T.S. ALVING AND ASSOCIATES, INC.
166 WINTER STREET
HOPKINTON, MASSACHUSETTS 01748
(508) 435-3679 –talving@verizon.net

SUBMITTAL OF A NOTICE OF INTENT REQUEST FOR AUTHORIZATION FOR DISCHARGE COVERAGE UNDER MASSACHUSETTS GENERAL DISCHARGE PERMIT No. MAG070000 PROPERTY AT 445 EAST MAIN STREET MILFORD, MASSACHUSETTS

PREPARED FOR:
Ledge End Realty Trust
32 Carribean Way
Ponce Inlet, FL 32127

PREPARED BY:
T.S. Alving and Associates, Inc.
166 Winter Street
Hopkinton, Massachusetts 01748

REPORT DATE
14 November 2016

TSA PROJECT NO:
1508-0552

TODD S. ALVING, LSP, PG

11/14/2016
DATE

T.S. ALVING AND ASSOCIATES, INC.
166 WINTER STREET
HOPKINTON, MASSACHUSETTS 01748
(508) 435-3679 –talving@verizon.net

14 November 2016

US Environmental Protection Agency
Dewatering GP Processing
Industrial Permit Unit (OEP 06- 4)
Post Office Square - Suite 100
Boston, MA 02109-3912

RE: Submission of a Notice of Intent
Request for Authorization for Discharge Coverage Under
Massachusetts General Permit No. MAG070000
Abandoned Quarry Reclamation Project
445 East Main Street
Milford, Massachusetts

Dear Ladies and Gentlemen:

In accordance with your guidance as published on the current webpage and on behalf of Ledge End Realty Trust, owner of the above referenced property and project proponent, T.S. Alving and Associates, Inc. (TSAA) has prepared this Notice of Intent (NOI) for coverage under Massachusetts General Permit No. MAG070000, dated 26 March 2015. **Figure 1, Locus Plan**, documents the regional position of the project site (herein after, the "Site"). This NOI is prepared by TSAA, in accordance with our General Terms and Conditions and Limitations, as appended to this letter for reference purposes.

The completed NOI form is attached to this letter as **Appendix A**. This letter is intended to provide project specific information supplemental to the NOI form.

I. GENERAL FACILITY INFORMATION

I.1 Name and Address of Facility

Former Quarry Reclamation Project
c/o Ledge End Realty Trust
32 Carribean Way
Ponce Inlet, FL 32127
ATT: Joe Dicarlo, Trustee
(508) 294-0333

I.2 Facility Location Address:

445 East Main Street
Milford, MA 01757

I.3 Legal Name, Address, Contact of Owner/Operator

Same as Item I.1 above. Proponent is a Private Entity

I.4 Topographic Map

See Attached, **Figure 1, Locus Plan**, based on current USGS Quad Sheet (Milford) and **Figure 2, Location Plan**, documenting existing conditions, including grades, features, improvements, and point of discharge, in the **FIGURES** section of this report. A copy of the MassDEP MCP Site Scoring Map, documenting state-recognized resource areas is also attached in the **FIGURES** section for reference.

I.5 Permit Status Questions

No prior NPDEP permit has been granted for this discharge.

The discharge is a "new discharge" as defined by 40 CFR Section 122.22.

The facility is not covered by an individual NPDEP permit.

The is no pending application on-file for any other permit with EPA for this discharge.

II. DISCHARGE AND PROJECT INFORMATION

II.1 Discharge Receiving Water

Figure 1 Locus Plan, and the attached MassDEP MCP Site Scoring Map document the location of an unnamed brook, on the property which is the locus of the project, flowing south and then southeast of the project, eventually discharging to Hopping Brook. Based on our review of Massachusetts Surface Water Quality regulation and our discussions with Massachusetts Department of Environmental Protection (MassDEP) officials, Hopping Brook appears to be a Class B freshwater surface water. No marine waters impacts are anticipated, given the locus of this Site, in the headwaters drainage basin of the Charles River. Milford, Holliston, and Medway are located about 35 miles upstream of the Charles River discharge into Boston Harbor.

II.2 Site Description

The property on which the Site is located is a 9.18 acre parcel, located in the eastern corner of Milford, Massachusetts, a rural and suburban community in Worcester County, about 35 miles west-southwest of Boston. The property fronts on East Main Street to the northwest, and is further bounded by commercial property (an automobile body repair facility) to the west, open wooded land and single-family residential development to the southwest and north, and open wooded land associated with a residential cluster developed property to the south. The property is improved by a vacant, abandoned building operated during the 1980 through 2004 time period as a restaurant and sports bar. Areas extended from East Main Street in the property's northwest corner eastward to the abandoned building are improved by weathered asphalt pavement access (driveway) and parking lot surfaces associated with this former commercial use. An abandoned septic system is located immediately south of the building.

A 0.66 acre open quarry pit, created during granite mining operations conducted during the 1950 through 1980 time frame and currently inundated with water, occupies eastern areas of the property. The balance of the property consists of wooded areas to the north and south of the quarry pit and the aforementioned improved areas.

Topographically, the property is situated in an region that slopes generally to the south and east. The aforementioned receiving water, an intermittent brook crosses the area in the western one-third of the property, and flows in a southerly direction. Beneath asphalt-paved areas, the brook is contained within a concrete culvert. North and south of the access driveway, the brook is generally contained within a natural swale. The downstream (southern) edge of the swale on the property is demarcated by the presence of an existing rip-rap diffuser. The point of the discharge area which is the subject of this submittal encompasses an area of about 4,375 square feet (above 125 feet in north to south length, by above 35 feet in width). South of this discharge point, the brook continues in a well defined channel. The bed of this channel retains the character of a high energy streambed, with gravel, cobble, and boulders present.

II.3 Resource and Release Information.

A copy of the current MassDEP MCP Site Scoring Map produced on-line for the 445 East Main Street property address is attached in the **FIGURES** section of this report. In summary, a review of the scoring map indicates that the Site is not located within the limits of a Zone I, Zone II, Interim Wellhead Protection Area (IWPA), Potentially Productive Aquifer (PPA), or Zone A, areas considered by MassDEP as potential or established drinking water protection areas. Neither the Site nor the receiving waterways area located in an area designated as Rare and Endangered Habitat.

A review of Appendix I linked to the GDP webpage indicates that no Massachusetts-designated Areas of Critical Environmental Concern (ACEC) are located in Milford,

Holliston, and Medway, the 3 communities located proximate to the Site and receiving waters. The Site is located well inland of the Eastern seaboard, and no potential for impacts to a marine environment are anticipated.

A review of the current MassDEP "Searchable Sites Database" for the Town of Milford, Massachusetts indicates that the 445 East Main Street property neither is, or has been the locus of a release of oil and/or hazardous materials reportable as an "MCP release" to MassDEP. Further review indicates that there are no reported MCP release sites within sufficiently close proximity to this Site as to pose a potential risk of discharge degradation. Finally, based on both our discussions with the current owner and our visual inspections of the property, we have identified no history or readily-identifiable evidence of a release of oil or hazardous materials on this property.

II.4 Project Background

For the purpose of the discharge associated with this NOI submission, the locus of this Site is the 0.66 acre abandoned quarry pit, currently inundated with standing surface water. The purpose of the proposed project will be to perform a real-time pump down test of the quarry pit, in order to determine the feasibility of removing standing water long enough to permit quarry pit reclamation. MassDEP has recently published and promulgated a Guidance Document entitled, "Interim Policy on the Reuse of Soil for Large Reclamation Projects", COMM 15-01 (8/28/2015). Projects of this type are reviewed by both MassDEP and local officials, and upon approval, operate under an Administrative Consent Order (ACO) issued by MassDEP. For this specific project, an estimated 35,000 cubic yards of soil will be utilized to reclaim the quarry pit (following successful dewatering) and then the balance of the property will be filled, to an estimated total volume of about 100,000+ cubic yards.

