



City of Keene, NH

Earth Excavation Permit Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

SECTION 1: PROJECT INFORMATION

PROJECT NAME:	TYPE OF APPLICATION BEING SUBMITTED & FEE:
	☐ EARTH EXCAVATION PERMIT—\$50.00
PROJECT ADDRESS(ES):	☐ EARTH EXCAVATION APPLICATION—\$250.00
	☐ MAJOR AMENDMENT—\$250.00
	☐ MINOR AMENDMENT—\$125.00
	☐ PERMIT RENEWAL—\$250.00

SECTION 2: CONTACT INFORMATION

PROPERTY OWNER	APPLICANT	
NAME/COMPANY:	NAME/COMPANY:	
MAILING ADDRESS:	MAILING ADDRESS:	
PHONE:	PHONE:	
EMAIL:	EMAIL:	
SIGNATURE:	SIGNATURE:	
PRINTED NAME:	PRINTED NAME:	
AUTHORIZED AGENT (if different than Owner/Applicant)	FOR OFFICE USE ONLY:	
NAME/COMPANY:	TAX MAP PARCEL #(s):	
	_____ - _____ - _____ - _____ - _____	
MAILING ADDRESS:	_____ - _____ - _____ - _____ - _____	
PHONE:	PARCEL SIZE:	DATE STAMP:
EMAIL:	ZONING DISTRICT:	
SIGNATURE:		
PRINTED NAME:	PROJECT #:	

SECTION 3: APPLICATION SUBMISSION REQUIREMENTS

A COMPLETE APPLICATION MUST INCLUDE THE FOLLOWING ITEMS AND MUST BE SUBMITTED BY ONE OF THE OPTIONS BELOW:

- **Email:** communitydevelopment@keeneenh.gov, with "Planning Board Application" in the subject line
- **Mail / Hand Deliver:** Community Development (4th Floor), Keene City Hall, 3 Washington St, Keene, NH 03431

The submittal requirements for Earth Excavation Permit applications are outlined further in **Article 25** and **Article 26.19** of the [Land Development Code \(LDC\)](#). You may request an exemption from providing any of the items below, except the application fee, notice list, narrative, and mailing labels. The Community Development Director may grant an exemption, if it is determined that the scope of the project does not warrant the submittal.

Note: Additional information may be requested by the respective decision-making authority during the review process.

GENERAL SUBMITTAL REQUIREMENTS

CERTIFIED NOTICE LIST (See **Attachment A** for more information.)

2 SETS OF MAILING LABELS (See **Attachment A** for more information.)

PROJECT NARRATIVE (See **Attachment B** for more information.)

FEES: Fill in the information below to calculate the total fee. Base application fees can be found at the top of page 1.

Base application fee + \$62 legal ad fee + (_____ current USPS certificate of mailing rate x _____ abutters) = _____ **(Total Fee)**

NOTE: Please call the Community Development Department for the current certificate of mailing rate. Checks should be made payable to the *City of Keene*. Credit card payments are accepted in-person or by calling 603-352-5440.

WAIVERS & EXCEPTIONS (See **Attachment C** for additional information.)

- ☐ **WAIVER(S) / EXCEPTION(S) REQUESTED**
☐ **NO WAIVER(S) / EXCEPTION(S) REQUESTED**

THE NAME & CONTACT INFORMATION OF THE PERSON OR ENTITY THAT WILL BE PERFORMING THE EXCAVATION.

PHOTOGRAPHS OF THE EXCAVATION SITE (See **Attachment D** for more information.)

PLAN SETS (See Attachment D for additional information.)		SUBMITTED	EXEMPTION REQUESTED
LOCUS MAP			
PHASING PLAN			
CONTEXT MAP			
EXISTING CONDITIONS MAP			
EXCAVATION SITE MAP			
EROSION CONTROL, SEDIMENTATION, AND DRAINAGE MANAGEMENT PLAN SET			
IMPACT CONTROL & MONITORING PLAN			
RECLAMATION PLAN			
TECHNICAL REPORTS (See Attachment D for additional information.)		SUBMITTED	EXEMPTION REQUESTED
SOILS ANALYSIS			
HYDROLOGIC / GEOLOGIC ANALYSIS			
TRAFFIC ANALYSIS			
VIEW PRESERVATION ANALYSIS			
ANALYSIS OF IMPORTANT HABITAT			
MISCELLANEOUS INFORMATION			

