

NYCDEP CAT-252

Design of Esopus Creek Bridge and Rt. 28A Bridge

October 2014



PROJECT OVERVIEW



Rte. 28A Bridge over Esopus Creek

- Concrete open-spandrel arch bridge
- 5 spans (Length: 454'-6")
- Condition Rating of 4

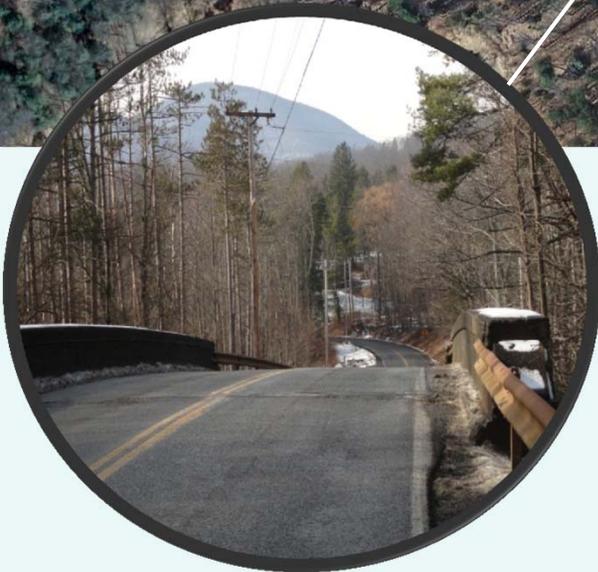
PROJECT OVERVIEW



Rte. 28A Bridge over CMRR

- Concrete Thru-girder/Floorbeam Bridge on Gravity Abutments
- 39-foot Single Span
- 22-foot Vertical Underclearance
- Condition Rating of 4

PROJECT OVERVIEW



Non-standard Roadway Geometry (Rt. 28A):

- Stopping Sight Distance (SSD) -
SSD = 80 ft. < 305 ft.
- Shoulder Width = 0-2 ft. < 3 min.

PROJECT OVERVIEW



Project Understanding



Non-Standard Intersection (Rt. 28/Rt. 28A):

- Three-legged 'Y' Intersection
- Two-way Slip Ramps
- Stop Sign Controlled
- Operational and Safety Considerations

PROJECT OVERVIEW



Project Understanding

GOALS AND OBJECTIVES

- Replace Bridges
 - ✓ Eliminate Structural Deficiencies
 - ✓ Low-Maintenance Structures
- Protection of DEP Water Resources
- Meet NYSDOT Design Standards
- Minimize Impacts to Natural Environment and Surrounding Community
- Innovative, Cost Effective Design



KEY DESIGN ISSUES

- Structural
 - ✓ Structure Type
 - ✓ Constructability
 - ✓ Geotechnical
- Highway/Traffic
 - ✓ Non-standard Features
 - ✓ Maintenance & Protection of Traffic
 - ✓ Property Impacts
- Environmental
 - ✓ Water Quality
 - ✓ Cultural and Historic Resources
 - ✓ CEQR/SEQR
- Civil
 - ✓ Stormwater Management
 - ✓ Hydrology/Hydraulics



ANTICIPATED PROJECT SCHEDULE

- NYCDEP Meeting with Town
(Review of alternatives) July 2015
- Basis of Design Report
(BODR) Spring 2016
- Design Completion Summer 2019
- Construction Start Spring 2020

QUESTIONS & ANSWERS?