The proposed dewatering field test proposed at this time will consist of the 24-hour/7 day per week operation of an electric 3 to 4 inch submersible pump, withdrawing surface water from the quarry at an estimated rate of about 300 gallons per minute (GPM). Discharge of water will occur about 125 feet west of the edge of the quarry, to the natural drainage detention area located on the opposite side of an asphalt-paved parking lot. As noted above, this natural drainage swale represents the historic tract of the unnamed brook, which crosses the project Site property in a north to south orientation. At the down gradient edge of the actual point of discharge retention area, the existing riprap diffuser berm will be improved, by adding an additional 12 inch+ stone installed at existing grade (no subsurface work will be performed) with a measured final placement of about 45 feet in length, 15 feet (at the base) width, and about 5 feet in additional height. The diffuser will serve to diffuse and slow flow and prevent channeling within the central axis of the swale (stream bed). Based on the nature of the water being discharged and the chemical testing already performed, no control of suspended solids is anticipated. Downstream of the diffuser, discharge is expected to flow within the existing natural bed of the stream. A field inspection of flow restriction downstream revealed the presence of a 24 inch

diameter concrete culvert pipe, located about 400 feet down stream of the point of discharge, directing stream flow under Zima Road. A review of the anticipated flow rate with respect to the capacity of this culvert indicates that the structure will handle this volume without restriction. Further downstream, a granite box culvert measuring about 3 foot in width by 3 feet in height transmits stream flow beneath a former rail road easement. The unnamed brook discharges to Hopping Brook, about 0.75 miles downstream to the southeast.

During the course of dewatering, discharge conditions including flow rate and visible suspended solids, and drawdown of the quarry will be monitored. We anticipate no need to conduct chemical testing of the discharge. Stream flow conditions downstream of the discharge point will also be monitored during this period.

III. OUTFALL AND FLOW INFORMATION

III.1 Flow Rate

We anticipate an maximum and average flow rate of about 300 GPM or about 432,000 GPD.

III.2. pH Discharge

On 7 June 2016, we conducted sampling of the surface water in quarry, obtaining a grab sample from the center of the water body, The sample was delivered to the laboratory about 2 hours after collection, and pH was measured at 6.32 su units at that time. We also conducted sounding of the pit for depth on this date, and found that conservatively, the submerged depth of quarry averages about 35 feet.

Additionally, the sample was analyzed for total oil and grease and suspended solids Results below applicable detection limits were reported for both parameters. A copy of the laboratory report documenting this testing is attached in **Appendix B** of this submittal for reference purposes. Based on the nature of this discharge source (surface water) no further chemical testing was performed at this time. See discussion below for supplemental chemical testing conducted in support of this submittal.

III.3. Source of Discharge Water

As noted, the source of this discharge is surface water in an open quarry pit. At 0.66 acres and assuming an average depth of water, the pit is estimated to contain about 7.5 million gallons of water. Please refer to Sections III.2 and IV.3, for a summary of chemical testing performed on this discharge source water.

III.4. Nature of Timing and Duration of Discharge

As stated, the purpose of this initial discharge will be to assess the feasibility of emptying the quarry pit of water with reasonable effort within a reasonable period of time, in order that in the future, with MassDEP approval, a reclamation of the pit can be conducted. Based on the estimated volume of water in the quarry, and the projected pumping rate, and assuming that some infiltration of water through bedrock fracture may be expected, we anticipate a pumping duration of between 20 and 40 days. The start and end dates of this dewatering task will depend on USEPA review. However, assuming the request is approved, and pending State and Local reviews, we would anticipate that the project will occur during a period of 1 year or less, or **December 2016 through November 2017**.

III.5 Location of Discharge

The attached MCP Site Scoring Map documents the UTM locus of this discharge, and the same on-line tool was used to determine latitude and longitude. The following coordinates define the approximate position of the 1 outfall on this project:

42d 09' 38"
71d 28' 57"

III.6. Flow and Dilution Calculations

Not applicable to this discharge.

III.7 Locus of Massachusetts Project with Respect to Area of Critical Environmental Concern (ACEC)

As noted in the narrative above, the project is not expected to impact an ACEC. No ACEC receptors are located within the corporate boundaries of the towns of Milford, Holliston, or Medway.

III.8 Monitoring and Recordkeeping

In accordance with Part 5 of the GDP, the permittee's engineer will conduct ongoing monitoring of the discharge throughout the duration of this work. Initial monitoring will include daily inspections to confirm stability of the system and flow characteristics. After 1 week of operation, inspections will be conducted every 3 days, or as necessary if required. Monitoring of suspended solids and the presence of petroleum odor/sheen will be completed. All observations including flow, discharge conditions, and inspection of the source water (quarry pit conditions) will be documented in on a daily log, and at Monthly intervals, a report will be prepared. The daily log and monthly reports will be maintained on-site, and made available for regulatory inspection. Submission of reports will be made as specified in the permit and agency comment communications.

IV. CONTAMINANT INFORMATION

IV.1 Pre-Treatment Parameters

No treatment of the discharge, including pH adjustment or de-chlorination will be conducted during this project.

IV.2 Nature of Remediation or Water Quality Issues.

As noted in the narrative above, a review of both readily available records, inspections, and interviews of current owners/operators have revealed no evidence of the release of oil and/or hazardous materials on or sufficiently close to the project Site, as to pose a potential threat of degradation to the discharge.

Based on the chemical testing performed on quarry surface water in June 2016, we documented no evidence of a release of oil and grease. Visual inspections of the quarry surface water have revealed no presence of petroleum sheen, free-phase petroleum project, or odors suggesting any impact. We further have observed no evidence of debris, dumping, or disposal in the quarry pit.

IV.3 Results of Discharge and Receptor Waters Chemical Testing

See results of pH, total suspended solids, and oil and grease testing in the original discharge source water sample is attached **in Appendix B.**

Based on a review of GDP requirements and our discussions with USEPA personnel regarding the presence of groundwater in this discharge, on 31 October 2016, we obtained representative, grab samples from both the quarry and stream surface waters. The quarry (discharge) sample was submitted for chemical testing of total metals and Chloride, and the stream (receptor water body) sample was submitted for testing of the general chemistry parameter for hardness. A laboratory report is attached in Appendix B for reference purposes.

In summary, the following metals and chloride parameters were reported:

Parameter	Result	Method Detection Limit
Total Metals (mg/l)		
Antimony	ND	0.005
Arsenic	ND	0.01
Cadmium	ND	0.002
Chromium(total)	ND	0.01
Copper	ND	0.01
Iron	0.21	0.05

Lead	ND	0.01
Nickel	ND	0.01
Silver	ND	0.007
Zinc	ND	0.01
Mercury	ND	0.0002
Chloride (mg/l)	2.64	1.0

and, in the stream receptor sample, the following result was reported:

Hardness (mg/l)	144	0.5

V. DETERMINATION OF ENDANGERED SPECIES ACT ELIGIBILITY (ESA)

On 10 August 2016, we completed an Information for Planning and Conservation (IPAC) request on the US Fisheries and Wildlife Service webpage. On 18 August 2016, we reviewed those results with USFWS personnel in the New England Ecological Services Field Office in Concord, New Hampshire. As a result of that review, a determination was made that there were no species in the project area with conservation measure recommendations available. Species were limited to the possible presence of the Northern Long-eared Bat and 18 migratory birds. Wetlands were identified in the area. As a result, the following measures are appropriate.

1. USFWS officials recommend avoidance of tree cutting to the extent practical during the course of this project.

2. Local (Town of Milford, Massachusetts) Conservation Commission Officials (Conservation Agent) will be copied on this NOI, for comment and information sharing purposes.