CONSULTANT FEE

Per **Article 26.19.7.A** of the [LDC](#), upon receipt of an Earth Excavation Permit application, the Planning Board shall retain a consultant, at the expense of the applicant, for the purpose of reviewing the application for completeness and compliance with NH RSA 155-E and the Earth Excavation Regulations in Article 25 of the LDC. This consultant shall review all aspects of the submittal. **Failure to comply with submitting application materials, including payment for the hiring of a consultant, will deem an application "incomplete."**

ATTACHMENT A: CERTIFIED NOTICE LIST INSTRUCTIONS

City of Keene, NH

Community Development Department Certified Notice List



If you have questions about how to complete an application, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

Per Article 26.2.4 of the Land Development Code (LDC) and in accordance with state law, certain Zoning Board of Adjustment (ZBA), Planning Board, and Historic District Commission (HDC) applications require mailed notice.

The following parties are required to be noticed as part of the application process:

- Property owner
- Project applicant
- Authorized agent (if applicable)
- All direct property abutters (including those across water bodies and roads), as well as all properties within 200-ft of the subject parcel
- Every engineer, architect, land surveyor, or soil scientist whose professional seal appears on any plan
- Holders of conservation, preservation, or agricultural preservation restrictions on the property

**Note: Only direct abutters must be noticed as part of HDC applications.*

For these applications, the following items must be submitted:

- A list of all persons entitled to notice
- 2 sets of mailing labels
- Notice certification form
- Mailing fee (current USPS certificate of mailing rate* x number of abutters)

**Please call the Community Development Department for the current certificate of mailing rate.*

The notice list shall include the following information:

- Property owner's name
- Property owner's mailing address
- Property owner's street address,
- The tax map parcel (TMP) number(s) (15-digit number)

The mailing labels shall include the following information:

- Property owner's name
- Property owner's mailing address
- The tax map parcel (TMP) number(s)

The City of Keene's [GIS Database](http://axisgis.com/keenenh/) (axisgis.com/keenenh/) can be used to generate an abutters list and mailing labels.

PLEASE MAKE SURE THAT ALL PARTIES INCLUDED ON THE NOTICE LIST ARE ALSO INCLUDED ON THE MAILING LABELS.

CERTIFICATION OF ACCURACY

By signing below, you are certifying that the submitted notice list is accurate and true to the best of your ability and that per **Article 26.2.4.A.3** of the LDC, the notice list is current to within 10 days of the application submittal.

Print Name

Date

Signature

NOTICE LIST

This template can be used to record the name, mailing address, street address, and tax map parcel (TMP) # for each party that is required to be noticed as part of an application.

[illegible]

ATTACHMENT B: PROJECT NARRATIVE INSTRUCTIONS

A written narrative addressing the criteria in **Article 25** and **Article 26.19.4.B** of the [LDC](#) is required for a complete application.

Below is a checklist of the items that must be included as part of this narrative:

- ☐ **Description of the location, boundaries and zoning district(s) of the proposed excavation parcel(s) and site.** (including the municipalities and counties in which the project lies.)
- ☐ **Description of the type(s) of earth material to be excavated and the methods to be employed to excavate, process, and transport the earth materials.**
- ☐ **Description of the expected duration of the entire excavation project, and whether the excavation project will include more than one non-contiguous excavation area, each of which would constitute an excavation phase.** (a separate excavation permit application shall be required for each non-contiguous excavation area)
- ☐ **Description of the number of acres of the excavation area and the excavation perimeter under consideration for the earth excavation permit.** (hereinafter “current permit phase”)
- ☐ **Description of the volume of earth material to be removed per year from the excavation area during the current permit phase and the proposed time schedule for the current permit phase.** (including a timeframe for completing incremental reclamation)
- ☐ **Description of the maximum breadth, depth, and slope of the excavation area for the current permit phase.**
- ☐ **Information about the location of the access driveway for the current permit phase and a description of any existing visual barriers between the excavation perimeter and the public highway to be utilized to access the site.**
- ☐ **Information about the elevation of the estimated highest annual average groundwater table within or adjacent to the proposed excavation area and an indication of whether the excavation will occur at depths below this level.** (if the applicant proposes to excavate bedrock, they shall provide the elevation of the estimated highest annual average groundwater table for both the overburden and the bedrock)
- ☐ **Description of the proposed methods of disposal of boulders, stumps, vegetation and other debris.**
- ☐ **Description of the proposed methods for controlling storm water, drainage, erosion, and sedimentation during the excavation project.**
- ☐ **Description of the means by which the applicant shall avoid and/or mitigate adverse impacts caused by dust, noise, and traffic at the site.**
- ☐ **Description of the precautions to be taken by the applicant to protect the safety and welfare of persons on the site.**
- ☐ **Description of the proposed method for handling, transporting, and disposing of fuel and/or chemicals on the site.**
- ☐ **Description of the means by which earth materials are proposed to be transported from the excavation site, and the proposed load limits and maximum number of vehicle trips per day.**
- ☐ **General description of the extent to which blasting will be used to excavate earth materials and the name and classification of any explosive substances that may be used at the excavation site over the course of the excavation project.**
- ☐ **Any other descriptive information that the Planning Board may reasonably deem necessary to determine compliance with NH RSA 155-E, the Earth Excavation Regulations in Article 25, and this LDC.**

ATTACHMENT C: WAIVER & EXCEPTION REQUEST INSTRUCTIONS

WAIVERS: Applicants may request a waiver from the Planning Board from strict compliance with specific provisions of the Earth Excavation Regulations outlined in **Article 25** and **Article 26.19** of the [Land Development Code \(LDC\)](#) on a case-by-case basis, following the procedure for waiver requests specified in **Article 26.19.13**.

EXCEPTIONS: The Planning Board shall also have the sole authority to grant an exception in writing to the standards contained in **NH RSA 155-E:4-a** ("Minimum and Express Operational Standards"), **NH RSA 155-E:5** ("Minimum and Express Reclamation Standards"), and **NH RSA 155-E:5-a** ("Incremental Reclamation").

Requests for waivers from the regulations and exceptions to statutory standards must be in writing and shall be subject to a public hearing. Such waiver or exception requests shall:

1. State specifically which requirements or standards are requested to be waived/excepted;
2. Explain why there is a need for the waiver(s) and/or exceptions(s); and,
3. Propose alternative requirements or standards, and shall demonstrate how the alternative requirements or standards cause the proposed excavation operation to comply with the criteria for waivers/exceptions in this section and how said alternative requirements and standards meet the intents and purposes of the City of Keene Earth Excavation Master Plan, NH RSA 155-E, and the Earth Excavation Regulations in Article 25 of this LDC.

PLEASE SUBMIT A SEPARATE WRITTEN REQUEST FOR EACH STANDARD THAT YOU ARE REQUESTING A WAIVER/EXCEPTION FROM.

GENERAL WAIVER/EXCEPTION CRITERIA: The criteria below must be addressed as part of each exception/waiver request.

1. The granting of a waiver/exception will not increase the potential for adverse impacts.
2. The requested waiver/exception is consistent with the purpose and intent of the City of Keene Earth Excavation Master Plan, and the Earth Excavation Regulations in Article 25 of this LDC.
3. The granting of the requested waiver/ exception will not be unduly injurious to public or environmental welfare.
4. The scale; volume; area; design features; siting of earth excavation operations; the nature of the proposed operation; the unique site characteristics including, but not limited, to topography, density of vegetation and/or surrounding land uses; and, the alternative conditions or standards, taken as a whole, will adequately avoid or mitigate the potential for adverse impacts.

SETBACK WAIVER/EXCEPTION CRITERIA: For waivers and exceptions of setbacks to property boundaries and public rights of way, the following criteria should also be addressed as part of the request.

1. Waivers and exceptions of setbacks to property boundaries and public rights of way shall not be granted for operations that include blasting or crushing activities.
2. The Planning Board shall consider the extent to which property owners abutting the affected setback have provided written consent to the proposed alternative setback.

SURFACE WATER RESOURCE WAIVER/EXCEPTION CRITERIA: For waivers and exceptions to surface water resource setbacks, the following criteria should also be addressed as part of the request.

