April 30, 2021

Whitney McClees
Conservation Agent and Sustainability Coordinator
Town of Fairhaven
40 Center Street
Fairhaven, MA 02719
Via email: wmclees@fairhaven-ma.gov

Subject: Notice of Intent Application
Nye Lubricants Building 3 Expansion Project
12-18 Rio Way

Dear Ms. McClees;

Apex Companies, LLC (Apex) on behalf of its client, Nye Lubricants, Inc., is pleased to provide this Notice of Intent application under the Massachusetts Wetlands Protection Act and the Fairhaven Wetlands Bylaw. This Notice of Intent is filed on behalf of Nye for the improvements being undertaken as part of planned expansion of Building 3. While the proposed building is outside of the resource area buffer zones, there are improvements being undertaken within the Commission's jurisdiction, including parking lot improvements to improve the stormwater management system, and provide an access path to and along the river's edge to comply with the Commonwealth's Chapter 91 regulations. In order to provide the Fairhaven Conservation Commission with a better understanding of the proposed work, we are providing the following documentation:

- Notice of Intent Transmittal Form
- Notice of Intent Form WPA 3
- Two checks to the Town of Fairhaven – 82972 for $437.50 for the Town's share of the filing fee and the advertising fee and 82973 for $2,500.00 for the peer review consultant deposit
- Cover Letter and Project Narrative
- Wetland Resource Area Analysis Report dated February 25, 2021 by LEC Environmental Consultants, Inc.
- Stormwater Management Report and Checklist
- Town of Fairhaven Abutter's List
- Soil Borings
- Figures 1-4 - Showing the project locus with respect to different map layers
- Project Plans entitled Building 3 Expansion Project, dated 4/30/2021

We look forward to meeting with the Commission to discuss the proposed work. In the meantime, should you have any questions, please do not hesitate to contact me at (617) 936-9024.
Sincerely,
Apex Companies, LLC

John B. McAllister, P.E.
Program Manager for Waterways Engineering

C:\Users\jmcallister\OneDrive - Apex Companies, LLC\Nye Lubricants\Building 3 Expansion\Conservation\NOI Cover Letter.docx

Notice of Intent Transmittal Form

Enter your transmittal number → X287759 (Transmittal Number)

Your unique Transmittal Number can be accessed online:
http://www.mass.gov/eea/agencies/massdep/service/approvals/transmittal-form-for-payment.html

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: MassDEP, 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

1. Permit Code: 4 to 7 character code from permit instructions	2. Name of Permit Category
WPA Form 3	BRP

3. Type of Project or Activity: Notice of Intent

B. Applicant Information – Firm or Individual

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

2. **Last Name** of Individual	3. **First Name** of Individual	4. MI
Mock	George	B

5. Street Address: 12 Howland Road

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #
Fairhaven	MA	02719	508-996-6721	

11. Contact Person	12. e-mail address
George Mock	gbm3@nyelubricants.com

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual: Building 3 Expansion Project

2. Street Address: 12-16 Rio Way

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Fairhaven	MA	02719		

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)*

1. Name of Firm Or Individual: Apex Companies, LLC

2. Address: 58H Connecticut Ave

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
South Windsor	CT	06704	617-936-9024	

8. Contact Person	9. LSP Number (BWSC Permits only)
John B. McAllister, P.E.	

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
82971	$237.50	4/29/2021

Notice of Intent Form WPA 3

Enter your transmittal number → X287759 (Transmittal Number)

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

2. **Last Name** of Individual	3. **First Name** of Individual	4. MI
Mock	George	B

5. Street Address: 12 Howland Road

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #
Fairhaven	MA	02719	508-996-6721	

11. Contact Person	12. e-mail address
George Mock	gbm3@nyelubricants.com

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual: Building 3 Expansion Project

2. Street Address: 12-18 Rio Way

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Fairhaven	MA	02719		

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)*

1. Name of Firm Or Individual: Apex Companies, LLC

2. Address: 58H Connecticut Ave

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
South Windsor	CT	06704	617-936-9024	

8. Contact Person	9. LSP Number (BWSC Permits only)
John B. McAllister, P.E.	

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).
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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
82971	$237.50	4/29/2021

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

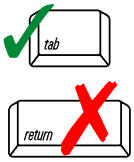
Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Fairhaven
City/Town

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



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

A. General Information

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

12-18 Rio Way (a. Street Address) | Fairhaven (b. City/Town) | 02719 (c. Zip Code)

Latitude and Longitude: 41°39'27.14"N (d. Latitude) | 70°54'46.40"W (e. Longitude)

19 (f. Assessors Map/Plat Number) | Lot 242 (g. Parcel /Lot Number)

2. Applicant:

George (a. First Name) | Mock (b. Last Name)

Nye Lubricants, Inc. (c. Organization)

12 Howland Road (d. Street Address)

Fairhaven (e. City/Town) | MA (f. State) | 02719 (g. Zip Code)

508-996-6721 (h. Phone Number) | (i. Fax Number) | gbm3@nyelubricants.com (j. Email Address)

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

a. First Name | b. Last Name

c. Organization

d. Street Address

e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email address

4. Representative (if any):

John (a. First Name) | McAllister (b. Last Name)

Apex Companies, LLC (c. Company)

58H Connecticut Ave (d. Street Address)

South Windsor (e. City/Town) | MA (f. State) | 06704 (g. Zip Code)

(617) 936-9024 (h. Phone Number) | (i. Fax Number) | jmcallister@apexcos.com (j. Email address)

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

$500 plus Town additional fees (a. Total Fee Paid) | $237.50 (b. State Fee Paid) | $262.20 (c. City/Town Fee Paid)

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Provided by MassDEP:

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A. General Information (continued)

6. General Project Description:

As part of a project to expand Building 3 to the east, Nye is proposing improvements within the resource area buffer zones, including stormwater upgrades and reduction of impervious area and a public access path along the water's edge to comply with Chapter 91 requirements

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

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

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

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

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

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land)
Bristol	
c. Book	**d. Page Number**
13087	300

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

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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

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

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☒ Riverfront Area	Acushnet River (coastal) 1. Name of Waterway (if available) - **specify coastal or inland**	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☒ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 198,000 square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
31,200	30,200	1,000

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

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

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

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Fairhaven
City/Town

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

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

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

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement

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

a. square feet of BVW

b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings

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

Provided by MassDEP:
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Fairhaven
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C. Other Applicable Standards and Requirements

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

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

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

   a. ☐ Yes ☒ No

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

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

   8/1/17
   b. Date of map

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

   c. Submit Supplemental Information for Endangered Species Review*

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

         (a) within wetland Resource Area _____ percentage/acreage

         (b) outside Resource Area _____ percentage/acreage

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

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

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

   (b) ☐ Photographs representative of the site

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

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

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

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing.
a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only b. ☐ Yes ☒ No

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

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

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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

Provided by MassDEP:

MassDEP File Number

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

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

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☒ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☒ A portion of the site constitutes redevelopment

      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☐ No. Check why the project is exempt:

      1. ☐ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

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

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

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

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

Massachusetts Department of Environmental Protection
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D. Additional Information (cont'd)

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

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

Building 3 Expansion Project
a. Plan Title

Apex Companies, LLC
b. Prepared By

John B. McAllister, P.E.
c. Signed and Stamped by

4/30/2021
d. Final Revision Date

As noted
e. Scale

Stormwater Manager Report, Wetland Resource Area Analysis
f. Additional Plan or Document Title

4/30/21
g. Date

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

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

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

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☒ Attach Stormwater Report, if needed.

E. Fees

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

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

82972
2. Municipal Check Number

4/29/21
3. Check date

82971
4. State Check Number

4/29/21
5. Check date

Nye Lubricants Inc.
6. Payor name on check: First Name

7. Payor name on check: Last Name

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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Provided by MassDEP:

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Fairhaven
City/Town

F. Signatures and Submittal Requirements

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

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

1. Signature of Applicant	2. Date: 5/7/2021
3. Signature of Property Owner (if different)	4. Date
5. Signature of Representative (if any)	6. Date: 4/29/21

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

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

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

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

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

A. Applicant Information

1. Location of Project:

12-18 Rio Way	Fairhaven
a. Street Address	b. City/Town
82971	$237.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

George		Mock
a. First Name		b. Last Name
Nye Lubricants, Inc.		
c. Organization		
12 Howland Road		
d. Mailing Address		
Fairhaven	MA	02719
e. City/Town	f. State	g. Zip Code
508-996-6721		gbm3@nyelubricants.com
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

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

B. Fees

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

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

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

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

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

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

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

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

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Pathway/Parking in Riverfront Buffer	1	500	$500

Step 5/Total Project Fee: $500

Step 6/Fee Payments:

Total Project Fee:	$500.00 (a. Total Fee from Step 5)
State share of filing Fee:	$237.50 (b. 1/2 Total Fee **less $**12.50)
City/Town share of filling Fee:	$262.50 (c. 1/2 Total Fee **plus** $12.50)

C. Submittal Requirements

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

Department of Environmental Protection
Box 4062
Boston, MA 02211

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

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

Two checks to the Town of Fairhaven –
82972 for $437.50 for the Town's share of the filing fee and the advertising fee and
82973 for $2,500.00 for the peer review consultant deposit

Town of Fairhaven Abutter's List

12 16 RIO WAY
MAP 19, LOT 242
100 FT ABUTTERS

MAP/LOT	SITE ADDRESS	OWNER ON RECORD	MAILING ADDRESS	CITY/TOWN	STATE	ZIP
17-018	11 HOWLAND RD	MNCL ASSOCIATES LLC	11 HOWLAND ROAD	FAIRHAVEN	MA	02719
17-056	19 21 HOWLAND RD	PNML REAL ESTATE LLC	19 HOWLAND ROAD	FAIRHAVEN	MA	02719
17-057	23 HOWLAND RD	PEREIRA MARTINHO JR	23 HOWLAND ROAD	FAIRHAVEN	MA	02719
17-074	29 HOWLAND RD	RESENDES DINO	9 FORSTER ROAD	ROCHESTER	MA	02770
17-075	31 HOWLAND RD	RESENDES DINO	9 FORSTER ROAD	ROCHESTER	MA	02770
17-093	37 HOWLAND RD	HOWLAND PATRICK	37 HOWLAND ROAD	FAIRHAVEN	MA	02719
17-094	39 HOWLAND RD	MEDEIROS BRETT ANTHONY & MCCORMACK	39 HOWLAND ROAD	FAIRHAVEN	MA	02719
		TABATHA-LYNN				
18-001	43 SYCAMORE STREET	AMARAL GARY A & ELIZABETH B	43 SYCAMORE STREET	FAIRHAVEN	MA	02719
18-002	50 HOWLAND ROAD	MEDEIROS ROBERT & FERNANDA	50 HOWLAND ROAD	FAIRHAVEN	MA	02719
18-121	41 SYCAMORE STREET	SANDERS MICHELLE	41 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-243A	32 HOWLAND ROAD	KING JADE REALTY LLC	C/O NATHAN NG	MILTON	MA	02186
19-243D	72 SYCAMORE ST	SYCAMORE STREET REALTY LLC	583 SOUTH STREET	NEW BRITAIN	CT	06051
19-243G	SYCAMORE ST	BUZZARDS BAY LANDING LLC	583 SOUTH STREET	NEW BRITAIN	CT	06051

