

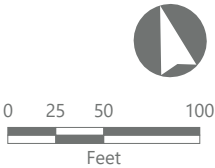


CHPE EM&CP

Albany and Greene Counties, New York

SWPPP Report

- Soil Type
- Co - Covington and Madalin soils
 - Mapped Soil Boundary
 - Project Area



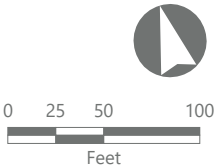


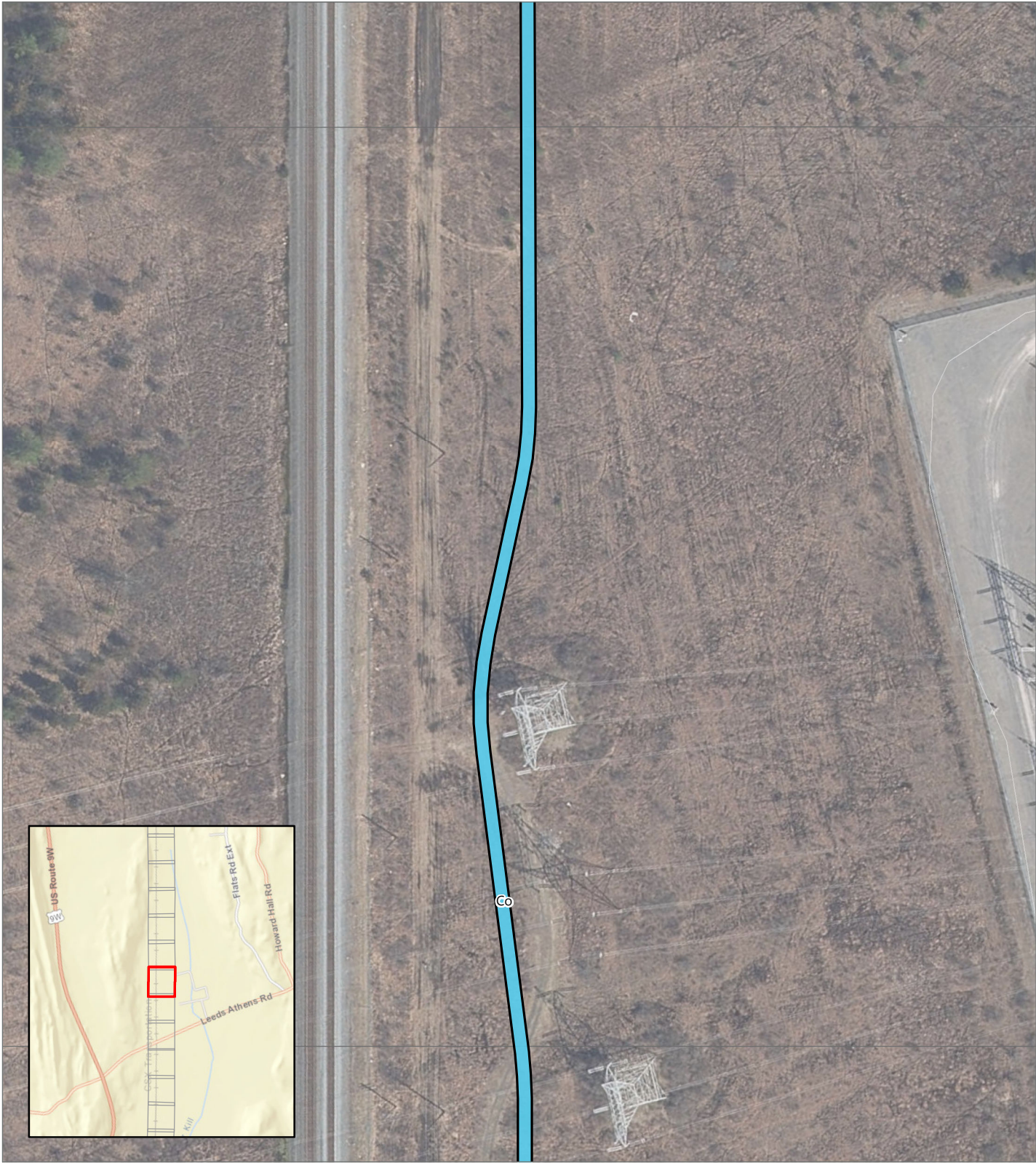
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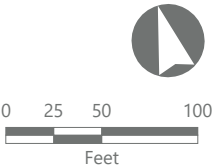


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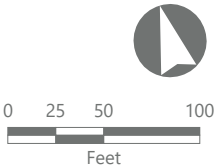


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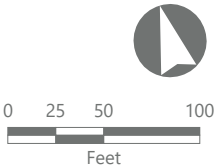


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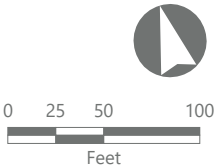


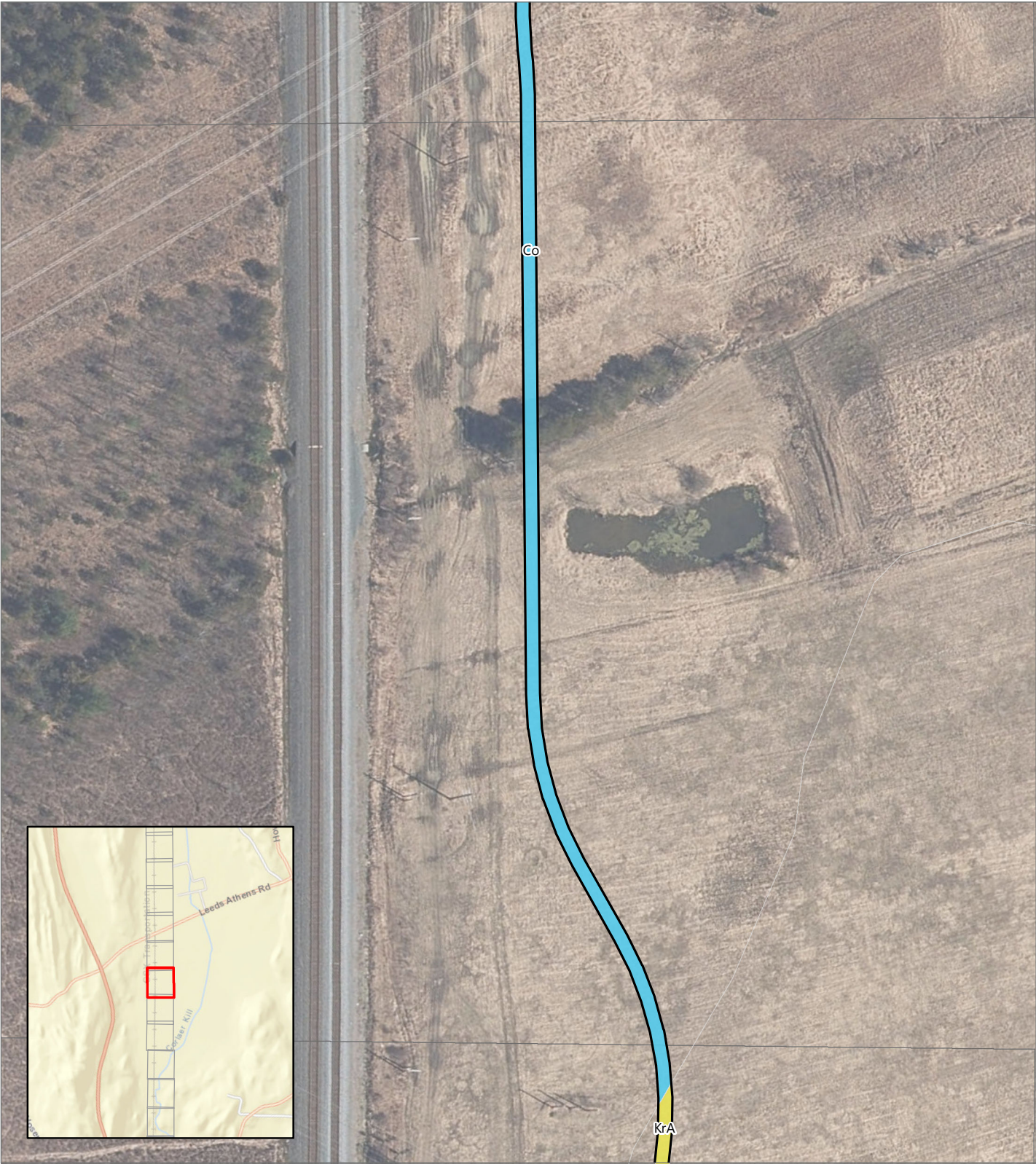
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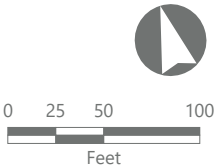


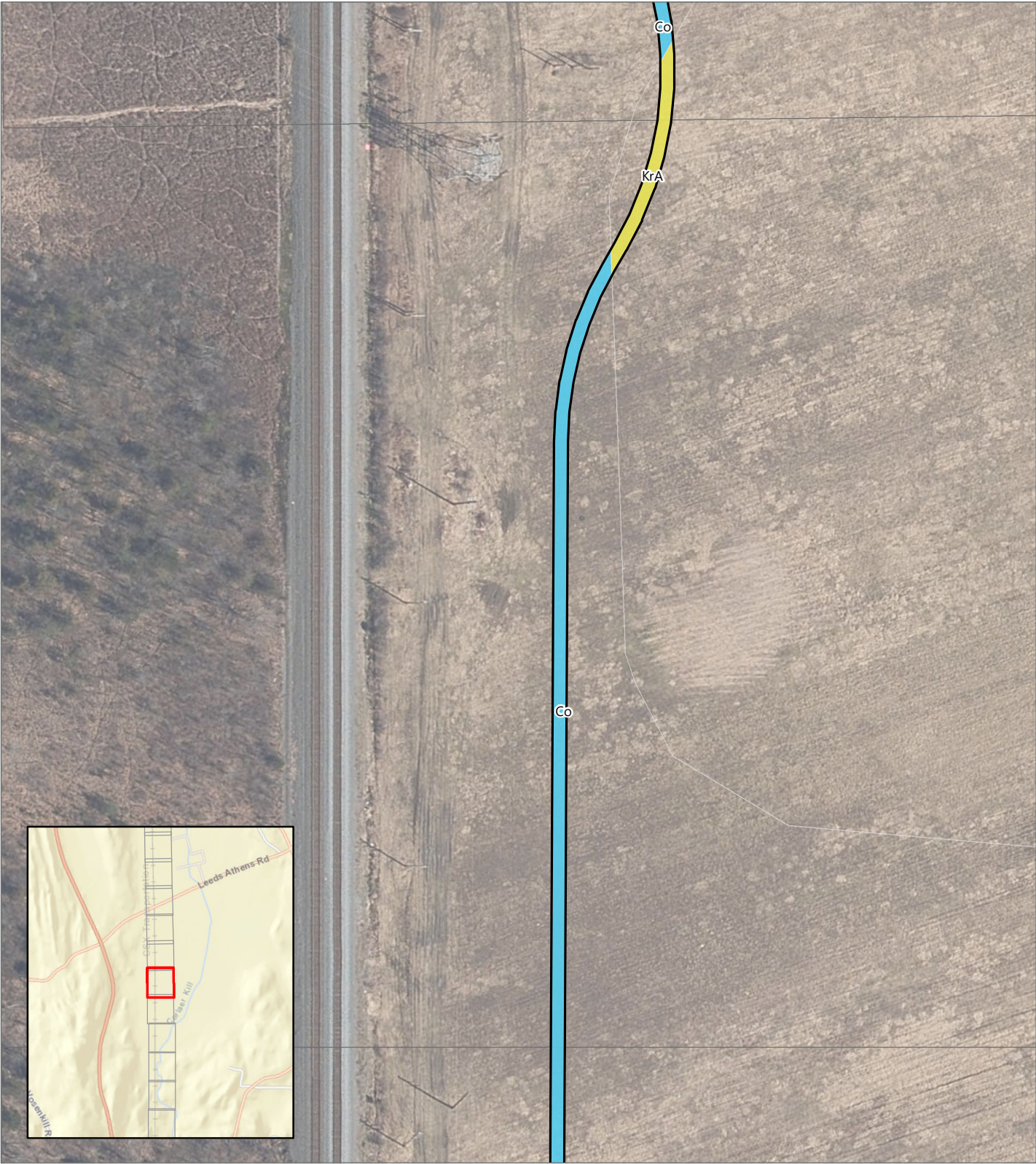
CHPE EM&CP

Albany and Greene Counties, New York

SWPPP Report

- Soil Type
- Co - Covington and Madalin soils
 - KrA - Kingsbury and Rhinebeck soils, 0 to 3 percent slopes
 - Mapped Soil Boundary
 - Project Area



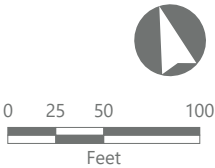


CHPE EM&CP

Albany and Greene Counties, New York

SWPPP Report

- Soil Type
- Co - Covington and Madalin soils
 - KrA - Kingsbury and Rhinebeck soils, 0 to 3 percent slopes
 - Mapped Soil Boundary
 - Project Area



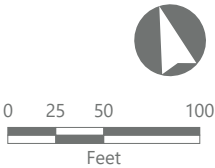


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SWPPP Report

- Soil Type
- Co - Covington and Madalin soils
 - Mapped Soil Boundary
 - Project Area