1. The proposed activity cannot be located in a manner that avoids an encroachment in the setback.
2. If the proposed activity cannot be located in a manner to avoid an encroachment in the setback, then all practicable measures have been taken to minimize the encroachment in the setback.
3. The area of encroachment does not adversely impact the functions and values associated with the setback or the surface water resource. Such demonstration shall include an evaluation of at least the following.
 - a. The size, character and quality of the affected surface water resource.
 - b. The nature of the functions and values served by the surface water resource.
 - c. The nature of the topography, slopes, soils and vegetation in the area that encompasses the surface water resource and the setback.
 - d. The location and connectivity of the surface water resource in relation to other surface water resources in the surrounding watershed.
 - e. The use of the setback as wildlife habitat and/or as a wildlife travel corridor.
 - f. The role of the setback in mitigating soil erosion, sediment and nutrient transport, groundwater recharge, flood storage and flow dispersion.
 - g. The rate, timing and volume of stormwater runoff and its potential to influence water quality associated with the affected surface water resource or any associated downstream surface water resources.
 - h. The sensitivity of the surface water resource and the setback to disruption from changes in the grading or vegetation structure in the setback.
4. In cases where the Planning Board grants a waiver of setbacks to surface water resources, the applicant shall be required to document the preexisting character and quality of the water resource prior to initiating site development activities. Such documentation shall serve as baseline information to be used to assess the effectiveness of the approved alternative setback standard.

ATTACHMENT D: SUBMITTAL MATERIALS

The items outlined below are required as part of a complete Earth Excavation Permit Application. Additional information can be found in **Article 26.19.4** of the [LDC](#). You may request an exemption from submitting any of these items by checking the appropriate box in **Section 3** of the application form.

Plans must be signed and stamped by a NH licensed engineer or architect and must show all items outlined in **Article 26.19.4** of the [LDC](#).

PLEASE SUBMIT 2 COPIES OF PLAN SETS ON 22-IN BY 34-IN PAPER OR LARGER SIZE AND AN ELECTRONIC PDF FILE.

ITEM DESCRIPTIONS

PHOTOGRAPHS OF THE EXCAVATION SITE: These photos should show at least the following vantage points, each of which shall be indicated on the site plan map.

1. The proposed excavation areas.
2. Areas within the proposed excavation perimeter where processing and stockpiling of earth material will occur.
3. The area where the proposed access driveway will be located, including the point where the access driveway meets the public right-of-way.
4. At least 2 vantage points along public rights-of-way abutting the excavation parcel(s), to show the existing visual barriers, vegetation and screening of the excavation site.

LOCUS MAP: This map should depict the location of the proposed excavation site within the boundaries of the City and all state numbered highways in the City.

PHASING PLAN: This plan should be drawn at a scale of 1-in = 500-ft (or other scale as requested) and show an outline of the location of each excavation area and corresponding excavation perimeter for each phase of the excavation project.*

*Notes shall be placed on the plan labeling the excavation area and corresponding excavation perimeter for each phase of the excavation project, indicating the approximate dates and duration of each phase, and the number of acres comprising the excavation area and the excavation perimeter for each phase, and the estimated volume of earth material to be excavated in each phase.

CONTEXT MAP OF THE EXCAVATION SITE: This map should be drawn at a scale of 1-in = 500-ft (or other scale as requested), and show the proposed excavation area and excavation perimeter that will be used during the current permit phase, and depicting all of the following information within a 1-mile radius of the excavation perimeter, unless otherwise specified.

1. Contours at 25-ft intervals, surface water resources, city streets (labeled), state highways, property lines (with parcels labeled to indicate primary land use), and all structures and buildings.
 2. Zoning district boundaries with each district clearly labeled.
 3. The location of any public water supplies, primary and secondary wellhead protection areas for municipal wells, ground-water aquifers, and potential future municipal wells and surface water resource areas identified in the City of Keene Water Resources Plan, and any updated water resource or aquifer information as shown on the City of Keene GIS system.
 4. The boundaries of Zone 1 and Zone 2 of the City's View Preservation Overlay as defined in Figure 14-1 in Article 14 of this LDC.
 5. The boundary lines of the excavation parcel(s) with the excavation perimeter highlighted.
 6. Approximate location of all private wells within 1-mile of the excavation area.
 7. Lot lines, abutter names and tax map parcel numbers of all properties abutting the excavation site.
- Any other information that the Planning Board may reasonably deem necessary to determine compliance with NH RSA 155-E, the Earth Excavation Regulations in Article 25, and this LDC.