12 16 RIO WAY
MAP 19, LOT 242
100 FT ABUTTERS

19-279	71 SYCAMORE ST	GERARD LINDA E	71 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-299	67 SYCAMORE ST	PSICHOPAIDAS NICK G & DEBRA D	67 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-300	65 SYCAMORE STREET	BARNES ETHAN	65 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-301	63 SYCAMORE STREET	GALAVOTTI CHRISTOPHER	63 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-325	59 SYCAMORE STREET	MATHESON LISA	59 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-326	57 SYCAMORE STREET	CORREIA CARLOS M & HARRIET J	57 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-327	55 SYCAMORE STREET	FERNANDES ANTONE K TRUSTEE OF	55 SYCAMORE STREET	FAIRHAVEN	MA	02719
		55 SYCAMORE ST IRREVOCABLE RE TRUST				
19-351	51 SYCAMORE STREET	RODERIQUES ROBERT C & JENNIFER L	15 OLIVER STREET	FAIRHAVEN	MA	02719
19-352	49 SYCAMORE STREET	MASCIANTONIO ANTHONY & ALLAIN TANYA-SUE	49 SYCAMORE STREET	FAIRHAVEN	MA	02719
19-353	47 SYCAMORE STREET	RAPOSA JOSEPH K & MARGARET M	47 SYCAMORE STREET	FAIRHAVEN	MA	02719

Project Narrative

Project Narrative

INTRODUCTION

This Notice of Intent is filed on behalf of Nye Lubricants, Inc. (Nye) for work within resource area buffer zones that will complement the expansion of Building 3 (to be located outside of the resource area buffer zones). The work included in this application includes a reduction of the impervious area within the buffer zone and stormwater management improvements within the Building 3 parking area as well, and construction of a public access path along the river's edge to comply with the Commonwealth of Massachusetts' Chapter 91 regulations. This application is being submitted in accordance with the Massachusetts Wetland Protection Act (M.G.L c131 s.40) and 310 CMR 10.00.

SITE HISTORY

Nye's operations along Howland Road involves two (2) parcels of land, Map 19 Lot 100 and Map 19 Lot 242. The Parcel on which Building 1 is located is Map 19 Lot 100 and Building 3 is located on Map 19 Lot 242, which is where the proposed expansion is set to take place. Nye owns and controls both Lot 100 and Lot 242. The Parcel on which the project is proposed is Map 19, Lot 242 has the address 12-16 Rio Way. That site had previously been a supermarket, however Nye's operations expanded in 1997 to redevelop this parcel and include it in their operations. Since then, Nye has continued to grow and with its recent acquisition by the Fuchs Group, the need to expand operations became apparent.

Founded in 1844, Nye's history is one of continual adaptation to market needs. From the Industrial Revolution to the Information Age, Nye's lubricants have enabled and improved breakthrough products and critical new technologies. The company started out with specialty oils derived fish and whales to lubricate delicate machinery such as watches, clocks and chronometers. Today, Nye formulates, manufactures, markets and sells high-quality synthetic oils, greases, and specialty fluids. Nye works with a broad range of industries, with a concentration in the automotive, aerospace and defense, in-vacuum manufacturing, semiconductor, medical device, appliance, and electronic markets. They also manufacture industrial maintenance lubricants for high temperature and extreme environments.

Nye is a wholly-owned subsidiary of Fuchs Petrolub SE with 180 employees and 28 International Channel Partners on six continents. Their technical sales and support offices serve over 50 countries worldwide. Their existing facilities include R&D and production labs, cleanroom operations, specialty packaging, production lines, and administrative offices. Nye's annual grease production capacity is greater than 3 million pounds. As part of this Building 3 expansion project they are aiming to increase capacity for manufacturing, packaging and warehousing to meet their growing needs.

SITE DESCRIPTION

Nye's operations on the two parcels of land are bounded to the west by the Acushnet River, to the south by Howland Road, to the East by Sycamore Street, and to the north by the Dattco Bus Yard. Building 3 is located at 12-16 Rio Way, which is Nye's access road to its facility off of Howland Road. Rio Way is the drive bounded by Nye's southern employee parking area to the west, and the parking area it leases to the adjacent commercial facility to the east.

With respect to the neighboring uses, Nye is zoned and operates as an industrial facility, as does the Dattco operations to the north. There are commercial facilities located to the southeast, and to the east along Sycamore street is residential.

The site is improved by two buildings containing offices and warehouse space with loading docks, paved parking areas, and a grassy area to the east. There is portion of land to the north of Building 1 and west of Building 3 that is relatively densely forested and does not involve any of Nye's operations.

The topography on the developed site is relatively flat, while there are several mounds in the forested area likely from construction debris and past remedial activities.

PROJECT PURPOSE

The primary goal of the project is to create a 60,000 sf expansion of Building 3 to the east and southeast of the existing building. That building will be used for warehousing, bulk storage and manufacturing. To support the development of that project, there are several improvements being proposed that include:

- Providing public access to and along the river to comply with the Chapter 91 regulations;
- Upgrades and improvements to the Stormwater management system;
- Breaking up some of the asphalt parking area with landscaped areas and stormwater features;

PROPOSED ACTIVITIES

A number of options for the building expansion were reviewed in order to find a plan and layout that optimized the project's goals.

The alternatives reviewed were:

1. The Do-Nothing Alternative – No change to the existing infrastructure and layout is made. This is the baseline comparison purposes
2. A 60,000 sf expansion to the west
3. Two new buildings to the southwest and southeast of building 3 totaling 60,000 sf
4. A 60,000 sf expansion to the east

Alternative No. 1 was not selected as it remains the status quo for Nye's operations and does not allow for the expansion and additional space that they require. Alternative No. 2 encroached closer to the wetland resource areas and impacted more of the Chapter 91 tidelands. Alternative No. 3 created a less efficient use of space for Nye's operations, still placed new infrastructure closer to the resource areas and within the Chapter 91 tidelands, and significantly disrupted on-site traffic circulation. Based upon the analysis conducted, Alternative No. 4 was chosen as it keeps the new infrastructure as far away from the resource areas, allows for efficient expansion of operations and has the least impact on internal traffic circulation.

The main activities being presented as part of this Notice of Intent filing to support the building expansion include the parking area improvements to the south and southwest of the existing Building 3 as well as the creation of a public access path to and along the river's edge to comply with the Chapter 91 regulations.

The parking area improvements are relatively straightforward and involve saw-cutting trenches within the existing paved area to allow for excavation of soils and replacement with an engineered soil mix, perforated underdrain pipe and landscaping plantings. These landscaped strips will break up the paved parking area and provide some stormwater treatment and conveyance.

The public access pathway along the river's edge is a requirement of the Chapter 91 program. The path will be 10 feet wide and relatively flat, with an average slope of 1 ft in 20 ft. The path will be constructed with an underlain geotextile fabric, backfilled with angular crushed stone within a reinforced grid, and covered with sand for the wearing surface.

While most of the work involving the stormwater management system lie outside of the Riverfront area and wetland resource buffer area, there will be marked stormwater management improvements as part of this project which will benefit the resource areas. Currently there is no on-site stormwater quality treatment, only conveyance. The proposed program will provide water quality treatment of the parking area runoff, promote infiltration, and break up the larger tributary areas to reduced peak flows and volumes. More information on that is provided in the stormwater management report.

With respect to the landscaping improvements being proposed, most of specified plant material is native to New England and all is appropriate to the coastal environment of Fairhaven. The selected plant species have characteristics of higher tolerance of soil and airborne salts to make them better adapted to the environment they are being planted. The variable plant species were selected for their attributes to create bio-diversity and vegetative screening in the buffer area between the proposed building and Sycamore Street. A no-mow grass was selected between the new building and the vegetative screening buffer on Sycamore Street as an alternative to the traditional high-resource lawn. No trees will be planted within 5' of proposed underground utility centerline to allow future repair or replacement access to underground utilities with minimal impact to plant materials. No trees will be planted in bio-engineering locations with sub-surface drainage infrastructure (that connects to the existing stormwater system) to prevent impact to and future access to drainage system, however they will be planted in the bio-engineering locations without sub-surface lines to help in surface stormwater management. And non-woody plant material was specified for bio-retention areas within the reconfigured parking area due to expected snow loading.

CONSTRUCTION ACTIVITIES

Equipment and Materials will most likely be mobilized to the site set up in a staging area located upland of the resource areas and to the south of the proposed Building 3 expansion footprint. Erosion controls around the construction area will include silt fence and straw wattles along the perimeter of the work area. Super silt fences will be installed around stockpiles. Daily operations will include maintenance of erosion control devices in the location surrounding the work zone. Refueling and maintenance operations will occur within the staging area, as well as equipment and material storage, with proper spill controls in place.

Asphalt will be removed by being sawcut and properly disposed of. Once the asphalt has been removed, backfill material will be imported to meet the design characteristics to support the landscaping goals. Stockpiling of excavated soils will be performed within the staging area and the materials will be

surrounded by a super silt fence. Any stockpiles left uncovered and untouched for more than 14 days will be seeded with an erosion control mix.

As the project will disturb more than one acre of land, the project will obtain a Construction General Permit under the EPA NPDES program and will have a Stormwater Pollution Prevention Plan prepared documenting the measures and actions taken to prevent resource impact and erosion and sedimentation, which will also comply with the Town's stormwater bylaw.