VI. DOCUMENTATION OF NATIONAL HISTORIC PRESERVATION ACT (NHPA) REQUIREMENTS

Based on our review of Appendix III of the DGP, we conclude that the proposed activities will are not likely to have the Potential to Affect Historic Properties. For this project, discharge of surface water from a quarry will be directed to an existing channel/outfall. While the proposed work does include improvements (or "altering") to an existing diffuser berm, these improvements will be limited to addition of rip rap stone over an existing structure, and no subsurface disturbance will be conducted.

A review of the MACRIS database indicates that there a several historic structures (single family dwellings, most notably at 441 East Main Street and 463 East Main Street, in the

general vicinity of the Site property and discharge. However, based on the location of these properties with respect to the proposed activities, no potential to affect these properties is anticipated.

Thus, Criteria A would appear to apply to this NOI, and no further review is applicable.

VII. SUPPLEMENTAL INFORMATION.

Please refer to contents of the **FIGURES** and **Appendix B** sections of this submittal, for supplemental materials in support of this NOI.

VIII. CONCLUSIONS

This report has been prepared by T.S. Alving and Associates, Inc. on behalf of Ledge End Realty Trust, for use as a request for authorization to discharge under Massachusetts General Permit No. MAG070000, in support on ongoing work at the property with an address of 445 East Main Street, Milford, Massachusetts, and is meant to reflect site conditions and factual information relative to environmental concerns at this location at the time of report preparation, to the extent of the scope of the investigation. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, or not used by any other party in whole or in part, without the prior written consent of TSAA. This report has been prepared in accordance with the attached Terms and Conditions and Limitations. No other warranties are expressed or implied. General Terms and Conditions and Limitations are also attached and are considered to be part of this document.

Should additional information regarding environmental concerns at or proximate to this site become available, the opinions and conclusions expressed in this report may require modification.

We trust the above and attached will prove sufficient in your review of this NOI and Request for Authorization to Discharge under the General Dewatering Permit. Should you have any questions or require any further information, please contact the undersigned.

Respectfully,

T.S. ALVING AND ASSOCIATES, INC.

Todd S. Alving, LSP
Engineering Geologist

c: file
E. J. Dicarlo, Ledge End Realty Trust
MassDEP - Division of Watershed Management
Town of Milford Conservation Commission
J. Howard, Zain Ridge Condominium Trust

C:\Users\Todd Desktop\Documents\JOBS\445 East Main Street Milford\General Dewatering Discharge Permit Documents\NOI Request Letter1.doc

VII. GENERAL TERMS AND CONDITIONS

1. SERVICES. T.S. Alving and Associates ("Engineer") has been engaged by client to provide the services set forth in the Proposal for Services dated 3/1/12 (the "Proposal") with respect to the project site identified in the Proposal (the "Site"), and in accordance with these terms and conditions. The Proposal and these General Terms and Conditions constitute, collectively, the Agreement between Client and Engineer.

2. PERFORMANCE OF SERVICES. Engineer will perform, or cause to be performed, any surface or subsurface testing, and other exploration and data analysis required by the Proposal. If Engineer engages the services of an outside contractor to perform any of the services required by the proposal, the contractor's invoice plus the Engineer's service charge shall be added to Engineer's fee. Engineer shall not be responsible for the accuracy of any contractor's work, nor does Engineer undertake to guarantee such work. In the event that Engineer is engaged to provide services on the Site during construction, clean-up or other Site activities, including monitoring of construction, it is understood that Engineer shall not have any responsibility for or control over working conditions on the Site, including adequacy of any contractor's safety measures in, on or near the Site, or compliance with any applicable federal, state or local regulations relating to the job site, contractor's employees, or public safety, all of which shall remain the sole and complete responsibility of the contractor. Client shall make available to Engineer all records, data or other information in Client's possession or known to it relating to the Site, including but not limited to activities conducted at the Site and surface and subsurface conditions affecting the Site. Client warrants the accuracy of the information supplied by it to Engineer and acknowledges that Engineer is relying upon such information without Engineer's verification of its accuracy. Engineer shall exercise reasonable care in seeking to locate underground structures in the area of proposed subsurface explorations at the Site, if applicable. Engineer shall not be responsible for damage, injury or interference to underground structures, which term includes but is not limited to cables, tanks and pipes, the existence of which were not disclosed to Engineer or do not appear on any plans provided to Engineer, or are wrongly located on such plans.

3. STANDARD OF CARE. Client acknowledges the inherent risks associated with oil, hazardous, radioactive, toxic, infectious, irritant, pollutant or otherwise dangerous substances or conditions associated with the services to be performed. Client also acknowledges that given the state of environmental science and the nature of environmental problems, sources of future liability sometimes will not manifest themselves to a point where they are reasonably identifiable through an external investigation. Engineer shall perform its professional services in accordance with generally accepted engineering and scientific practice ordinarily followed by members of the environmental consulting profession performing similar services under similar circumstances, in the same or similar locality. The degree of care exercised by Engineer shall be judged solely as of the time the services are rendered. Client acknowledges that Engineer's services will be rendered without any warranty, express or implied, beyond Engineer's observance of such standard of care.

4. BILLING AND PAYMENT. Engineer shall submit invoices to Client twice per month, or on such other schedule as Engineer shall determine, and payment for each invoice shall be due within fifteen (15) days of invoice date. Interest for late payments shall be at the rate of one and one-half (1.5%) percent per month or the maximum rate allowed by law, whichever is less, of the outstanding balance. Client shall pay all costs incurred by Engineer in collecting overdue payments. In the event that Client fails to pay any invoice in full within fifteen (15) days after invoice date, Engineer shall have the right, without waiving or limiting any other rights, to suspend or terminate its services upon written notice to Client. If Engineer elects to suspend or terminate services for nonpayment of invoices, Client shall pay Engineer in full for all services performed by Engineer up to the date of termination of services, and for cancellation charges due to Engineer's subcontractors.

5. SAMPLES. Engineer shall dispose of all samples of soil, groundwater, waste, rock or other materials obtained in connection with the performance of its services within thirty (30) days after submission of Engineer's report, except as otherwise provided in the Proposal or unless prohibited by applicable law. Client shall pay all costs for storage of samples in excess of thirty (30) days after submission of Engineer's report. Samples shall be disposed of at a qualified waste disposal facility or returned to Client for final disposal. Client shall pay all costs associated with the storage, treatment, and disposal of samples and shall indemnify and hold harmless Engineer from any claim or liability arising therefrom.

6. RIGHT OF ENTRY. Client grants to Engineer, its agents, employees, consultants, contractors and subcontractors, entry to the Site, from time to time, for the purpose of performing the services described in the Agreement. If Client is not the owner of the Site, Client warrants and represents that it has authority and permission to the owner to grant Engineer this right of entry. Engineer agrees to take reasonable precautions to minimize damage to the Site from use of equipment required to perform the services, but the cost of any correction, repair or replacement resulting from Engineer's performance of services at the Site have not been included in the Engineer's fees and shall be borne by Client. In the event that Engineer shall require access to property that is not owned by Client for the purpose of making surveys, borings or other investigation, Client shall make all necessary arrangements for Engineer to gain access to such property.

7. OWNERSHIP OF DOCUMENTS AND DATA. All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents, data or information prepared by Engineer as part of its services shall remain the sole property of Engineer. Client shall have the right to make and retain copies of all reports and other materials supplied by Engineer, provided, however, that Engineer does not intend nor represent that reports and other materials are suitable for reuse by Client for any other project or for use by any party other than Client. Reuse of reports or other materials by Client or any other party, whether in whole or in part, or as may otherwise be modified, without Engineer's prior written permission or adaptation for the specific purpose intended by the user shall be at user's sole risk, without liability on the part of Engineer. Client shall indemnify and hold harmless Engineer from all claims, damages, and expenses, including reasonable attorneys' fees, arising out of such unauthorized reuse. Engineer shall have the right to obtain compensation for any reuse or adaptation of reports and other materials for which reuse Engineer has granted permission.