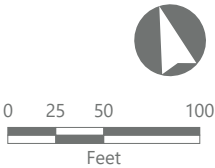


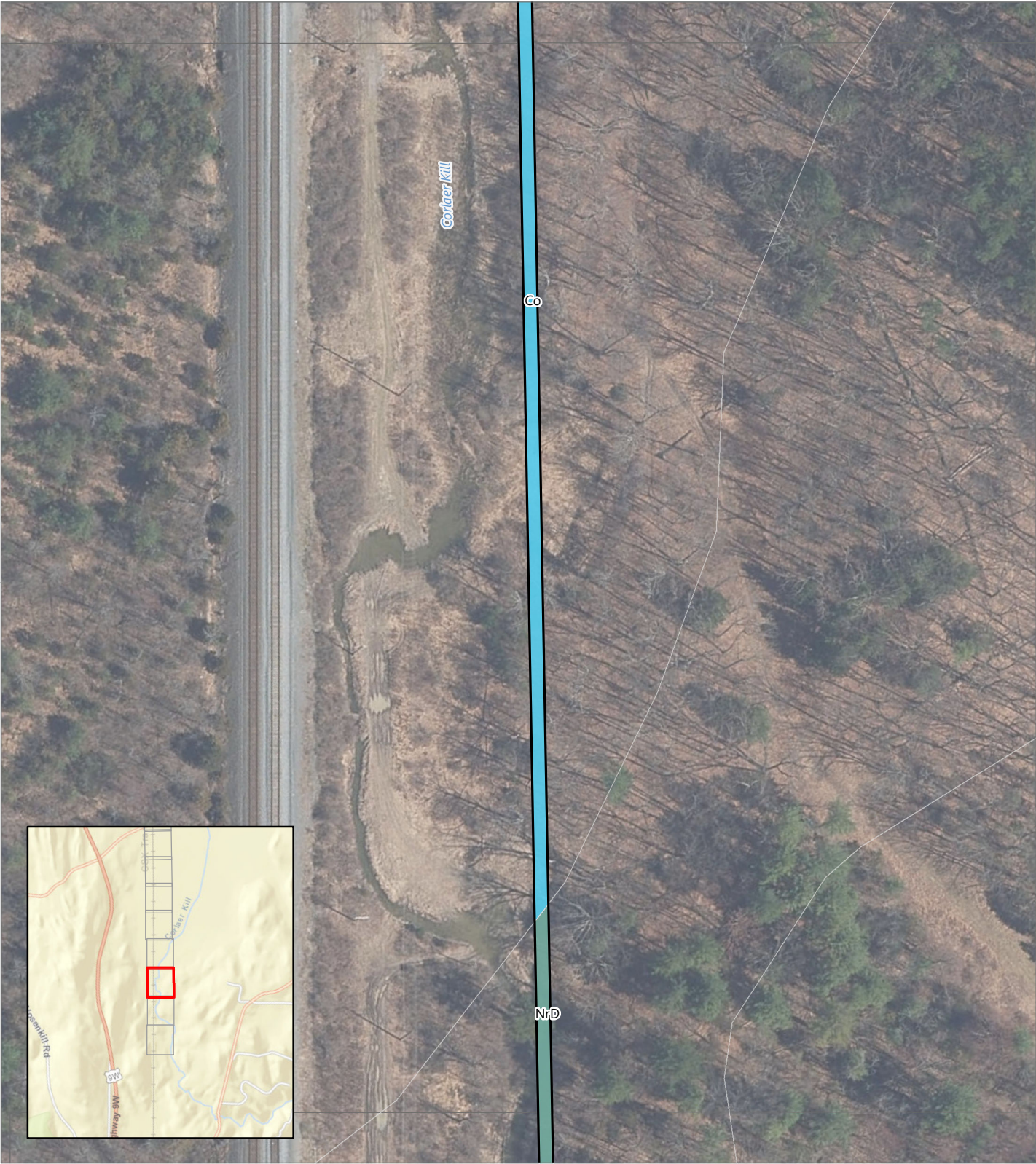
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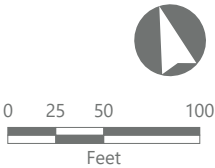


CHPE EM&CP

Albany and Greene Counties, New York

SWPPP Report

- Soil Type
- Co - Covington and Madalin soils
 - NrD - Nassau channery silt loam, hilly, very rocky
 - Mapped Soil Boundary
 - Project Area



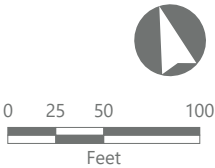


CHPE EM&CP

Albany and Greene Counties, New York

SWPPP Report

- Soil Type
- NrC - Nassau channery silt loam, rolling, very rocky
 - NrD - Nassau channery silt loam, hilly, very rocky
 - Mapped Soil Boundary
 - Project Area



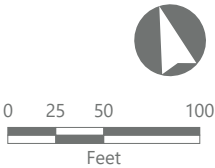


CHPE EM&CP

Albany and Greene Counties, New York

SWPPP Report

- Soil Type
- NrC - Nassau channery silt loam, rolling, very rocky
 - NrD - Nassau channery silt loam, hilly, very rocky
 - Mapped Soil Boundary
 - Project Area



Map Unit Description (Brief, Generated) (NY)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) (NY) report displays a brief description of the major soils that occur in a map unit, as well as the name and percentage of each minor component in the map unit. This description is generated from the underlying soil attribute data. Descriptions of non-soil (miscellaneous areas) and minor components are not included.

Additional information about the map units described in this report is available in other Web Soil Survey reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Web Soil Survey reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated) (NY)

Albany County, New York

Map Unit: CIB—Claverack loamy fine sand, 3 to 8 percent slopes

Component: Claverack (85%)

The Claverack component makes up 85 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits. Depth to a root restrictive layer, strongly contrasting textural stratification, is 20 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. The hydrologic soil group is C/D.

Minor Components: Elnora (5%), Colonie (3%), Cosad (2%), Elmridge (2%), Unnamed soils (2%), Stafford (1%)

Map Unit: CoB—Colonie loamy fine sand, 3 to 8 percent slopes

Component: Colonie (85%)

The Colonie component makes up 85 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial beach ridges, proglacial deltas. The parent material consists of sandy glaciofluvial or eolian deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2s. This soil does not meet hydric criteria. The hydrologic soil group is A.

Minor Components: Unnamed soils (7%), Elnora (5%), Claverack (3%)

Map Unit: EnA—Elnora loamy fine sand, 0 to 3 percent slopes

Component: Elnora (85%)

The Elnora component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on proglacial beach ridges, proglacial deltas. The parent material consists of sandy glaciofluvial, eolian, or deltaic deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during February, March, April, May. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. The hydrologic soil group is A/D.

Minor Components: Colonie (5%), Stafford (5%), Unnamed soils (4%), Granby (1%)

Map Unit: HuB—Hudson silt loam, 3 to 8 percent slopes

Component: Hudson (90%)

The Hudson component makes up 90 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. The hydrologic soil group is C/D.

Minor Components: Rhinebeck (5%), Madalin (2%), Unnamed soils (2%), Claverack (1%)

Map Unit: HuC—Hudson silt loam, 8 to 15 percent slopes

Component: Hudson (90%)

The Hudson component makes up 90 percent of the map unit. Slopes are 8 to 15 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. The hydrologic soil group is C/D.

Minor Components: Rhinebeck (4%), Unnamed soils (4%), Madalin (2%)

Map Unit: HuD—Hudson silt loam, hilly

Component: Hudson, hilly (85%)

The Hudson, hilly component makes up 85 percent of the map unit. Slopes are 15 to 25 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. The hydrologic soil group is C/D.

Minor Components: Unnamed soils (6%), Rhinebeck (5%), Unnamed soils (4%)

Map Unit: HuE—Hudson silt loam, 25 to 45 percent slopes

Component: Hudson (85%)

The Hudson component makes up 85 percent of the map unit. Slopes are 25 to 45 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. The hydrologic soil group is C/D.

Minor Components: Unadilla (5%), Unnamed soils (5%), Colonie (3%), Fluvaquents (1%), Udifluvents (1%)

Map Unit: Ma—Madalin silt loam, 0 to 3 percent slopes

Component: Madalin (85%)

The Madalin component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions, lake plains. The parent material consists of brown clayey glaciolacustrine deposits derived from calcareous shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Minor Components: Rhinebeck (5%), Canandaigua (4%), Fonda (4%), Cosad (2%)

Map Unit: Ra—Raynham very fine sandy loam

Component: Raynham, poorly drained (50%)

The Raynham, poorly drained component makes up 50 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions. The parent material consists of glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 11 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The hydrologic soil group is C/D.

Component: Raynham, somewhat poorly drained (30%)

The Raynham, somewhat poorly drained component makes up 30 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions. The parent material consists of glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 13 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The hydrologic soil group is C/D.

Minor Components: Unnamed soils (8%), Scio (5%), Birdsall (2%), Shaker (2%), Unnamed soils (2%), Cosad (1%)

Map Unit: RhA—Rhinebeck silty clay loam, 0 to 3 percent slopes

Component: Rhinebeck (90%)

The Rhinebeck component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Minor Components: Madalin (5%), Raynham (5%)

Map Unit: RhB—Rhinebeck silty clay loam, 3 to 8 percent slopes

Component: Rhinebeck (85%)

The Rhinebeck component makes up 85 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Minor Components: Claverack (5%), Madalin (5%), Raynham (5%)

Map Unit: Ud—Udipsamments, smoothed

Component: Udipsamments, smoothed (70%)

The Udipsamments, smoothed component makes up 70 percent of the map unit. Slopes are 0 to 45 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This soil does not meet hydric criteria. The hydrologic soil group is A.

Minor Components: Unnamed soils (10%), Urban land (10%), Colonie (5%), Elnora (5%)

Map Unit: Ug—Udorthents, loamy

Component: Udorthents, loamy (90%)

The Udorthents, loamy component makes up 90 percent of the map unit. Slopes are 0 to 8 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 3 percent. This soil does not meet hydric criteria. The hydrologic soil group is A.

Minor Components: Unnamed soils (10%)

Map Unit: Uh—Udorthents, clayey-Urban land complex

Component: Udorthents, clayey (40%)

The Udorthents, clayey component makes up 40 percent of the map unit. Slopes are 0 to 8 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, October, November, December. Organic matter content in the surface horizon is about 2 percent. This soil does not meet hydric criteria. The hydrologic soil group is C/D.

Component: Urban land (30%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Minor Components: Hudson (10%), Scio (10%), Rhinebeck (7%), Madalin (3%)

Map Unit: Ut—Urban land-Udorthents complex, 0 to 8 percent slopes

Component: Urban land (50%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Udorthents (30%)

The Udorthents component makes up 30 percent of the map unit. Slopes are 0 to 8 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 3 percent. This soil does not meet hydric criteria. The hydrologic soil group is A.

Minor Components: Unnamed soils (10%), Unnamed soils (10%)

Map Unit: Wa—Wakeland silt loam

Component: Wakeland (80%)

The Wakeland component makes up 80 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The hydrologic soil group is C.

Minor Components: Raynham (5%), Teel (5%), Wayland (5%), Unnamed soils (3%), Rhinebeck (2%)

Greene County, New York

Map Unit: Co—Covington and Madalin soils

Component: Covington (45%)

The Covington component makes up 45 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions. The parent material consists of calcareous clayey glaciolacustrine deposits or glaciomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 7 inches during January, February, March, April, May, October, November, December. Organic matter content in the surface horizon is about 10 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The hydrologic soil group is D.

Component: Madalin (30%)

The Madalin component makes up 30 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. The hydrologic soil group is C/D.

Minor Components: Canandaigua (5%), Hudson (5%), Kingsbury (5%), Rhinebeck (5%), Vergennes (5%)

Map Unit: EnB—Elmridge very fine sandy loam, 3 to 8 percent slopes

Component: Elmridge (80%)

The Elmridge component makes up 80 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of loamy over clayey glaciolacustrine or marine deposits. Depth to a root restrictive layer, strongly contrasting textural stratification, is 18 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The hydrologic soil group is C/D.

Minor Components: Madalin (5%), Nassau (5%), Rhinebeck (5%), Shaker (5%)

Map Unit: HvB—Hudson and Vergennes soils, 3 to 8 percent slopes

Component: Hudson (40%)

The Hudson component makes up 40 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Component: Vergennes (35%)

The Vergennes component makes up 35 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. The hydrologic soil group is D.

Minor Components: Elmridge (5%), Kingsbury (5%), Madalin (5%), Nunda (5%), Rhinebeck (5%)

Map Unit: HvC—Hudson and Vergennes soils, 8 to 15 percent slopes

Component: Hudson (40%)

The Hudson component makes up 40 percent of the map unit. Slopes are 8 to 15 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Component: Vergennes (35%)

The Vergennes component makes up 35 percent of the map unit. Slopes are 8 to 15 percent. This component is on proglacial lake plains. The parent material consists of clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. The hydrologic soil group is D.

Minor Components: Elmridge (5%), Kingsbury (5%), Madalin (5%), Nunda (5%), Rhinebeck (5%)

Map Unit: HvE—Hudson and Vergennes soils, 25 to 50 percent slopes

Component: Hudson (45%)

The Hudson component makes up 45 percent of the map unit. Slopes are 25 to 50 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Component: Vergennes (30%)

The Vergennes component makes up 30 percent of the map unit. Slopes are 25 to 50 percent. This component is on proglacial lake plains. The parent material consists of clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. The hydrologic soil group is D.