WETLAND RESOURCES

See attached report from LEC Environmental, Inc. regarding the wetland resource conditions.

Wetland Resource Area Analysis Report dated February 25, 2021
by LEC Environmental Consultants, Inc.

February 25, 2021

Email [John.McAllister@ApexCos.com]

Mr. John McAllister
Apex Companies, LLC
1213 Purchase Street, Suite 208
New Bedford, MA 02740

Re: Wetland Resource Area Analysis Report
10 Howland Road and 12-16 Rio Way
(Map 19, Lots 100 & 242)
Fairhaven, Massachusetts

[LEC File #: ACLLC\20-482.01]

Dear Mr. McAllister:

As requested, LEC Environmental Consultants, Inc., (LEC) conducted a site evaluation and Wetland Resource Area Analysis at the above-referenced site in Fairhaven, Massachusetts. The purpose of the evaluation was to determine Wetland Resource Area boundaries within the two parcels ("the site"). The January 18, 2021 site evaluation was conducted in accordance with the *Massachusetts Wetlands Protection Act* ("*Act*"; M.G.L. c. 131, s. 40) and its implementing *Regulations* (310 CMR 10.00). The location of delineated Wetland Resource Areas is depicted on the *Draft Existing Conditions Plans*, prepared by Farland Corp., dated January 8, 2021 (under separate cover).

The following report provides a general site description, wetland delineation methodology, a description of the Wetland Resource Areas, and potential regulatory implications.

General Site Description

The site is comprised of two parcels (Map 19, Lots 100 & 242) located immediately north of Howland Road and west of Sycamore Street in a dense residential and industrial section of northwestern Fairhaven, Massachusetts (Attachment A, Figures 1 & 2). The site is bordered by residential and commercial development on Howland Road and Sycamore Street to the north, east and south, and the Acushnet River abuts the site to the west/northwest. The site is accessible from Howland Road via a paved entrance.


Figure 1: northwest view of remediation area.

The site is improved by two buildings containing offices and warehouse space with loading docks, paved parking areas, and a

rectangular manicured lawn area to the east of the building and parking areas. Lawn area is also located within fringing uplands along the Acushnet River and immediately adjacent to the southwestern building on the 10 Howland Road parcel. The western portion of the site immediately north of the southwestern building contains an approximately 65,000-square foot forested area that has become established in a previously disturbed landscape associated with past remediation activities (Figure 1). The western portion of the property also contains a gravel area with picnic tables encompassed by evergreen shrubs and trees.

The western property boundary extends along the tidally influenced Acushnet River coastline and contains coastal Wetland Resource Areas including Coastal Bank, Coastal Beach, and Salt Marsh. A 36-inch diameter metal pipe with a tide gate is present at the southwestern most portion of the site within a concrete headwall and appears to discharge stormwater from upgradient catch basins on-site and within Howland Road (Figure 2).

Figure 2: East view of the metal pipe and tide-gate with riprap.

Topography is flat throughout the developed portion of the site and undulates within the forested remediation area. Topography along the Acushnet River coastline is gently sloping in some areas and abrupt in others where steeply sloped riprap revetments are present.

Vegetation observed within the forested upland (remediation area) includes a canopy layer of honey locust (*Gleditsia triacanthos*), black cherry (*Prunus serotina*), white oak (*Quercus alba*), and Norway maple (*Acer platanoides*). The understory includes saplings from the canopy layer and sweet pepperbush (*Clethra alnifolia*), Russian olive (*Elaeagnus angustifolia*), tartarian honeysuckle (*Lonicera tatarica*), and multiflora rose (*rosa multiflora*). Patches of Japanese knotweed (*Fallopia japonica*) are present throughout. The observed groundcover layer is sparse and includes poison ivy and seedlings from the overstory. Dense entanglements of multiflora rose, Asiatic bittersweet (*Celastrus orbiculatus*), and poison ivy (*Toxicodendron radicans*) are common within the remediation area and along the edge of the Wetland Resource Area boundaries.

Natural Heritage and Endangered Species Program Designation

According to the 14th Edition of the *Massachusetts Natural Heritage Atlas* (effective August 1, 2017) published by the Natural Heritage & Endangered Species Program (NHESP), the site is not within *Estimated Habitat of Rare Wildlife* and/or *Priority Habitat of Rare Species.* No Certified Vernal Pools (CVP) or Potential Vernal Pools (PVP) are mapped on-site. (Attachment A, Figure 2).

According to the BioMap2 Core Habitats and Critical Natural Landscapes interactive mapping program, the western limits of the site are mapped within an Aquatic Core Habitat (ID: 298) and an Upland Buffer of Aquatic Core Critical Natural Landscape (ID: 192) (Attachment A, Figure 3).

Floodplain Designation

According to the July 16, 2014 FEMA Flood Insurance Rate Map (FEMA FIRM) for Town of Fairhaven (*Community Panel 25005 C 0391G*), the western portion of the site is mapped within a Zone AE (el. 6) – *Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood* and the remainder of the site is mapped within a Zone X (shaded) – *Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood* (Attachment A, Figure 4).

Wetland Resource Areas

On January 18, 2021, LEC conducted a site evaluation to identify and characterize existing protectable Wetland Resource Areas located on or adjacent to the site. The Wetland Resource Areas associated with the site includes Salt Marsh, Coastal Beach, Coastal Bank, and Land Subject to Coastal Storm Flowage (LSCSF). A brief description of the Wetland Resource Areas is provided below.

Salt Marsh

Salt Marsh is defined at 310 CMR 10.32(2) as *a coastal wetland that extends landward up to the highest high tide line, that is, the highest spring tide of the year, and is characterized by plants that are well adapted to or prefer living in, saline soils. Dominant plants within salt marshes typically include salt meadow cord grass (Spartina patens) and/or salt marsh cord grass (Spartina alterniflora), but may also include, without limitation, spike grass (Distichlis spicata), high-tide bush (Iva frutescens), black grass (Juncus gerardii), and common reedgrass (Phragmites). A salt marsh may contain tidal creeks, ditches and pools.*

Figure 3: North view of Salt Marsh (left), Coastal Beach (center), and riprap Coastal Bank (foreground) proximate to wetland flags 18-26.

Salt Marsh is present in segments of the western portion of the site where vegetation extends to the landward most boundary between wetland flags 4-7 and 13-21 (Figure 3). The Salt Marsh is dominated by salt meadow cordgrass (*Spartina patens*) with scattered individuals of sea lavender (*Limonium nashi*). Shrubs including marsh elder (*Iva frutescens*) and bayberry (*Morella pennsylvanica*) are more common along the Salt Marsh boundary. The segment of Salt Marsh present between wetland flags 4 and 7 is dominated by a monoculture of common reed (*Phragmites australis*).

Coastal Beach

Coastal Beach is defined at 310 CMR 10.27(2) as *unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats. Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing human-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.*

Figure 4: East view of Acushnet River coastline proximate to wetland flags 1-6.

Coastal Beach is present within segments between the Salt Marsh on the western portion of the site. The beach contains areas dominated by fine sands (wetland flags 21-26) and cobbles (flags 1-4 and 7-12). A culvert is present at wetland flag 26 and appears to direct stormwater from developed portions of the site into the Acushnet River. Common reed stalks and significant amounts of litter and debris are present in the wrack near wetland flags 1-13 (Figure 4).

Coastal Bank

Coastal Bank is defined at 310 CMR 10.30 as *the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland.*

Coastal Bank extends along the top of the riprap revetments at the edge of lawn area (south of wetland flag 26) or paved parking areas (north of wetland flag 1).

The limits of the Coastal Bank have been determined by Apex Companies, LLC in accordance with the DEP *Wetland Protection Program Policy (DWW Policy 92-1): Coastal Banks: Definition and Delineation Criteria for Coastal Bank.*

Land Subject to Coastal Storm Flowage (LSCSF)

Land Subject to Coastal Storm Flowage (LSCSF) is defined at 310 CMR 10.04 as *land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater.*

As previously noted, according to the July 16, 2014 FEMA Flood Insurance Rate Map (FEMA FIRM) for the Town of Fairhaven (*Community Panel 25005 C 0391G*), the western portion of the site is mapped within a Zone AE (el. 6) – *Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood* and the remainder of the site is mapped within a Zone X (shaded) – *Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood* (Attachment A,

Figure 4). As a result, the western portion of the site mapped within the Zone AE is located within LSCSF.

Summary

LEC identified and delineated the boundaries of Salt Marsh and Coastal Beach at 10 Howland Road and 12-16 Rio Way in Fairhaven, Massachusetts. Coastal Bank and LSCSF are also present on-site. The aforementioned Wetland Resource Areas are protected under the *Act* and its implementing *Regulations*. Should proposed work activities occur within any of the Wetland Resource Areas and/or the 100-foot Buffer Zone, a filing with the Fairhaven Conservation Commission and the Massachusetts Department of Environmental Protection (MassDEP) will be required. Should any work be proposed within the aforementioned Wetland Resource Areas, additional environmental permitting may be required.

We appreciate the opportunity to provide you with this Wetland Resource Area Analysis Report. If you should have any questions or require additional information, please do not hesitate to contact us at (508) 746-9491.

Sincerely,

LEC Environmental Consultants, Inc.

