

November 4, 2022

Ms. Becca Solomon, Conservation Agent
Conservation Commission
Town of Ashland
101 Main Street
Ashland, MA 01721

RE: 299 Wilson Street, (Map 17 Parcel 0002), Ashland, Massachusetts, Notice of Intent

Dear Ms. Solomon:

GCG Associates, Inc. has reviewed the following information for the 299 Wilson Street, Notice of Intent filing for reconstruction existing drainage channel with lined riprap channel, remove existing CMP pipe & construct new concrete channel both tasks located at Ashland Water treatment plan property.

Documents:

1. Notice of Intent package for 299 Wilson Street prepared by Engineering Design Consultants, Inc. (EDC), dated August 01, 2022.

Plan:

1. Offsite Stormwater Improvements, Wilson Street – Howe Street, prepared by EDC, dated September 27, 2022, consists of 2 sheets.

Based upon our review of the above information, we offer the following comments with respect to compliance with 310 CMR 10.00 Wetland Protection, and MassDEP Stormwater Management requirements per Massachusetts Stormwater Handbook (MSH). The numerical section of the regulations is referenced at the beginning of each comment unless it is a general comment.

General Comments:

1. The project site at 299 Wilson Street is shown on the Town of Ashland Assessors record as 299 Howe Street (Map 17 parcel 0002), where consists of 2.76 acres, owned by the Town of Ashland Water Department and operating as their water treatment plant and pump station. The proposed riprap channels on the two sides the treatment plant driveway and the replacement of CMP pipe with a riprap/concrete channel are within parcel 0002. The Ashland Water Department also owns the southern abutting property as shown on the Hopkinton Assessors record as #0 Wilson Street, parcel R8 37 0, where consists of 3.097 acres in the Town of Hopkinton, where a water treatment lagoon is occupied. The proposed riprap settling basin is in parcel R8 37 0, where is under the Town of Hopkinton's

jurisdiction, any work proposed within the Town of Hopkinton would require proper permits from the Town of Hopkinton and Hopkinton Conservation Commission's Order of Conditions.

2. The applicant should provide information regarding flagging of resource areas and a narrative report addressing project scope and goal, and how the project meets performance standards and stream standards.
3. The DEP comments should also be addressed which are attached as part of this letter.

Plan Comments:

1. The proposed riprap at the up-stream (western) side of water treatment plant driveway should provide additional information which should include the following.
 - a. The southwest portion of the proposed riprap apron is in the Town of Hopkinton, work should coordinate with the Town of Hopkinton, Applicant should identify the ownership of Wilson Street and obtain the proper permit(s) as necessary.
 - b. Riprap apron dimensions (bottom width, channel depth and longitudinal slope) should be specified on the riprap apron detail plan.
 - c. Riprap apron section A-A shows an unspecified width channel bottom with 2H (horizontal) to 1V (vertical) side slope on two sides. GCG recommends providing additional existing contour(s) and spot grades in this area on the plan view. The existing twin 24-inch diameter RCPs (reinforced concrete pipe) culverts discharge onto this depression, where restricted by the twin 12-inch diameter VCPs (vitrified clay pipe) outlet underneath the paved driveway. Which creates backup/ponding situations in front of the twin 12" CV outlet pipes. Applicant should identify the existing overflow flow path during the backup occurrence. Plan should provide proposed contour to clarify if an earth berm is required on the western side of the riprap apron, and analysis the overtop situations within the riprap apron/channel and control the overflow path.
 - d. Riprap apron section A-A shows an elevation drop in front of the pipe(s) flared end section invert. Plan should provide riprap apron inverts.
 - e. Clarify the intent of the flared end section(s), if proposed, which should be protected with riprap armor. If the deteriorated headwalls are intended to remain, they should be properly repaired.
2. The proposed riprap at the down-stream (eastern) side of water treatment plant driveway should provide additional information which should include the following.
 - a. Riprap apron dimensions, bottom width, height, invert, and slope should be shown on the plan.
 - b. Discharge pipes end should be protected by flared end section with riprap armor or headwall.
3. Specify the location of the "Channel" section detail and provide dimensions, sizing channel bottom width to keep design flow within the armor section with freeboard or equipped with emergency spillway.
4. Existing 36" CMP (corrugated metal pipe) replacement should provide additional information which should include the following.
 - a. Identify the existing 3.5'W x 3'H box culvert lower invert elevation and analysis the maximum flow rate and velocity and sizing the concrete-riprap apron/channel