Minor Components: Elmridge (5%), Kingsbury (5%), Nunda (5%), Rhinebeck (5%), Shaker (5%)

Map Unit: HwC3—Hudson and Vergennes silty clay loams, 8 to 15 percent slopes, severely eroded

Component: Hudson (45%)

The Hudson component makes up 45 percent of the map unit. Slopes are 8 to 15 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Component: Vergennes (30%)

The Vergennes component makes up 30 percent of the map unit. Slopes are 8 to 15 percent. This component is on proglacial lake plains. The parent material consists of clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. The hydrologic soil group is D.

Minor Components: Burdett (5%), Elmridge (5%), Kingsbury (5%), Nunda (5%), Rhinebeck (5%)

Map Unit: HwD3—Hudson and Vergennes silty clay loams, 15 to 25 percent slopes, severely eroded

Component: Hudson (50%)

The Hudson component makes up 50 percent of the map unit. Slopes are 15 to 25 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. The hydrologic soil group is C/D.

Component: Vergennes (30%)

The Vergennes component makes up 30 percent of the map unit. Slopes are 15 to 25 percent. This component is on proglacial lake plains. The parent material consists of clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. The hydrologic soil group is D.

Minor Components: Burdett (5%), Elmridge (5%), Kingsbury (5%), Rhinebeck (5%)

Map Unit: KrA—Kingsbury and Rhinebeck soils, 0 to 3 percent slopes

Component: Kingsbury (40%)

The Kingsbury component makes up 40 percent of the map unit. Slopes are 0 to 3 percent. This component is on proglacial lake plains. The parent material consists of calcareous, clayey glaciomarine deposits or glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent. The hydrologic soil group is D.

Component: Rhinebeck (30%)

The Rhinebeck component makes up 30 percent of the map unit. Slopes are 0 to 3 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent. The hydrologic soil group is C/D.

Minor Components: Covington (5%), Elmridge (5%), Hudson (5%), Madalin (5%), Shaker (5%), Vergennes (5%)

Map Unit: KrB—Kingsbury and Rhinebeck soils, 3 to 8 percent slopes

Component: Kingsbury (45%)

The Kingsbury component makes up 45 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of calcareous, clayey glaciomarine deposits or glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent. The hydrologic soil group is D.

Component: Rhinebeck (30%)

The Rhinebeck component makes up 30 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of clayey and silty glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent. The hydrologic soil group is C/D.

Minor Components: Covington (5%), Elmridge (5%), Hudson (5%), Madalin (5%), Vergennes (5%)

Map Unit: NrC—Nassau channery silt loam, rolling, very rocky

Component: Nassau (70%)

The Nassau component makes up 70 percent of the map unit. Slopes are 8 to 15 percent. This component is on ridges, benches, till plains. The parent material consists of channery loamy till derived mainly from local slate or shale. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 60 percent. Below this thin organic horizon the organic matter content is about 4 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. The hydrologic soil group is D.

Minor Components: Rock outcrop (10%), Arnot (5%), Lordstown (5%), Oquaga (5%), Tuller (5%)

Map Unit: NrD—Nassau channery silt loam, hilly, very rocky

Component: Nassau (70%)

The Nassau component makes up 70 percent of the map unit. Slopes are 15 to 25 percent. This component is on benches, till plains, ridges. The parent material consists of channery loamy till derived mainly from local slate or shale. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 60 percent. Below this thin organic horizon the organic matter content is about 4 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. The hydrologic soil group is D.

Minor Components: Arnot (5%), Lordstown (5%), Oquaga (5%), Rock outcrop (5%), Tuller (5%), Valois (5%)

Map Unit: RhC—Riverhead loam, rolling

Component: Riverhead (75%)

The Riverhead component makes up 75 percent of the map unit. Slopes are 8 to 15 percent. This component is on terraces, proglacial deltas. The parent material consists of loamy glaciofluvial deposits overlying stratified sand and gravel. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The hydrologic soil group is A.

Minor Components: Chenango (5%), Elmridge (5%), Hudson (5%), Udifluvents (5%), Valois (5%)

Map Unit: Sh—Shaker very fine sandy loam

Component: Shaker (80%)

The Shaker component makes up 80 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions. The parent material consists of loamy over clayey glaciolacustrine or glaciomarine deposits. Depth to a root restrictive layer, strongly contrasting textural stratification, is 18 to 40 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 8 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The hydrologic soil group is C/D.

Minor Components: Alden (5%), Canandaigua (5%), Madalin (5%), Rhinebeck (5%)

Map Unit: Ta—Tioga loam

Component: Tioga (80%)

The Tioga component makes up 80 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during February, March, April. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria. The hydrologic soil group is A.

Minor Components: Middlebury (10%), Chenango (5%), Udifluvents (5%)

Map Unit: Ur—Udorthents, loamy

Component: Udorthents (80%)

The Udorthents component makes up 80 percent of the map unit. Slopes are 0 to 8 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. The hydrologic soil group is A.

Minor Components: Tunkhannock (5%), Valois (5%), Volusia (5%), Wellsboro (5%)

Map Unit: Wa—Wayland soils complex, non-calcareous substratum, 0 to 3 percent slopes, frequently flooded

Component: Wayland (60%)

The Wayland component makes up 60 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on valleys. The parent material consists of silty and clayey alluvium derived from interbedded sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 9 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The hydrologic soil group is B/D.

Component: Wayland, very poorly drained (30%)

The Wayland, very poorly drained component makes up 30 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on valleys. The parent material consists of silty and clayey alluvium derived from interbedded sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. Organic matter content in the surface horizon is about 15 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The hydrologic soil group is B/D.

Minor Components: Holderton (10%)

Data Source Information

Soil Survey Area: Albany County, New York
Survey Area Data: Version 19, Aug 29, 2021

Soil Survey Area: Greene County, New York
Survey Area Data: Version 20, Aug 29, 2021

Appendix D

Historic Resource Plan

SUPPLEMENTAL CULTURAL RESOURCES MANAGEMENT PLAN

**Champlain Hudson Power Express HVDC Transmission Line Project
CSX: Selkirk Rail Yard Bypass to Catskill (Segment 10, Package 6)**

[REDACTED-Public Version]

Lake Champlain to New York City
Albany & Greene Counties, New York

HAA 4268-83
SHPO 09PR03910

Submitted to:

KIEWIT ENGINEERING GROUP INC.
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April 2023

MANAGEMENT SUMMARY

SHPO Number: 09PR03910
Involved Agencies: U.S. Department of Energy, U.S. Army Corps of Engineers, NYSHPO
Phase of Survey: Supplemental Cultural Resources Management Plan

LOCATION INFORMATION

Municipality: Towns of Athens, Bethlehem, Catskill, Coeymans, Coxsackie, New Baltimore and Villages of Ravena and Coxsackie
County: Albany and Greene Counties

CULTURAL RESOURCE MANAGEMENT PLAN OVERVIEW

Objective: *The purpose of this Supplemental Cultural Resources Management Plan is to synthesize data sets into one document, and to provide OPRHP/DPS contact information for identified roles within the original Cultural Resource Management Plan drafted by TRC in 2015 and finalized in 2021.*
The plan also proposes Programmatic Allowances and an Archeological Monitoring Plan to assist with ongoing review and compliance as stipulated in the Programmatic Agreement between DOE and NYSHPO in 2021.
The Supplemental CRMP focuses on Package 6, Segment 10 which will be placed primarily along the CSX railroad ROW between Bethlehem (Albany County) and Catskill (Greene County).

Report Authors: Matt Lesniak, and Matthew Kirk, MA RPA
Date of Report: April 2023

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Appendix 1: Champlain Hudson Power Express Cultural Resources Management Plan (TRC 2021)
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LIST OF ACRONYMS

ACHP – Advisory Council on Historic Preservation
AMP – Archeological Monitoring Plan
APE – Area of Potential Effect
BMP – Best Practices Management Plan (2012)
CA – Consulting Archeologist
CFR – code of federal regulations
CHPE, LLC – Champlain Hudson Power Express, LLC
CLG –Certified Local Government
CMP –corrugates metal pipe
CRMP – Cultural Resources Management Plan
CRIS – Cultural Resource Inventory System (NYSHPO)
EM&CP – Environmental Management and Construction Plan
DOE – U.S. Department of Energy
GIS – Geographic Information System
GPS – Global Positioning System
HABS – Historic American Building Survey
Hartgen – Hartgen Archeological Associates, Inc.
HDD – horizontal directional drilling
HAER – Historic American Engineering Record
HALS – Historic American Landscape Survey
HVAC – high-voltage alternating current
HVDC – high-voltage direct current
LOW –Limits of Work
MOA – Memorandum of Agreement
MP – mile post, railroad
MW – megawatt
NHPA – National Historic Preservation Act
NRE – National Register-eligible
NHL – National Historic Landmark
NRHP –National Register of Historic Places
NYAC – New York Archaeological Council
NYSHPO – New York State Historic Preservation Officer
NYSM – New York State Museum
OPRHP – Office of Parks, Recreation and Historic Preservation
PPO – Project Preservation Officer
RCP – Reinforced concrete pipe
ROW – Right-of-Way
SOI – Secretary of the Interior
SRHP –State Register of Historic Places
TRC – TRC Companies, Inc

CULTURAL RESOURCES MANAGEMENT PLAN

1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) has been retained to create a supplemental Cultural Resources Management Plan (CRMP) for the proposed Champlain Hudson Power Express (Project) located over multiple counties through New York. The current phase of work focuses on the overland portion along the CSX Railroad, between the Town of Bethlehem (Albany County) and the Town of Catskill (Greene County).

The Project has received approvals by the U.S. Department of Energy (DOE), the U.S. Army Corps of Engineers, with consultation from the NYSHPO. The goal of the Supplemental CRMP is to provide a framework in which potential impacts to all relevant historical properties and archeological sites (determined to be eligible for or listed in the National Register of Historic Places) known to exist or may be discovered are to be managed. This management plan will also create a comprehensive framework for identifying and undertaking any additional archeological work that may be required prior to and during the construction of the Project.

TRC Companies, Inc. (TRC) created a draft comprehensive CRMP in 2015, finalized in 2021 to include three additional reports. This management plan is referred to throughout the current document (Appendix 1), with this document serving to fully incorporate all the relevant information for Phase I of construction into one succinct document. In the event of a conflict between this document and that provided in Appendix 1, the CRMP (2021) will prevail.

This plan was enacted to comply with Section 106 of the National Historical Preservation Act and will be reviewed by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) as well as the aforementioned federal agencies. This plan was established according to the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP.

The *Programmatic Agreement Among The U.S. Department of Energy, And The New York State Historic Preservation Officer For Managing Historic Properties That May Be Affected By Authorizing The Construction, Operation, Connection And Maintenance Of The Champlain Hudson Power Express HVDC Transmission Line Project* (Programmatic Agreement), executed in 2021, stipulates completion of a Cultural Resources Management Plan (CRMP) to create procedures for the consideration and management of historic properties within the Champlain Hudson Power Express HVDC Transmission Line Project (Project).

Stipulation IV(B) within the Programmatic Agreement specifies the CRMP will be applied in lieu of Section 106 implementing regulations 36 CFR Part 800.4 – 800.6 to satisfy requirements of compliance with Section 106 of the National Historical Preservation Act (16 U.S.C. 470) related to identification of historic properties (36 CFR Part 800 800.4), assessment of adverse effects (36 CFR Part 800 800.5), and resolution of adverse effects (36 CFR Part 800.6).

This Supplemental CRMP has been developed in response to Programmatic Agreement Stipulation IV(B) and Stipulation II(C)(8 – 11 and 19). TRC completed the *Champlain Hudson Power Express HVDC Transmission Line Project Cultural Resources Management Plan* which was finalized in 2021 (TRC 2021). This document provided detailed procedures for unanticipated discoveries, monitoring during construction-related ground disturbance, and monitoring during post-construction operations; all stipulations of the CRMP (TRC 2021) remain applicable.

Current design and engineering requirements indicate effects to historic and landscape resources may also require consideration throughout Project execution; this Supplemental CRMP supports streamlined coordination and consultation with NYSHPO through agreement on programmatic allowances and treatments. This Supplemental CRMP provides structure and process for implementing requirements of the Programmatic Agreement and the CRMP (TRC 2021).

2 Project Information

The Project involves the construction of approximately 339 miles of a high voltage direct current underground and underwater transmission line, running from Montréal, Canada to Queens, New York. This transmission line will bring 1,250 megawatts of hydropower to replace the use of fossil fuels, reducing carbon emissions and helping achieve renewable and clean energy in New York State. This proposed project will provide enough power for more than 1 million homes throughout New York State. Installation of this transmission line will occur primarily beneath the ground within roadway and railroad right of way. Direct impacts to streams and waterbodies are avoided through means such as attaching to existing infrastructures (bridges and culverts) or incorporating the use of horizontal directional drilling (HDD).

Several archeological reports by Hartgen and TRC examined and detailed the sensitivity and potential of the APE. These resources have been utilized in the creation of the Supplemental Cultural Resource Management Plan (CRMP).

The bolded report includes portions of the most current Project (Segment 10) and provides relevant background information.

