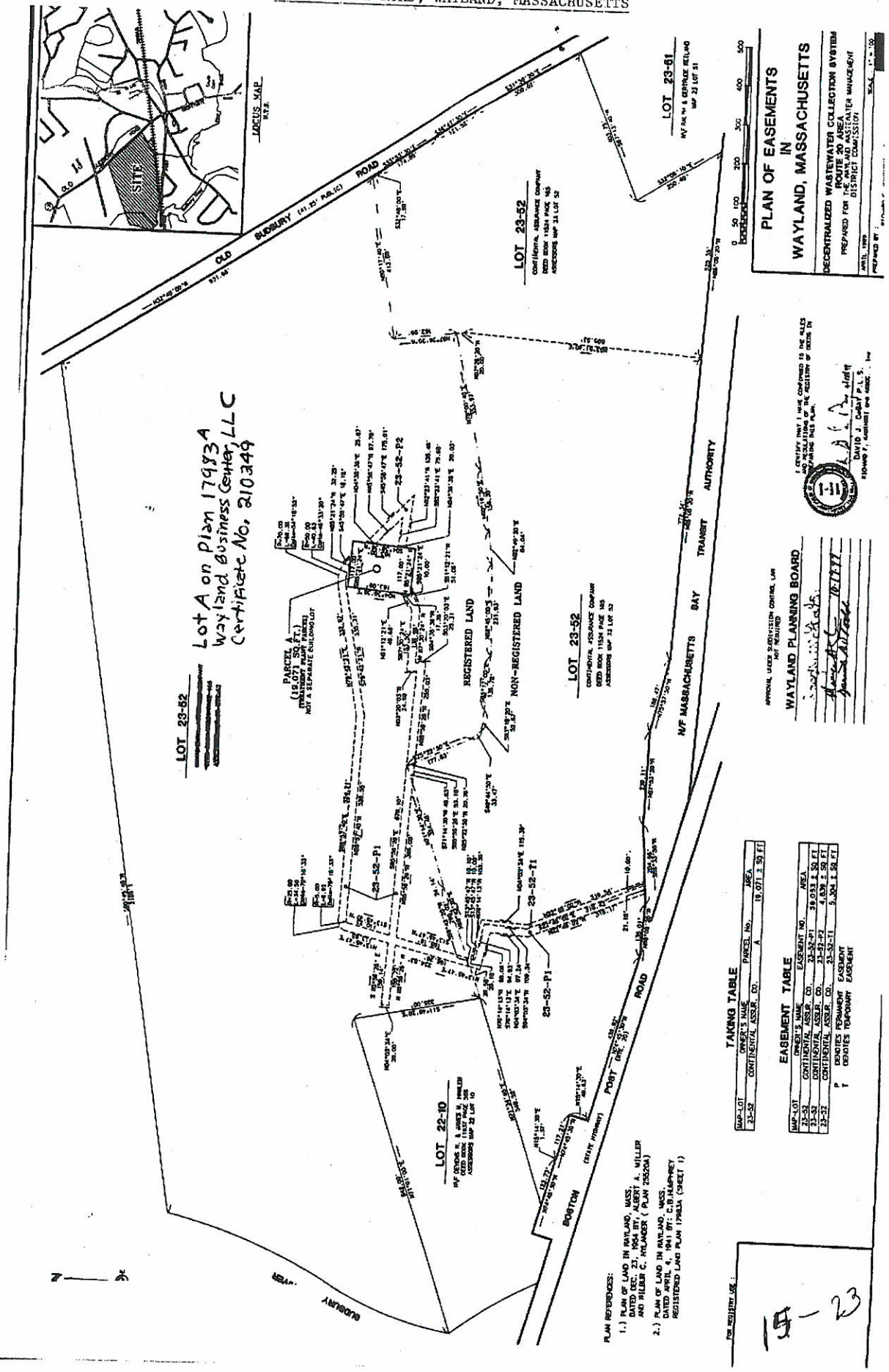

EXHIBIT B

ORDER OF TAKING - WAYLAND BUSINESS CENTER SEWAGE TREATMENT PLANT AND APPURTENANT EASEMENTS 400-440 BOSTON POST ROAD, WAYLAND, MASSACHUSETTS

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (this "Agreement") is made and entered into as of this 22nd day of August, 1997 by and between WAYLAND MEADOWS CORPORATION, a Massachusetts corporation (hereinafter called "Seller"), having an address at 145 Rosemary Street, Suite E, Needham, Massachusetts 02194, and CONGRESS GROUP VENTURES, INC., or its assignee (hereinafter called "Purchaser"), having an address at One Memorial Drive, Cambridge, Massachusetts 02142.

W I T N E S S E T H:

In consideration of the mutual covenants, agreements, representations and warranties contained in this Agreement and other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged by the parties, Seller and Purchaser hereby covenant and agree as follows:

14.03 Sewage Treatment Plant.

Seller and Purchaser acknowledge: (i) that there is a sewage treatment plant (the "Plant") located on the Real Property and servicing the buildings located on the Real Property; (ii) that the Plant is not currently in operation due to the fact that there are currently no tenants in occupancy of the buildings located on the Real Property; (iii) that the Plant appears to have the physical capacity to treat and dispose approximately 63,000 gallons per day of sewage and waste water (the "Capacity"); (iv) that the parties hereto estimate the sewage disposal needs of the current buildings on the Real Property at approximately 30,000 gallons per day; (v) that Purchaser, upon purchasing the Real Property, intends to expand the buildings on the Real Property or construct additional buildings on the Real Property so as to add to the total rentable square footage of the Real

17-23
#6-

Property; (vi) that in connection with such expansion or addition, Purchaser intends to apply for appropriate permits from governmental authorities having jurisdiction thereof so as to permit sewage and waste water treatment and disposal from the Plant at its Capacity; (vii) that the Plant operating at Capacity may be in excess of the sewage disposal requirements of the buildings, as ultimately expanded or constructed by Purchaser, on the Real Property; (viii) that Seller intends to construct townhouse condominiums or similar residential structures (the "Residences") on a parcel of land being retained by Seller abutting the Real Property; and (ix) that Seller, as a condition precedent to the execution of this Agreement, required that Purchaser agree, from and after the Closing, to allow any excess and unused capacity at the Plant to service the sewage disposal requirements of the Residences. The foregoing represent acknowledgement of facts known or believed to be true by Seller and Purchaser or statements as to future intentions of Seller and Purchaser; they do not and shall not constitute representations and warranties or covenants or agreements on either Seller's or Purchaser's part. Subject to the foregoing sentence, Seller and Purchaser agree as follows:

(a) Purchaser agrees that Purchaser shall use its commercially reasonable efforts to obtain applicable permits, licenses and approvals from governmental authorities having jurisdiction thereof so as to permit sewage and waste water treatment and disposal at the Plant at Capacity (the "Permits").

(b) In the event that the Permits are issued, Seller constructs the Residences and at the time of the construction of the Residences the Plant has sufficient physical capacity to provide for sewage treatment and waste water disposal (i) for the current buildings on the Real Property, as the same may be expanded by Purchaser or as Purchaser may plan to expand same, and any additional buildings constructed or planned by Purchaser to be constructed on the Real Property, and (ii) for the Residences, then Purchaser shall permit Seller, at Seller's sole cost, risk and expense, to connect waste disposal conduits from the Residences to the Plant. From and after any such connection, Seller agrees to pay a pro rata share of all costs, expenses and liabilities with respect to the maintenance and operation of the Plant. Purchaser shall grant to Seller an easement over the Real Property for the purpose of connecting conduits to the Plant, such easement to be located on the Real Property as shall be

mutually agreed by Purchaser and Seller and such easement to provide that Seller shall have access to, from and over the easement area for the purposes of maintaining, at Seller's sole cost and expense, the waste water conduit connecting the Residences to the Plant.

(c) In the event that the Permits are issued, Seller constructs the Residences and at the time of the construction of the Residences the Plant has either insufficient excess physical capacity to provide for waste disposal and waste water treatment for the Residences or appropriate governmental permits cannot be obtained by Seller for connection of conduits from the Residences to the Plant, then Purchaser shall permit Seller, at its sole cost, risk and expense, to construct a sewage treatment plant on the Real Property at a location mutually agreed between Seller and Purchaser (or alternatively, if mutually determined to be preferable between Seller and Purchaser, to expand the existing Plant) so as to provide waste disposal and waste water treatment for the Residences. In connection therewith, Purchaser shall grant Seller an easement over the Real Property for the purpose of connecting conduits to the Plant, such easement to be located on the Real Property as shall be mutually agreed by Purchaser and Seller and such easement to provide that Seller shall have access to, from and over the easement area for the purposes of constructing a sewage treatment plant for the Residences and operating and maintaining, at Seller's sole cost and expense, such sewage treatment plant to service the Residences. Such easement shall be located so as to cause the least amount of disruption to the operation of the Real Property and the conduct of any tenants' business thereon.

