

Language from WPA Form 1 Submitted in 2013

Area Description:

The project is located in the vicinity of 660 Newton Street alongside Route 116 in an existing MassDOT easement created during the 1950 relocation of the state highway. Within this area, a series of catch basins collect runoff from approximately 3.18 acres of impervious area, consisting mostly of runoff from Route 116 and associated sidewalks. Runoff currently discharges untreated to Stony Brook, (MA34-19), a waterbody impaired for turbidity and elevated E.coli bacteria located northeast of the proposed project area. MassDOT has identified a targeted reduction of 7.3% of directly contributing impervious area to this water segment, or a total of 0.23 acres. No resource areas are located within the proposed project boundaries, however bordering vegetated wetlands and river bank / riverfront area are located both northeast and west of the proposed project area.

Work Description:

The project consists of the installation of a gutter inlet capable of capturing runoff from 0.24 acres of directly connected impervious area. This structure will discharge via a new 12 inch pipe into a stone-lined sediment forebay capable of storing 0.1 inches of runoff to concentrate sediments into an easily maintainable location adjacent to Route 116. Stormwater will then overflow into an infiltration basin capable of storing and infiltrating the 2 inch storm via a stone checkdam. Larger storms will overflow into a new outlet structure which then flows back into the existing closed drainage system in Route 116 before discharging to Stony Brook as with current conditions.

Onsite test pits indicated the presence of broken asphalt approximately two feet below grade, likely associated with removal of the original roadway. Underlying soils transition from coarse sand to loam with evidence of mottling approximately four feet below grade. The proposed project will remove and properly dispose of all asphalt-containing fill, replacing material with clean, well-drained material capable of adequately infiltrating and treating stormwater runoff. The proposed bottom of the infiltration basin will be located at least three feet above seasonally high groundwater and poorly drained soils. Erosion controls, including temporary silt sacks at affected catch basins will be utilized as necessary. Any upland areas disturbed during construction will be restored to existing conditions.