- Hartgen. 2010a. Pre-Phase IA Archeological Screening: Champlain Hudson Power Express.
- **Hartgen. 2010b. Phase IA Literature review and archaeological sensitivity assessment: Champlain-Hudson Power Express.**
- Hartgen. 2012. Phase IB Archeological Field Reconnaissance and Phase II Archeological Site Evaluation: Champlain Hudson Power Express, Canadian Pacific Railway Segment.
- Hartgen. 2013a. GIS Analysis: Archeological Sites within APE Archeological Sites Intersected by a 50-ft wide Construction Corridor Along the November 2012 CHPE/TDI Centerline.
- Hartgen. 2013b. GIS Analysis NRHP Properties within APE National Register of Historic Place Eligible (NRE) and Listed (NRL) Properties Intersected by a 50-ft wide Construction Corridor along the November 2012 CHPE/TDI Centerline.
- Hartgen. 2013c. GIS Analysis Underwater Resources within APE Underwater Anomalies and Sites within Lake Champlain and the Hudson River Intersected by a 50-ft wide Construction Corridor along the November 2012 CHPE/TDI Centerline.
- TRC. 2020a. Phase IA Archeological Assessment of Champlain-Hudson Alternative Routes, New York.
- TRC. 2020b. Phase IA Archeological Assessment of Champlain Hudson Astoria Converter Station and Astoria Preferred Alternative Route, Boroughs of Queens, New York.
- TRC. 2020c. Phase IA Archeological Assessment of Champlain-Hudson Power Express Project, Harlem Rail Yard Preferred Alternative, Boroughs of Queens, New York.
- TRC. 2021. Phase IA Archeological Assessment of the Champlain-Hudson New Scotland Converter Station, New Scotland, Albany County, New York.
- TRC. 2022. Phase IA Archeological Survey letter for the Stony Point Horizontal Directional Drill (HDD), Stony Point, Rockland County, New York.

2.1 Description of the Project

The area of potential effects (APE) includes portions of the Project that will be directly altered by the proposed undertaking. The overall APE encompasses 339 linear miles; the width of the APE varies. For the overall cable route, the Project is divided into 14 Packages with their associated Environmental Management and Construction Plan (EM&CP) submittals (Table 1). The current Supplemental CRMP focuses on Segment 10, Package 6 in Albany and Greene Counties.

Segment 10, Package 6 is an overland portion of the Project route along CSX Railroad, extending from just south of the Selkirk Yard Bypass in the Town of Bethlehem (Albany County), to the Town of Catskill (Greene County), totaling 20.9 miles.

This Supplemental CRMP further considers the currently proposed route and proposed deviations in relation to recommendations for additional archeological testing or monitoring. As such, more fine-grained recommendations relative to specific Station numbers are provided here.

Table 1 CHPE Packages, Segments, Locations and Dates.

Construction Segment	EM&CP Design Packages	Location Description	Segment Length (miles)	Anticipated EM&CP Filing with DPS	Anticipated Start of Construction
OVERLAND SEGMENTS					
1, 2	1A/1B	Putnam to Dresden/ Dresden to Whitehall	17.6	April 15, 2022	November 2022
3	1C/2	Whitehall to Fort Ann Fort Ann to Fort Edward	20.8	December 23, 2022	May 2023
4, 5	3	Fort Edward to Milton	26.5	April 2023	June 2023
6	4A	Milton to Ballston	10.2	April 2023	July 2023
7	4B	Ballston to Schenectady/Rotterdam	9.6	April 2023	July 2023
8	5A	Rotterdam to Bethlehem	16.99	December 21, 2002	May 2023
9	5B	Selkirk Rail Yard Bypass	5.31	December 21, 2002	May 2023
10	6	Ravena to Catskill	20.9	April 2023	June 2023
11	7A	Catskill to Germantown	8.6	March 27 & 31, 2023	July 2023
12	7B	Stony Point to Haverstraw	7.6	April 2023	July 2023
13, 14, 15	8	Queens	2.13	April 2023	June 2023
Laydown Yards EM&CP	3,5B,6	Fort Edward, Bethlehem, Coxsackie	N/A	November 11, 2022	March 2023
MARINE SEGMENTS					
16	9	Transitional HDD (Stony Point)	N/A	September 29, 2022	September 2023
17	10	3 Transitional HDDs (Putnam, Catskill, Clarkstown)	N/A	December 14, 2022	April/May 2023
18	11	Lake Champlain (Pre-Lay Mattressing)	96	April 2023	August 2023
TBD	TBD	Lake Champlain (Cable Installation)	96	December 2023	TBD
19	12	Hudson River (Pre-Lay Mattressing)	89.1	April 2023	August 2023
20	13	Hudson River (Cable Installation)	89.1	December 2023	June 2024
21	14	Harlem River	6.3	December 2023	May 2024
22	TBD	Converter Station, Astoria Complex, (Queens)	N/A	January 31, 2023	June 2023
23	TBD	Astoria Rainey Cable HVAC System, (Queens)	3.5	TBD	TBD

Changes in the APE, including those necessary to avoid known historic and archeological resources, may be required to accommodate project implementation. Changes to the APE will follow methodology outlined in the CRMP (TRC 2021). The CRMP states: *If the corridor is changed or if a construction zone wider than 55 feet (terrestrial) or 50 feet (in-water) is required to build the Project, then the APE will be adjusted accordingly. All additional efforts to identify, assess, and manage cultural resources shall use the same guidance as that stipulated in the CRMP. It shall be the responsibility of the PPO and his/her designee to work with the appropriately trained archaeologist to ensure that survey and assessment of new APE construction areas is completed before construction takes place* (TRC 2021). Changes in the APE and associated survey and reporting will be provided to Signatories of the Programmatic Agreement in conjunction with annual reporting requirements (Section 3.6 Reporting Requirements).

3 Package 6 Activities

This package extends from the Town of Bethlehem on the CSX Railroad right-of-way (Castleton Subdivision, MP QG 11.880) to the Town of Catskill (River Subdivision, MP QR 122.00). The construction activities in this segment include both open trench and duct bank excavations. The trenches will typically be 4.5 feet in depth and 2.4 feet in width and the base. The open trenches will be backfilled with sand around the conduit and flowable fill above. The duct bank excavations will be placed in concrete with flowable fill above and appropriate subbases, bases and asphalt pavement repair (Figure 1).

Disturbance beyond the typical trench cuts include the location of splice vaults, and boring/receiving pits for HDD installation (Tables 2 and 3). These are discussed in detail below relative to potential archeological resources and previous evaluation and assessment.

3.1 Splice Locations and Vaults

Various splice vaults and open trench locations will also be installed to connect the cable segments together into an integrated whole. The splice and transition vaults will generally be about 15 by 40 feet in size. In all, forty-two (42) splice locations and vaults will be constructed in the Package 6 portion of the Project (Splice locations 194 to 231, plus Splice locations 210.A, 219.A, 220.A, 225A, 228A, and 229.A). The splice locations generally include a crane pad and work areas typically 50 feet by 100 feet. While the splice locations and vaults themselves are often within the permitted route, many of the work areas associated with them extend beyond the permitted route.

Archeological testing or monitoring is recommended for thirty-two (32) of the splices (Table 2): 195, 198, 203-205, 209, 210, 210A, 211-219, 219.A, 220.A, 220-225, 225.A, 226-229, 228A, and 229.A.

Table 2. Splice Locations and Recommendations, Package 6.

Item	Station Number	Description	Recommendations/Notes
Begin Package	60000+00	Town of Bethlehem, Albany County.	None.
Splice 194	60003+25	West side of railroad. Work area extends slightly outside of permitted route. Previously disturbed based on historic aerials.	None.
Splice 195	60035+00	West side of railroad. Work area extends beyond permitted route.	Testing or monitoring work area.*
Splice 196	60067+00	West side of railroad. Wetlands work area to be timber matted.	None.
Splice 197	60090+50	West side of railroad. Outside of permitted route, work area to be timber matted.	None.

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Splice 198	60122+35	West side of railroad. Work area extends outside permitted route. Appears undisturbed.	Testing or monitoring work area.*
Splice 199	60151+00	West side of railroad. Adjacent to HDD 93. Work area to be timber matted.	None.
Splice 200	60183+00	West side of railroad. Work area appears disturbed from drainage improvements.	None.
Splice 201	60210+00	West side of railroad. Disturbed by nearby trailer park and partially wet.	None.
Splice 202	60241+50	West side of railroad. Between Railroad Avenue and railroad tracks, disturbed.	None.
Splice 203	60273+75	East side of railroad tracks. Work area appears undisturbed.	Testing or monitoring work area.*
Splice 204	60306+00	East side of railroad. Outside of permitted route.	Testing or monitoring work area.*
Splice 205	60328+00	East side of railroad. Outside of permitted route.	Testing or monitoring work area.*
Splice 206	60360+25	East side of railroad. In area of recent disturbance.	None.
Splice 207	60391+50	West side of railroad. Largely within permitted route.	None.
Splice 208	60423+50	East side of railroad. Area of previous disturbance.	None.
Splice 209	60448+00	East side of railroad. Largely within permitted route. Work area outside permitted route appears undisturbed.	Testing or monitoring work area.*
Splice 210	60479+50	East side of railroad. Outside permitted route.	Testing or monitoring work area.*
Splice 210.A	60500+40	East side of railroad. Outside permitted route.	Testing or monitoring work area.*
Splice 211	60532+65	West side of railroad; steeply sloped area. Work area may require grading.	Testing or monitoring in level areas.*
Splice 212	60551+50	West side of railroad. Work area extends outside permitted route.	Testing or monitoring work area.*
Splice 213	60567+00	West side of railroad. Crane pad and work area outside permitted route.	Testing or monitoring work area.*
Splice 214	60591+50	West side of railroad. Work area partially outside permitted route, appears undisturbed.	Testing or monitoring work area.*
Splice 215	60619+00	Work area extends outside of permitted route.	Testing or monitoring work area.*
Splice 216	60651+00	West side of railroad, crane pad and work area outside permitted route.	Testing or monitoring work area.*
Splice 217	60683+25	East side of railroad, cable splice and work area outside permitted route.	Testing or monitoring.*
Splice 218	60700+00	West side of railroad tracks near Bailey Street. Undisturbed and outside permitted route.	Testing or monitoring work area.*
Splice 219	60731+50	East side of railroad. Splice, crane pad and work area well outside permitted route. Undisturbed.	Testing or monitoring.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Splice 219.A	60754+00	Outside permitted route and undisturbed.	Testing or monitoring.*
Splice 220	60785+00	Splice, crane pad and work area outside permitted route	Testing or monitoring.*
Splice 220.A	60809+00	Splice, crane pad and work area outside permitted route.	Testing or monitoring.*
Splice 221	60840+50	Splice and work area extends outside ROW, undisturbed.	Testing or monitoring.*
Splice 222	60863+00	Outside permitted route, undisturbed.	Testing or monitoring.*
Splice 223	60886+00	Outside permitted route, undisturbed.	Testing or monitoring.*
Splice 224	60914+00	Outside permitted route, undisturbed.	Testing or monitoring.*
Splice 225	60925+00	Outside permitted route, undisturbed.	Testing or monitoring.*
Splice 225.A	60949+00	Outside permitted route, undisturbed.	Testing or monitoring.*
Splice 226	60979+00	East side of railroad. Work area is partially outside of permitted route. Portion to be timber matted.	Testing or monitoring for portions of work area outside of permitted route and nearby turnaround.*
Splice 227	61000+00	East side of railroad. Splice and work area are outside of permitted route.	Testing or monitoring.*
Splice 228	61028+00	East side of railroad. Splice and work area are outside of permitted route.	Testing or monitoring.*
Splice 228.A	61060+00	East side of railroad. Splice and work area are outside of permitted route.	Testing or monitoring.*
Splice 229	61082+00	East side of railroad. Splice and work area are outside of permitted route.	Testing or monitoring.*
Splice 229.A	61111+00	East side of railroad. Splice and work area are outside of permitted route.	Testing or monitoring.*
End of Package	61112+98	Town of Catskill, Greene County	None.

3.2 HDD

In the Package 6 portion of Segment 10, additional HDDs will be required to avoid and minimize impacts to various wetland, railroad, and roadway crossings. In all, twenty-five (25) locations have been identified: HDDs 91, 93-95, 97-99, 101, 102, 104, 105, and 108-111 (17 in all), plus HDD 91.A, 92/92.A, 93.A, 96.XX, 96.A, 96.B, 97.A, 99.A, and 101.A (eight in all). The proposed HDDs 100 has been eliminated, and 103 and 104, 106 and 107 have been combined (Table 3).

Many of the HDD work areas will extend outside of the permitted route, and many of the locations are in or near areas of high archeological potential (Table 3). Archeological work or monitoring is recommended for sixteen (16) of the HDDs: 92/92.A, 96.XX, 96.A & 96.B, 97.A, 98, 99, 99.A, 101.A, 102, 105, 106 & 107, 108-111, and 111.A.

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Table 3. HDD Locations and Recommendations, Package 6.