(d) In the event that at any time Purchaser determines that there shall not be excess capacity at the Plant to provide for sewage and waste water treatment and disposal for the Residences, Purchaser agrees to so notify Seller. In addition, at Seller's request from time to time, Purchaser agrees to furnish Seller with Purchaser's reasonable estimate of the excess capacity of the Plant, if any.

(e) Seller and Purchaser shall cooperate with one another in furtherance of the foregoing provisions of this Section 14.03, it being understood and agreed that definitive written agreements shall be negotiated in

good faith and executed between Seller and Purchaser at such time as Seller and Purchaser have determined the physical capacity of the Plant as finally permitted by Purchaser, the total gallonage of waste and waste water generated by the Real Property, as finally improved by Purchaser, the total gallonage of waste and waste water generated by the Residences, as finally constructed by Seller, and such other matters as are relevant to the operation, maintenance and permitting of the Plant and the operation, maintenance and permitting of any additional plant constructed by Seller pursuant hereto or the expansion of the Plant pursuant hereto. Such definitive agreements shall detail the arrangements between Seller and Purchaser, including, without limitation, arrangements regarding the location of any easements, the sharing of costs, expenses and liabilities, and other matters relating to the operation and maintenance of the Plant.

(f) The provisions of subsections 14.03(b), (c) and (e) above shall be subject to the following: (i) that the arrangements between Seller and Purchaser with respect to the Plant or any expanded or additional sewage and waste water treatment plant shall not constitute any party a public utility within the meaning of applicable statutes, rules, regulations or ordinances or otherwise subject either party to statutes, rules, regulations which would otherwise not apply were the Plant or any expanded or additional sewage and waste water treatment plant used solely to service such party, the real estate owned by it and its tenants, occupants and others caliming by, through and under such party; and (ii) mutually satisfactory arrangements to protect each party and its respective principals, officers, directors, employees, mortgagees, agents and representatives from and against any and all liability, claims, cost, injury or damages resulting from claims of the assignees, tenants and other third parties claiming by, through and under the other party.

(f) The provisions of this Section 14.03 shall be binding upon and inure to the benefit of Seller and Purchaser and their respective successors and assigns.

(g) The provisions of this Section 14.03 shall survive the Closing hereunder.

20-23

SECOND AMENDMENT TO PURCHASE AND SALE AGREEMENT

This Second Amendment to Purchase and Sale Agreement is made and entered into this 9th day of December, 1997 by and between WAYLAND MEADOWS LIMITED PARTNERSHIP, a Massachusetts limited partnership whose sole general partner is Wayland Meadows Corporation, a Massachusetts corporation ("Seller") and CONGRESS GROUP VENTURES, INC. ("Purchaser").

Reference is made to that certain Purchase and Sale Agreement, dated as of August 22, 1997, by and between Wayland Meadows Corporation, as seller, and Purchaser with respect to property located at 430 Boston Post Road, Wayland, Massachusetts, as more particularly described therein, as amended by an Amendment to Purchase and Sale Agreement dated August 22, 1997 (collectively, the "Agreement").

Seller hereby represents and warrants that all right, title and interest of Wayland Meadows Corporation, as seller under the Agreement, have been assigned to, and all obligations and liabilities of it as seller thereunder have been assumed by, Seller.

Capitalized terms not otherwise defined herein shall have the same meaning as ascribed to them in the Agreement.

21-23

9. The provisions of Section 14.03 shall apply from and after such time, if any, as Seller acquires the Option Parcel pursuant to the Option Agreement and shall be deemed waived by Seller upon expiration or termination of the Option Agreement. The Seller agrees that Purchaser may pursue, and agrees to cooperate with Purchaser in any effort of Purchaser to provide for, municipal or other third party ownership and/or operation of the Plant and the obtaining of requisite permits therefor by the municipality or other third party ("Sewer Outsourcing"), provided, however, that the arrangements for Sewer Outsourcing shall provide Seller with sewer capacity substantially equivalent to that to which Seller would have been entitled under Section 14.03 in the absence of such Sewer Outsourcing. Nothing in the foregoing sentence is intended to or shall be construed to diminish or waive any rights of Purchaser under Section 14.03.

4E

DEED

Wayland Business Center LLC, a Delaware limited liability company, having an address c/o Congress Group Ventures, Inc., One Memorial Drive, Cambridge, Massachusetts 02142 ("WBC"), for consideration paid and in full consideration of the sum of Ten Dollars ($10.00), grants to Wayland Meadows Limited Partnership, a Massachusetts limited partnership, having an address c/o Levco, Inc., 145 Rosemary Street, Needham, Massachusetts 02194 ("WMLP"), all (except as otherwise provided below) of WBC's right, title and interest in and to the parcels of land described in Exhibit A attached hereto and incorporated herein, being a portion of the same premises conveyed to WBC by WMLP under deed dated December 10, 1997 filed with the Middlesex South Registry District of the Land Court as Document No. 1049389, noted on Certificate of Title No. 210249, and recorded with the Middlesex South District Registry of Deeds in Book 27977, Page 52.

The foregoing conveyance is made subject to all matters of record to the extent in force and applicable.

WBC hereby reserves unto itself the non-exclusive right and perpetual easement in common with WMLP and others currently or hereafter entitled thereto, in, over and under (i) the portion of Lot 2 (as described on Exhibit A attached hereto) designated "Proposed 5' Utility Easement" on the Land Court Plan (as defined in Exhibit A attached hereto), containing 1,796 square feet, more or less, and (ii) the portion of Lot 3 (as described in Exhibit A attached hereto) designated "Proposed 5' Utility Easement" on such Land Court Plan, containing 1,745 square feet, more less, to locate, relocate, construct, reconstruct, extend, repair, replace, maintain, operate, inspect, and use, at WBC's sole cost and expense, (1) subsurface natural gas, water sanitary sewer, and/or storm drain lines and telephone and telecommunications wires, cables and conduits, and all subsurface or surface (but not above surface) facilities and improvements incidental thereto, and (2) signage in conformity with applicable law, visible from Old Sudbury Road.

WBC hereby grants to WMLP the non-exclusive right and perpetual easement in common with WBC and others currently or hereafter entitled thereto, in, over and under the portion of WBC's remaining land designated "Proposed 25' Wide Drainage Easement" on the Land Court Plan, containing 1,690 square feet, more or less, to locate, relocate, construct, reconstruct, extend, repair, replace, maintain, operate, inspect, and use at WMLP's sole cost and expense, a subsurface storm drain line and all subsurface or surface (but not above surface) facilities and improvements incidental thereto, subject to WBC's use of such area for driveway purposes.

WBC and WMLP each covenant and agree that any and all installation, maintenance, repair and replacement work of such party pursuant to the foregoing rights and easements reserved and granted herein shall be performed in a good and workmanlike manner and in compliance with all applicable laws, rules, regulations, ordinances, codes and by-laws. All such work shall be performed within the respective easement areas herein described, and in the event that any such work shall damage, destroy, or disturb any landscape, seeded, graded,

MBT 12/23/98 01:56:05 459 45.00

Lot AB-1 off of Old Sudbury Road, Wayland

32174 PAGE 142

STT RECORD BOOK

dupe in land court

paved or other area outside such easement areas, the party conducting such work shall promptly restore and repair the affected areas substantially to its former condition. Each of WBC and WMLP hereby agrees to defend, indemnify and hold harmless the other, its officers, directors, partners, members, trustees, beneficiaries, employees, agents, invitees, tenants and contractors from and against any loss or damage, including without limitation reasonable attorneys' fees and costs, incurred by any of them as a result of the act or omission of the indemnifying party or its officers, directors, partners, members, trustees, beneficiaries, employees, agents, invitees, tenants and contractors (collectively, "Indemnitor's Related Parties") and arising out of the rights and obligations created hereby, or by the exercise by the indemnifying party and the Indemnitor's Related Parties of the rights and easements created hereby, or by the failure of the indemnifying party and the Indemnitor's Related Parties to comply with any applicable laws, rules, regulations or ordinances in connection with the exercise of their rights or obligations hereunder.

Subject also to real estate taxes and assessments, which WMLP assumes and agrees to pay as provided in a separate agreement between the parties.

The within covenants, restrictions, reservations and grants of easements shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, and the benefits and burdens hereof shall run with the land.

The recording and filing for registration of this Deed shall evidence acceptance and agreement to the terms hereof on the part of WMLP, its successors and assigns.

Executed as a sealed instrument this 18th day of December, 2000.

WAYLAND BUSINESS CENTER LLC

By: Wayland Business Center, Inc.