8. CONFIDENTIALITY OF INFORMATION. Engineer shall not knowingly disclose any confidential business or technical information obtained or generated in connection with its services under this Agreement. Any information the Client intends to be considered confidential shall be clearly marked with the word "Confidential". Confidential information shall not be disclosed except: (i) in order for Engineer to perform the services required by the Agreement; (ii) for compliance with professional standards of conduct for preservation of the public safety, health, and welfare; (iii) for compliance with any court order or governmental directive; (iv) if it becomes public knowledge through no fault of Engineer; (v) if it is acquired by Engineer from a party not under an obligation of confidentiality to Client; or (vi) disclosure is necessary for the protection of Engineer against claims or liability arising from the performance of its services. Client agrees to indemnify and hold harmless Engineer from any claim or liability for damage, injury or loss allegedly arising from Engineer's notification or failure to notify public officials regarding conditions existing at the Site.

9. INSURANCE AND INDEMNITY. Engineer shall maintain worker's compensation insurance in accordance with requirements of the state in which the services are being performed and standard public liability insurance, and shall furnish information and certificates to Client at Client's request. Client acknowledges that professional liability and other insurance may not be available to Engineer for its work relating to certain hazardous substances. Engineer shall not be responsible for any loss, damage or liability beyond the amounts, limits, exclusions and conditions of such insurance as Engineer maintains. Client has requested Engineer to undertake potentially uninsurable obligations and therefore Client shall indemnify and hold harmless Engineer, its officers, directors, agents, and employees from all claims, demands and causes of action, including expenses of defense for personal injury, and loss or damage of property owned by third parties arising out of or in any manner connected with or related to the presence, discharge, release, or escape of contaminants of any kind or the performance of services hereunder, excepting only such liability as may arise solely out of the gross negligence or willful misconduct of Engineer. Engineer shall not be responsible for any loss, damage or liability arising from Client's willful or negligent acts, errors and omissions or for those by Client's staff, consultants, contractors and agents or for any person for whose conduct Engineer is not legally responsible.

10. LIMITATION OF LIABILITY; REMEDIES. The liability of Engineer, its officers, directors, agents, and employees for any damage or costs resulting from its failure to perform under this Agreement shall be limited to an aggregate amount not to exceed Engineer's aggregate fees for services rendered under the Agreement. Neither Client nor Engineer, its officers, agents and employees or contractors shall be liable to the other in any action or claim for consequential, incidental, special or punitive damages and this protection afforded any entity or individual shall apply whether the action for recovery of damages is based on contract, tort (including sole, concurrent or other negligence and strict liability), statute or otherwise. Client and Engineer agree to waive any statutory remedies which are inconsistent with these terms, to the extent such waiver is permitted by law. Engineer's non-exercise of any rights or remedies, whether specified herein or otherwise provided by law, shall not be deemed a waiver of such rights or remedies, nor of any other rights and remedies under this Agreement, or at law.

11. SEVERABILITY; ASSIGNMENT. The Agreement constitutes the entire understanding of the parties and supersedes any prior or subsequent communications, representations or agreements, including any purchase or work order or other document forwarded by Client to which notice of objection is hereby given. If any portion of the Agreement is held invalid or unenforceable, any remaining portion shall continue in full force and effect. Client shall not assign any aspect of this Agreement except upon the prior written consent of Engineer.

12. FORCE MAJEURE. Engineer shall have no liability for any failure to perform or for any delay in performance due to circumstances beyond its reasonable control.

LIMITATIONS

1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client. The work described in this report was carried out in accordance with the Terms and Conditions or our proposal.

2. In preparing this report, TSAA has relied on certain information provided by federal, state, and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to TSAA at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, TSAA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.

3. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the site or to structures on the site was unavailable or limited, TSAA renders no opinion as to the presence of hazardous materials or oils, or to the presence of indirect evidence relative to hazardous materials or oil, in that portion of the site or structure. In additional, TSAA renders no opinion as to the presence of hazardous material or oil, or the presence or indirect evidence relating to hazardous materials or oil, where direct observations of the interior walls, floor, or ceiling of a structure on a site was obstructed by objects or covering on or over these surfaces.

4. TSAA did not perform testing or analysis to determine the presence or concentration of asbestos or lead paint at the site or in the environment at the site.

5. The purpose of this report is to assess the physical characteristics of the subject site with respect to the presence in the environment of hazardous materials or oil. No specific attempt was made to check on the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.

6. The conclusions and recommendations contained in this report are based in part where noted, upon the data obtained from a limited number of soil, surface water, and/or ground water samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration is completed. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations presented in this report.

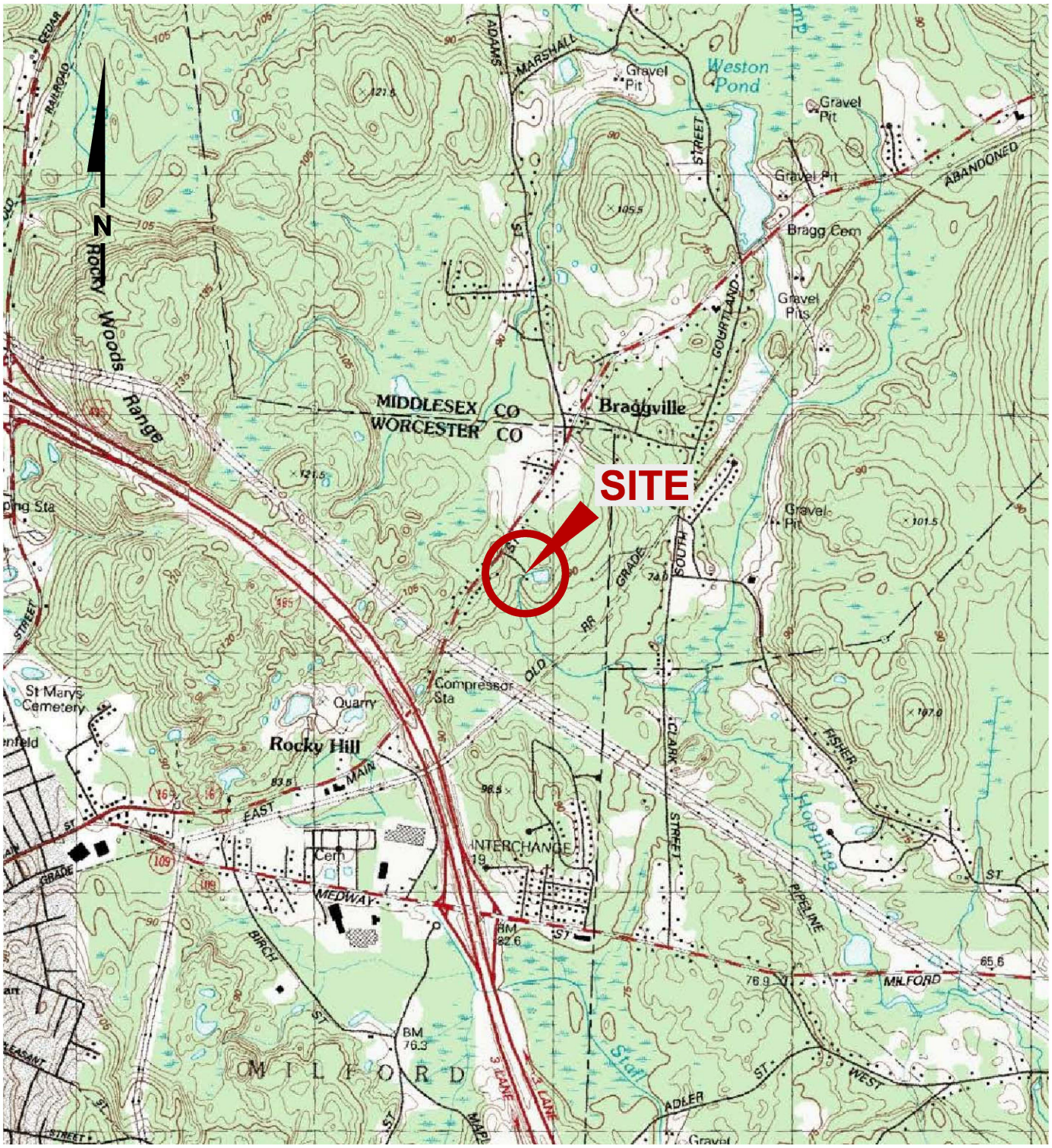
7. Any water level reading made in test pits, borings, and/or observations wells were made at the times and under the conditions stated in the report. However, it must be noted that fluctuations in the level of ground water may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

8. Except as noted within the text of the report, no quantitative laboratory testing was performed as part of the site assessment. Where such analysis have been conducted by an outside laboratory, TSAA has relied upon the data provided and has not completed an independent evaluation of the reliability of these data.