Item	Station	Description	Recommendations/Notes
Begin Package	60000+00	Town of Bethlehem, Albany County.	None.
HDD 91	60009+00 to 60015+00	Crosses beneath Route 9W, both work areas remain within ROW, north set up in electrical transmission line. Area previously disturbed based on historic aerials.	None.
HDD 91.A	60042+50 to 60058+25	Crosses beneath Old Ravena Road. North work area is 150 feet west of railroad track, fully within permitted route. South work area to be timber matted.	None.
HDD 92 / 92.A	60092+00 to 60120+00	Crosses beneath Old Ravena Road and Coeymans Creek. North work outside permitted route and timber matted. South work area also extends outside permitted route.	Testing or monitoring or for south work area.*
HDD 93	60154+50 to 60171+50	Crosses beneath a pond and access road. North work area primarily within permitted route and timber matted. Disturbed from drainage improvements. South in cement plant property.	None.
HDD 93.A	60172+00 to 60179+50	Crosses beneath stream. North work area previously disturbed by quarry. South area appears disturbed from drainage improvements.	None.
HDD 94	60244+50 to 60256+00	Crosses beneath Main Street (Ravena Village), also beneath the railroad tracks from west to east. North set up is between railroad and Railroad Avenue, disturbed. South work area appears to have been cleared and graded in the early 2010s according to aerials.	None.
HDD 95	60283+50 to 60295+50	Crosses beneath an unnamed stream. North work area is sloped and disturbed from utility corridor. South work area at toe of highway berm, likely disturbed.	None.
HDD 96.XX	60331+00 to 60353+00	Under stream, New Baltimore Road and avoiding substation. North work area extends outside permitted route. Wetlands and disturbance. South work area inside permitted route and in area of sand/gravel mining.	Testing or monitoring, north work area only.*
HDD 96.A and 96.B	60375+00 to 60390+00	Crosses beneath Hannacroix Creek, and also east of railroad to west. North and south work areas outside permitted route, appear undisturbed, but may be steeply sloped.	Testing or monitoring, pits and work areas.*
HDD 97	60413+50 to 60419+00	Crosses beneath NY Route 144, from west of railroad to east. North work area within permitted route and timber matted. South work within permitted route.	None.
HDD 97.A	60428+50 to 60445+50	Under Sickles Creek and steep ravines. North work has prior disturbance. South work area extends outside permitted route, some slope.	Testing or monitoring, south work area only.*
HDD 98	60468+50 to 60479+00	Crosses beneath a drainage. North and south work areas extend outside permitted route.	Testing or monitoring, both work areas.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Item	Station	Description	Recommendations/Notes
HDD 99	60480+50 to 60497+00	Crosses railroad tracks and stream, from east side of railroad to the west side. North work area extends beyond the permitted route. South work inside permitted route.	Testing or monitoring, both work areas.*
HDD 99.A	60503+00 to 60530+00	Passes under New York Thruway (I-87) and small stream. North pit and work areas outside permitted route. Portion of south pit work area outside permitted route.	Testing or monitoring, both work areas.*
HDD 101	60535+00 to 60546+00	Crosses beneath unnamed stream, wetlands, and steep ravines. North and south pits and associated work areas within permitted route. Sloping in areas and likely disturbed.	None.
HDD 101.A	60575+50 to 60582+50	Crosses unnamed stream and steep slopes. Both work areas within permitted route. Associated south turnaround area appears undisturbed.	Testing or monitoring, south turnaround.*
HDD 102	60595+50 to 60615+00	Cable crosses beneath Cocksackie Creek and an unnamed stream. North work area is within area of disturbance. South work area extends outside permitted route.	Testing or monitoring, south work area only.*
HDD 103 and 104	60656+20 to 60079+50	Cable crosses beneath railroad, from west to east. North work area largely inside permitted route, south work area in previous disturbance.	None.
HDD 105	60867+00 to 60692+00	Cable crosses beneath railroad, from east to west. North work area undisturbed and outside permitted route. South work area disturbed.	Testing or monitoring, north work area only.*
HDD 106 and 107	60706+50 to 60718+50	Cable crosses beneath railroad, from west to east. South pit and work area outside of permitted route and undisturbed.	Testing or monitoring, south pit and work area only.*
HDD 108	60812+00 to 60837+50	Both work areas are outside of permitted route, and undisturbed.	Testing or monitoring, pits and work areas.*
HDD 109	60917+00 to 60922+50	Crosses beneath wetlands. Outside permitted route, undisturbed.	Testing or monitoring, pits and work areas.*
HDD 110	60934+50 to 60946+00	Crosses beneath wetlands. Both work areas are outside permitted route, undisturbed.	Testing or monitoring, pits and work areas.*
HDD 111	60953+00 to 60964+00	Crosses beneath Schoharie Turnpike (CR 28). North work area combined with Splice 225A, undisturbed. South pit and work area outside permitted route and undisturbed. Portions to be timber matted.	Testing or monitoring, north pits and work area, and south work area outside of permitted route.*
HDD 111.A	61083+00 to 61105+00	Under wetlands and Corlaer Kill. Both north and south pits and associated work areas outside of permitted route.	Testing or monitoring.*
End of Package	61112+98	Town of Catskill, Greene County	None

3.3 Access Roads

The Package 6 drawings distinguish between access routes and access roads. Access routes, as distinct from the Access roads, are alignments with existing roads or paths that will be used as they are to reach the Project from

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

public roadways. The Access roads will involve some construction and potential grading, whether laying down stone or using timber mats, to use for the Project.

Most of the access roads follow existing roads, drives, or tracks of some kind. However, the existing roads are rarely as wide as the access roads for the Project – the access roads will be 16 to 20 feet wide, in work corridors that will be 40 feet wide.

Archeological testing or monitoring is recommended for twelve (12) of the access roads (Access Roads 6-01, 6-02, 6-03, 6-06, 6-07, 6-14A, 6-17, 6-20, 6-22, 6-22A, 6-24, and 6-25) (Table 4). These access roads do not include parallel access roads along the railroad ROW, these deviations will be discussed separately.

Table 4. Access Roads and Recommendations, Package 6.

Access Roads	Station Number	Location	Notes/Recommendations
Access Road 6-01	60039+00	Off US Route 9W, parallel to existing power line ROW. Largely undisturbed. About 450 feet long.	Testing or monitoring.*
Access Road 6-02	60059+00	From Project west to Old Ravena Road. Wooded. About 2,100 feet.	Testing or monitoring portion without timber matting.*
Access Road 6-03	60081+00	From Project southwest to Flemings Park mobile homes. Existing road. About 440 feet.	Testing or monitoring.*
Access Road 6-04	60170+00	From Project to Lafarge Access Road. Previously disturbed. About 190 feet.	None.
Access Road 6-05	60232+00	From Project west, along a large building to Dempster Street. Prior disturbance.	None.
Access Road 6-06	60256+00	From Cottage Street to HDD 92 southern work area. Some steep slope.	Testing or monitoring.*
Access Road 6-07	60330+00	From Project to Birchwood Lane. About 600 feet. Wooded.	Testing or monitoring.*
Access Road 6-08	60358+00	From Project east to New Baltimore Rd. Existing parking area and access road next to substation. About 650 feet. Prior disturbance.	None.
Access Road 6-09	60352+00	Interior access road. Existing access road near substation. About 200 feet. Prior disturbance.	None.
Access Road 6-10	60360+00	Existing stone dust road. About 950 feet. Prior disturbance.	None.
Access Road 6-11	60357+00	Short road from Access Road 6-10 to Project, about 120 feet. Prior disturbance.	None.
Access Road 6-12	60416+00	From Project to NY Route 144. About 160 feet. Prior disturbance.	None.
Access Road 6-13	60418+50	From Project to NY Route 144. About 450 feet. Prior disturbance.	None.
Access Road 6-14A	60444+00	Wooded area south of Railroad Avenue. About 1,500 feet.	Testing or monitoring.*
Access Road 6-16	60477+00	From Project northeast to NY Route 9W. Along Kreitmeir Road and informal access road. About 1,550 feet.	None.

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Access Roads	Station Number	Location	Notes/Recommendations
		Prior disturbance.	
Access Road 6-17	60501+00	From W. Hawley Lane to Project. About 550 feet. Appears undisturbed.	Testing or monitoring.*
Access Road 6-18	60546+00	From end of West Van Gurpin Lane to Project. About 4,000 feet along private drive. Prior disturbance.	None.
Access Road 6-19	60594+00	Spur from Project northwest to Access Road 6-18. Existing earthen road. About 150 feet.	None.
Access Road 6-20	60570+00	Existing stone road through agricultural field. About 3,100 feet long. Last 700 feet in undisturbed field.	Testing or monitoring undisturbed last 700 feet.*
Access Road 6-21	60643+00	From Project over tracks to River Road. Existing gravel drive.	None.
Access Road 6-22	60693+00	From Bailey Street (Lawrence) to Project. Appears mostly undisturbed.	Testing or monitoring.*
Access Road 6-22A	60746+00	From Flint Mine Road to Project. Appears mostly undisturbed.	Testing or monitoring.*
Access Road 6-24	60837+00	From Project east to Flats Road. Existing dirt track. Within 150 feet of Murderers Creek. About 500 feet long.	Testing or monitoring.*
Access Road 6-25	60953+00	From Project southeast to Schoharie Turnpike. Follows existing utility lines. About 100 feet.	Testing or monitoring.*

3.4 Excursions from Permitted Route

Due to other design and engineering constraints, particularly wetlands and other environmental factors, the proposed cable route deviates outside of the area previously archeologically considered (the permitted route). These include 23 segments as outlined in the EM&CP, however, most of these segments also contain HDD pits or vault structures, which were previously addressed above. It is recommended that testing or archeological monitoring be performed in the dry, level, undisturbed portions of seven (7) of the segments (Table 5).

Table 5. Excursions and Recommendations for Package 6.

Number S10-	Station	Proposed activities	Observations	Archeological Recommendations
2	60085+50 to 60094+00	West side of tracks, cable route and temporary access roads.	Includes the Coeymans Creek corridor, and area of high archeological potential.	Testing or monitoring.*
5	60144+00 to 60147+00	Cable route and temporary parallel access road.	Areas are largely undisturbed.	Testing or monitoring.*
8	60254+00 to 60342+00	East side of railroad. Cable route and parallel access roads.	Near New York Thruway and utility corridor. Long stretch of parallel access roads. Some areas may be disturbed.	Testing or monitoring.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Number S10-	Station	Proposed activities	Observations	Archeological Recommendations
9	60355+00 to 60374+00	East side of railroad. Cable route and parallel access roads.	Includes the Hannacroix Creek corridor, an area of high archeological potential. Areas to the north of the area are disturbed (60359+00 to 60369+00) and do not require testing or monitoring.	Testing or monitoring of undisturbed areas. *
19	60633+00 to 60661+00	East side of railroad. Cable route and parallel access roads.	Areas appear undisturbed. Several known archeological sites in the vicinity, with high archeological potential.	Testing or monitoring. *
22	60691+00 to 60707+00	West side of tracks, cable route and parallel access road.	Known sites in the vicinity. Appears undisturbed.	Testing or monitoring. *
23	60712+00 to 61112+40	East side of railroad. Cable route and temporary parallel access roads to railroad ROW (outside of permitted route) and associated splice locations and HDD areas.	Long stretch in Cocksackie east of railroad ROW and existing utility lines. High archeological potential.	Testing or monitoring. *

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

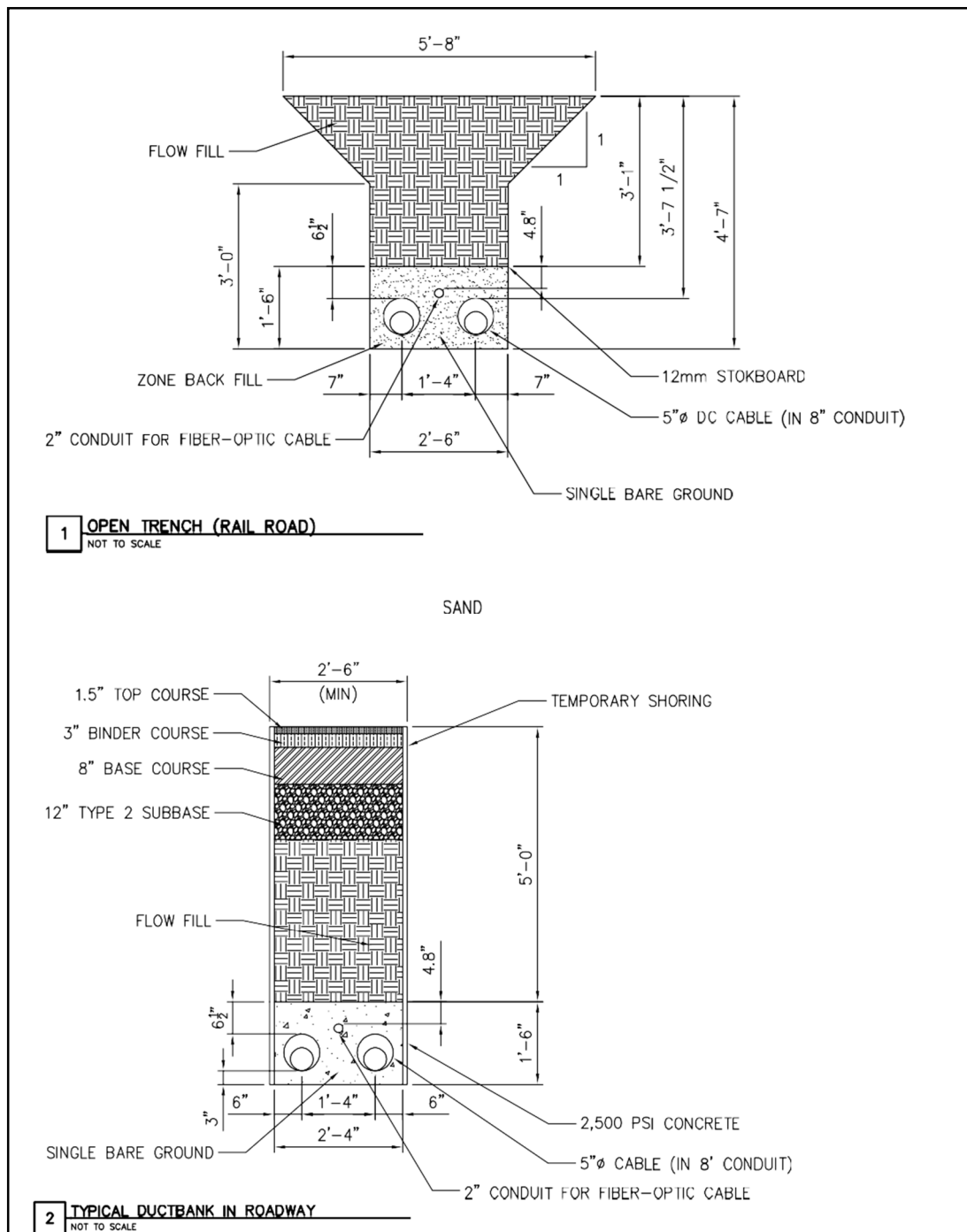


Figure 1. Typical open trench (railroad) and duct bank (roadway) installation of the cable illustrated.