By: _____
Dean F. Stratouly, President
Hereunto duly authorized

COMMONWEALTH OF MASSACHUSETTS

Suffolk, ss. December 18, 2000

The personally appeared the above-named Dean F. Stratouly, President of Wayland Business Center, Inc., Manager of Wayland Business Center LLC, and acknowledged the foregoing instrument to be his free act and deed and the free act and deed of such corporation and such limited liability company, before me,

Debra A. Brown
DEBRA A. BROWN
Notary Public
My Commission expires: 11/2/2001

EXHIBIT A

Legal Description

Three parcels of land, consisting of registered land and recorded land, as follows:

LAND IN WAYLAND

Registered Land:

Lot 2 and Lot 3 as shown on Land Court Plan No. 17983-G, filed with the Office of the Land Court Engineers on November 2, 2000. Lot 2 is shown having an area of 14.36 acres (625,552 s.f.), and Lot 3 is shown as having an area of 1.04 acres (45,327 s.f.).

Recorded Land:

Lot AB-1, shown as having an area of 449,974 s.f. (10.33 acres), as shown on the plan entitled "Division and Consolidation Plan of Land in Wayland Massachusetts" prepared for Wayland Business Center LLC, prepared by Vanasse Hangen Brustlin, Inc., scale 1" = 60', dated May 1, 2000, bearing an endorsement of the Wayland Planning Board stating that Planning Board approval under the subdivision control law is not required, dated August 5, 2000, recorded herewith.

1066860.2 libc

LAND COURT, BOSTON, The land herein described will be shown on our approved plan to follow as

DEC 21 2000

Plan 17983G Lots 2 and 3
(EXAMINED AS TO DESCRIPTION ONLY)
Louis A. Moore, Engineer RCS

SUBJECT TO PRIOR REGISTRATION OF A COURT ORDER DATED

Nov. 27, 2000

Attachment 3
DEP Hydrogeologic Report Approval Letter

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

RICHARD K. SULLIVAN JR.
Secretary

KENNETH L. KIMMELL
Commissioner

October 26, 2012

John Moynihan, Facilities Director
Wayland Wastewater District Commission
41 Cochituate Road
Wayland, MA 01778

RE: Approval of Hydrogeological Evaluation Report
Wayland Town Office Playing Fields
41 Cochituate Road, Wayland, Massachusetts
Transmittal Number: X250635

Dear Mr. Moynihan:

The Massachusetts Department of Environmental Protection (MassDEP) has completed its review of the hydrogeological evaluation report dated March, 2012 that was submitted on your behalf by Tighe & Bond, Inc. (T&B). An addendum to the report dated October 1, 2012 was submitted by T&B in response to a MassDEP request for additional information. The report and addendum summarize the results of the hydrogeologic evaluation conducted by T&B to support a proposed groundwater discharge of treated sanitary effluent at the Town Office Playing Fields in Wayland, Massachusetts. The evaluation was conducted in accordance with the scope-of-work submitted by T&B on November 16, 2011 and approved by MassDEP on January 23, 2012. Notice of the availability of the scope-of-work was published in the Environmental Monitor on December 21, 2011.

The Town of Wayland is seeking to add 17,000 gallons per day (gpd) of capacity to its Wastewater Management District by permitting a groundwater discharge under the playing fields adjacent to the Town Office Building. The proposed effluent disposal area will accommodate flows that exceed the existing wastewater treatment facility's NPDES permitted flow rate of 52,000 gpd. A new wastewater treatment facility is currently under construction and will utilize membrane bioreactor technology.

The proposed groundwater discharge will be within the playing fields located southeast of the Wayland Town Office Building. The specific site evaluated by T&B lies northeast of the baseball field and includes the existing leachfield of the Town Office Building Title 5 septic system. This location does not lie within any MassDEP designated nitrogen sensitive areas. The primary source for potable water within the Town is the Wayland Water Department. The

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TDD# 1-866-539-7622 or 1-617-574-6868
MassDEP Website: www.mass.gov/dep

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nearest public water supply well is located approximately 1.1 miles northwest of the proposed location, and the nearest private drinking water well is approximately 5000 feet to the northeast.

Soil tests and borings performed within the foot print of the proposed soil absorption system (SAS) encountered up to 33 inches of fill underlain by 5 to 7 feet of loamy, fine sand that coarsens downward to a medium-to-coarse sand. These deposits in turn overlie a horizon of gray silt interpreted locally to be the bottom of the unconfined aquifer. Percolation testing of the loamy, fine sand yielded a percolation rate of less than 2 minutes per inch.

The proposed subsurface disposal system was evaluated at a design flow of 17,000 gpd. Soil evaluation and percolation testing of the proposed site support a long term application rate (LTAR) of 2.5 gallons/day/square foot (gpd/ft^2). T&B has, however, proposed a design for the SAS using an LTAR of 1.47 gpd/ft^2. This design will spread the hydraulic load across a greater area and thereby minimize groundwater mounding and site grading impacts. The minimum leaching area required for the proposed discharge is 11,560 square feet. T&B's SAS design consists of twenty nine, 100-foot long trenches having a leaching area of 11,600 square feet. Trenches will be spaced 6 feet apart to accommodate MassDEP's required reserve area. T&B has designated an area of 22,600 square feet (100 feet by 226 feet) for primary and reserve purposes. A site plan of the proposed SAS entitled "Figure 4-3R: Groundwater Contour Plan" and dated September 10, 2012 is included with the submitted report addendum. Construction details of the proposed SAS are found on "Figure 5-1R2: Effluent Disposal Layout" and "Figure 5-2R2: Disposal Bed Profile." Both are also dated October, 2012.

Estimated seasonal high groundwater beneath the proposed SAS is at elevation 124.5 feet above mean sea level (msl). T&B has calculated that groundwater mounding beneath the proposed SAS will be approximately 2.4 feet; resulting in a mounded seasonal high groundwater elevation of 126.9 feet above msl. T&B has therefore proposed a minimum bottom of bed elevation for the SAS of 130.9 feet above msl to ensure that the required four feet of unsaturated separation is maintained between the top of the mounded seasonal high water table and the base of the proposed SAS.

T&B's analysis of groundwater mounding impacts suggests that a groundwater high will develop beneath the SAS and that groundwater will flow from the SAS toward the wetlands located southeast of the site. A monitoring well network has been proposed for the long-term monitoring of groundwater quality in the vicinity of the proposed SAS. The proposed network consists of three wells; one well (UG-1) upgradient of the proposed SAS and two wells (DG-2 and DG-3) downgradient of the SAS. The locations of these proposed wells are shown on Figure 4-3R which is entitled "Groundwater Contour Plan" and dated September 10, 2012.

MassDEP concurs with T&B's determination that the site has sufficient hydraulic capacity to accept a design flow of 17,000 gpd of treated wastewater at a loading rate of 1.47 gpd/ft^2.

Pursuant to 314 CMR 5.09 (1) (f), MassDEP hereby **approves** the hydrogeologic report submitted by T&B and authorizes the applicant to apply for an **Individual Groundwater**

Discharge Permit (BRPWP 79). Submission **of an individual Groundwater Discharge Permit application for this project is subject to the following conditions:**

1. The design flow of the permitted groundwater discharge shall not exceed 17,000 gallons per day.

2. The long term application rate to the SAS shall not be greater than **1.47 gpd/ft^2**.

3. The proposed SAS shall not be constructed until a Groundwater Discharge Permit has been obtained from MassDEP. The proposed SAS shall be constructed within the footprint indicated on Figure 4-3R of the Wayland Town Office Playing Fields Hydrogeologic Report. Figure 4-3R is entitled "Groundwater Contour Plan" and dated September 10, 2012.

4. The proposed SAS shall not be constructed until the existing Title 5 flow from the Town Office Building has been directed to the Wayland Wastewater Treatment Facility and the components of the existing SAS removed from the site.

5. MassDEP approves the proposed monitoring well locations shown on the aforementioned Figure 4-3R. The approved monitoring plan will be referenced in the Groundwater Discharge Permit when issued. MassDEP recognizes that proposed locations are somewhat dependent upon final site development and may require modification; any changes, however, must be submitted to this office for approval prior to well installation. Final monitoring wells must be installed and sampled for all groundwater quality parameters listed in the issued permit no later than 90 days prior to startup of the wastewater treatment plant and discharge to the SAS.

6. An Initial Groundwater Monitoring Well and Groundwater Quality Report must be submitted to this office prior to any discharge of wastewater. This report must include;

    a. a final surveyed site plan depicting the as-built locations of the SAS, the reserve area, all monitoring wells and all appropriate elevation data,

    b. boring logs and well construction details for all monitoring wells, and

    c. the analytical results of the groundwater samples collected from the final groundwater monitoring wells. These results will be used to establish the baseline groundwater quality for the site.

