

A permanent drainage easement is required at approximate STA 80+80 LT on property owned by the Town of West Brookfield at #543 West Main Street. The easement is needed to construct and maintain the proposed flared end pipe outlet and stone for pipe ends that will be located on the Town property. This flared end outlet will replace an existing headwall outlet located approximately three (3) feet from the property line. Due to the proposed widening, the drainage outlet will be located approximately seven (7) feet further from the roadway on the Town property. The existing pipe culvert under West Main Street that connects to the wetland on the property on the opposite side of the roadway owned by the Department of Fish and Wildlife is also being replaced as part of the project. The culvert and headwall require replacement to accommodate the proposed roadway widening. The proposed widening will increase safety for roadway users.

Alternatives to avoid impacts to the property at #543 West Main Street and the need for a permanent easement and were considered. These include:

- Not widening the roadway and maintaining the existing culvert and headwall was considered, but this would not accomplish the goals of the project to improve safety for road users.
- Shifting the alignment of the roadway away from the Town owned property was also considered. However, this would result in filling wetlands on the property owned by the Department of Fish and Game and was not feasible due to the greater environmental impacts.
- Constructing a headwall or retaining wall instead of the proposed flared end with stone was considered. However, this would still require an easement for constructing the wall and would still require the placement of stone to prevent erosion at the pipe outlet.

Steps to reduce and mitigate impacts to the property at #543 West Main Street have been implemented in the design. These include:

- Minimizing grading impacts by using deep post guardrail and slopes that tie into the existing terrain as close as possible to the roadway.
- Installation of stone for pipe ends at the pipe outlet to help filter sediment and reduce erosion on the property.
- Sediment control barriers consisting of compost filter tubes are proposed at the limits of grading to prevent sediment from construction activities from reaching the wetlands.