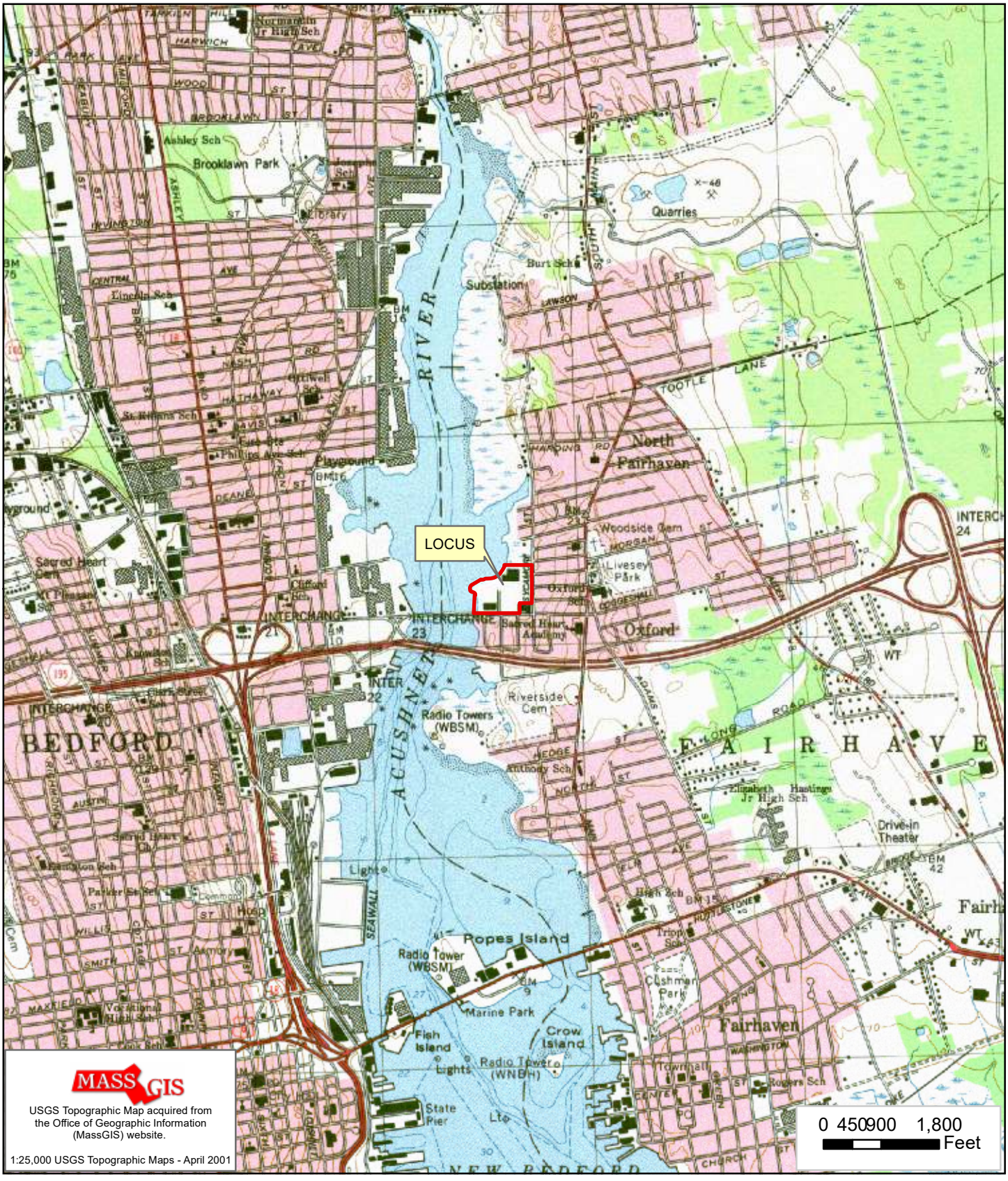
Claire Hoogeboom
Wetland Scientist

Mark Manganello
Assistant Director of Ecological Services

Attachments

Attachment A

Locus Maps
Figure 1: USGS Topographic Map
Figure 2: Aerial Orthophoto Map
Figure 3: BioMap 2
Figure 4: FEMA Flood Insurance Rate Map



MASS GIS

USGS Topographic Map acquired from the Office of Geographic Information (MassGIS) website.

1:25,000 USGS Topographic Maps - April 2001

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 1: USGS Topographic Map

10 Howland Road & 12-16 Rio Way
Fairhaven, Massachusetts

N

February 10, 2021

LEC Environmental Consultants, Inc.
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 2: Aerial Orthophoto Map

10 Howland Road & 12-16 Rio Way
Fairhaven, Massachusetts

N

February 10, 2021

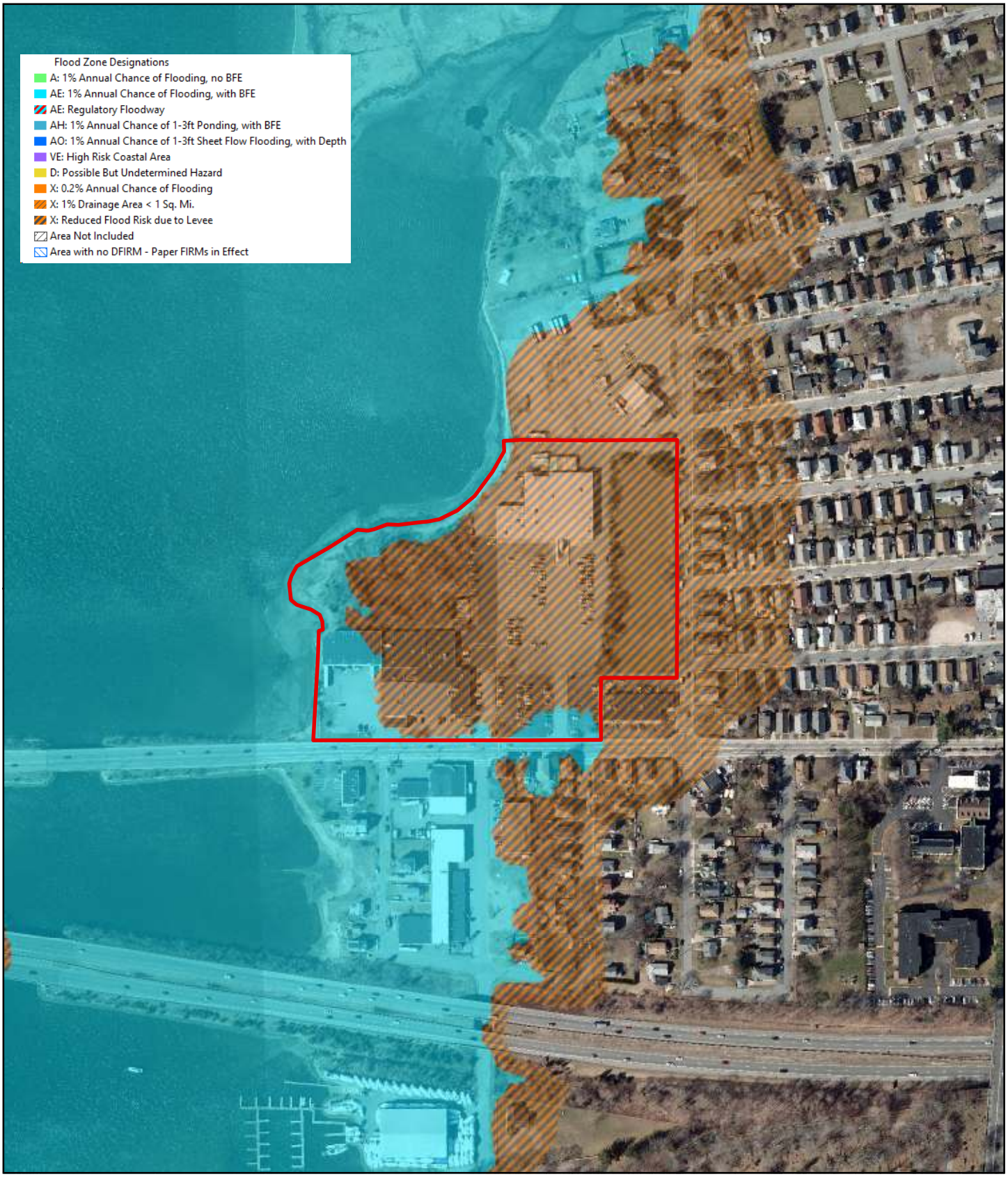
LEC Environmental Consultants, Inc.
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 3: BioMap2

10 Howland Road &12-16 Rio Way
Fairhaven, Massachusetts

N

February 10, 2021



LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 4: FEMA Flood Insurance Rate Map

10 Howland Road & 12-16 Rio Way
Fairhaven, Massachusetts

N

February 10, 2021

Stormwater Management Report and Checklist

Soil Borings

APPENDIX B

TEST BORING LOGS

Taken from report entitled:
Geotechnical Engineering Report for the Proposed Nye Lubricants Building Addition
Prepared by Paul Aldinger & Associates, Inc.
101 Commercial Way
East Providence, RI
February 2007

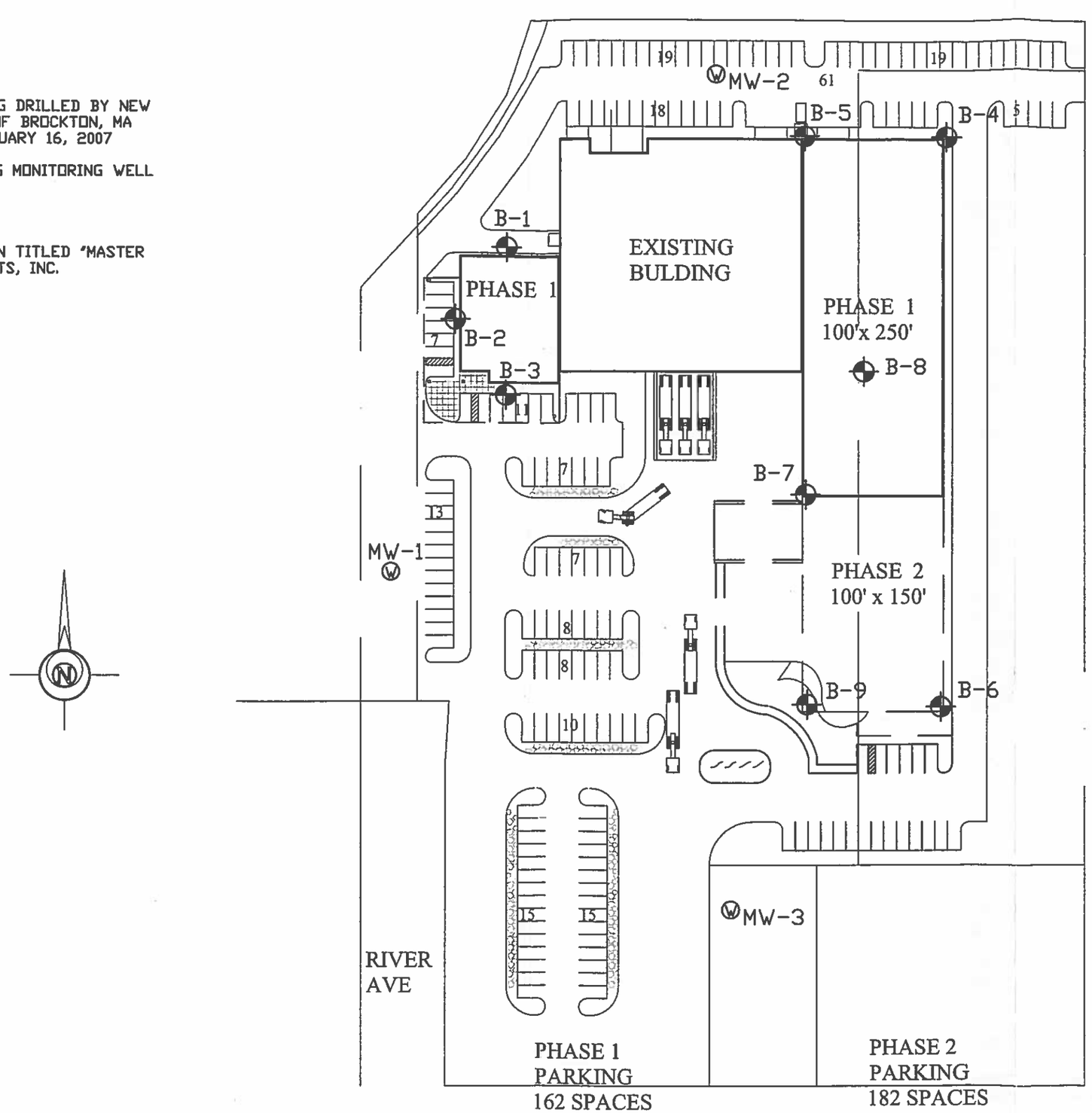
LEGEND:

B-1 ⊕ LOCATION OF TEST BORING DRILLED BY NEW HAMPSHIRE BORING, INC. OF BROCKTON, MA FROM JANUARY 10 TO JANUARY 16, 2007

MW-1 Ⓦ LOCATION OF AN EXISTING MONITORING WELL

NOTES:

DEVELOPED FROM AN UNDATED PLAN TITLED "MASTER PLAN" PROVIDED BY NYE LUBRICANTS, INC.



Paul B. Aldinger
&
Associates, Inc.
Geotechnical/Structural
Engineering and Geohydrology

101 Commercial Way
East Providence, RI 02914

Phone: (401) 435-5570 Fax: (401) 435-5569

NYE LUBRICANTS
BUILDING ADDITIONS
FAIRHAVEN, MA

NYE LUBRICANTS, INC.

SUBSURFACE
EXPLORATION PLAN

PROJ. NO.: 06173 DRAWN BY:
DATE: 1/17/07 DESIGNED BY:
SCALE: 1"=80' CHECKED BY:

Figure No. 3

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-1 SHEET 1 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/10/2007 DATE END 1/11/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/11/2007		6'	Out	Upon Completion

DEPTH	CASING BLOWS	SAMPLE NO.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMARKS	STRATUM DESCRIPTION
0		S1	24/12	0.5 - 2.5	15-20	Dense, brown, FINE TO COARSE SAND, little gravel,		4" ASPHALT
					18-14	trace to little silt, trace cobbles.		
						(FILL)		
		S2	24/12	4 - 6	10-10	Medium dense, brown-gray, FINE TO MEDIUM SAND,		
5					8-8	little silt, trace gravel. (FILL)		
		S3	24/10	9 - 11	20-20	Dense, brown-gray, FINE TO MEDIUM SAND, little silt,		
					18-16	trace gravel. (FILL)		10.2'
10						(trace roots @ 10.2') (Fill)		
		S4	24/5	14 - 16	9-12			14'
					12-15	Black, ORGANIC SILT, trace gravel and coarse sand.		15'
15						(Slight fuel odor)		
						Gray, FINE TO COARSE SAND AND GRAVEL.		
		S5	24/12	19 - 21	47-17	Dense, brown-gray, FINE SAND, some silt, trace		
					14-14	cobbles. (Glacial Outwash)		
20								
		S6	24/5	24 - 26	7-13	Medium dense, brown-gray, FINE SAND AND SILT,		
					10-6	trace coarse sand. (Glacial Outwash)		
25								
		S7	24/10	29 - 31	4-3	Loose, brown, FINE TO MEDIUM SAND, little silt.		
					4-3	(Glacial Outwash)		
30								

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-1

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-1 SHEET 2 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN./ REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
35			S8	24/18	34 - 36	3-6	Medium dense, brown, FINE SAND, some silt.		
						4-5	(Glacial Outwash)		
									38'
			S9	24/16	39 - 41	32-75	Very dense, gray-brown, FINE TO MEDIUM SAND,		
40						37-31	little silt and gravel, trace cobbles. (Glacial Till)		
									41'
							Bottom of Boring @ 41'		
45									
50									
55									
60									
65									
70									
75									

REMARKS:

BORING No B-1

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-2 SHEET 1 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/10/2007 DATE END 1/10/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

CASING SIZE: HW 4" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/10/2007		5'	Out	Upon Completion

DEPTH	CASING BLOWS	SAMPLE NO.	SAMPLE PEN./REC	SAMPLE DEPTH (FL)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0		S1	24/12	0.5 - 2.5	17-13	Dense, brown, FINE TO COARSE SAND, little gravel,		3" ASPHALT
					20-19	trace silt and cobbles.		
						(FILL)		
		S2	24/10	4 - 6	18-46	Very dense, brown, FINE TO COARSE SAND, some		
					37-44	gravel, trace to little silt.		
5						(FILL)		
								8'
		S3	24/8	9 - 11	48-27	Very dense, brown-gray, FINE TO MEDIUM SAND, little		
					32-30	silt and gravel, trace cobbles. (Probable Fill)		
10								
		S4	24/8	14 - 16	32-18	Medium dense, gray, FINE TO COARSE SAND, some		
					9-14	gravel, trace silt and cobbles. (Seam of Black		
15						Silt)		
		S5	24/10	19 - 21	7-7	Medium dense, gray, FINE TO COARSE SAND, trace		
					8-10	gravel and silt. (Glacial Outwash)		
20								
		S6	24/8	24 - 26	6-6	Medium dense, gray, FINE TO COARSE SAND, trace		
					8-7	gravel and silt. (Glacial Outwash)		
25								
		S7	24/4	29 - 31	6-7	Medium dense, gray, GRAVEL AND FINE TO COARSE		
					5-7	SAND. (Glacial Outwash)		
30								

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-2

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-2 SHEET 2 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
35			S8	24/9	34 - 36	9-23 13-14	Dense, brown, FINE TO COARSE SAND AND GRAVEL, trace silt. (Outwash)		38'
40			S9	24/8	39 - 41	8-15 6-12	Medium dense, brown, FINE TO MEDIUM SAND, little gravel and silt, trace coarse sand. (outwash)		
45			S10	24/12	44 - 46	27-10 15-21	Medium dense, brown, FINE TO MEDIUM SAND, little gravel, trace silt and coarse sand. (outwash)		47'
50			S11	24/12	49 - 51	28-71 76-82	Very dense, brown-gray, FINE TO MEDIUM SAND, little silt and gravel, trace coarse sand. (Glacial Till)		51'
55							Bottom of Boring @ 51'		
60									
65									
70									
75									

REMARKS:

BORING No B-2

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-3 SHEET 1 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/11/2007 DATE END 1/12/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/12/2007		5'	Out	Upon Completion

DEPTH	CASING BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0		S1	24/10	0.5 - 2.5	9-8	Medium dense, brown, FINE TO COARSE SAND, little gravel, trace silt and cobbles. (FILL)		3" ASPHALT
					15-12			
		S2	24/14	4 - 6	28-18	Dense, brown, FINE TO MEDIUM SAND, little silt, trace gravel. (FILL)		
5					13-23			8'
		S3	24/2	9 - 11	19-21	Very dense, brown-gray, FINE TO COARSE SAND, some gravel, trace cobbles. (Probable Fill)		
					32-27			
10		S4	24/10	14 - 16	20-37	Very dense, gray-brown, FINE TO COARSE SAND, little to some gravel, trace to little silt, trace cobbles. (Slight fuel odor) - Seam of Black Silt in Sample		
					22-16			
15								
		S5	24/18	19 - 21	17-23	Dense, gray-brown, FINE TO MEDIUM SAND, and silt, trace gravel. (Outwash)		
					25-24			
20		S6	24/6	24 - 26	22-60	Very dense, gray-brown, FINE TO MEDIUM SAND, some gravel, trace silt and cobbles. (Outwash)		28'
					45-24			
25		S7	24/12	29 - 31	6-9	Medium dense, brown, FINE SAND, little silt. (Outwash)		
					6-7			
30								

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-3

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-3 SHEET 2 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
35			S8	24/10	34 - 36	3-7	Medium dense, brown, FINE TO COARSE SAND,		
						8-9	trace silt. (Outwash)		
			S9	24/14	39 - 41	6-6	Medium dense, brown-orange, FINE TO MEDIUM		
40						10-10	SAND, trace gravel. (Outwash)		
			S10	24/16	44 - 46	4-15	Brown, FINE SAND AND SILT.		44.5
45						16-21	Brown, FINE TO COARSE SAND AND GRAVEL.		45'
							Dense, brown, FINE TO MEDIUM SAND, little silt,		
							trace to little gravel. (Glacial Till)		
			S11	24/14	49 - 51	27-33	Very dense, brown, FINE TO MEDIUM SAND, little to		
50						39-61	some silt, trace gravel, weathered rock, and cobbles.		
							(Glacial Till)		
			S12	24/12	54 - 56	29-39	Very dense, brown, FINE TO MEDIUM SAND, some		
55						52-61	silt, trace gravel and weathered rock.		
							(Glacial Till)		56'
							Bottom of Boring @ 56'		
60									
65									
70									
75									

REMARKS:

BORING No B-3

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-4 SHEET 1 OF 1 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/15/2007 DATE END 1/15/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/15/2007		5'	Out	Upon Completion