9. The conclusions and recommendations contained in this report are based in part where noted, upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As indicated within the report, some of these data may be of a preliminary "screening" level data nature and should be confirmed with quantitative analysis if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage time, and other factors. Should additional chemical date become available in the future, these data should be reviewed, and the conclusions and recommendations presented herein modified according.

10. Chemical analysis have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and or ground water at this site.

FIGURES



SOURCE:
USGS TOPOGRAPHIC QUADRANGLE
MEDFIELD, MASSACHUSETTS 1987

SITE COORDINATES:
42°09'37"N 71°28'56"W
4,670,554mN, 294,938mE, Zone19

N

0 2000

SCALE IN FEET
1:24000

FIGURE 1 - LOCUS PLAN

445 EAST MAIN STREET
MILFORD, MASSACHUSETTS

CAD FILE	DATE	LSP	SITE
445 EAST MAIN MILFORD LOCUS	8/11/16	TSA	

T.S. Alving and Associates, Inc.
166 Winter Street, Hopkinton, Massachusetts 01748 (508) 435-3679

FIGURE 1

C:\Users\Doreen Local\Documents\Todd Alving\445 East Main St Milford MA\445 EAST MAIN MILFORD LOCUS.dwg, Tab: LOCATION PLAN, Plotted: Aug 11, 2016

LEGEND:

- UTILITY POLE
- DRAIN MANHOLE
- SEWER MANHOLE
- BOLLARD
- HYDRANT
- GUARD RAIL
- GAS GATE
- TELEPHONE MAN HOLE
- DRAIN LINE
- INVERT
- CHAIN LINK FENCE
- VENT PIPE
- OAK TREE
- TREE LINE
- GUY WIRE
- WATER LINE
- WELL
- WETLANDS

LOT 18 & 20
AREA = 489,780S.F.±
OR
11.24 ACRES

EAST MAIN STREET (STATE HIGHWAY LAYOUT - APRIL 16, 1929) (PUBLIC - VARIABLE WIDTH) (ROUTE 16)

TUSINO MICHELE A JR

TUSINO JOSEPH F

CARVALHO ROBERT A

MCGILVRAY THERESA M

MCGILVRAY THERESA M

FAUCHER MARIO

DANIEL A. & PAUL M ANNANTUONIO

DAVID W DUES & DAWN MERRILL

JUAN R DIAZ

DOMENIC R DUTCHER

PATRICIA F CROWLEY

CARY & LISA M TASHJIAN

AMADEU + SUSANA ROXO

CHARLES D & ALLYSON L JULIAN

ALLEN L + BEVERLY J CONSIGLI

KRISTIN PYNE TRUSTEE

SWAN RIDGE AT MILFORD LLC

SWAN RIDGE AT MILFORD LLC

ZONE RC
ZONE IB
ZONE LINE

BORDERING VEGETATED WETLANDS

ASPHALT PAVEMENT

DISCHARGE DETENTION AREA

APPROXIMATE POINT OF DISCHARGE

RIP RAP DIFFUSER

PUMP

POINT OF WATER WITHDRAWAL
QUARRY
WATER ELEV=300.1
JANUARY 18, 2006

1 STORY W/A F.F.=295.65

BORDERING VEGETATED WETLANDS

MEAN ANNUAL HIGH WATER LINE (MAHWL)

N

0 80 160
SCALE IN FEET

BASE PLAN SHOWN FROM TETRA TECH RIZZO (FRAMINGHAM, MA) TITLED "EXISTING CONDITIONS PLAN" FOR QUARRY POND VILLAGE, MILFORD, MA, SHEET NO. 2 DATED SEPTEMBER 17, 2008.

FIGURE 2 - LOCATION PLAN

445 EAST MAIN STREET
MILFORD, MASSACHUSETTS

CAD FILE	DATE	PROJECT
445 EAST MAIN MILFORD SITE	11/11/16	1508-0552

T.S. Alving and Associates, Inc.
166 Winter Street, Hopkinton, Massachusetts 01748 (508) 435-3679

FIGURE 2

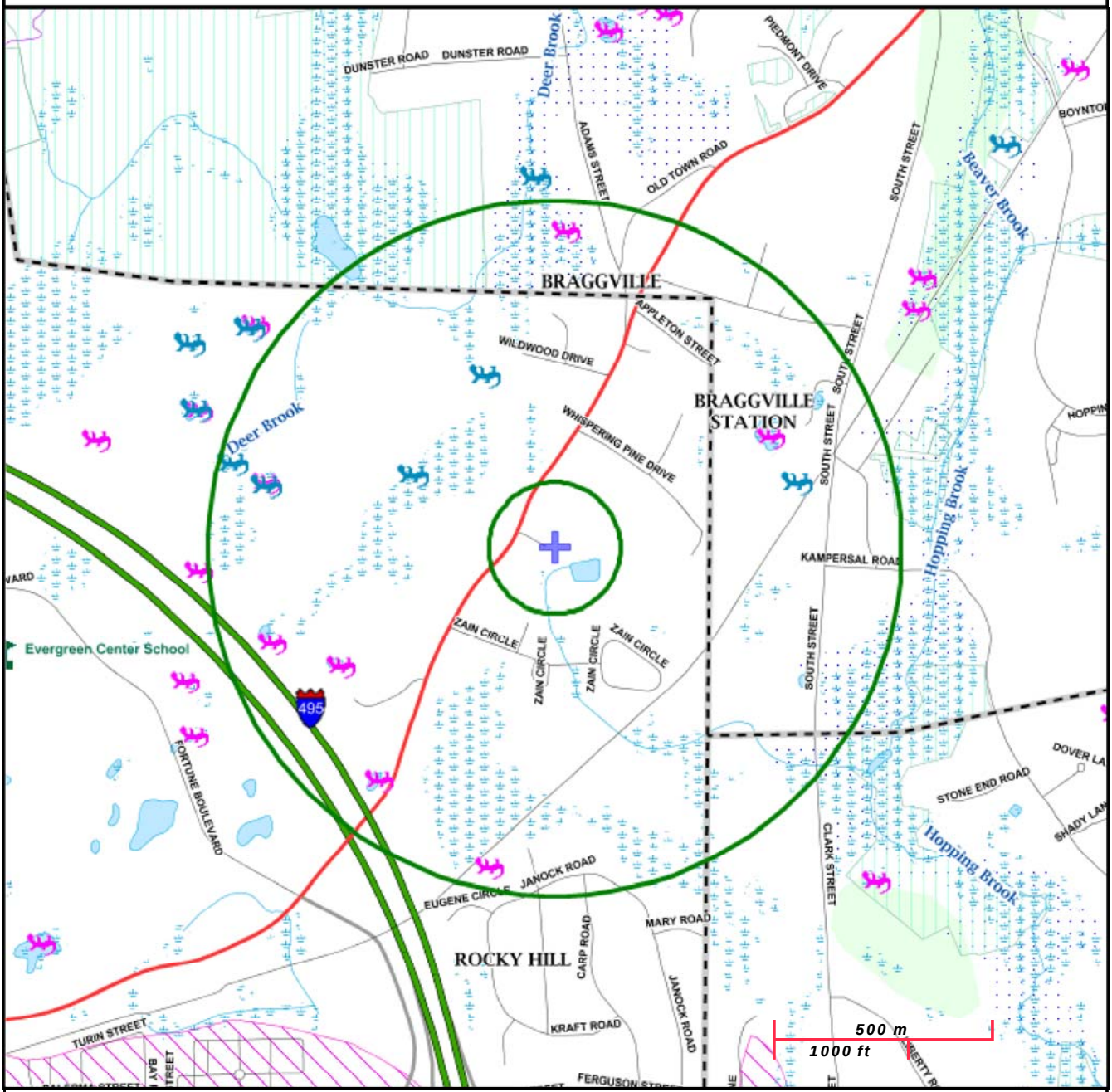
MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
QUARRY RECLAMATION
445 EAST MAIN STREET MILFORD, MA
NAD83 UTM Meters:
4670599mN , 294928mE (Zone: 19)
October 27, 2016

