



March 30, 2021

Sudbury Conservation Department
275 Old Lancaster Road
Sudbury, MA 01776
Attn: Lori Capone, Conservation Coordinator

**Re: Marlboro Road Culvert Replacement NOI
Response to Comments**

Dear Ms. Capone:

Thank you for coordinating the review of the proposed culvert replacement on Marlboro Road in Sudbury. The following letter compiles responses to comments received from you via email on March 18, 2021. The comments received are provided below for your reference, and our response follows each comment in italics:

1. There is no discussion on how the project meets the Wetlands Bylaw. Unaltered Buffer Zone (Adjacent Upland Resource Area) is a resource area under the Bylaw. Impacts thereto should be mitigated or explain how functions provided by AURA are not being impacted.
 - *The Town of Sudbury Wetlands Administration Bylaw (Article XXII) and its associated Sudbury Wetlands Administration Bylaw Regulations (revised September 25, 2017) establishes jurisdictional Adjacent Upland Resource Areas (AURAs). The Bylaw defines AURAs as land within 100-feet of wetland resource areas, within 200-feet of top of bank, and with varying extent when adjacent to vernal pools, ponds <10,000 square feet in area, or isolated land subject to flooding. The proposed replacements of Marlboro Rd culvert include work within 100-feet of Bordering Vegetated Wetlands, considered an AURA under the Bylaw.*

The project was designed to minimize the amount of disruption and alteration to the AURA within the project limit of work, and the work area is generally within in the portion of the AURA that is already altered. Temporary land disturbances caused by construction will be stabilized and restored to existing conditions. A native New England Conservation/Wildlife seed mix will be applied to the temporarily disturbed areas. The blend of species will provide a permanent cover of grasses, forbs, wildflowers, and legumes to control soil erosion and enhance wildlife habitat. The roadway above the crossing will be replaced in the same footprint as the existing roadway.

The Marlboro Road culvert is undersized and causes a scour hole at the outlet that is undermining the adjacent roadway. This crossing has been prioritized by the Town for replacement. A localized slope failure occurred in August of 2019 that resulted in emergency slope stabilization measures. Further deterioration of the roadway embankment could result in failure of the roadway section and compromising of the utilities within. The proposed alternative provides the least amount of temporary and permanent impact while substantially improving the stability and hydraulic capacity of the crossing. The new crossing will provide better wildlife passage with the natural bottom.

2. Revise delineation and impact calculations for Bordering Land Subject to Flooding based on defined FEMA elevations: 141.4 upstream, 135 downstream.



- *The attached plans have been revised to indicate the revised delineation and impact calculations for Bordering Land Subject to Flooding, using the defined FEMA elevations. See Sheet C-102 for these revisions. This has reduced the area of impact to the BLSF by approximately 414 square feet.*
- 3. Add erosion controls around upstream grading beyond the coffer dam.
 - *Sediment barrier has been added around the upstream grading beyond the coffer dam.*
- 4. Is the riprap behind the upstream headwall needed or can this be vegetated?
 - *Due to the slope of this area, we are recommending the small amount (approximately 146 SF) of riprap.*
- 5. Add a construction detail for the geocell.
 - *A construction detail for the geocell has been added to plan sheet C-201.*
- 6. Note where reinforced matting and erosion control matting is proposed.
 - *We have removed the reference to reinforced matting, which we are not using. A note has been added indicating the area where the erosion control matting is to be applied on the north side of the culvert (where slopes are greater than 3:1).*
- 7. Remove "Contractor Option" from erosion control details. Plan/Order dictates erosion controls needed, which the contractor can request to modify later, but it should not be left to their own discretion.
 - *We have removed "Contractor Option" from the erosion control details.*
- 8. Note native seed mixes that should be used.
 - *A native seed mix specification has been added to the notes and callouts on sheet C-102. Native wildflower seed mix shall be New England Environmental Conservation/Wildlife mix, or similar. Native wetland seed mix shall be New England Erosion Control/Restoration mix for detention basins and moist sites.*

If you have any questions or require additional information, please do not hesitate to contact me at 207-558-3662 or email me at dstairs@woodardcurran.com.

Sincerely,

WOODARD & CURRAN INC.

Darrin Stairs, PE
Project Manager

Enclosures: Revised Drawings