DEPTH	CASING BLOWS	SAMPLE NO.	PEN./REC	DEPTH (FL)	BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0		S1	24/12	0 - 2	4-10	Gray, FINE TO MEDIUM SAND, trace gravel and silt.		3" GRASS/TOPSOIL
					23-15			0.7'
						Dense, brown, FINE TO MEDIUM SAND, little silt, trace gravel and coarse sand. (FILL)		4.5'
5		S2	24/20	4 - 6	7-9	Medium dense, light brown, FINE TO MEDIUM SAND,		
					9-8	trace to little silt, trace gravel. (FILL)		7'
		S3	24/16	9 - 11	39-44	Very dense, brown, FINE TO COARSE SAND, little		
10					40-40	gravel and silt. (Glacial Till)		
		S4	24/10	14 - 16	45-75	Very dense, brown, FINE TO MEDIUM SAND, little to		
15					41-25	some gravel, little silt, trace cobbles. (Glacial Till)		
		S5	24/10	19 - 21	43-83	Very dense, brown, FINE TO MEDIUM SAND, some		
20					76-61	gravel, little silt, trace cobbles. (Glacial Till)		21.5'
						BOULDER		23.5'
		S6	2/1	24 - 26	100/2"	Very dense, brown-gray, FINE TO MEDIUM SAND, little		
25						gravel and silt. (Glacial Till)		26'
						Bottom of Boring @ 26'		
30								

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS: Spoon refusal @ 24.2' - Probable boulder/bedrock.
Roller bit down to 26'

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-4

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-5 SHEET 1 OF 1 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/12/2007 DATE END 1/12/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/12/2007		5'	Out	Upon Completion

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0			S1	24/14	0.5 - 2.5	10-7	Medium dense, brown, FINE TO MEDIUM SAND, little		3" ASPHALT
						6-6	silt, trace gravel. (FILL)		
			S2	24/12	4 - 6	10-8	Medium dense, brown, FINE TO MEDIUM SAND, little		
5						9-14	silt, trace gravel and coarse sand. (FILL)		
									8'
			S3	24/4	9 - 11	12-6	Medium dense, brown, FINE TO COARSE SAND, little		
10						7-11	gravel, trace cobbles.		13'
			S4	24/10	14 - 16	14-25	Very dense, gray, FINE SAND, trace to little silt, trace		
15						36-31	coarse sand. (Glacial Outwash)		
			S5	24/10	19 - 21	5-9	Medium dense, gray, FINE SAND, little silt.		
20						10-10	(Glacial Outwash		23'
			S6	24/12	24 - 26	14-23	Dense, brown, FINE TO MEDIUM SAND, little gravel and		
25						18-19	silt. (Glacial Till)		
			S7	24/10	29 - 31	15-15	Medium dense, brown, FINE TO MEDIUM SAND, little		
30						9-15	silt and gravel, trace cobbles. (Glacial Till)		31.5'
							Refusal - Probable boulder/bedrock.		33.5
							Bottom of Boring@ 33.5'		

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-5

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-6 SHEET 1 OF 1 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/15/2007 DATE END 1/15/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/15/2007		5'	Out	Upon Completion

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0			S1	24/16	0 - 2	3-4	Loose, gray, FINE TO MEDIUM SAND, trace silt.		0.5' TOPSOIL
						5-6	(FILL)		
									3'
			S2	24/14	4 - 6	11-25	Dark brown, FINE TO MEDIUM SAND, some gravel, little		
			S2A			9-4	silt, trace glass and brick. (FILL)		4.5'
5							Brown, FINE TO MEDIUM SAND, little gravel and silt. (Fill)		
							9'		9.0'
			S3	24/6	9 - 11	30-52	Very dense, brown, FINE TO MEDIUM SAND, little		
						33-23	gravel and silt, trace cobbles. (outwash)		
10									
			S4	24/16	14 - 16	10-12	Medium dense, brown, FINE TO MEDIUM SAND, trace		
						13-17	gravel and silt. (Outwash)		15.6'
15							Brown-orange, FINE TO COARSE SAND, little gravel. (Outwash)		17'
			S5	24/12	19 - 21	19-21	Dense, brown, FINE TO MEDIUM SAND, little to some		
						21-58	gravel, little silt. (Glacial Till)		
20									21.5'
							BOULDER		22.5'
			S6	3/2	24 - 24.3	100/3"	Very dense, gray, FINE TO MEDIUM SAND AND		
25							GRAVEL. (Glacial Till)		26'
							Bottom of Boring @ 26'		
30									

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS: Spoon Refusal @ 24.3' - Probable boulder/bedrock.
Roller bit down to 26'

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-6

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-7 SHEET 1 OF 1 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/12/2007 DATE END 1/12/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN/REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0			S1	24/16	0.5 - 2.5	15-16	Dense, brown, FINE TO COARSE SAND, little gravel,		3" ASPHALT
						18-40	trace silt and cobbles. (FILL)		
									3'
							Bottom of Boring @ 3'		
5									
10									
15									
20									
25									
30									

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS: Encountered casing refusal @ 3' - Probable rubber from miscellaneous fill.
Stopped boring @ 3' and moved Drill Rig to a different boring location.

Note: Drill Rig broke down at the end of the day. Relocated to a different hole with a new Drill Rig.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-7

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-8 SHEET 1 OF 1 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/16/2007 DATE END 1/16/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/16/2007		5'	Out	Upon Completion

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0			S1	24/16	0 - 2	1-11	Gray, FINE TO MEDIUM SAND, trace silt. (FILL)		1' 0.5' TOPSOIL
						40-29	Brown, FINE TO COARSE SAND, little gravel, trace silt		
							and cobbles. (FILL)		3'
			S2	24/14	4 - 6	2-3	Brown, FINE TO MEDIUM SAND, little gravel and silt,		
			S2A			3-4	trace glass and wood. (FILL)		5'
5			S3	24/8	6 - 8	4-7	Black, ORGANIC SILT AND PEAT, trace fibers.		
						5-3			8'
							Brown, FINE TO MEDIUM SAND, little silt.		
			S4	24/14	9 - 11	12-32	Very dense, brown, FINE TO MEDIUM SAND, little		
						45-42	gravel, trace to little silt. (Glacial Outwash)		
10									
			S5	24/8	14 - 16	13-79	Very dense, brown, FINE TO MEDIUM SAND, some silt,		
						30-20	trace gravel and cobbles. (Glacial Outwash)		
15									
									19'
			S6	24/12	19 - 21	27-22	Dense, brown, FINE TO MEDIUM SAND, little gravel and		
						16-20	silt, trace coarse sand. (Glacial Till)		
20									
			S7	3/0	24 - 26	100/3"	No Recovery.		
									25.5'
25							Bottom of Boring @ 25.5'		
30									

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS: Spoon Refusal @ 24.3' - No Recovery.
Probable boulder/bedrock.
Roller bit down to 25.5'

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-8

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-9 SHEET 1 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DRILLER: D. Dunklee
HELPER:
INSPECTOR: P. Baganha

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
DATE START 1/16/2007 DATE END 1/16/2007

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

CASING SIZE: NW 3" OTHER:

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
1/16/2007		5'	Out	Upon Completion

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./REC	DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
0			S1	24/6	0.5 - 2.5	12-12	Medium dense, brown, FINE TO COARSE SAND, little		3" ASPHALT
						7-9	gravel, trace silt and cobbles. (FILL)		
									3'
			S2	24/8	4 - 6	7-4	Loose, dark brown-black, FINE TO MEDIUM SAND, little		
						4-6	gravel, trace silt, cinders, ash, and tile. (FILL)		
5			S3	24/12	6 - 8	5-7	Medium dense, dark brown, FINE TO COARSE SAND,		
			S3A			9-4	trace gravel, cinders, ash, and brick. (FILL)		7.5'
							Brown-gray, FINE TO MEDIUM SAND, little silt, trace		
							gravel. (Fill)		9'
			S4	24/4	9 - 11	7-3	Loose, brown, FINE TO MEDIUM SAND, little gravel and		
10						4-4	silt, trace cobbles and roots. (Fill)		
			S5	24/18	14 - 16	7-3	Brown, FINE TO MEDIUM SAND, little silt, trace gravel		
			S5A			5-13	and fibrous (Slight odor)		15'
15							Gray, FINE TO MEDIUM SAND, little silt, trace gravel.		
							(Outwash)		
			S6	24/10	19 - 21	28-18	Dense, brown, FINE TO COARSE SAND, trace silt and		
						15-14	gravel. (Outwash)		
20									
			S7	24/8	24 - 26	12-19	Dense, brown, FINE TO COARSE SAND, trace silt and		
						17-20	cobbles. (Outwash)		
25									
									28'
			S8	24/14	29 - 31	35-38	Very dense, brown-gray, FINE TO MEDIUM SAND, some		
						61-55	gravel, little silt, trace cobbles. (Glacial Till)		
30									

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFt
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

REMARKS:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR I DUE TC OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

NEW HAMPSHIRE BORING, INC. 1215 West Chestnut Street Brockton, MA 02301	PROJECT Nye Lubricatns Fairhaven, MA Paul B. Aldinger & Associates, Inc.	REPORT OF BORING No. B-9 SHEET 2 OF 2 FILE No. 10381 CHKD. BY N. Pranskus

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN/REC	SAMPLE DEPTH (FT.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION	REMKS	STRATUM DESCRIPTION
			S9	16/14	34 - 35.4	29-32	Very dense, gray, FINE TO MEDIUM SAND, some		
						100/4"	gravel, little silt, trace cobbles. (Glacial Till)		35.4'
35							Bottom of Boring @ 35.4'		
40									
45									
50									
55									
60									
65									
70									
75									

REMARKS: Spoon Refusal @ 35.4' - Probable boulder/bedrock.