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- accordingly, apron/channel dimensions, longitudinal slope, inverts should be specified on the plan. Channel should be sized to maintain the design flow within the armor section and sizing the downstream riprap apron width and length accordingly.
- b. Identify the existing 18" AC (asbestos-cement) water main pipe elevations at the box culvert crossing, and analysis existing separation between the water main and box culvert. Provide details for the proposed concrete headwall. Headwall should be designed to encase the water main and box culvert including steel reinforcement should be installed around the water main encasement. Headwall on top of the water main is not acceptable.
 - c. Replacing the 36" CMP with concrete apron/channel will also reduce the pipe cover over the water main, evaluate the available space between bottom of the box culvert and water pipe to assure room for the proposed 24" thick stone/concrete slurry apron/channel. Water main with less than 4 feet of cover should be insulated.
 - d. The existing concrete slab should be removed and disposed. Box Culvert end/outfall should be protected by a properly designed headwall.
5. The proposed settling basin is in the Town of Hopkinton and inside their 50 feet No Disturb Zone. Hopkinton Conservation Commission approval and waiver may be required. Additional issues should be addressed as follows.
- a. The proposed contour 312 connects to the contour inside the wetland area and the south end of the same contour connects to contour 314 and should be revised. The contours as shown will require grading in the wetland resource area.
 - b. The proposed spot grade 311.0 at the easterly settling basin edge will create a narrow reach along the existing contour 312 in the wetland area. GCG recommends designing the outlet as a board-created weir spillway and sizing the opening to handle the design flow with sufficient breadth width to prevent erosion.
 - c. The proposed settling basin appeared to collect a small section of Wilson Street pavement surface runoff along the proposed basin and the surface runoff from portion of the water treatment lagoon driveway, which majority is gravel drive except for 50'+/- length pavement near the Wilson Street intersection. The impervious area runoff entering this settling basin is relatively limited. GCG recommends establishing an operation and maintenance plan for the settling basin, as proposed, the riprap bottom would require hand removal of debris and weeds, and difficult to remove sediments. GCG recommends installing a concrete pad or loam and seed basin floor with a gravel access path to allow maintenance vehicle or utilize wheelbarrow to remove accumulated sediments.
 - d. Settling basin should be properly sized, since the impervious watershed area is relatively small. The storage volume could be reduced to a more gradual slope instead of the proposed 2H:1V steep side slope. The steep slope is also located within four feet from the edge of pavement. A guard rail should be installed.
6. The last page of the Notice of Intent package included a NRCS Rock Riprap Lined Waterway Design – Cut/Paste Plan, which shows an 8-foot-wide bottom channel with 2.5' depth and 18 feet top width. Applicant should clarify the applicant and location of this waterway design.

GCG recommends all improvements should be supported by proper sizing calculations, with consideration of emergency by-pass and down stream erosion control. The proposed improvements require regular inspection and maintenance to work as intended. An Operation

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and Maintenance should be established to assign the responsible party, budget, inspect schedule and maintenance, which should include pavement sweeping, vegetation and erosion maintenance and repair, sediment removal.

If you have any questions regarding this matter, please contact our office.

Respectfully submitted,
GCG ASSOCIATES, INC.