ITEM DESCRIPTIONS CONTINUED

EXISTING CONDITIONS MAP: This map should be drawn at a scale of 1-in = 50-ft (or other scale as requested), and show the proposed excavation area and excavation perimeter for the current permit phase, and depicting all of the following information within the excavation perimeter and within a 500-ft radius beyond the excavation perimeter.

1. Contours of at most 2-ft intervals showing existing topography and drainage patterns.
2. Surface waters, rock outcroppings, and important habitat. (All wetland areas located within a 300-ft radius surrounding the excavation perimeter shall be delineated by a wetlands scientist certified by the State of New Hampshire.)
3. Public streets and rights-of-way, lot lines, abutter names, and tax map parcel number(s) of all abutting properties within the 300-ft radius surrounding the excavation perimeter.)
4. Location of existing wooded and vegetated areas. (Areas that have been logged within 10-years prior to the application date shall be identified as such on the plan, with a notation indicating the month and year of the cut.)
5. Location of buildings, structures, power lines and other utilities, wells, septic systems, private roads or driveways, stone-walls, cellar holes, cemeteries, easements, and rights-of-way. (Septic systems, stonewalls, cellar holes, cemeteries, easements and rights of way located outside of the excavation parcels do not need to be shown on the map.)
6. An outline of the proposed excavation area, excavation perimeter, and access driveway.

EXCAVATION SITE MAP: This map should be drawn at a scale of 1-in = 50-ft (or other scale as requested), and focus on the area within the proposed excavation perimeter to be used during the current permit phase and showing the following information.

1. Contours of at most 2-ft intervals showing existing topography and drainage patterns.
2. Surface waters.
3. The location of and proposed number of acres within the excavation perimeter and the excavation area, and the volume of earth material to be removed per year from the excavation area during the permit period.
4. The location, breadth, depth, and slope of all sidewalls within the proposed excavation area.
5. Locations of proposed buildings, structures, accessory facilities/activities, safety fencing, processing areas, and material stockpiling areas within the excavation perimeter, including designated fuel storage, refueling, and equipment maintenance areas.
6. Proposed locations of and provisions for vehicular traffic, parking areas, access and service driveways, including design and materials to be used for constructing said areas and driveways, truck flow on site, and any proposed traffic controls for site entrances and exits.
7. Location and types of proposed water storage areas for water to be used to support excavation operations, and drainage and storm water management structures and devices.
8. Location, height, type and materials of existing and proposed visual and sound barriers on the excavation site.
9. Location and nature of proposed dust control structures, devices and processes.
10. Any additional information that the Planning Board may reasonably deem necessary to determine compliance with NH RSA 155-E, the Earth Excavation Regulations in Article 26 and this LDC.

EROSION CONTROL, SEDIMENTATION & DRAINAGE MANAGEMENT PLAN: This plan should show the methods that will be implemented to control runoff volume, velocity and water quality during the current permit phase. This plan shall be drawn at a scale of 1-in = 50-ft (or other scale as requested) & should show the following information within the proposed excavation perimeter to be used during the current permit phase.

1. Contours of at most 2-ft intervals showing existing topography and drainage patterns.
2. Surface waters.
3. The location of the excavation area, the excavation perimeter, and the access driveway.
4. The location and type of all earth stockpile areas.
5. The proposed grading and drainage pattern within the excavation perimeter.
6. The location(s) and design details for all proposed erosion control, sediment control, and water and drainage management structures, devices, and processes including but not limited to: water detention ponds; sediment settlement areas; silt fences and other erosion control devices; flow dissipation measures; soil stabilization measures; water storage ponds to be used to support operations; and any other measures necessary to minimize erosion and sedimentation, and promote soil stabilization.
7. A note describing the procedures and timing for inspecting, maintaining, and repairing erosion control, sedimentation control, and water and drainage management structures, devices and processes.
8. A note indicating the requirement for documenting in a log all inspection and maintenance activities, all adverse impacts identified during inspections, and actions taken to remediate the adverse impacts.