4 Historic/Archeological Properties within/along the Cable Route

The Phase IA addendum archeological report detailed twenty four (24) previously reported archeological sites and three (3) historic properties along the Package 6 portion of the Project.

4.1 Himmer Rockshelter Site (NYSM 380)

The Himmer Rockshelter is mapped as on the east bank of Cocksackie Creek. The location is just on the north side of the Albany County/Greene County boundary (Towns of New Baltimore and of Cocksackie). No direct impacts are anticipated.

4.2 Satisfaction Site (NYSM 388)

This site is mapped on the east side of Cocksackie Creek It was reported by Tom and Paul Weinman, prolific avocational archeologists in the region.

4.3 Bailey Street Precontact Site (03941.000155)

This site was identified by Hartgen Archeological Associates, in advance of the construction of the Cocksackie Town Hall. The precontact site was subject to a Phase II investigation, which recommended the site as not eligible for the National Register. The site has since been destroyed by construction. No additional work or protection measures are recommended.

4.4 Greene Annex Correctional Site (03905.000108)

The site is on the south side of Plank Road in the Town of Cocksackie. It is a particularly artifact-rich, precontact site, having yielded over 7,000 artifacts, some of which date to the Late Archaic (4000 to 1000 BC) period. However, CRIS indicates the site was determined not eligible for the National Register.

4.5 Victoria Site (03905.000162, NYSM 10742)

The Victoria Site is in the Tow of Cocksakie. Flint Mine Road is within 200 feet of the site to the south in the Town of Cocksackie. Like the Greene Annex Correctional Site a short distance to the north, the Victoria Site produced thousands of artifacts. In addition to Late Archaic artifacts, the Victoria Site also contained artifacts dating to the Middle Woodland period (300 BC to AD 1000). The site has been determined eligible for the National Register. The cable route is on the east side of the railroad opposite the site through an area that appears to have some disturbances.

4.6 Flint Mine Hill Archeological District (90NR00539) National Register Listed

Flint Mine Hill is a large precontact quarry rich with Normanskill/Mount Merino chert that outcrops near the surface in great quantity and quality. The precontact quarry located on the ridge of the hill is thought to be the largest of its kind in eastern North America (Brumbach and Weinstein 1999). There are numerous lithic workshops on and around the hill, where precontact people reduced the stone ore into more useable and portable lithic packages. The district is quite large extending from about Flint Mine Road to Schoharie Turnpike. The boundary coincides with the CSX rail line on the east and to the west the boundary is along and west of US Route 9W until its intersection with Schoharie Turnpike. The following sites are within and directly associated with the quarry site: Fluted Point Find near Flint Mine Hill (NYSM 8025), Unnamed Site (NYSM 8280), Flint Mine Hill Workshops, and Russian Workshop (NYSM 405).

The Fluted Point Find (NYSM 8025) is mapped as a large area, encompassing the entire landform known as Flint Mine Hill on the west side of the railroad (in the Town of Cocksackie).

The Flint Mine Hill Workshops Site is several acres in extent lies off the northeast corner of Flint Mine Hill, in the Town of Cocksackie. The site is west of the Russian workshops, described below, and well west of the cable route.

The Russian Workshop is a site reported in two, slightly different, locations, both approximately 250 feet west of the railroad. Like the Flint Mine Hill Workshop site, it is in a relatively flat area off the northeast corner of Flint Mine Hill, in the Town of Cossackie. One of the Russian Workshop locations is on the west side of the railroad. The two sites are located between the Flint Mine Hill Workshops and the railroad.

Unnamed Site (NYSM 8280) is drawn as an oval encompassing located on the east side of Flint Mine Hill in the Town of Cossackie. It is thought to be related to the complex of precontact sites on and around Flint Mine Hill. The cable route and temporary access road passes through the site. It is recommended that temporary roads should use timber matting or other methods to limit ground disturbance.

4.7 Solar Fields Sites 6, 7, 8, and 11

This cluster of sites east of Flint Mine Hill was identified as part of a recent professional archeological survey for a proposed solar farm (Curtin 2011; TetraTech 2020). Four of the sites identified from the survey lie within or adjacent to the cable route, east of the railroad tracks. Site 11 (03905.000196) is the northernmost, its status for the National Register is undetermined. The site consists of a moderate density of lithic debitage and three stone tools.

Continuing south, Solar Fields Site 8 (03905.000193) lies east of the cable route. It too is medium density lithic scatter with over 30 flakes, nine cores, and three stone tools. Its status for the National Register is undetermined.

To the southwest of Site 8, is Solar Fields Site 7 (03905.000192).. The site is a fairly dense scatter of lithic debitage (nearly 200 pieces), 35 cores, and 7 stone tools. It appears to be a workshop associated with the nearby quarry.

Finally, Solar Fields Site 6 is the southernmost of the cluster. The site is medium density lithic scatter with 12 cores, and a hammerstone, suggesting it is a workshop associated with Flint Mine Hill. Its status for the National Register is undetermined.

4.8 Flats Road Precontact Site (03905.000203)

The Flat Road Precontact Site lies south of Flats Road within the Spoor Farm parcel. This site consists of a lithic scatter identified recently by systematic archeological investigations associated with the CSX line (landmark Archaeology 2015). The site is within the Spoor Farm complex (National Register eligible), both will be avoided by HDD.

4.9 Possible Mound (NYSM 432)

The Possible Mound (NYSM 432) is actually two sites that are mapped as both a polygon and a point, but both appear to refer to the same resource. The site was reported as having two, discontinuous site locations on opposite sides of the railroad. While reporting the site in 1963, Frank Schambach wrote that it included nine graves, and it may have been a burial mound. Both the cable route and access road are within the site boundaries. Archeological testing in advance of construction is recommended. The Hartgen interpretation of the boundaries of the Possible Mound Site is placed in the middle of the eastern lobe of the Schambach version, approximately 400 feet east of the railroad.

4.10 Prehistoric Site 3 (P-3)

The P-3 site is 150 feet west of the railroad in the Town of Athens. The site is situated on a bedrock outcrop overlooking Athens. At this location, the Project activities will be on the east side of the railroad, the opposite side from P-3, and no impacts are anticipated.

4.11 JMA Sites 1-3, and 6-9

The JMA series of sites were discovery by a professional archeological survey in advance of a proposed utility project that stretched across large portions of the Town of Athens (no report was ever completed, but site

forms were submitted to SHPO). Over 19 precontact sites were identified. Seven (7) are located within or immediately adjacent to cable route in Package 6 and discussed below.

JMA Site 9 (03902.000249) is the northernmost of the seven and consisted of a single artifact find. The site was found immediately adjacent to the railroad ROW. The site was determined not eligible for the National Register.

Further south, JMA Site 8 (03902.000248) is also immediately adjacent to the railroad ROW. It too consisted of a single artifact, and the site was determined not eligible for the National Register. Continuing south, JMA Site 7 (03902.000247) is along the east side of the railroad tracks as well. It consisted of a medium density assemblage of chert debitage. Its status for the National Register is undetermined.

JMA Site 6 (03902.000246) is between the railroad and utility corridor to its east. It was characterized as a camp and workshop, dating from the Early Woodland and Late Woodland periods. The artifact assemblage included a Levanna-style arrowhead, at least one other bifacial tool, several scrapers, cracked rocks, and hundreds of lithic debitage fragments. Its status for the National Register is undetermined.

JMA Site 1 (03902.000241) is fairly high-density site with an assemblage of over 80 fragments of debitage, two stone tools, and a hammerstone for tool making. The site is immediately west of the proposed cable route near Station 61087+00. Its status for the National Register is undetermined. To the southeast is JMA Site 2 (03902.000242), this too is a very high-density site with over 400 pieces of debitage and a quartz hammerstone.

JMA Site 3 (03902.000243) is the southernmost of the seven discussed here. It consisted of a light scatter of debitage over an area about 50 feet in length. It was determined not eligible for the National Register.

4.12 Spoor Farm (03905.000056)

Three historic farm properties lie within and immediately adjacent to the proposed cable route. The first dates from the early 18th century and the other two from the late 18th and early 19th century (Gromek 2020; Howe 2020).

The Spoor Farm was established in 1733 based on the datestone above the stone farmhouse door (Figure 2). The property contains a number of outbuildings of unknown dates, and their contribution to the eligibility of the property has yet to be fully evaluated. The Spoor Farm is on the east side of Flint Mine Hill and partially overlaps with NYSM 8025 site and includes Flats Road Precontact Site (03905.000203). There is a high likelihood of historic archeological deposits and features on the property, as well. The farm will be avoided with HDD.



Figure 2. Spoor Farmhouse built about 1733, east elevation (Gromek 2020).

4.13 857 Flats Road (03905.00056)

This property has been determined National Register eligible as an intact example of a 19th century-farm complex with Greek-Revival farmhouse and New World “Dutch”-style barn and related farm fields. The cable will pass under the rear of the property which fronts on Flats Road. Most of the buildings are located along Flats Road. The Project will not likely adversely affect the property.

4.14 Rushmore Farm (10NR06093)

The Rushmore Farm is listed on the National Register as a well-preserved example of an 18th-century farmstead in eastern New York (LaFrank 2010). The farmstead lies in the Town of Athens south of Leeds-Athens Road, west of the CSX tracks, and east of US Route 9W. The farmhouse is a one-and-a-half-story mortared stone with a stone smokehouse. The western half of the house dates to the late 18th century and the eastern half to the early 19th century. The property is immediately adjacent to the cable route but separated from the Project by the railroad tracks. No impacts are anticipated to the National Register Listed property.

4.15 Summary

In all, three historic properties are within or adjacent to the proposed cable route: Spoor Farm, 857 Flats Roads, Athens, and Rushmore Farm. The Spoor Farm property is eligible for the National Register and will be avoided by HDD. The cable route and access road will be placed at the rear of a 19th-century farm determined to be eligible for the National Register: 857 Flats Road (03905.00056). No adverse effects are likely, a final determination of effects will be made by the Project and NYSHPO will provide concurrence. The Rushmore Farm is west of the Project and will not be directly impacted.

A total of twenty-three (23) archeological sites are within or adjacent to the Project in this Package (Table 6). One site has a high probability of containing human remains. It is recommended that testing in advance of construction occur near the NYSM Site 432, a possible burial mound in the Town of Athens.

Lastly, these sites are in close proximity to the proposed cable route, and as much of the route deviates outside of the permitted route, archeological testing or monitoring is recommended for the stations near the following sites:

- Satisfaction Site (NYSM 388).
- Flint Mine Hill Archaeological District (90NR00539) National Register Listed. Immediately adjacent on the west side of the railroad ROW. National Register-Listed archeological district.
- Solar Field Precontact Site 11 (03905.000196). Cable route is immediately adjacent.
- Unnamed (NYSM 8280). Cable route is within the site boundaries.
- Fluted Point Find near Flint Mine Hill (NYSM 8025). Cable route is within the site boundaries.
- Solar Field Precontact Site 8 (03905.000193). Cable route is close to the site.
- Solar Field Precontact Site 7 (03905.000192). Cable route is within the site boundaries.
- Solar Field Precontact Site 6 (03905.000191). Cable route is immediately adjacent.
- JMA Site 7 (03902.000247). Cable route is immediately adjacent.
- JMA Site 6 (03902.000246). Cable route is immediately adjacent.
- JMA Site 1 (03902.000241). Cable route is immediately adjacent.
- JMA Site 2 (03902.000242). Cable route is immediately adjacent.
- JMA Site 3 (03902.000243). Cable route is immediately adjacent to the site.

Table 6. Archeological and Historic Resources Within and Near the Proposed Cable Route in Package 6.

