

Site Alteration Permit Application

"135 High Street Ashland MA"

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135 High Street
Ashland MA 01721

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1.0 Project Summary

The project is contained within a single-family residential building lot totaling approximately 3.2 acres located on the westerly side of High Street in Ashland MA. High Street is a public way in the town of Ashland. The residential building lot is shown on a plan dated July 31, 1951 and recorded in the Middlesex South District Registry of Deeds as Plan Number 1338 of 1951. The project site includes a wooden existing 2 story wood dwelling with an existing asphalt driveway and other amenities associated with single family residential uses. The site also includes a newly constructed wooden horse barn with gravel access driveway and a stone dust riding ring.

The site is characterized by gradual to moderate sloped terrain that flows in an easterly to westerly direction from the pavement within the High Street Right-of-way to the rear boundary of the parcel. The parcels contain both lawn and natural woodlands with several mature trees and moderately dense undergrowth of natural woody shrub species;

No wetlands resource areas or other environmentally sensitive areas exist on the project site.

The proposed project consists of the construction of a horse barn and associated riding ring for use by the horses owned by the parcel owner. The project site terrain was shaped to mimic the existing site grades prior to construction. The intent was to re-create the slopes in a manner that would not create issues for access to the ring by the animals for riding/exercising. Fill materials were imported to the site to create the lawn areas. Loam materials have been placed over the fill materials and seed added to encourage rapid stabilization of all disturbed areas with vegetation (i.e. grass). The lawn areas are growing successfully on all loamed and seeded areas.

1.1 Site Features

Topography: the site topography is gradually to moderately sloped. The topography located on the site ranges in elevation from 102 to elevation 62 (Assumed Elevation Datum). The project site is lawn area and natural woodlands associated with residential uses at the site.

Soils: The site is located in an area of Woodbridge and Paxton soils (Type B and C soils) according to the NRCS web soil survey. This soil type is characterized as "fine sandy loam" and generally has the characteristic of moderate to well drained soils.

Wetlands: An on-site visual review by the staff at this office revealed that no wetlands resource areas exist at the project site. No rare species habitat identified under the Natural Heritage and Endangered Species Program exist at the project site.

Surface Water: The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Town of Ashland at the project location indicates that the site is within Zone X, an area of minimal flooding (see Community Panel Number 25017C0513F dated July 7, 2014).

2.0 Construction Activity

2.1 Construction sequence

The Owner will be responsible for implementing the following erosion control and site stabilization practices. The Owner may designate these tasks to a subcontractor, but the responsibility for implementing these controls and ensuring proper function remains with the Owner. The erosion control and site stabilization measures shown on the attached design plans were selected based on the expected construction activities as follows:

1. Define project limits and stake elements of site alteration.
2. Install erosion/sedimentation controls (i.e. rip-rap diffusing pads) where shown on site plans
3. Monitor and update erosion control measures as needed. Complete grading activities, if necessary.
4. Final plantings and stabilization of any disturbed areas or areas of "washout" as specified. Monitor conditions until stabilization is complete. Monitor drainage flows to insure storm water flows are directed into the rip-rap pads.

It is anticipated that the above sequence of activities will begin as weather conditions allow, but no later than May 15, 2018 and will be completed prior to November 30, 2018.

2.2 Site Specific Stabilization Practices

Stabilization practices that include the establishment of vegetation that will prevent erosion and reduce storm water runoff velocity are the foremost preventative measures for minimizing sediment discharge. By reducing the energy of storm water flow over the ground surface, stabilization methods allow for increased infiltration of water into the ground surface and for deposition of sediment prior to a discharge to receiving areas.

Stabilization of disturbed soils shall be implemented as soon as practicable but no more than fourteen (14) days after grading or construction activities have temporarily or permanently ceased unless there is sufficient snow cover to prohibit implementation or unless earth disturbing activities within the area will resume within twenty-one (21) days.

The installation of the rip-rap diffusing pads will control the velocity of storm water flows and will direct these flows to areas designed to minimize soil erosion and sedimentation. The infiltration of portions of the storm water flows will further aid in reducing the volume of water flowing to areas adjacent to the project site.

2.3 Permanent Stabilization Measures

Permanent Vegetative Cover: Vegetative cover provides a low maintenance solution to minimize runoff velocity, prevent erosion and retain particulates. Permanent cover includes the establishment of grassed lawns in areas that do not receive excessive erosive forces or require impervious surfaces. The Owner shall provide permanent vegetative cover as prescribed on the attached design plans as soon as possible during

construction. The establishment of permanent vegetative cover during construction in select areas is preferred over that of temporary seeding.

The rear yard of the existing dwelling has been graded such that storm water flows will be directed into the rear of the project site. The storm water flows will be directed to the naturally wooded areas to the west of the existing ring and be allowed to follow the natural grade throughout that area.

2.4 Storm water infiltration

The site is located in an area of Type C soils as shown on NRCS soils maps. A level of proposed infiltration will be achieved through the construction of a stone rip-rap diffusing pads as well as flows over the existing woodlands where leaf litter and organic soil materials will encourage the infiltration of storm water flows.

3.0 Inspection and Maintenance and Procedures

Inspections. The following practices will be used to inspect erosion and sediment controls. The Owner is responsible for designating an individual responsible for inspection and maintenance procedures, if necessary.

- Formal inspections of all erosion and sediment control measures proposed as part of the project must occur weekly and following storm events. The inspections will occur during and after storm events anticipated to result in storm water runoff until site alteration activities have been completed and disturbed areas stabilized

Maintenance. The following maintenance practices will be used by the Owner to maintain erosion and sediment controls.

- All erosion and sediment control measures and other protective measures must be maintained in an effective operational manner.
- If site inspections indicate the measures are not operating effectively additional controls shall be placed or maintenance performed as soon as possible and before the next storm event to maintain the effectiveness of the measures.
- All pollution prevention measures must be maintained in good working order. If repair is necessary, it must be initiated within 24 hours of discovery, if possible.
- Maintenance and inspection of the measures must be continued on the site as long as a portion of the site remains disturbed.
- Stabilization measures must be initiated as soon as is practicable on a portion of the site where construction has temporarily or permanently ceased. This must occur within 14 days after activities have ceased unless it is precluded by snow cover or frozen ground or unless activities will resume within 21 days after the suspension of activities.