ITEM DESCRIPTIONS CONTINUED

IMPACT CONTROL AND MONITORING PLAN SET: This plan set should be created for avoiding, identifying, and responding to adverse impacts associated with the excavation operations. It shall propose structures, devices, and processes for avoiding potential adverse impacts. The plan shall also provide protocols to be used for documenting baseline conditions, conducting monitoring for adverse impacts, responding to and/or correcting adverse impacts when they are identified, and for documenting monitoring activities, adverse impacts that occur, and how the adverse impacts were corrected. Potential impacts to be addressed in this plan shall include noise, dust, reduction of groundwater quantity and quality, spills of toxic or hazardous materials, blasting and pollution of surface and ground water.

THIS PLAN SET SHOULD INCLUDE THE FOLLOWING ITEMS:

A NOISE IMPACT CONTROL AND MONITORING PLAN, WHICH SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:

1. The location and design of structures, devices, and processes to be installed on the site to avoid, control, and minimize adverse noise levels from leaving the excavation site.
2. A protocol for conducting monitoring of sound levels and complying with the earth excavation regulations in Article 24 of this LDC. Said protocol shall include at least: proposed locations for measuring background ambient sound levels and for monitoring sound levels once the excavation operation has commenced; proposed dates for measuring ambient sound levels; proposed annual time periods when sound monitoring will be conducted; and, specifications for sound measurement equipment to be used.
3. A protocol for responding to noise complaints, complying with the earth excavation regulations in Article 24 of this LDC.

A DUST CONTROL AND MONITORING PLAN, WHICH SHALL INCLUDE AT LEAST THE FOLLOWING:

1. The location and design of structures, devices and processes to be installed, maintained and/or implemented to control air borne dust, and/or transportation of dirt and mud by vehicles exiting the site.
2. A protocol for inspecting structures, devices, and processes to determine if maintenance is necessary and/or to determine if and when control and abatement processes should be implemented.

A GROUNDWATER LEVEL MONITORING PLAN, WHICH SHALL INCLUDE AT LEAST THE FOLLOWING:

1. The location and depth of all ground water monitoring wells and the seasonal high groundwater depth at each well.
2. A protocol for monitoring the effect of the excavation operations on ground water levels to prevent dewatering of surface waters, wetlands, public and private wells or water supplies, and groundwater aquifers, including bedrock aquifers. Such a plan is only required for those projects proposing to excavate below the overburden seasonal high groundwater level.
3. A response plan for providing an immediate replacement water supply for any public or private water supplies that are disrupted as a result of the excavation operations.

A HAZARDOUS AND TOXIC SPILL RESPONSE PLAN, WHICH SHALL INCLUDE AT LEAST THE FOLLOWING:

1. A list of all hazardous and toxic substances to be used or stored on the site.
2. A protocol for containing and abating spills when they occur and for remediating and restoring areas impacted by spills.

A PLAN FOR MONITORING AND REMEDIATING ADVERSE IMPACTS TO SURFACE OR GROUND WATER QUALITY CAUSED BY THE EXCAVATION OPERATION.

ITEM DESCRIPTIONS CONTINUED

RECLAMATION PLAN: This plan should provide an overview of the long-term reclamation objectives for the excavation project and a detailed reclamation plan for the current excavation phase. Said plans shall contain the following information.

1. A description, if known or anticipated, of proposed future land use on the excavation site after completion of the excavation project. In this description, the applicant shall demonstrate that the proposed future land use is consistent with the Zoning Regulations (Articles 2 through 19 of this LDC) and the City's Comprehensive Master Plan. If no future land use is known or anticipated at the time of application, the reclamation plan shall reflect a return to natural vegetated condition similar to the pre-excavation condition.
2. A detailed narrative description of the process and schedule for reclamation, including specifications of proposed soil conditioning, seeding and mulching methods, and the quantities, sizes, and types of plant materials to be used in reclaiming the site.
3. A detailed description of the means by which the applicant intends to remediate the adverse impacts to soils, drainage systems, surface water, ground water, vegetation, overburden, topography, and fill materials.
4. A map of the excavation perimeter drawn at a scale of 1-in = 50-ft, or other scale as the Community Development Director may reasonably deem necessary, depicting the following information.
 - a) Boundaries of the area to be reclaimed.
 - b) Final topography of the reclaimed area showing at most 2-ft contour intervals.
 - c) Final surface drainage pattern including the location and physical characteristics of all existing, modified and/or constructed drainage structures.
 - d) Locations of buildings, structures, and/or fences, proposed to remain on the site after reclamation.
 - e) Locations, types and sizes of all proposed landscaping to be planted as part of the reclamation plan.
5. A written estimate of all reclamation costs associated with the current permit phase.