Please be advised that this approval **is not** a Groundwater Discharge Permit. It does, however, authorize the project proponent to apply for an Individual Groundwater Discharge Permit. MassDEP requires that the application (BRPWP 79) be accompanied by a MassDEP Transmittal Form and include all required supporting documentation. Included in the supporting documentation shall be a certification from a Massachusetts Registered Professional Engineer that the approved Hydrogeological Report has been reviewed and accurately reflects site

conditions as of the date of the permit application. Information on any changes noted during the review shall be included in the Engineering Report that accompanies the application.

While the Town may file an application for a Groundwater Discharge Permit, supported by the technical information noted above, it is important to note that MassDEP **will not** issue a Groundwater Discharge Permit until such time as an Administrative Consent Order (ACO) has been executed with the Town, establishing a schedule and timeline for actions needed to address wastewater management needs. This requirement for an ACO has been discussed in detail in prior meetings with the Town, and articulated in MassDEP's letter to the Town dated December 5, 2011. Elements of the ACO shall include, at a minimum:

- Requirement that the Town applies for and receives a MassDEP Groundwater Discharge Permit pursuant to the requirements of 314 CMR 5.00;
- Requirement for the Town to closely monitor and report wastewater flows to the Town's wastewater treatment plant;
- Requirement that the Town proceed to construction with all infrastructure needed to commence a groundwater discharge, in compliance with the terms and conditions of the groundwater discharge permit, when average daily flows to the wastewater treatment plant meet or exceed 80 percent of the NPDES permitted flow limit (41,600 gallons per day) for a consecutive 90-day period of record.
- Requirement that the Town provides a schedule for completion of construction of groundwater discharge facilities, and provides an acceptable operations protocol to ensure that the discharge limits of both the NPDES and groundwater permits will be met.

MassDEP advises the Town to engage in discussions with MassDEP expeditiously so that negotiations can move forward, and actions on a Groundwater Discharge Permit application can proceed on a timely basis.

If you have questions regarding the comments and conditions of this approval, please contact Kevin Brander of my staff at 978-694-3236.

Sincerely,

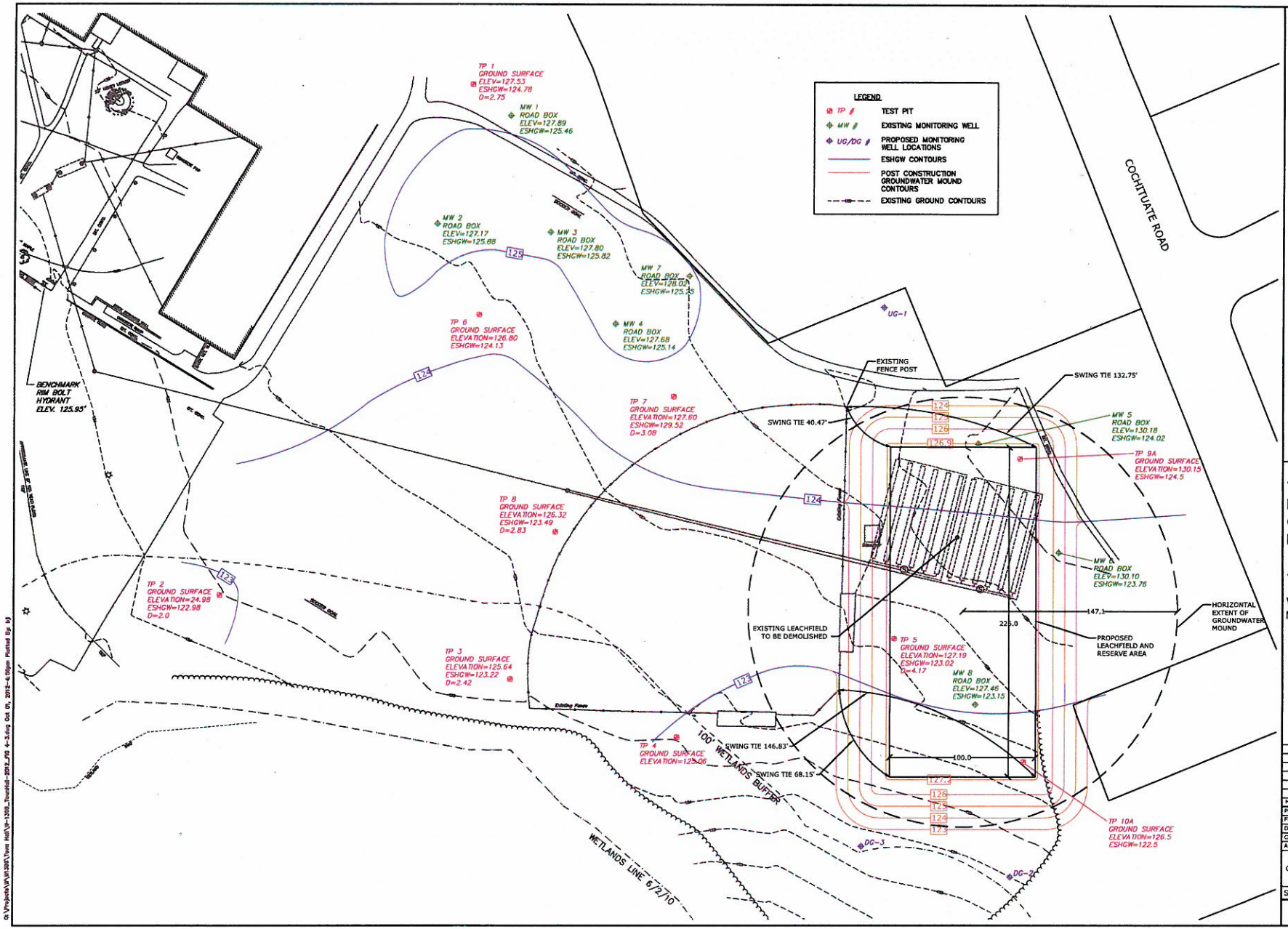
Eric Worrall
Deputy Regional Director
Bureau of Resource Protection

EW/HS/hs

cc: Fred Turkington/Town of Wayland
Julia Junghanns/Wayland Board of Health
Ian Catlow/Tighe & Bond
Karla King/Tighe & Bond

Marybeth Chubb/MassDEP/Boston
Greg Tomaszewski/MassDEP/NERO
Heidi Zisch, MassDEP/NERO Counsel

Attachment 4
Monitoring Well Data



Tighe&Bond
Consulting Engineers
www.tighebond.com

Town Office Building Groundwater Discharge

41 Cochituate Road

Wayland, Massachusetts

VERIFY SCALE
BAR IS 1 INCH ON ORIGINAL DRAWING
0 — 1 INCH
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

Mark	Date	Description

PROJECT NO:	W1396
FILE:	TownHall_2012
DRAWN BY:	BJL
CHECKED:	KLK
APPROVED BY:	IBC

GROUNDWATER CONTOUR PLAN

SCALE: 1"=30'

FIGURE 4-3R2

10/01/12

Boring and Monitoring Well Data
Wayland: Town Office Ball Fields

Monitoring Well ID	Date Installed	Approximate Ground Surface Elevation *FT*	Depth to Bottom (from ground) *FT*	Bottom Elevation *FT*	At Time of Construction: Depth to Groundwater (from ground) *FT*	At Time of Construction: Groundwater Elevation *FT*
MW-1	1/9/2012	127.89	10.0	117.9	3.75	124.14
MW-2	1/9/2012	125.47	12.0	113.5	2.61	122.86
MW-3	1/9/2012	125.41	12.0	113.4	3.30	122.11
MW-4	1/9/2012	127.68	10.0	117.7	3.86	123.82
MW-5	1/9/2012	130.18	10.0	120.2	7.48	122.70
MW-6	1/9/2012	130.1	10.0	120.1	7.66	122.44
MW-7	1/9/2012	128.02	10.0	118.0	4.09	123.93
MW-8	1/9/2012	127.46	10.0	117.5	5.63	121.83

Notes:
1. Elevations based on survey performed by

Tighe&Bond
www.tighebond.com

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. **MW-1**
Page 1 of 1
File No.
Checked by: BJL

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/09/12 End: 01/09/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1400	2.2'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	3, 3	Brown, SANDY LOAM			Road Box
			1-3	5, 4, 3, 6	Brown, f SAND, some silt			2' Riser
			3-5	4, 6, 9, 11	Brown, m-c SAND, Water @ 4'			
5			5-6	9, 5	Brown, f SAND and silt			8' Screen
			6-10	3, 6, 6, 5, 3, 3, 7, 6	Gray, SILT, trace f sand			
10								Well Set at 10'
15								
20								
25								
30								

Notes:

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. **MW-2**
Page 1 of 1
File No.
Checked by: BL

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/09/12 End: 01/09/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1000	2'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	4, 4	Brown, SANDY LOAM			Road Box
			1-3	7, 6, 5, 4	Brown, f SAND, some silt			2' Riser
			3-4	4, 4	Brown, c SAND, some m sand			
5			4-6	7, 7, 6, 5	Brown, f SAND and silt, Water @ 4'			
			6-12	7, 7, 4, 3, 3, 3, 6, 7, 7, 7, 5, 6	Gray, SILT			10' Screen
10								
								Well Set at 12'
15								
20								
25								
30								

Notes:

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. **MW-3**
Page 1 of 1
File No.
Checked by: ABC

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/09/12 End: 01/09/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1045	2.7'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	5, 6	Brown, SANDY LOAM			Road Box
			1-3	6, 5, 4, 6	Brown, f SAND, some silt			2' Riser
			3-4	4, 6	Brown, c SAND, some m sand			
5			4-6	7, 13, 8, 8	Brown, f SAND and silt, Water @ 4'			
10			6-15	6, 7, 10, 8, 2, 4, 6, 7	Gray, SILT, trace f sand			10' Screen
								Well Set at 12'
15				5, 5, 6, 6				
20								
25								
30								

Notes:

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. **MW-4**
Page 1 of 1
File No.
Checked by: GSC

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/09/12 End: 01/09/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1245	3.5'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	4, 4	Brown, SANDY LOAM			Road Box
			1-3	6, 5, 3, 6	Brown, f SAND, some silt			2' Riser
			3-4	11, 8	Brown, c SAND, some m sand			
5			4-6	4, 6, 8, 7	Brown, f SAND and silt, Water @ 4'			8' Screen
			6-10	6, 6, 7, 5, 3, 4, 6, 8	Gray, SILT, trace f sand			
10								Well Set at 10'
15								
20								
25								
30								

Notes:

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. **MW-5**
Page 1 of 1
File No.
Checked by: RJC

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/10/12 End: 01/10/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1450	7.55'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	4, 4	Brown, SANDY LOAM			Road Box
			1-3	6, 5, 3, 4	Brown, f-m SAND, trace gravel			2' Riser
			3-5	5, 4, 4, 8	Light brown, f-m SAND, Water @ 4'			
5			6-8	6, 6, 6, 6, 10, 7	Brown, m-c SAND, trace gravel			8' Screen
			8-10	8, 5, 10, 9	Gray, SILT, trace f sand			
10								Well Set at 10'
15								
20								
25								
30								

Notes:

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. **MW-6**
Page 1 of 1
File No.
Checked by: BC

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/10/12 End: 01/10/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1525	7.75'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	3, 4	Brown, SANDY LOAM			Road Box
			1-3	4, 6, 4, 5	Brown, f-m SAND, trace gravel			2' Riser
			3-5	4, 8, 12, 14	Light brown, f-m SAND, Water @ 4'			
5			6-8	10, 7, 6, 6, 5, 6	Brown, m-c SAND, trace gravel			8' Screen
			8-10	3, 5, 6, 12	Gray, SILT, trace f sand			
10								Well Set at 10'
15								
20								
25								
30								

Notes:

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. MW-7
Page 1 of 1
File No.
Checked by: ORC

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/09/12 End: 01/09/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1330	3.45'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	4	Brown, SANDY LOAM			Road Box
				4				
			1-3	6	Brown, f SAND, some silt			2' Riser
				5				
				3				
				6				
			3-4	11	Brown, m-c SAND, trace gravel			
				8				
			4-6	4	Brown, f SAND and silt, Water @ 4'			
				6				
5				8				
				7				8' Screen
			6-10	6	Gray, SILT, trace f sand			
				6				
				7				
				5				
				3				
				4				
				6				
				8				
10								Well Set at 10'
15								
20								
25								
30								

Notes:

Tighe&Bond

Consulting Engineers
Westfield, Massachusetts

Project: W-1396
Location: 41 Cochituate Rd, Wayland, MA
Client:

Boring No. **MW-8**
Page 1 of 1
File No.
Checked by: CBL

Drilling Co.: TDS
Foreman:
T&B Rep.: ADM1
Date Start: 01/10/12 End: 01/10/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
1/13/2012	1600	5.60'		

Depth (ft.)	Casing Blows Per Ft.	Sample No. / Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-1	5, 4	Brown, SANDY LOAM			Road Box
			1-3	4, 3, 8, 6	Brown, f-m SAND, Water @ 5'			2' Riser
			3-5	7, 10, 11, 11				
5			6-8	5, 4, 8, 7, 7, 4	Brown, m-c SAND			8' Screen
			8-10	3, 3, 3, 11	Gray, SILT, trace f sand			
10								Well Set at 10'
15								
20								
25								
30								

Notes:

Attachment 5
Plans and Specifications Approval Letter

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHEAST REGIONAL OFFICE
205B Lowell Street, Wilmington, MA 01887 • (978) 694-3200

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

August 23, 2010

David Schofield, Chairman
Wayland Wastewater Management District Commission (WWMDC)
41 Cochituate Road
Wayland, MA 01778

RE: Wayland, Wastewater Treatment Plant Upgrade Project, April 2010, Plans and Specifications (Volume 1 & 2)

Dear Mr. Schofield:

The Northeast Regional Office of the Massachusetts Department of Environmental Protection, ("MassDEP" or the "Department") has received and reviewed the above-referenced plans and specifications prepared on behalf of the Wayland Wastewater Management District Commission (WWMDC), by Tighe & Bond Consulting Engineers.

The Plans are 53 sheets and entitled:

Wastewater Treatment Plant Upgrade
Wayland, Massachusetts
April 2010
Tighe & Bond Consulting Engineers
Ian Catlow, P.E., No. 46112
Robert Peirent, P.E. No. 36038

The Specifications are similarly titled and include Volumes 1 & 2.

The contract work consists of upgrading the Commission's wastewater treatment plant from an Extended Aeration plant to a Membrane Bioreactor System facility. Construction of the new plant is comprehensive in scope and includes, but is not limited to, the following major components:

- Site preparation;

- Construction of a new masonry structure;
- Installation of a precast concrete valve chamber;
- Influent screening equipment;
- Equalization tank and submersible mixers;
- Membrane bioreactor equipment including membrane cartridges, permeate pumps, fine bubble aeration diffusers, instrumentation and controls;
- UV disinfection equipment;
- Chemical injection equipment and chemical dosing pumps;
- Sludge storage facilities;
- SCADA system;
- Construction of new water mains, hydrants, and service connections;
- Construction of a new outfall to the Sudbury River (crossing Route 20);
- Demolition of the existing wastewater treatment facility; and
- all ancillary work necessary to complete construction of the new wastewater treatment facility.

After review of both the plans and specifications, and in light of receipt of an August 12, 2010 e-mail from Mr. Ian Catlow of Tighe & Bond responding to MassDEP comments, MassDEP hereby approves the above referenced plans and specifications with the following conditions:

1. The Final Plans (all sheets) and Specifications shall be signed and stamped by a Massachusetts Registered Professional Engineer.
2. Prior to construction, WWMDC shall provide MassDEP with a copy of the Final Plans and Specifications, which shall incorporate the revisions noted in the August 12, 2010 email noted above.
3. WWMDC shall obtain all required local, state, and federal permits prior to undertaking the construction work.
4. Any modifications to the approved plans and specifications must be reviewed and approved by MassDEP in writing.

If you have any questions regarding this letter, please contact Lisa Dallaire of my staff at (978) 694-3238.

Sincerely,

Eric Worrall
Deputy Regional Director
Bureau of Resource Protection

WWMDC
Upgrade Project

CC: Fred Turkington, Town Manager, Town of Wayland
Ian Catlow, Tighe & Bond Consulting Engineers
David Ferris, MassDEP/BRP/Boston
George Harding, WCC, USEPA-New England, Region I, 1 Congress Street, Suite 1000, Boston, MA 02114-2023
David Boucher, Chief Operator, 430/440 Boston Post Road, Wayland, MA 01778

Attachment 6
Location of the Facility Narrative and Site Map

MassDEP
Massachusetts Department of Environmental Protection

Coordinate Information Tool

Click on the map and get coordinate information in NAD83 UTM and WGS84 (Lat/Lon).

Enter Address: 41 cochituate road, wayland, ma Search

1. Enter a complete street address then click the Search button.
2. If the address search is correct, click to get coordinate information for that location.
3. To refine the map display use the Map Tools then click on location with the tool.