Michael J. Carter

Michael J. Carter, P.E.
Project Manager

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COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHEAST REGIONAL OFFICE
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CHARLES D. BAKER
Governor

KATHLEEN A. THEOHARIDES
Secretary

KARYN E. POLITO
Lieutenant Governor

MARTIN SUUBERG
Commissioner

DATE: October 28, 2022

Municipality ASHLAND
(city/town)

RE: NOTIFICATION OF WETLANDS PROTECTION ACT FILE NUMBER

The Department of Environmental Protection has received a Notice of Intent filed in accordance with the Wetlands Protection Act (M.G.L. c. 131, §40):

Applicant:	THE TRAILS LLC	Owner:	TOWN OF ASHLAND
Address:	490B BOSTON POST ROAD, SUITE 202 SUDBURY, MA 01776	Address:	101 MAIN STREET ASHLAND, MA, 01721
LOCUS:	299 WILSON STREET		

This project has been assigned the following file # : NE 095-0976

A FILE NUMBER ONLY INDICATES THAT THE APPLICATION CONTAINS THE MINIMAL SUBMITTAL REQUIREMENTS AND IS ADMINISTRATIVELY COMPLETE - NOT THAT THE INFORMATION IN THE APPLICATION IS ADEQUATE FOR ISSUANCE OF AN ORDER OF CONDITIONS.

Although a file # is being issued, please note the following:

Project is not permittable as proposed. NOI appears premature, as project may not move forward until work proposed on DCR property is also reviewed and approved. What is project purpose? How owns land south of Wilson Street? Who delineated wetlands?

Project is NOT Buffer Zone only, as noted on NOI. Work is proposed on Inland Bank to two intermittent streams and possibly in BLSF. Work is also proposed directly adjacent to BVW, so impacts can be expected. Impacts to all jurisdictional resource areas must be quantified. Top of Bank and BLSF must be delineated and shown on the plans.

Details must be submitted on how performance standards are met for impacts to each resource area, including stream crossing standards for culvert extension. Rip-rapping Bank does not meet 10.54(4)(a)4 or 5. Greater than 50 linear feet of Bank will be altered, so a Wildlife Habitat Evaluation under 10.60 must be completed. Information must be submitted on how project meets stormwater standards, including hydrological calculations.

Project proposes fill in an Outstanding Resource Water/Critical Area (Zone I and Zone II public drinking water supply), so a 401 WQC is required.

ADDITIONAL REQUIREMENTS:

A 401 Water Quality Certification (WQC) (314 CMR 9.00) may be required for this project. The project qualifies for

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD# 1-866-539-7622 or 1-617-574-6868.

<http://www.mass.gov/dep>

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32 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772

401 Certification under the Army Corps of Engineers General Permit for Massachusetts (MAGP), provided that the project meets certain conditions outlined in 314 CMR 9.03 and 9.04, and the conditions under MAGP. WQC information is available at <https://www.mass.gov/regulations/314-CMR-9-401-water-quality-certification> and MAGP information is available at <http://www.nae.usace.army.mil/Missions/Regulatory/StateGeneralPermits/MassachusettsGeneralPermit.aspx>.

401 WQC applications must now be submitted electronically through MassDEP's ePLACE online tool at <https://www.mass.gov/lists/water-quality-certification-forms-massdep>. MASSDEP WILL NO LONGER ACCEPT PAPER APPLICATIONS FOR THESE FILINGS. General instructions and visual ePLACE step-by-step instructions to assist in submitting your application are available online at <https://www.mass.gov/how-to/ww-10-11-major-minor-fill-and-excavation-projects>. and <https://www.mass.gov/how-to/ww-07-08-09-water-quality-certifications-dredging-projects>

If you have any questions regarding this letter, please contact: ALICIA GEILEN @ (978)-694-3234

Cc: Ashland Conservation Commission, Town Hall 101 Main St, Ashland, MA, 01721
Owner: TOWN OF ASHLAND, 101 MAIN STREET, ASHLAND, MA, 01721
Representative: ENGINEERING DESIGN CONSULTANTS, INC, 32 TURNPIKE ROAD, SOUTHBOROUGH, MA, 01772

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