SOILS ANALYSIS: This analysis shall focus on land within the excavation perimeter, and shall include at least the following:

1. An analysis of soils maps signed and stamped by a NH licensed soil scientist as shown in the Cheshire County Soil Survey, identifying the location of hydrologic soils grouped in class A or B and identifying the location of any soils or topographic conditions that are susceptible to erosion.
2. The location and logs for all soil test pits and/or borings made on the site in preparing the earth excavation permit application.

HYDROLOGIC/GEOLOGIC ANALYSIS: This analysis shall be required for all excavation projects that propose depths below the seasonal high ground water table in either the overburden or the bedrock. This analysis shall include at least the following:

1. The seasonal high ground water table elevations in the proposed excavation area as determined by digging test pits and/or installing monitoring wells.
2. The location of public and private wells within one-half (½) mile of the proposed excavation area.
3. The location of all surface water bodies and wetlands within 300-ft of the excavation perimeter.
4. A baseline water depth or elevation for all wells, and surface water bodies identified above.
5. The results of a 72-hour constant discharge pump test.

ITEM DESCRIPTIONS CONTINUED

TRAFFIC ANALYSIS: This analysis shall be conducted by a NH licensed transportation engineer and shall identify the impacts on road safety and capacity as a result of the excavation operation. This analysis shall include at least the following information:

1. A description of the proposed truck travel route along any City streets to be used between a State Numbered Highway and the excavation access driveway.
2. The estimated annual, weekly, daily and peak hour vehicle trips to and from the excavation site for all trucks used for transporting earth materials and for all vehicles including, but not limited to, personal vehicles of employees, agents, representatives, and customers.
3. The proposed maximum number of vehicle trips per day for all vehicles accessing the site, and the proposed maximum number of trips per day for all trucks used for transporting earth materials and equipment.
4. In the event the estimated number of vehicle trips per day for all vehicles exceeds 100 vehicle trips, the applicant shall provide a complete traffic study, which shall include at least the following:
 - a. Daily and peak hour traffic counts for all streets included along the proposed travel route.
 - b. An estimate of the volume distribution for vehicles entering and leaving the excavation site.
 - c. A level of service analysis for all intersections that may be impacted by the excavation operation.
 - d. An accident analysis for all road segments and intersections that may be impacted by the excavation operation.

VIEW PRESERVATION ANALYSIS: All applicants for an earth excavation permit who propose to locate the excavation site within Zone 1 or Zone 2 of the View Preservation Overlay as defined in Figure 14-1 in Article 14 of this [LDC](#), shall submit a visual analysis demonstrating the extent to which the excavation operation will be visible from any public right-of-way, abutting property, or prominent overlook not located on the excavation site. This analysis may include a combination of photographs, elevations, and cross sections to demonstrate the extent of the visual impact.

ANALYSIS OF IMPORTANT HABITAT: All applicants for an earth excavation permit shall provide an environmental review of the excavation site obtained from the NH Natural Heritage Bureau, to determine if any lands within the excavation site are listed in the NH Natural Heritage Database as containing rare, endangered or threatened species, species of special concern, or exemplary natural communities.

NOTE: If lands within the analysis area are included in the NH Natural Heritage Database, a natural resource inventory for both vegetation and wildlife shall be completed by a forest ecologist, wildlife biologist, or other qualified professional, to verify the presence and/or significance of the important habitat and to determine whether the excavation will cause an adverse impact, degradation, or fragmentation of said important habitat.

MISCELLANEOUS INFORMATION: Applicants for an earth excavation permit shall provide to the Planning Board any and all additional information that the Board may reasonably deem necessary in order to complete a site-specific review of the excavation site and to determine whether the proposed excavation complies with NH RSA 155-E, and the Earth Excavation Regulations in Article 25 of this LDC.