Cultural Resource Name	Location	Impact	Protection Measure
Himmer Rockshelter (NYSM 380)	Town of Coxsackie	None, site is well east of the cable route.	None.
Satisfaction (NYSM 388)	Town of Coxsackie	Within or immediately adjacent to the cable Route.	Testing or Monitoring.* Use of timber matting for parallel temporary access road also recommended.
Bailey Street Precontact Site (03941.000155)	Town of Coxsackie		Determined Not Eligible. Site is now destroyed. No protection measure recommended.
Greene Annex Correctional Site (03905.000108)	Town of Coxsackie.	Site is on the west side of the railroad and cable route lies east of railroad here.	Determined Not Eligible. None.
Victoria Site (03905.000162, NYSM 10742)	Town of Coxsackie	Cable route is on the east side of the railroad ROW. Site is on the west side.	Eligible for the National Register. Site will be avoided.
Flint Mine Hill Archaeological District (90NR00539) National Register Listed	Town of Coxsackie and Town of Athens	Immediately adjacent on the west side of the railroad ROW.	National Register-Listed archeological district. Will not be directly impacted.
Solar Field Precontact Site 11 (03905.000196)	Town of Coxsackie	Cable route is immediately adjacent to the site.	Testing or Monitoring.*
Russian Workshop (Flint Mine Archaeological District) (NYSM 405)	Town of Coxsackie	Site is located on the west side of the railroad ROW, cable will be placed on east side.	None.
Unnamed (NYSM 8280)	Town of Coxsackie	Cable route is within the site boundaries.	Testing or Monitoring.*
Fluted Point Find near Flint Mine Hill (NYSM 8025)	Town of Coxsackie	Cable route between is within the site boundaries.	Testing or Monitoring.*
Solar Field Precontact	Town of Coxsackie	Cable route is close to the site.	Testing or Monitoring.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Cultural Resource Name	Location	Impact	Protection Measure
Site 8 (03905.000193)		(60792+00)	
Solar Field Precontact Site 7 (03905.000192)	Town of Coxsackie	Cable route is within the boundaries of the site.	Testing or Monitoring.*
Solar Field Precontact Site 6 (03905.000191)	Town of Coxsackie	Cable route is immediately adjacent to the site.	Testing or Monitoring.*
Flats Road Precontact Site (03905.000203)	Town of Coxsackie	Cable route is within site boundaries.	Site will be avoided with HDD.
Spoor Farm, 957 Flats Road (03905.000228) Eligible 18th-century farmhouse and property	Town of Coxsackie	Cable route passes under the property.	Property determined eligible. To be avoided with HDD.
857 Flats Road (03905.00056)	Town of Coxsackie	Cable route and access roads at the rear of the property.)	Property determined eligible. No adverse effects likely.
Possible Mound (NYSM 432) (03902.000007)	Town of Athens	Cable route is within the site boundaries.	Archeological testing in advance of construction is recommended.
Prehistoric Site 3 (P-3) (03902.000232)	Town of Athens	Site is located on west side of railroad. Cable route is on east.	None.
JMA Sites 9 (03902.000249)	Town of Athens	Cable route is within site boundaries.	Determined not eligible. None.
JMA Site 8 (03902.000248)	Town of Athens	Cable route is within site boundaries.	Determined not eligible. None.
Rushmore Farm (10NR06093) National Register Listed Property	Town of Athens	East boundary is contiguous to CSX RR ROW.	None.
JMA Site 7 (03902.000247)	Town of Athens	Cable route is immediately adjacent to the site boundaries.	Testing or Monitoring.*
JMA Site 6 (03902.000246)	Town of Athens	Cable route is immediately adjacent to the site boundaries.	Testing or Monitoring.*
JMA Site 1 (03902.000241)	Town of Athens	Cable route is immediately adjacent to the site boundaries.	Testing or Monitoring.*
JMA Site 2 (03902.000242)	Town of Athens	Cable route is immediately adjacent to the site boundaries.	Testing or Monitoring.*
JMA Site 3 (03902.000243)	Town of Athens	Cable route is immediately adjacent to the site boundaries.	Testing or Monitoring.*

4.16 Construction Timeline

The construction timeline is November 2022 to December 2025 for the entire project.

5 Cultural Resource Management Plan

5.1 Objective

It is the objective of this CRMP to demonstrate a comprehensive plan for the encounter of cultural resources during the construction and installation of the transmission line, as well as the various other components affiliated with it.

TRC created a final CRMP for the permitting process, with an overall permitting CRMP created in 2015, and subsequent revisions and addendums in 2021. The plan provides guidance for those monitoring activities not indicated in the CRMP (TRC 2021) which specifically addressed previously identified sites within or along the permitted route; and, unanticipated discoveries when an archeologist is not present.

No areas of monitoring have been previously identified in the current segment of the Project. This current report serves as the supplemental CRMP for the now planned construction activities, tasked in synthesizing the previously reported data into one document and identifying roles and points of contact for communication ease.

5.1 Heritage Areas, Special Events, and Other Resources

As part of the Section 106 process, the federal agency solicited comment and feedback from Tribal Nations that have expressed an interest in the regions in which the Project is to be constructed. As part of that endeavor, no traditional cultural properties were identified within or immediately adjacent to the Project. No other heritage areas or special events have been identified within this segment of the Project. The Certificate Holder, and its assignees, continues to solicit information from the public and other stakeholders to identify such areas, should they exist. No such areas, events, or properties have been identified in this segment of the Project.

5.2 Project Preservation Officer (PPO)

Hartgen will act as the Consulting Archeologists (CA) for the purpose of this effort. The CA will work closely with the Project Preservation Officer (PPO); the PPO or their designee will be present for all ground disturbing activities, and will have “stop-work” authority. The PPO will be part of the prime construction management team, Kiewit Corporation, currently Ashley L. Bushey.

It is the responsibility of the CA to train this individual as a PPO and to provide a hands-on workshop for construction personnel, as designated by the PPO. The PPO and the construction team should have an understanding of cultural resources present in different areas, as well as understanding the potential for unknown cultural deposits. It is the responsibility of the PPO to implement the CRMP (TRC 2021) and ensure that requirements and conditions of the CRMP are met. Table 7 includes the necessary contact information.

The PPO will have the authority to cease excavation or construction work. In the event of encountering cultural materials or human remains, it is the responsibility of the PPO to halt construction activities and contact and coordinate with the CA to visit the location of the discoveries as quickly as possible. Unanticipated discoveries, such as human remains, will follow the protocols developed by OPRHP in 2021 in consultation and coordination with the state’s Tribal entities. This protocol supersedes previous iterations presented in the BMP, CRMP (TRC 2021), and other related documents and plans (Appendix 2).

In the event of these discoveries, the CA will have up to three workdays to excavate and remove cultural material from the APE before the construction continues. The CA, in consultation with the PPO and the NYSHPO, may request additional archeological field assistance to complete the necessary work in a timely manner. It is the responsibility of the PPO to work with the appropriately trained archeologists to ensure that the survey and assessment of any change in the APE is completed prior to construction taking place.

5.3 Identification of Historic Properties

Changes in the APE or modifications to work proposed within the APE will prompt review of the subject location(s) for historic properties. The review will include archeological survey as specified in the CRMP (TRC 2021) in addition to completion of a files search that will include previous survey data through New York CRIS and may be supplemented with local assessor records, historic topographic maps, historic aerial images, Sanborn Fire Insurance and other historic maps, and other resources as available.

Properties are typically considered to hold historic potential when they meet or exceed 50 years of age. The Project may elect to consider the historic potential of properties approaching this age threshold to accommodate anticipated construction horizons. The Project will complete a survey evaluation for properties that meet or exceed the age threshold for historic potential, have no existing determination of NRHP eligibility or a determination ten or more years old, and may be affected by project activities. The evaluation will be completed by a cultural resource specialist who meets or exceeds the Secretary of the Interior’s Professional Qualification Standards (SOI Standards) in a discipline appropriate for the subject site; archeological sites will

be evaluated by professionals who meet or exceed the SOI Standards in the area of archeology; architectural and landscape sites will be evaluated by professionals who meet or exceed the SOI Standards in the area of Architectural History. Survey evaluations will be subject to quality assurance review by a professional other than the author(s) who meets or exceeds applicable SOI Standards. Survey information will be input into the New York CRIS system prior to submission of annual reports on January 10 of each calendar year that this agreement is in effect.

5.3.1 Barriers and Other Protective Measures

No barriers or protective measures have been requested by stakeholders for this Segment of the Project. If portions of the Project are altered, additional assessment, which may include desktop review, pedestrian survey, and/or archeological shovel tests, will be required to determine the presence or absence of cultural resources. Should cultural resources be identified, the Certificate Holder will avoid these resources if possible. Protective measures may include installation of temporary fencing and/or site delineation on Facility maps. Should an archeological site be impacted by Project activities, mitigation will include notification procedures and data recovery as stipulated in the Section 4.0 of the CRMP (TRC 2021), and/or other treatment measures determined through consultation with NYSHPO, Tribal Nations, and consulting parties.

5.3.2 Reporting Requirements

The CRMP (TRC 2021) establishes a requirement for annual reporting concerning activities conducted under the CRMP: *The PPO will prepare an annual report to the DOE and NYSHPO (and any of the other signatory or consulting parties listed in the Programmatic Agreement), which summarizes activities conducted under this CRMP on an annual basis for as long as this CRMP is in effect (i.e., through post-construction monitoring). The report will be completed and submitted on or before January 10 of each year. The CRMP may be updated and/or revised as appropriate to improve its implementation so long as concurrence is reached by the parties involved is achieved. The annual report will include a summary of all historic properties and archaeological resources that may have been encountered during construction and how they were treated. Post-construction reports will identify which cultural resources were monitored and provide a summary of resource conditions and whether looting or other forms of ground disturbance were noted* (TRC 2021).

The PPO will establish and maintain:

- A system of tracking archeological monitoring reports;
- Application of Program Comments, Exemptions, or Program Alternatives;
- Application of Programmatic Allowances;
- Implementation of Treatment Measures;
- Potential changes to APE;
- Annual report that summarizes the above items stipulated by the CRMP (TRC 2021).

5.4 Programmatic Allowances

Activities considered Programmatic Allowance are not exempt from archeological monitoring and remain subject to unanticipated discovery protocols, including stop-work provisions, as contained in the CRMP (TRC 2021).

Programmatic Allowances include actions where historic properties will not be affected or effects to historic properties hold limited potential to diminish historic integrity. Where Programmatic Allowance(s) are applicable, the action will not require independent consultation with the State Historic Preservation Office (SHPO).

Application of Programmatic Allowances requires review by Project Preservation Officer (PPO). The PPO must complete:

- Memorandum to file containing a verbal description of work proposed, verbal description and map of geographic area subject to the work proposed;
- Summary of file search and/or literature review conducted to identify potential historic properties,
- Description of historic properties affected (if any);
- Justification for the application of one or more Programmatic Allowances.

The Project will maintain a tracking system of memoranda applying Programmatic Allowances, which will be communicated to NYSHPO and the Programmatic Agreement signatories in an annual report.

In addition to the Programmatic Allowances contained in this document, the Project may include application of relevant Section 106 Program Comments and program alternatives including but not limited to:

- Program Comment for Actions Affecting Post-1945 Concrete and Steel Bridges (*Federal Register*, Vol. 77, No. 222, November 16, 2012)
https://www.achp.gov/sites/default/files/program_comments/2017-01/program%20comment%20concrete%20and%20steel%20bridges.pdf
- Program Comment to Exempt Consideration of Effects to Rail Properties within Rail Rights-of-Way (*Federal Register* Vol. 84, No. 125, June 28, 2019)
<https://www.govinfo.gov/content/pkg/FR-2019-06-28/pdf/2019-13779.pdf>
- Advisory Council on Historic Preservation (ACHP) Exemption Regarding Historic Preservation Review Process for Effect to the Interstate Highway System (*Federal Register* Vol 70, No. 46, March 10, 2005)
https://www.achp.gov/sites/default/files/exemptions/2017-01/final_interstate_exemption_notice.pdf

5.4.1 Transportation Facilities

- A. Resurfacing existing roadways and/or replacement in-kind of highway signals, signage, or appurtenances when approved by the owner of the transportation facility.
- B. Replacement in-kind of railroad signals, crossing materials, and other railroad features or appurtenances when approved by the owner of the transportation facility.
- C. Installation of utility attachments on bridges in areas with existing utility attachments.

5.4.2 Ground Disturbing Activities

- A. Ground disturbing activities within areas of documented previous disturbance.
- B. Ground disturbing activities within non-historic and non-contributing properties or features when no vertical improvements are proposed. Vertical improvements may consist of, but are not limited to, buildings, structures, and other forms of infrastructure with height above ground and constructed by the Project.
- C. Ground disturbing activities within historic and contributing properties when action is discrete (including but not limited to edges of agricultural fields, wooded areas, lawns, or curbs), where no contributing or potentially contributing buildings, structures, objects, sites, or features are present (including but not limited to slate sidewalks, hitching posts, carriage steps, mature trees, fences, retaining walls, and other landscaping dating to the historic period of 50 years or more in age).

5.4.3 Temporary Staging and Temporary Facilities

- A. Temporary staging or stockpiling within existing parking areas.
- B. Temporary staging or stockpiling within transportation rights of way.

- C. Temporary staging or stockpiling within areas with documented previous ground disturbance when the ground is returned to pre-construction appearance, including contours and vegetation.
- D. Installation of temporary construction support facilities when the ground is returned to pre-construction appearance, including contours and vegetation.
- E. Location of temporary construction trailers not requiring a foundation or pad.

5.4.4 Utilities, Lighting, and Maintenance Facilities

- A. Installation of underground utilities using directional bore drilling or similar method.
- B. Replacement, repair, and/or maintenance of existing underground utilities in-kind when work occurs within the existing utility footprint.
- C. Installation, replacement, or upgrade to lighting within transportation rights of way and/or at Project locations requiring routine maintenance.
- D. Establishing maintenance facilities within Project easements or right of way no more than 10-feet high with a footprint no more than 120 square feet when facility is not located within a State Register of Historic Places (SRHP) or National Register of Historic Places (NRHP) historic district.