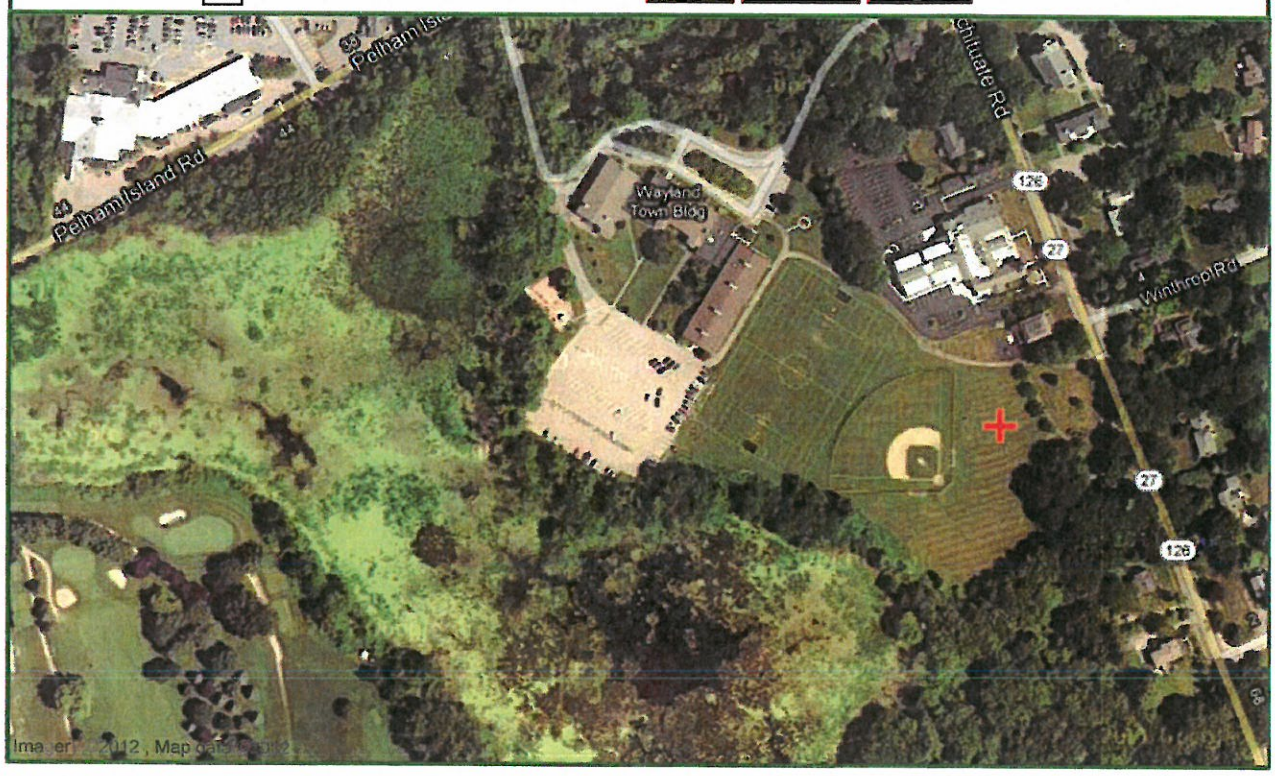
Helpful Links

Priority Resource Map Viewer

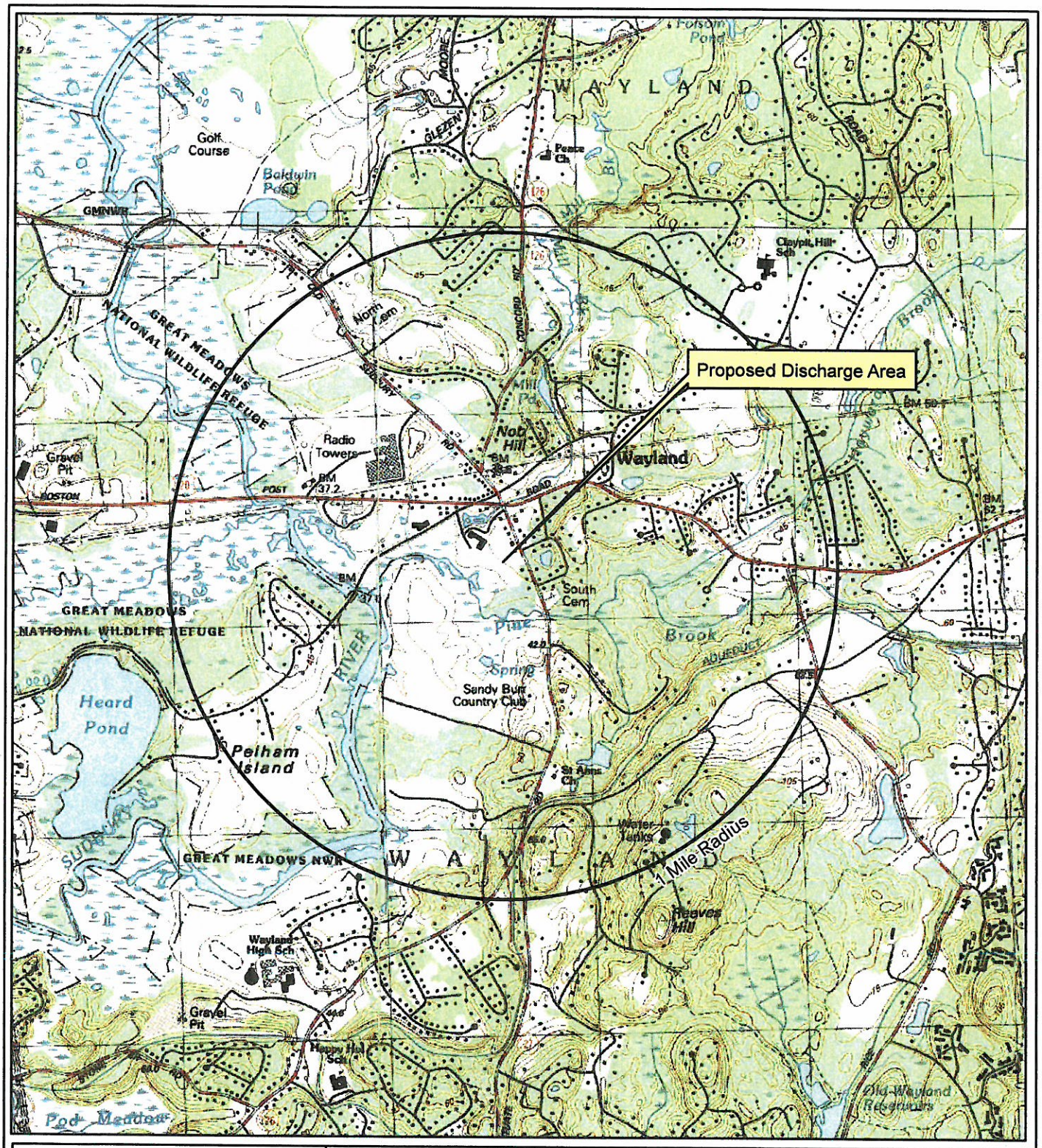
Commonwealth of Massachusetts Office of Geographic Information (MassGIS)

Map Tools:

Select Base Map: Street Satellite Terrain



The site is located at 41 Cochituate Road, to the southeast of the baseball field.



1:25,000

0 2,000

Feet

Based on USGS Topographic Map for Natick, MA Quadrangle. Revised 1987
Circle indicates a 1 mile radius