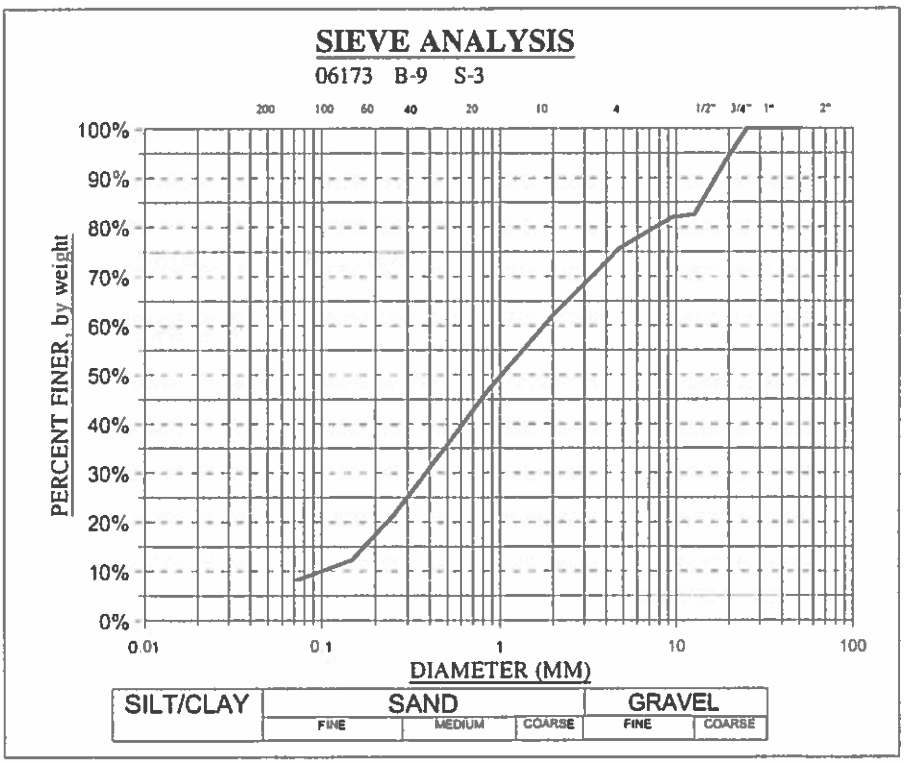
BORING No B-9

SIEVE ANALYSIS

DESCRIPTION: Fine to coarse SAND, some Gravel, trace Silt		PROJ:	NYE Lubricants
		LOCATION:	Fairhaven, MA
		JOB #:	06173
Sample Location		DATE:	01/18/07
		CONTAINER #:	53
USCS:	SP-SM	CONT.+ WET SOIL:	345.25
BORING NO.:	B-9	CONT.+ DRY SOIL:	294.77
DEPTH:	6'-8'	WGT WATER:	50.48
SAMPLE #:	S-3	CONT WGT:	84.57
WASH SIEVE	yes	DRY SOIL:	210.20
		% MOIST:	24.02

SIEVE	OPENING (MM)	WEIGHT RETAINED	ACCUM. RETAINED	% RETAINED	TOTAL % FINER/WGT
2"	50.800	0.00	0.00	0.0%	100.0%
1 ½"	37.500	0.00	0.00	0.0%	100.0%
1"	25.400	0.00	0.00	0.0%	100.0%
3/4"	19.100	13.90	13.90	6.6%	93.4%
1/2"	12.700	22.81	36.71	17.5%	82.5%
3/8"	9.525	0.99	37.70	17.9%	82.1%
4	4.750	14.41	51.12	24.3%	75.7%
10	2.000	28.58	79.70	37.9%	62.1%
20	0.840	32.89	112.59	53.6%	46.4%
40	0.420	30.24	142.83	67.9%	32.1%
60	0.250	22.69	165.52	78.7%	21.3%
100	0.149	18.76	184.28	87.7%	12.3%
200	0.074	8.46	192.74	91.7%	8.3%
Pan	0.000	17.46	210.20	100.0%	0.0%
TOTAL DRY WT.			210.20		

	% GRAVEL	% SAND	% SILT & CLAY
TOTAL	24.3%	67.4%	8.3%
COARSE	0.0%	13.6%	
MEDIUM		30.0%	
FINE	24.3%	23.7%	



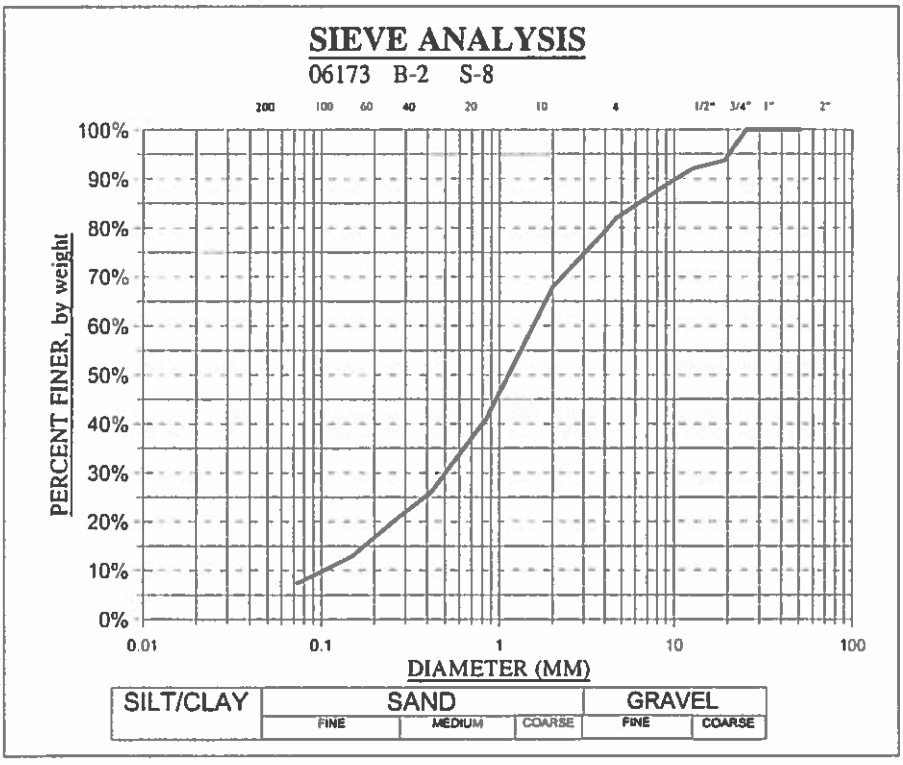
QPRO FILE 06173.B-9.S-3.gs

SIEVE ANALYSIS

DESCRIPTION: Fine to coarse SAND, little Gravel, trace Silt		PROJ:	NYE Lubricants
		LOCATION:	Fairhaven, MA
		JOB #:	06173
Sample Location		DATE:	01/18/07
		CONTAINER #:	102
USCS:	SW-SM	CONT.+ WET SOIL:	410.51
BORING NO.:	B-2	CONT.+ DRY SOIL:	376.45
DEPTH:	34'-36'	WGT WATER:	34.06
SAMPLE #:	S-8	CONT WGT:	108.23
WASH SIEVE	yes	DRY SOIL:	268.22
		% MOIST:	12.70

SIEVE	OPENING (MM)	WEIGHT RETAINED	ACCUM. RETAINED	% RETAINED	TOTAL % FINER/WGT
2"	50.800	0.00	0.00	0.0%	100.0%
1 ½"	37.500	0.00	0.00	0.0%	100.0%
1"	25.400	0.00	0.00	0.0%	100.0%
3/4"	19.100	16.92	16.92	6.3%	93.7%
1/2"	12.700	4.32	21.24	7.9%	92.1%
3/8"	9.525	7.47	28.71	10.7%	89.3%
4	4.750	26.74	47.98	17.9%	82.1%
10	2.000	37.98	85.96	32.0%	68.0%
20	0.840	72.46	158.42	59.1%	40.9%
40	0.420	39.89	198.31	73.9%	26.1%
60	0.250	17.16	215.47	80.3%	19.7%
100	0.149	18.16	233.63	87.1%	12.9%
200	0.074	14.54	248.17	92.5%	7.5%
Pan	0.000	20.05	268.22	100.0%	0.0%
TOTAL DRY WT.			268.22		

	% GRAVEL	% SAND	% SILT & CLAY
TOTAL	17.9%	74.6%	7.5%
COARSE	0.0%	14.2%	
MEDIUM		41.9%	
FINE	17.9%	18.6%	



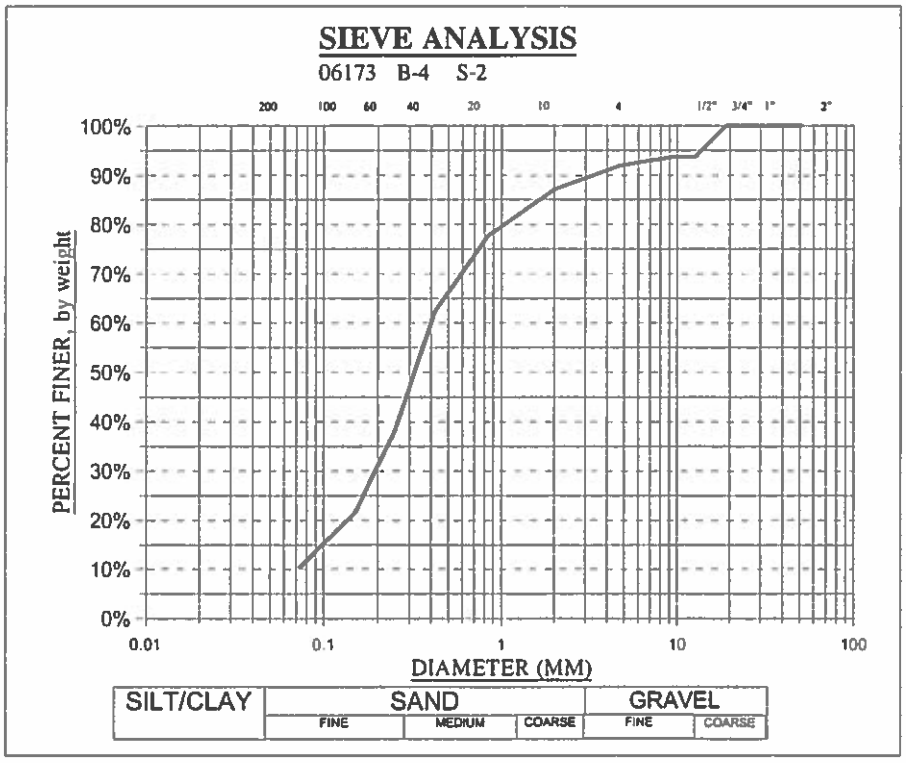
QPRO FILE 06173.B-2 S-8.gs

SIEVE ANALYSIS

DESCRIPTION:	Fine to medium SAND, little Silt, trace Gravel, trace coarse Sand	PROJ:	NYE Lubricants
		LOCATION:	Fairhaven, MA
		JOB #:	06173
Sample Location		DATE:	01/18/07
		CONTAINER #:	58
USCS:	SW-SM	CONT.+ WET SOIL:	440.03
BORING NO.:	B-4	CONT.+ DRY SOIL:	386.85
DEPTH:	4'-6'	WGT WATER:	53.18
SAMPLE #:	S-2	CONT WGT:	85.34
WASH SIEVE	yes	DRY SOIL:	301.51
		% MOIST:	17.64