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg.,Non-Com.

APPENDIX A

NOTICE OF INTENT

II. Suggested Notice of Intent (NOI) Format

1. General facility information. Please provide the following information about the facility.

a) Name of facility: Quarry Reclamation	**Mailing Address for the Facility:** 32 Carribean Way, Ponce Inlet, FL 321127	
b) Location Address of the Facility (if different from mailing address): 445 East Main Street, Milford, Massachusetts	**Facility Location** **longitude:** 42-09-38 **latitude:** 71-28-57	**Type of Business:** Vacant Quarry Property **Facility SIC codes:**

c) Name of facility owner: Ledge End Realy Trust **Owner's email:** hardrockej@gmail.com

Owner's Tel #: (508) 294-0333 **Owner's Fax #:** _____

Address of owner (if different from facility address)

Owner is (check one): 1. Federal ____ **2. State** _____ **3. Private** ✔ **4. Other** _____ **(Describe)**_____

Legal name of Operator, if not owner: Same As Owner

Operator Contact Name: _____

Operator Tel Number: _____ **Fax Number:** _____

Operator's email: _____

Operator Address (if different from owner)

d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? ✔

e) Check Yes or No for the following:

1. **Has a prior NPDES permit been granted for the discharge? Yes** ____ **No** ✔ **If Yes, Permit Number:** _____
2. **Is the discharge a "new discharger" as defined by 40 CFR Section 122.2? Yes** _____ **No** ✔
3. **Is the facility covered by an individual NPDES permit? Yes** _____ **No** ✔ **If Yes, Permit Number** ____
4. **Is there a pending application on file with EPA for this discharge? Yes** _____ **No** ✔ **If Yes, date of submittal:**

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

a) Name of receiving water into which discharge will occur: Unnamed Brook to Hopping Brook

State Water Quality Classification: Class B or C **Freshwater:** X **Marine Water:** _____

b) Describe the discharge activities for which the owner/applicant is seeking coverage:

- [ ] **1. Construction dewatering of groundwater intrusion and/or storm water accumulation.**
- [ ] **2. Short-term or long-term dewatering of foundation sumps.**
- [ ] **3. Other.**

c) Number of outfalls 1

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 432,000 **GPD**
Average Monthly Flow SAME **GPD**

e.) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 6.32 **Min pH** 6.32

f.) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit.

g.) What treatment does the wastewater receive prior to discharge?

h.) Is the discharge continuous? Yes _____ **No** ✔ **If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B)** Intermittent
If (P), number of days or months per year of the discharge 30 **and the specific months of discharge** 12 _____;
If (I), number of days/year there is a discharge _____
Is the discharge temporary? Yes ✔ **No** _____
If yes, approximate start date of dewatering 12/1/2016 **approximate end date of dewatering** 11/31/2017 _____

i.) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. 42-09-38 **lat.** 71-28-57**; Outfall 2: long.**_____ **lat.**_____**; Outfall 3: long.**_____ **lat.**_____**.**

j.) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations_____ **cfs**
(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

k.) Does the discharge occur in an ACEC? Yes _____ No __✔__
If yes, provide the name of the ACEC: _____

3. Contaminant Information

a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC_{50} in percent for aquatic organism(s)).

b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendix IV. In addition, respond to the following questions.

a) Which of the three eligibility criteria listed in Appendix IV, Criterion (A, B, or C) have you met? A_____
b) Please attach documentation with your NOI supporting your response. Please see Appendix IV for acceptable documentation

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

a) See Screening Process in Appendix III and respond to questions regarding your site and any historic properties listed or eligible for listing on the National Register of Historic Places. Question 1: Yes _____ No __✔__ ; Question 2: No __✔__ Yes _____

b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No __✔__ If yes, attach the results of the consultation(s).

c) Which of the three National Historic Preservation Act eligibility criterion listed in Appendix III, Criterion (A, B, or C) have you met? _____

d) Is the project located on property of religious or cultural significance to an Indian Tribe? Yes _____ or No ____ If yes, provide that name of the Indian Tribe associated with the property. _____

6. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) 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 inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: Quarry Reclamation

Operator signature: 

Print Full Name and Title: Emidio J. DiCarlo, Trustee, Ledge End Realty Trust

Date:

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

APPENDIX B

CHEMICAL TESTING LABORATORY REPORTS

317 Elm Street
Milford, NH 03055

(603) 673-5440
Fax (603) 673-0366
Sales@chemservelab.com

Wednesday, June 15, 2016

Todd Alving
TSAA
166 Winter St
Hopkinton MA 01748

Project Name: Milford Quarry
Project #: 1508-0552
Project Location: Milford MA
Control #: 104592

Lab ID: 16060081
Date Received: 6/7/2016

Dear Todd Alving

Enclosed please find the laboratory results for the above referenced samples that were received by the ChemServe sample custodian on the above referenced date. Any abnormalities to the samples upon receipt would be noted on the enclosed chain of custody document. This report is not valid without a completed chain of custody with the corresponding control number, attached.

All samples analyzed by ChemServe are subject to quality standards. These standards are as stringent or more stringent than those established under NELAC, 40 CFR Part 136, state certification programs, and corresponding methodologies. ChemServe has a written QA/QC Procedures Manual that outlines these standards, and is available for your reference, upon request. Unless otherwise stated on the Chain of Custody or within the report, all holding times, preservation techniques, container types, and analytical methods are analogous with those outlined by NELAC. All units are based on “as received” weight unless denoted “dry”.

Residual chlorine, sulfite and pH are intended to be performed as an immediate field analysis. Should any of these analyses be performed in the lab instead of in the field it will result in those analyses being performed out of holding time.