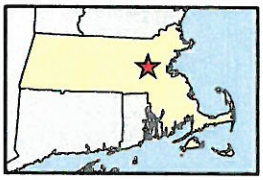


FIGURE 1-1
SITE LOCUS MAP

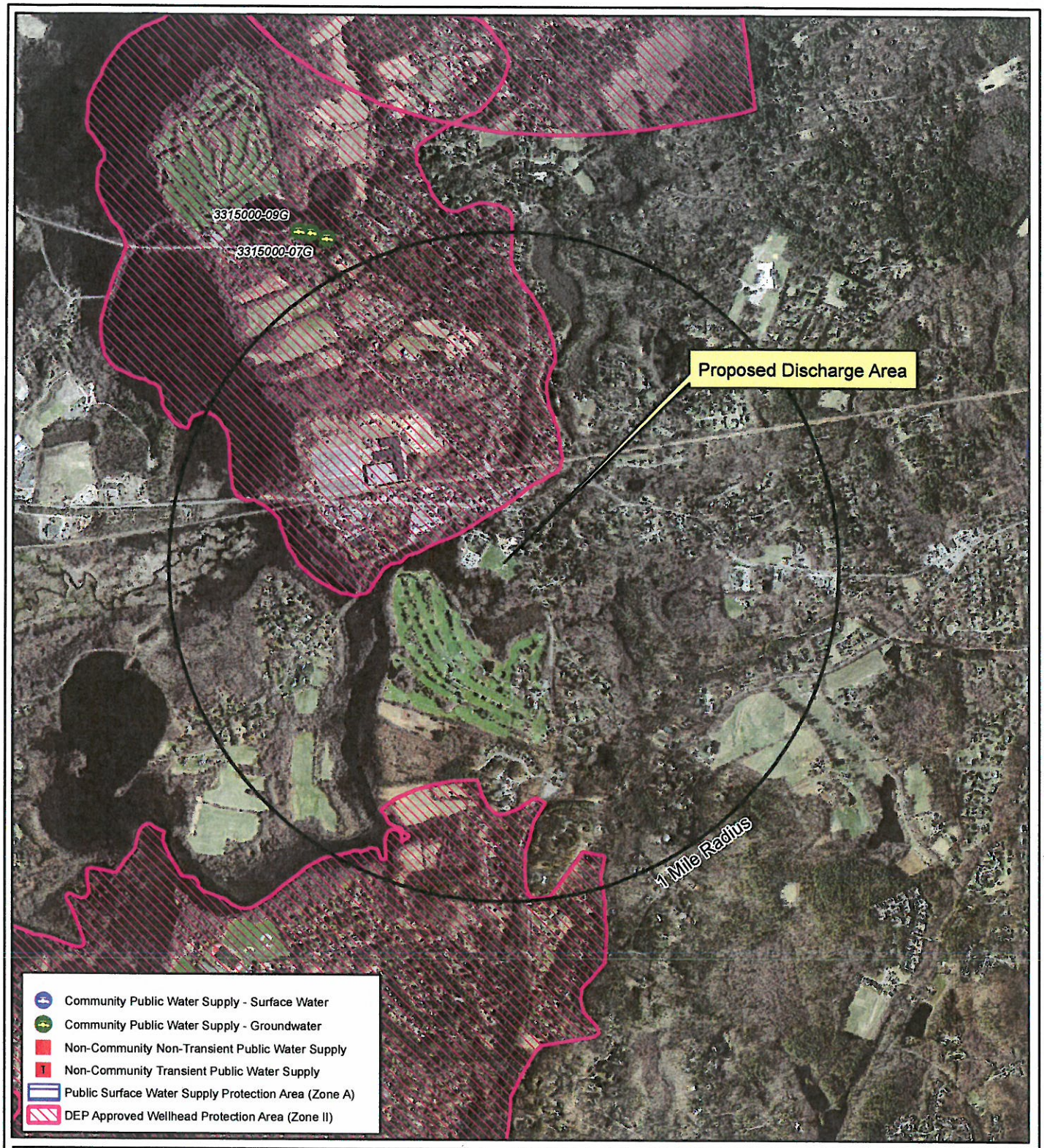
Wayland Town Offices
Wayland, Massachusetts

Tighe&Bond

March, 2012

G:\GIS\MA\WaylandMA\avproj\pipline_topo.mxd Date Saved: 11/18/2011 User: scs

W-1396



1:25,000

0 2,000
Feet

Data source: Office of Geographic and Environmental Information (MassGIS) Data valid as of February 2012
Based on MassGIS Color Orthophotography (April 2009)
Circle indicate 1 mile radius

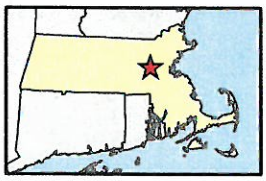


FIGURE 3-1
PUBLIC WATER SUPPLIES

Wayland Town Offices
Wayland, Massachusetts

Tighe&Bond
March, 2012

G:\GIS\MA\WaylandMA\avproj\pipline_pws.mxd Date Saved: 11/18/2011 User: scs

W-1396

Private Wells

Town	Address	Well Type	Total Depth	Depth to Bedrock	Water Level
Wayland	412 Commonwealth Road	Monitoring	52	14	45
Wayland	Route 20	Monitoring	24	0	14
Wayland	18 Black Oak Road	Irrigation	951	2	30
Wayland	130 Main Street	Monitoring	15	0	8.5
Wayland	6 Barley Lane	Monitoring	16	0	8
Wayland	East Plain Street	Monitoring	8	0	.5
Wayland	Route 20	Monitoring	33	0	31
Wayland	12 Charles Street	Monitoring	35	0	28
Wayland	131 Boston Post Road	Monitoring	27	0	19
Wayland	Route 20	Monitoring	15	0	6
Wayland	533 Boston Post Road	Monitoring	25	0	7
Wayland	Oak Street	Monitoring	53.5	0	6
Wayland	310 Cochituate Road	Monitoring	14	0	7
Wayland	533 Boston Post Road	Monitoring	17	0	6.4
Wayland	19 Main Street	Monitoring	15	0	7
Wayland	9 Gennaro Circle	Domestic	138	117	25
Wayland	11 Gennaro Circle	GTCL	105	90	15
Wayland	10 Gennaro Circle	GTCL	131	118	36
Wayland	356 Boston Post Road	Monitoring	15		8
Wayland	400 Boston Post Road	Monitoring	30		15
Wayland	95 Claypit Hill Road	Irrigation	320	92	30
Wayland	32 Claypit Hill Road	Domestic	685	117	11
Wayland	8 Bennett Road	Irrigation	500	90	35
Wayland	325 Boston Post Road	Monitoring	13	0	6
Wayland	51 Plain Road	Irrigation	260	91	6
Wayland	61 Old Sudbury Road	Irrigation	160	93	40
Wayland	304 Boston Post Road	Monitoring	20	0	12
Wayland	397 Boston Post Road	Irrigation	900	60	20
Wayland	4 Plain Road	Monitoring	18		11

Source: MassDEP SearchWell website (http://public.dep.state.ma.us/searchwell/), 2012

Attachment 7
Water Supply Data

BRP WP 81 Application, Item C.11 - Water Supply Data
Town of Wayland

Water Sources	Year 1 (2007)	Year 2 (2008)	Year 3 (2009)	Year 4 (2010)	Year 5 (2011)
Baldwin Pond	114,386,991	57,916,800	98,635,400	157,224,787	170,942,831
Campbell	87,541,900	49,695,600	86,387,400	32,160,360	24,996,800
Chamberlain	95,239,799	77,208,812	12,201,800	97,910,512	47,212,519
Meadowview	0	662,701	65,599	0	0
Happy Hollow Well #1	141,675,500	156,122,601	110,239,718	66,001,532	81,718,647
Happy Hollow Well #2	198,611,944	206,195,906	221,260,000	152,188,423	151,322,772
TOTAL	**637,456,134**	**547,802,420**	**528,789,917**	**505,485,614**	**476,193,569**

Attachment 8
Engineering Design Report Scope of Work
Email Correspondence with MassDEP

Karla L. King

From: Brander, Kevin (DEP) <kevin.brander@state.ma.us>
Sent: Tuesday, July 02, 2013 8:02 AM
To: Karla L. King
Cc: Tomaszewski, Gregory (DEP)
Subject: RE: Wayland

Karla:

Clearly, the Wayland individual GW permit application is not typical of most applications, since the WWTP already exists is operating. The approach you laid out below seems appropriate give the circumstances particular to Wayland:

- As you propose, you should include the conceptual design of the forcemain, and facilities for connecting Town hall , and the SAS (you should also include a discussion of any required permits for construction -wetlands, MassDOT, etc.);
- For the questions relevant to the WWTP, a description of the existing WWTP would be appropriate, along with information on any modifications or operational changes that will be necessary to meet the terms and conditions of a GW discharge permit;
- As noted in the instructions, the plans and specifications for the proposed conveyance/discharge system do not need to be submitted until 90 days prior to startup, although we do encourage permittees to submit this information earlier whenever possible, so that any potential issues are flagged early on.

Feel free to call if you have additional questions.

KB

****

Kevin Brander, P.E.
Section Chief
Wastewater Management Section
DEP/NERO
205B Lowell Street
Wilmington, MA 01887
(978) 694-3236

From: Karla L. King [mailto:KLKing@tigheBond.com]
Sent: Monday, July 01, 2013 9:10 PM
To: Brander, Kevin (DEP)
Subject: FW: Wayland
Importance: High

Kevin,

To follow-up on a few items:

Per your email to Ian below, an engineering report is required to be submitted with the Individual Groundwater Discharge Permit. I went through the list of requirements for the engineering report and they are identical between the

General Permit and the Individual Permit. For the purposes of Wayland, I am assuming this report will essentially be a compilation of the hydrogeo report and the WWTF engineering design report. In addition to design data associated with both the WWTF and the groundwater discharge system,we plan to show the conceptual layout of the forcemain between the WWTF, the new grinder pump system that will be required at the Town Building, and the layout of the groundwater discharge system. Items C-L, P, and Q under the Report Requirements appear to be all relevant to the WWTF. Items M, N and W under the Report Requiremetns do not appear to be required as the WWTF is already built. Please confirm if there are any other specific items that you anticipate being included.