SIEVE	OPENING (MM)	WEIGHT RETAINED	ACCUM. RETAINED	% RETAINED	TOTAL % FINER/WGT
2"	50.800	0.00	0.00	0.0%	100.0%
1 ½"	37.500	0.00	0.00	0.0%	100.0%
1"	25.400	0.00	0.00	0.0%	100.0%
3/4"	19.100	0.00	0.00	0.0%	100.0%
1/2"	12.700	18.85	18.85	6.3%	93.7%
3/8"	9.525	0.00	18.85	6.3%	93.7%
4	4.750	5.22	24.07	8.0%	92.0%
10	2.000	14.85	38.92	12.9%	87.1%
20	0.840	28.36	67.28	22.3%	77.7%
40	0.420	46.24	113.52	37.7%	62.3%
60	0.250	72.64	186.16	61.7%	38.3%
100	0.149	50.35	236.51	78.4%	21.6%
200	0.074	33.31	269.82	89.5%	10.5%
Pan	0.000	31.69	301.51	100.0%	0.0%
TOTAL DRY WT.			301.51		

	% GRAVEL	% SAND	% SILT & CLAY
TOTAL	8.0%	81.5%	10.5%
COARSE	0.0%	4.9%	
MEDIUM		24.7%	
FINE	8.0%	51.8%	



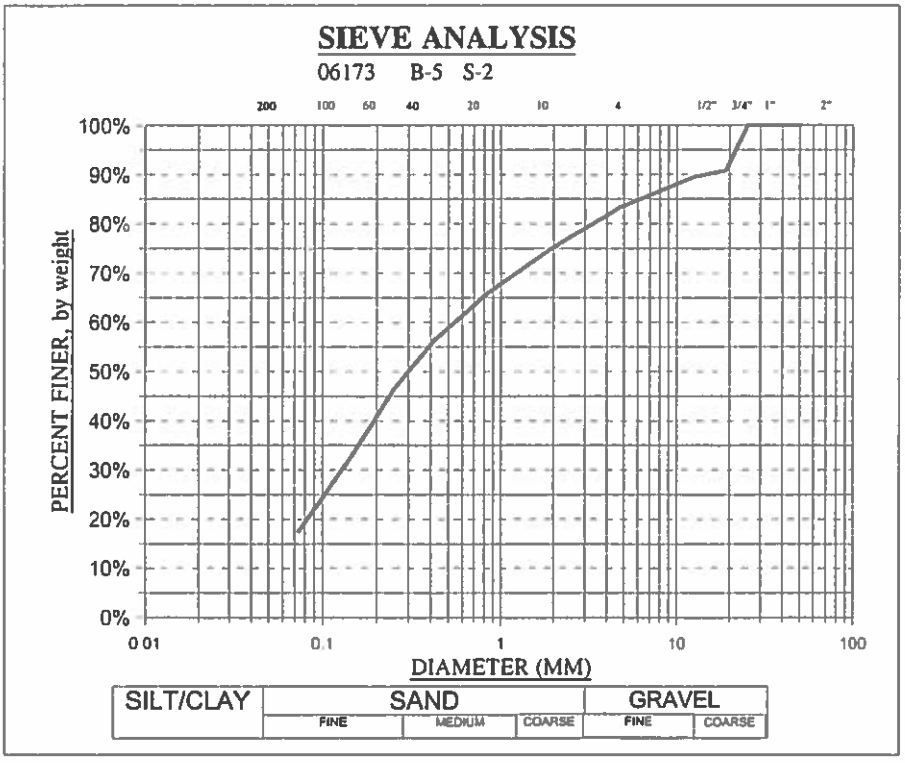
QPRO FILE 06173.B-4.S-2.gs

SIEVE ANALYSIS

DESCRIPTION:	Fine to medium SAND, little Silt and Gravel, trace coarse Sand	PROJ:	NYE Lubricants
		LOCATION:	Fairhaven, MA
		JOB #:	06173
Sample Location		DATE:	01/18/07
		CONTAINER #:	55
USCS:	SM	CONT.+ WET SOIL:	442.65
BORING NO.:	B-5	CONT.+ DRY SOIL:	403.09
DEPTH:	4'-6'	WGT WATER:	39.56
SAMPLE #:	S-2	CONT WGT:	84.06
WASH SIEVE	yes	DRY SOIL:	319.03
		% MOIST:	12.40

SIEVE	OPENING (MM)	WEIGHT RETAINED	ACCUM. RETAINED	% RETAINED	TOTAL % FINER/WGT
2"	50.800	0.00	0.00	0.0%	100.0%
1 ½"	37.500	0.00	0.00	0.0%	100.0%
1"	25.400	0.00	0.00	0.0%	100.0%
3/4"	19.100	29.11	29.11	9.1%	90.9%
1/2"	12.700	4.25	33.36	10.5%	89.5%
3/8"	9.525	5.91	39.27	12.3%	87.7%
4	4.750	19.84	53.20	16.7%	83.3%
10	2.000	25.68	78.88	24.7%	75.3%
20	0.840	29.89	108.77	34.1%	65.9%
40	0.420	30.03	138.80	43.5%	56.5%
60	0.250	31.81	170.61	53.5%	46.5%
100	0.149	41.96	212.57	66.6%	33.4%
200	0.074	50.42	262.99	82.4%	17.6%
Pan	0.000	56.04	319.03	100.0%	0.0%
TOTAL DRY WT.			319.03		

	% GRAVEL	% SAND	% SILT & CLAY
TOTAL	16.7%	65.8%	17.6%
COARSE	0.0%	8.0%	
MEDIUM		18.8%	
FINE	16.7%	38.9%	



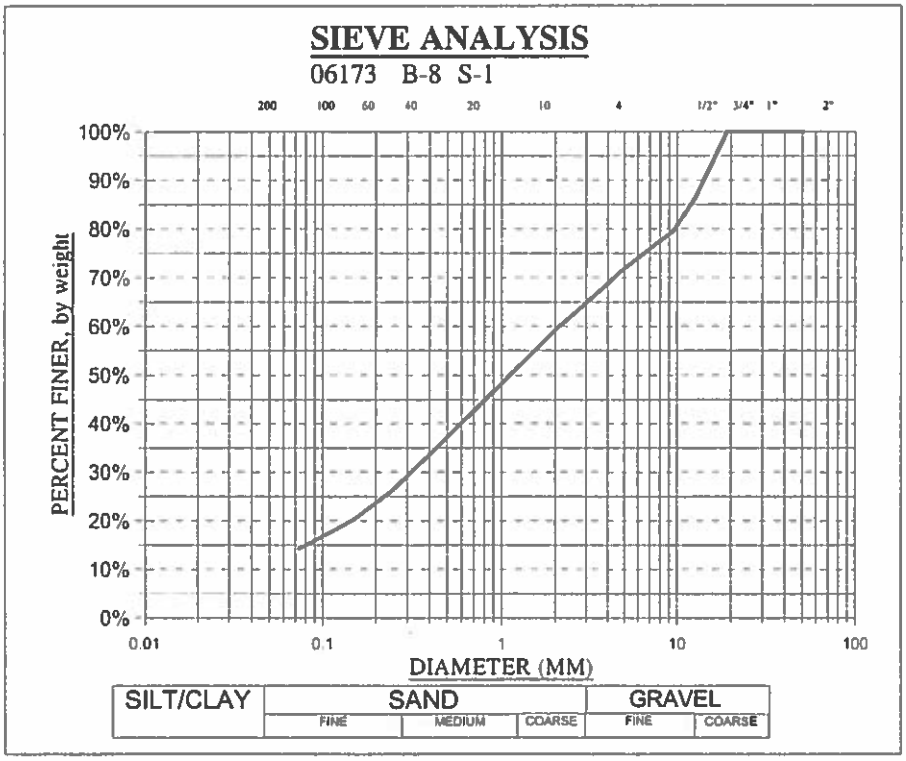
QPRO FILE 06173.B-5.S-2.gs

SIEVE ANALYSIS

DESCRIPTION: Fine to coarse SAND, some Gravel, little Silt		PROJ:	NYE Lubricants
		LOCATION:	Fairhaven, MA
		JOB #:	06173
Sample Location		DATE:	01/18/07
		CONTAINER #:	49
USCS:	SM	CONT.+ WET SOIL:	229.80
BORING NO.:	B-8	CONT.+ DRY SOIL:	222.88
DEPTH:	0'-2'	WGT WATER:	6.92
SAMPLE #:	S-1	CONT WGT:	110.42
WASH SIEVE	yes	DRY SOIL:	112.46
		% MOIST:	6.15

SIEVE	OPENING (MM)	WEIGHT RETAINED	ACCUM. RETAINED	% RETAINED	TOTAL % FINER/WGT
2"	50.800	0.00	0.00	0.0%	100.0%
1 ½"	37.500	0.00	0.00	0.0%	100.0%
1"	25.400	0.00	0.00	0.0%	100.0%
3/4"	19.100	0.00	0.00	0.0%	100.0%
1/2"	12.700	15.28	15.28	13.6%	86.4%
3/8"	9.525	7.65	22.93	20.4%	79.6%
4	4.750	17.12	32.40	28.8%	71.2%
10	2.000	13.33	45.73	40.7%	59.3%
20	0.840	15.51	61.24	54.5%	45.5%
40	0.420	12.57	73.81	65.6%	34.4%
60	0.250	9.04	82.85	73.7%	26.3%
100	0.149	6.92	89.77	79.8%	20.2%
200	0.074	6.60	96.37	85.7%	14.3%
Pan	0.000	16.09	112.46	100.0%	0.0%
TOTAL DRY WT.			112.46		

	% GRAVEL	% SAND	% SILT & CLAY
TOTAL	28.8%	56.9%	14.3%
COARSE	0.0%	11.9%	
MEDIUM		25.0%	
FINE	28.8%	20.1%	



QPRO FILE 06173 B-8 S-1.gs