I certify that I have reviewed the above referenced analytical data and state forms, and I have found this report within compliance with the procedures outlined within NELAC. ChemServe’s certified parameter list can be found at http://www.chemservelab.com/Laboratory-Information-and-Documentation.aspx

Jay Chrystal - President/Laboratory Director

Certificate Number 1008

317 Elm Street
Milford, NH 03055
(603) 673-5440
Sales@chemservelab.com

TSAA
Todd Alving
166 Winter St
Hopkinton MA 01748

Control #: 104592
Project Number: 1508-0552
Project Name: Milford Quarry
Project Location: Milford MA

Lab ID: 16060081
Date: 6/15/2016

Lab ID: 16060081

Sample Receiving and Comment Summary

Were samples submitted with a chain of custody?	Yes
Do all samples received match the chain of custody?	Yes
Were all samples received within applicable holding times?	No
Were all containers intact when received?	Yes
Were samples for volatile organic analysis free of headspace (per method)?	N/A
Was there evidence of cooling or were samples received on the same day as collection?	Yes
If the sample pH was not correct was it adjusted where applicable?	Yes
Were samples for dissolved metals already filtered by the client or field sampling?	N/A
Were Samples for O-phos filtered in the field?	N/A
Were samples received in the appropriate containers?	Yes
Were samples received in the appropriate containers?	Yes

Sample	Method	Client Identity	Matrix	Analyst
16060081-001	SM 4500-H-B	SW-1	Wastewater	CarolB

Comment: pH analysis performed in lab

**** Blank comment sections denote "No Comment"***

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Sales@chemservelab.com

TSAA
Todd Alving
166 Winter St
Hopkinton MA 01748

Control #: 104592
Project Number: 1508-0552
Project Name: Milford Quarry
Project Location: Milford MA

Analytical Results

Lab ID: 16060081
Date: 6/15/2016

Sample	Client Sample Identity	Start Date/Time Sampled:	Matrix
16060081-001	SW-1	6/7/2016 1:00:00 PM	Wastewater

Composite Start Date and Time 6/7/2016 1:00:00 PM **Composite End Date and Time**

Parameter	Method	Result	Qualifier	Date/Time Analyzed	Dilution Factor	RDL
Oil & Grease SGT-HEM	EPA 1664A	< 5 mg/L		6/9/2016	1	5
Oil & Grease Total	EPA 1664A	< 5 mg/L		6/9/2016	1	5
Total Suspended Solids	SM 2540D	< 4 mg/L		6/13/2016	1	4
pH	SM 4500-H-B	6.32 units	RO	6/7/2016 3:15:00 PM	1	0

Qualifier:	Description:
B-	Method blank contaminated with target analyte.
B1-	BOD had total oxygen loss. Result reported as ">"the highest dilution.
B2-	BOD had no oxygen loss. Result reported as "<" the lowest dilution.
G-	Reporting limit elevated due to matrix interference.
H-	Method prescribed holding time exceeded.
J-	Indicates an estimated value. Value is less than the quantitation limit.
IL-	Internal Standard(s) recovery was low due to matrix. Result may be biased high.
IH-	Internal Standard(s) recovery was high due to matrix. Result may be biased low.
LH-	Laboratory control spike(s) was high. Results may be biased high.
LL-	Laboratory control spike(s) was low. Results may be biased low.
MH-	Matrix spike recovery high due to matrix. Results may be biased high.
ML-	Matrix spike recovery low due to matrix. Results may be biased low.
N-	Non-target compound. Reported as a TIC.
NC-	Spike recovery was not calculated due to the concentration of the analyte being >4 times the concentration of the spike added.
R-	RPD outside acceptable recovery limits.
RO-	Sample received out of holding time.
SH-	Surrogate recovery high due to matrix
SL-	Surrogate recovery low due to matrix
U-	BOD/CBOD blank had an oxygen depletion greater than the suggested amount of 0.200.
V-	Sample pH for volatile analysis was not <2 when checked at time of analysis.
Z	Too numerous to count (TNTC)

An "A" in the result column on the report indicates absent for presence/absent bacteria and a "P" indicates present for presence/absent bacteria.

Chain of Custody No. 104592

Multiple COC's Yes (No)

ChemServe ENVIRONMENTAL ANALYSTS

CHAIN OF CUSTODY

317 Elm Street Milford, NH 03055
(603) 673-5440/ Fax (603) 673-0366

A CUSTOMER INFORMATION

CUSTOMER: TSA

ADDRESS: 166 WINTER ST

CITY/STATE/ZIP HOPKINTON, MA 01748

TELEPHONE: 508-435-3679

REPORT TO: TODD AWINS

EMAIL TO: TAWINS@VERIZON.NET

B PROJECT INFORMATION

JOB NAME: MILFORD QUARRY

JOB NUMBER: 1502-0552

LOCATION: MILFORD, MA

INVOICE EMAIL: SAME

INVOICE TO: SAME

P.O. NUMBER:

C SAMPLE INFORMATION

TURNAROUND TIME: (CIRCLE ONE:)

10 DAY STANDARD (5) RUSH (MUST BE PRE-APPROVED)

7day 5 day 4 day 3 day 2 day 1 day Same Day

MCP ☐ YES ☒ NO

☐ GWI ☒ GW2 ☒ GW3

STATION # (D)	SAMPLE IDENTIFICATION & LOCATION (E)	COLLECTED DATE (F)	COLLECTED TIME (G)	SAMPLE TYPE GRAB (H)	SAMPLE TYPE COMP (H)	MATRIX (I) SOLID (S) GROUND WATER (G) DRINKING WATER (D) WASTEWATER (W)	# OF CONTAINERS (J)	CONTAINER AND PRESERVATIVE (K) 1 Amber-HCl 500ml Plastic-Non	ANALYSIS (L)
	SW-1	6/7/16	1300	X		Liquid-Surface H2O	2	X X	TSS, PH, O+G, W/ Si. Cleanup + (SGT)
		DATE	TIME						
		DATE	TIME						
		DATE	TIME						
		DATE	TIME						
		DATE	TIME						
		DATE	TIME						
		DATE	TIME						
		DATE	TIME						

M CUSTODY

SAMPLER: TODD AWINS (print name)

SIGNATURE:

	DATE	MILITARY TIME
RELINQUISHED:	6/7/16	1300
RECEIVED:	6/7/16	1904
RELINQUISHED:	6/7/16	2104
RECEIVED FOR LAB:	6/7/16	3:00

SAMPLE CHECK LIST:

RECEIVED WITHIN HOLD TIME YES OR NO

RECEIVED IN GOOD CONDITION YES OR NO

TEMP BLANK 11.1 °C

SHIPPED OR HAND DELIVERED

SAMPLES WERE PROPERLY PRESERVED YES NO N/A

SAMPLES WERE FILTERED IN FIELD LAB N/A

IF NO EXPLAIN:

GROUP # 160600081 6/14

FIELD READING(S) & COMMENTS:

317 Elm Street
Milford, NH 03055

(603) 673-5440
Fax (603) 673-0366
Sales@chemservelab.com

Monday, November 07, 2016

Todd Alving
TSAA
166 Winter St
Hopkinton MA 01748

Project Name: Milford Quarry
Project #: 1508-0552
Project Location: Milford MA
Control #: 106584

Lab ID: 16100408
Date Received: 10/31/2016

Dear Todd Alving

Enclosed please find the laboratory results for the above referenced samples that were received by the ChemServe sample custodian on the above referenced date. Any abnormalities to the samples upon receipt would be noted on the enclosed chain of custody document. This report is not valid without a completed chain of custody with the corresponding control number, attached.

All samples analyzed by ChemServe are subject to quality standards. These standards are as stringent or more stringent than those established under NELAC, 40 CFR Part 136, state certification programs, and corresponding methodologies. ChemServe has a written QA/QC Procedures Manual that outlines these standards, and is available for your reference, upon request. Unless otherwise stated on the Chain of Custody or within the report, all holding times, preservation techniques, container types, and analytical methods are analogous with those outlined by NELAC. All units are based on “as received” weight unless denoted “dry”.

Residual chlorine, sulfite and pH are intended to be performed as an immediate field analysis. Should any of these analyses be performed in the lab instead of in the field it will result in those analyses being performed out of holding time.