Secondly, can you please confirm that design drawings and specifications are not due until 90 days before startup under the Individual Permit. Also, please confirm that the scope of the design drawings and specifications would only include the new systems and not the entire WWTF.

Much appreciated,

Karla

-----Original Message-----
From: Brander, Kevin (DEP) [mailto:kevin.brander@state.ma.us]
Sent: Monday, June 24, 2013 10:53 AM
To: Ian B. Catlow
Subject: RE: Wayland

An "engineering report" is required in support of the permit application, and is generally described in the application instruction materials. The level of detail is not as great as in a typical design report.

KB

-----Original Message-----
From: Ian B. Catlow [mailto:IBCatlow@tigheBond.com]
Sent: Tuesday, June 18, 2013 5:54 AM
To: Brander, Kevin (DEP)
Subject: Wayland

Kevin:
I know that Karla confirmed that plans will not be required with Wayland's Individual permit application but I'd like to know if a design report is needed. Please confirm.
Ian

Karla L. King

From: Ian B. Catlow
Sent: Friday, August 30, 2013 11:40 AM
To: Karla L. King
Subject: FW: Permit information

-----Original Message-----
From: Brander, Kevin (DEP) [mailto:kevin.brander@state.ma.us]
Sent: Monday, July 29, 2013 11:57 AM
To: Ian B. Catlow
Cc: Worrall, Eric (DEP)
Subject: FW: Permit information

Ian:

In response to your questions below:

Yes, plans and specifications are not required until 90 days prior to startup.

Please provide the current operations contract, noting that the scope will be expanded as needed to meet any additional requirements related to the GW discharge permit.

KB

****

Kevin Brander, P.E.
Section Chief
Wastewater Management Section
DEP/NERO
205B Lowell Street
Wilmington, MA 01887
(978) 694-3236

-----Original Message-----
From: Worrall, Eric (DEP)
Sent: Thursday, July 25, 2013 3:18 PM
To: Brander, Kevin (DEP); Zisch, Heidi (DEP)
Subject: FW: Permit information

Kevin,

For your response when you return. thanks

-----Original Message-----

From: Ian B. Catlow [mailto:IBCatlow@tigheBond.com]
Sent: Thursday, July 25, 2013 3:10 PM
To: Turkington, Frederic
Cc: Worrall, Eric (DEP); Knight, Fred; Mako71wt@gmail.com; mjlanza@comcast.net
Subject: Re: Permit information

Thanks Fred and Eric.

Eric, this seems to match well with what we have discussed with Kevin in the recent past. I would still appreciate two minor additional clarifications on this issue. They are as follows:
1. Our prior discussions with the department indicated that design plans and specifications are not required for submittal at this time. Please confirm that this is still the case.
2. I recognize that having an operations contract in place is typical for all groundwater discharge facilities. The town has a similar contract with an operator for the existing NPDES permit as well, however it does not reflect sampling for all of the criteria that would be required under a groundwater discharge permit. Please confirm that it would be sufficient for the town to submit a copy of their existing contract with the understanding that if future effluent limits change, some of the details of the contract might change as well.

Thanks for taking the time to develop this level of detail. I realize that this was a slightly unusual request for clarification but I feel that what you have emailed us is beneficial to all involved.
Ian

On Jul 25, 2013, at 2:23 PM, "Turkington, Frederic" <fturkington@wayland.ma.us> wrote:

> Eric,
>
> Thanls for providing the follow-up information. We are endeavoring to submit water data for Town Center retail business by early next week and will work diligently and expeditiously to submit a complete individual groundwater discharge permit.
>
> Thanks,
> Fred
> _____
> From: Worrall, Eric (DEP) [eric.worrall@state.ma.us]
> Sent: Thursday, July 25, 2013 12:49 PM
> To: Turkington, Frederic
> Cc: Brander, Kevin (DEP); Zisch, Heidi (DEP); Fallon, MacDara (DEP);
> Boardman, Faye (DEP); Ferris, David (DEP)
> Subject: Permit information
>
>
> Fred,
>
>
>
> Following up on our discussion from last week, attached are some suggestions to assist the Town in the preparation of the individual groundwater discharge permit. Unfortunately, Kevin is out on vacation this week so if you could forward this email to Ian Catlow, and other town officials you deem appropriate, I would appreciate it. Also, we have not received any groundwater flow data from Fred Knight for consideration of additional flow capacity so if you would still like MassDEP to review and consider this information, please forward it at your convenience.

>
> As you are aware, the issuance of Groundwater Discharge Permits are subject to the requirements of 314 CMR 5.00 and 314 CMR 2.00. MassDEP also has Guidelines for the Design, Construction, Operation, and Maintenance of Small Wastewater Treatment Facilities with Land Disposal, dated May 2013, which provide further detail on the application procedure, and technical documents which are needed to support the permit application. The Guidelines were written for broad application, and MassDEP notes that conditions unique to the particular discharge being proposed are important when applying the information in the Guidelines.
>
>
>
> You have asked for guidance on the scope of information and level of detail needed to support an Individual GW discharge permit, and more specifically, what additional information should accompany the individual permit application as an Engineering Report beyond that submitted in support of the General GW Discharge Permit application transmitted to MassDEP in January 2013. Based on its review of the General Permit Application, MassDEP regulations, and the Guidance referenced above, MassDEP offers the following suggestions. Please note that MassDEP is not the Town's expert and the Town should consult with its own technical staff and experts on what is specifically required by the Town in this application process to comply with applicable MassDEP regulations.
>
>
>
> Application:
>
>
>
> • The MassDEP BRP WP 79 GW permit application must be submitted, along with a properly completed transmittal form. Permit Form/instructions at http://www.mass.gov/eea/agencies/massdep/water/approvals/wastewater-forms.html#1. Be mindful of the application completeness checklist, which will help ensure that you have all the proper supporting materials/forms.
>
>
>
> Engineering Report:
>
>
>
> The Engineering Report, along with appendices (ER) submitted in support of the General Permit Application included substantial detail on many relevant technical aspects of the treatment works, and all of the information in that ER are also appropriate to include in the ER for the Individual GW Discharge Permit Application. The following additional information and recommendations would provide further detail typical and appropriate for supporting an Individual GW Discharge Permit Application:
>
>
>
> • Project Design Criteria: Supplement the ER/appendices with:
>
>
>
> o A more detailed description of the proposed conveyance works from the existing WWTP to the Soil Absorption System (SAS), including the conceptual design for the pipe alignment on the Town Hall site to the SAS; basic design data on the proposed clearwell/pump station; proposed compliance sampling location for GW discharge permit; and more detail on the conceptual design of the force main to connect wastewater flows from Town Hall to the Town's sewer system.

>
> o A summary of the existing Discharge Monitoring Report (DMR) data, indicating the performance of the treatment system in the context of the NPDES and potential GW discharge permit limits, and a description of operational modifications, if any, needed to comply with permit limits. This should include data on existing flows, including a discussion on seasonal fluctuations.
>
> o A description of any I/I work undertaken or planned by the Town.
>
> o Identification of any local, state, or federal permits needed for the project.
>
> o A listing of the facilities served by the WWTP
>
> o A brief summary/reference to the approved Hydrogeological Report, citing the document as a source for water resources/impacts for the proposed SAS, proximity to residences, hydrogeological investigations, and subsequent DEP's approval.
>
> o Reference to (date, title, author) the O&M Manual for the existing WWTP, and indication that the O&M will be updated to include provisions for the pump station/force main/SAS prior to construction and operation of proposed facilities.
>
> o Appendix including the Wayland Wastewater Management District Commission sewer use regulations or bylaw.
>
>
>
> Other:
>
>
>
> • Operations Contract: The application should include a copy of the operations contract, and the staffing plan for the WWTP.
>
> Please note that 314 CMR 2.03(2) and 314 CMR 5.09A(4) only authorizes MassDEP to issue a permit once a complete application is received. Therefore, MassDEP cannot grant a permit if an application is fails to meet the requirements of 314 CMR 5.09A, including all applicable guidelines. If, following identification of any insufficiency, an applicant fails to correct it and instead requests that the application be processed as submitted, the inadequacies may result in and form the basis of a denial of a permit application per 314 CMR 2.03(2). In addition to the requirement of 314 CMR 5.09A(5) to comply with all applicable MassDEP guidelines, 314 CMR 2.03(2) also authorizes MassDEP to require the applicant to provide any additional information that may be necessary within applicable timeframes and to attend any informal conferences relative to a permit application.
>
> Thanks, if you have further questions, I would recommend that your engineering consultant speak with Kevin Brander. If you have other questions or would like to discuss further, please give me a call.
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>
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