I certify that I have reviewed the above referenced analytical data and state forms, and I have found this report within compliance with the procedures outlined within NELAC. ChemServe’s certified parameter list can be found at http://www.chemservelab.com/Laboratory-Information-and-Documentation.aspx

Jay Chrystal - President/Laboratory Director

ACCREDITED IN ACCORDANCE WITH nelac
Certificate Number 1008

317 Elm Street
Milford, NH 03055
(603) 673-5440
Sales@chemservelab.com

TSAA
Todd Alving
166 Winter St
Hopkinton MA 01748

Control #: 106584
Project Number: 1508-0552
Project Name: Milford Quarry
Project Location: Milford MA

Lab ID: 16100408
Date: 11/7/2016

Lab ID: 16100408

Sample Receiving and Comment Summary

Were samples submitted with a chain of custody?	Yes
Do all samples received match the chain of custody?	Yes
Were all samples received within applicable holding times?	Yes
Were all containers intact when received?	Yes
Were samples for volatile organic analysis free of headspace (per method)?	N/A
Was there evidence of cooling or were samples received on the same day as collection?	Yes
If the sample pH was not correct was it adjusted where applicable?	Yes
Were samples for dissolved metals already filtered by the client or field sampling?	N/A
Were Samples for O-phos filtered in the field?	N/A
Were samples received in the appropriate containers?	Yes
Were samples received in the appropriate containers?	Yes

Sample	Method	Client Identity	Matrix	Analyst
16100408-001	EPA 200.7	SW-2	Groundwater	CharleneF

Comment: no comment

**** Blank comment sections denote "No Comment"***

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(603) 673-5440
Sales@chemservelab.com

TSAA
Todd Alving
166 Winter St
Hopkinton MA 01748

Control #: 106584
Project Number: 1508-0552
Project Name: Milford Quarry
Project Location: Milford MA

Analytical Results

Lab ID: 16100408
Date: 11/7/2016

Sample	Client Sample Identity	Start Date/Time Sampled:	Matrix
16100408-001	SW-2	10/31/2016 11:00:00 AM	Groundwater

Composite Start Date and Time 10/31/2016 11:00:00 AM **Composite End Date and Time**

Parameter	Method	Result	Qualifier	Date/Time Analyzed	Dilution Factor	RDL
Acid Digestion	EPA 200.7			11/1/2016	1	0
Antimony	SW 6010C	< 0.005 mg/L		11/1/2016	1	0.005
Arsenic	SW 6010C	< 0.01 mg/L		11/1/2016	1	0.01
Cadmium	SW 6010C	< 0.002 mg/L		11/1/2016	1	0.002
Chromium	SW 6010C	< 0.01 mg/L		11/1/2016	1	0.01
Copper	SW 6010C	< 0.01 mg/L		11/1/2016	1	0.01
Iron	SW 6010C	0.210 mg/L		11/1/2016	1	0.05
Lead	SW 6010C	< 0.01 mg/L		11/1/2016	1	0.01
Nickel	SW 6010C	< 0.01 mg/L		11/1/2016	1	0.01
Silver	SW 6010C	< 0.007 mg/L		11/1/2016	1	0.007
Zinc	SW 6010C	< 0.01 mg/L		11/1/2016	1	0.01
Mercury	SW 7470A	< 0.0002 mg/L		11/3/2016	1	0.0002
Chloride	SW 9056	2.64 mg/L		11/4/2016 8:11:00 AM	1	1

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Control #: 106584
Project Number: 1508-0552
Project Name: Milford Quarry
Project Location: Milford MA

Analytical Results

Lab ID: 16100408
Date: 11/7/2016

Sample	Client Sample Identity	Start Date/Time Sampled:	Matrix
16100408-002	Stream-1	10/31/2016 11:15:00 AM	Groundwater

Composite Start Date and Time 10/31/2016 11:15:00 AM **Composite End Date and Time**

Parameter	Method	Result	Qualifier	Date/Time Analyzed	Dilution Factor	RDL
Acid Digestion	EPA 200.7			11/1/2016	1	0
Hardness by calculation	SM 2340B	144 mg/L		11/4/2016	1	0.5

Qualifier:	Description:
B-	Method blank contaminated with target analyte.
B1-	BOD had total oxygen loss. Result reported as ">"the highest dilution.
B2-	BOD had no oxygen loss. Result reported as "<" the lowest dilution.
G-	Reporting limit elevated due to matrix interference.
H-	Method prescribed holding time exceeded.
J-	Indicates an estimated value. Value is less than the quantitation limit.
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LL-	Laboratory control spike(s) was low. Results may be biased low.
MH-	Matrix spike recovery high due to matrix. Results may be biased high.
ML-	Matrix spike recovery low due to matrix. Results may be biased low.
N-	Non-target compound. Reported as a TIC.
NC-	Spike recovery was not calculated due to the concentration of the analyte being >4 times the concentration of the spike added.
R-	RPD outside acceptable recovery limits.
RO-	Sample received out of holding time.
SH-	Surrogate recovery high due to matrix
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U-	BOD/CBOD blank had an oxygen depletion greater than the suggested amount of 0.200.
V-	Sample pH for volatile analysis was not <2 when checked at time of analysis.
Z	Too numerous to count (TNTC)

An "A" in the result column on the report indicates absent for presence/absent bacteria and a "P" indicates present for presence/absent bacteria.

Chain of Custody No. 106584

Multiple COC's Yes No

ChemServe ENVIRONMENTAL ANALYSTS

CHAIN OF CUSTODY

317 Elm Street Milford, NH 03055
(603) 673-5440/ Fax (603) 673-0366

A CUSTOMER INFORMATION

CUSTOMER: TSAA
ADDRESS: 166 WINTER ST
CITY/STATE/ZIP HUDSON, MA 01749
TELEPHONE: (508) 435-3679
REPORT TO: TODD ALVINS
EMAIL TO: TALVINS@VERIZON.NET

B PROJECT INFORMATION

JOB NAME: MILFORD QUARRY
JOB NUMBER: 1502-0552
LOCATION: MILFORD, MA
INVOICE EMAIL: SAME
INVOICE TO: SAME
P.O. NUMBER:

C SAMPLE INFORMATION

TURNAROUND TIME: (CIRCLE ONE:)

10 DAY STANDARD RUSH (MUST BE PRE-APPROVED)

7day 5 day 4 day 3 day 2 day 1 day Same Day

MCP ☐ YES ☒ NO ☐ GWI ☒ GW2 ☒ GW3

STATION # (D)	SAMPLE IDENTIFICATION & LOCATION (E)	COLLECTED DATE (F)	COLLECTED TIME (G)	SAMPLE TYPE GRAB (H)	SAMPLE TYPE COMP (H)	MATRIX (I)	# OF CONTAINERS (J)	CONTAINER AND PRESERVATIVE (K) 500ml PLASTIC	500ml PLASTIC (HNO3)*	ANALYSIS (L)
	SW-2	10/31/16	1100	X		LIQUID-SURFACE H2O	1	X		TOTAL ANT, AS, Cd, CHR, Cu, CHLORIDE, FE, Hg, Ni, Ag, ZN, Pb *
	STREAM-1	10/31/16	1115	X		LIQUID-SURFACE H2O	1		X	HARDNESS

MATRIX: SOLID (S) GROUND WATER (G) DRINKING WATER (D) WASTE WATER (W)

M CUSTODY

SAMPLER: TODD ALVINS (print name)
SIGNATURE:

	DATE	MILITARY TIME
RELINQUISHED:	10/31/16	1120
RECEIVED:	10/31/16	1120
RELINQUISHED:	10/31/16	1345
RECEIVED FOR LAB:	10/31/16	1345

SAMPLE CHECK LIST:

RECEIVED WITHIN HOLD TIME (YES) OR NO
RECEIVED IN GOOD CONDITION (YES) OR NO
TEMP BLANK 5 °C
SHIPPED OR (HAND DELIVERED)
SAMPLES WERE PROPERLY PRESERVED (YES) NO N/A
SAMPLES WERE FILTERED IN FIELD LAB (N/A)
IF NO EXPLAIN:

GROUP # 16100408 11-7

FIELD READING(S) & COMMENTS:

* Added HNO3 to preserve metals sample upon arrival @ lab. CB