5.4.5 Pre-Construction Due Diligence and Testing

- A. Conducting geotechnical testing, hazardous materials sampling, seismic or vibration testing or monitoring, or drill samples.
- B. Wetland testing and delineation.
- C. Wildlife surveys and inventories.
- D. Property line and ownership verification surveys.
- E. Utility location surveys.

5.4.6 Hazard and Hazardous Waste Removal

- A. Removal of debris related to weather or storm damage, or present as a result of modern dumping.
- B. Hazardous waste removal.

5.4.7 Environmentally Sensitive Area (ESA) Protection and Mitigation

- A. Installation of temporary fencing to protect areas of cultural, biological, or other environmentally sensitive area from the effects of construction.
- B. Obtaining credits in/from and existing wetland mitigation bank.
- C. Vegetation or landscaping to support habitat mitigation when the subject action affects less than one-half acre and does not occur within an archeologically sensitive area, as defined by the Supplemental CRMP.

5.4.8 Drainage Improvements

- A. Erosion control measures including placement of best management practices, rip rap within non-historic channels, and emergency erosion control measures.
- B. Re-grading or re-establishing existing drainage channels.
- C. Temporary drainage systems including culvert placement and grading, provided the area is returned to pre-construction appearance.
- D. Replacement or up-sizing corrugated metal pipe (CMP), concrete box culvert (CBC), reinforced concrete pipe (RCP), and plastic pipe culverts where no architectural headwalls or wingwalls are present or where these features, if present, will remain in place.

5.4.9 Signage and Surveillance

- A. Installation, maintenance, repair, or removal of security systems.
- B. Installation of signage not located within a NRHP district.
- C. Replacement of existing signs; including within a NRHP district when replacement is in-kind and at the same location as the sign to be replaced.
- D. Maintenance, repair, or removal of signage.
- E. Installation of less than 100 linear feet of security fence within Project easements or right of way when not located within a SRHP or NRHP historic district.

5.4.10 Easements and Right of Way

- A. Acquisition of easements or right of way from non-historic properties and when not located within a State Register of Historic Places (SRHP) or National Register of Historic Places (NRHP) historic district.
- B. Acquisition of easements or right of way for sub-terranean activities when no surface rights or access is conferred.

5.5 Treatment Measures

When Project actions do not qualify as Programmatic Allowances, the Project will complete an evaluation of the potential for actions to diminish the historic integrity of historic or archeological resources, as defined in 36 CFR Part 800.5(a)(1). The Project may reference applicable National Register Bulletins, published by the National Park Service, to support the evaluation. Project actions found to diminish integrity as defined in 36 CFR Part 800.5(a)(1) will require Treatment Measures. The Project will complete a memorandum documenting eligibility of the resource(s), application of the criteria of adverse effect, avoidance measures considered, efforts to minimize the effect, coordination with property owner(s) or local government(s) in selection of Treatment Measures if applicable, and rationale for application of the selected Treatment Measure, if applicable. A separate Memorandum of Agreement (MOA) will not be required when one or more of the following Treatment Measures are selected. If the Project action is determined not to diminish integrity, further action will not be required.

The Project will maintain a tracking system of memoranda and Treatment Measures, which will be communicated to NYSHPO and the Programmatic Agreement signatories in the annual report.

This section will not apply to designated National Historic Landmark properties, as consultation with the Department of the Interior is required (36 CFR Part 800.10), generally conducted via consultation with the National Park Service.

5.5.1 Data Recovery

Data recovery and reporting is the preferred mitigation for archeological sites. Implementation of this Treatment Measure will follow protocol contained in the CRMP (2021) Section 4.0 Project Effects and Management Measures. Additional details concerning data recovery for resources identified during archeological monitoring or that are unanticipated discoveries are outlined below.

5.5.2 Certified Local Government or Historic Preservation Board/Commission Priority Project Sponsorship

The Project crosses through several Certified Local Government (CLGs) jurisdictions. CLG programs are a division of municipal or county government to create and implement local-level historic preservation planning and programming. Many CLGs maintain a formal historic preservation plan containing goals and priority projects for preservation activities within their jurisdiction. Whether or not a CLG maintains a formal historic preservation plan, all are required to maintain a system of identification and documentation of historic

properties, sometimes referred to as historic survey. Communities may also maintain a Historic Preservation Board, Commission, or similar entity and choose not to become a CLG. Each program will formally or informally document preservation priorities within their jurisdictions, often identifying lack of funding as a significant barrier to implementation.

Site-specific mitigation often has limited value to advancement of historic preservation. To create broader impact to the historic properties and the communities they serve, the Project may coordinate with CLGs or Historic Preservation Boards/Commissions to sponsor one or more of the priority projects identified within that entity's jurisdiction and not necessarily within the Project APE.

Example projects include, but are not limited to, historic surveys, State or National Register Nominations, historic context documentation, completion (or update) of a strategic preservation plan, completion of a strategic historic survey plan, archeological or architectural history field schools, historic preservation technical trainings or workshops, workshops related to historic preservation tax credits, and more.

New York CLGs are listed on the NYSHPO website at: <https://parks.ny.gov/shpo/certified-local-governments/listing.aspx>

5.5.3 Digital Photography Package

Prior to implementation of the work necessitating implementation of Treatment Measures, a digital photography package will be prepared by an individual meeting the Secretary of the Interior's Professional Qualification Standards. The photography package will include images demonstrating the property in its setting and context, images showing each exterior building elevation, images showing the spatial relationships of building(s) and features of the site, and appropriate detail images. A map showing photograph locations and view direction will be included. A photography log will be included containing photograph numbers, cardinal direction viewpoint, historic resource name and number (if applicable), street address (if applicable), city or town, county, state, and image description. The digital photography package will follow the National Park Service photography standards for the National Register of Historic Places:

https://www.nps.gov/subjects/nationalregister/upload/Photo_Policy_update_2013_05_15_508.pdf

Copies of the photography package on archival CD will be provided to NYSHPO, local Historic Preservation Board or Commission, and/or interested local or state repositories. One set of archivally produced, archivally labelled photographs will be provided to the NYSHPO.

5.5.4 National Park Service Heritage Documentation (HABS/HAER/HALS)

Prior to implementation of the work necessitating implementation of Treatment Measures, the property subject to the work will be documented to National Park Service standards using the appropriate heritage documentation form: Historic American Building Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS). Work will be completed by a Cultural Resource Specialist who meets or exceeds the Secretary of the Interior's Professional Qualification Standards. The appropriate level of documentation (Level I, Level II, Level III) will be selected based on the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation, as published in the Federal Register July 21, 2003: https://www.NationalParkService.gov/hdp/standards/standards_regs.pdf

The Project will follow HABS/HAER/HALS Standards & Guidelines published by National Park Service Heritage Documentation Programs. The Project will coordinate with the National Park Service Northeast Region to obtain an applicable HABS/HAER/HALS. The Project will complete comment resolution with the National Park Service Northeast Region and submit final documentation for transmittal to the Library of Congress.

5.5.5 Public Interpretation

Public interpretation will be designed and produced, which may include print or digital media, on-site or off-site signage, workshops or technical trainings, or other means of engaging and educating interested public regarding historic properties. If the public interpretation involves physical signage, installation will require agreements from the landowner accepting the sign(s) including responsibility for maintenance.

Completion of public interpretation as a Treatment Measure will be executed independent of the commitment to provide \$5,000 in educational investment included in the CRMP (TRC 2021).

5.6 Property Owner Requests

The Project may accommodate property owner requests, including privately and publicly held properties, that may exceed Project needs or requirements. If a property owner request accommodated by the Project escalates permitting, consultation, or Treatment Measure requirements, the subject property owner will assume responsibility for associated costs.

6 Archeological Monitoring Methodology

6.1 Objective

The objective of the archeological monitoring is to identify and document archeological deposits that may be encountered in areas that were previously inaccessible for archeological survey or not considered during the initial resource assessment, specifically in those areas outside of the originally permitted route. The monitoring methodology is established to create an efficient and streamlined notification process and means to determine the potential eligibility of resources for inclusion on the National Register, and for the creation and adoption of timely and effective mitigation strategies.

6.2 Monitoring

The Archeological Monitor will observe the contractor's excavations within designated areas as indicated by station numbers in the Supplement CRMPs (Table 8). On the basis of such observations, the Archeological Monitor may request a short-term cessation of work in the vicinity of a potential archeological site or find in order to record information or to evaluate exposed archeological deposits. Within the course of observation, the Archeological Monitor may request from the on-site supervisor time to evaluate significant finds, deposits, or other archeological materials in an effort to assess their eligibility for the National Register.

The Archeological Monitor may direct the Contractor's workers in the use of machinery on a very limited basis to assist in the exposure of material of archeological importance. This assistance will comprise work which would otherwise be done without archeological involvement, but where archeological direction can ensure that significant material is not disturbed.

The Archeological Monitor will inspect excavation areas, soil profiles, backdirt piles, and will collect artifact and soil samples as appropriate. The Archeological Monitor will map and document archeological deposits using field notes, photography, and measured scale drawings. The locations of archeological deposits will be mapped with a submeter GPS unit.

Archeological monitoring and associated site or find evaluation time will vary depending on the type of site or find encountered. Typical stop-work requests to complete archeological evaluation will be accommodated within one hour or less, often within fifteen minutes. Stop-work will be limited to an area within 50 feet of the potential archeological find; work may continue outside the area of the potential archeological find provided work occurs in an area not subject to archeological monitoring or an additional Archeological Monitor is available to observe the work.

6.3 Notification

For archeological finds that may be National Register-eligible but cannot be adequately recorded during a short cessation of work (typically one hour or less per find) and cannot be otherwise avoided, the Archeological Monitor will notify the on-site Supervisor and request a halt to construction activities near the find. The Archeological Monitor shall notify the Project Preservation Officer (PPO), who shall in turn notify the NYSHPO, other stakeholders and Tribal Nations, as appropriate within 48 hours of the initial reporting of the finds, per 36 CFR Part 800.13(b)(3). During this time, work in the immediate vicinity of the find must halt and the area of concern fenced or otherwise protected from construction activities. Once the area is secured, activity adjacent to the find may continue during the consultation process. Per 36 CFR Part 800.13(b)(3), NYSHPO, other stakeholders and Tribal Nations will have 48 hours from the time of notification to respond.

6.4 Determination of Eligibility

The NYSHPO will make a determination of eligibility for the archeological resource based on the information provided by the Archeological Monitor and PPO. The NYSHPO shall receive this information from electronic communications and respond within 48 hours, per 36 CFR Part 800.13(b)(3).

6.5 Determination of Effects, Mitigation Efforts and Dispute Resolution

It is expected that potential archeological finds will be located within a relatively narrow construction corridor with limited means for avoidance. When a site is determined eligible for inclusion on the National Register, avoidance is not possible, and continued construction requires disturbance of the site, the resulting Section 106 determination of effect will be Adverse Effect. Determinations of Adverse Effect require mitigation treatment to resolve; a separate Memorandum of Agreement will not be required when mitigation treatments contained within this document, or a Supplemental CRMP associated with the area of the subject archeological site, is selected. Dispute resolution among the parties will be guided by the CRMP (TRC 2021).

6.5.1 Data Recovery Mitigation Strategy

Data recovery mitigation strategy will be outlined in a brief plan that provides guidance on the level of effort expected, square meters of excavation, sampling percentage, and number of anticipated feature excavations. The strategy will provide a schedule for the proposed recovery/documentation efforts with the understanding, including options to expedite the process, which may include 10-hour working days and additional crew. The mitigation plan shall also include a protocol for artifact collection, processing, cataloging, analyses, and final curation of materials, as outlined in the original CRMP (Section 4.3). The data recovery plan will be provided to NYSHPO, Tribes, and other stakeholders prior to implementation; these parties will have up to 15 days to review and provide comment. Mitigation efforts can move forward as soon as NYSHPO approves the work plan. The PPO will notify the NYSHPO, Tribes, and other stakeholders of the completion of the fieldwork and that portion of the project shall be cleared to resume construction.

6.5.2 Alternative Archeological Mitigation

Alternative archeological mitigation efforts that contemplate non-traditional excavation and or data recovery methods may be appropriate considering the circumstances. Numerous treatment methods may be selected including but not limited to off-site archeology, non-invasive archeology in the vicinity, and other appropriate strategies may also be considered. Factors that may influence such decisions include the Project's constraints (in terms of construction corridor width and depth), weather and soil conditions, hazardous work environments, other health and safety concerns, and Project schedule.

7 Deliverables

7.1 Periodic Updates

The PPO in coordination and under the guidance of the CA will provide periodic (bimonthly) updates on the progress of cable installation via email to the stakeholders. The communication will include project progress, discussion of unanticipated cultural resources, and the schedule for future work.

7.2 Annual Report

The CA will provide an annual report detailing the activities completed under the CRMP (TRC 2021) to the DOE and NYSHPO for as long as the CRMP is in effect. This report will be completed and submitted on or before January 10th each year. This report will include a summary of all historic properties and archeological resources that may have been encountered during construction and how they were treated. Post construction reports will identify which cultural resources were monitored and provide a summary of resource conditions and whether forms of disturbance were noted.

7.3 Communications

Through the many moving parts of this Project, efficient and immediate contact and consultation will be vital. The Project contacts are listed in the table below:

Table 7. Project Contacts.

Agency/Organization	Role	Contact person	Contact information
Kiewit Corporation	Project Preservation Officer	Ashley L. Bushey	Ashley.Bushey@Kiewit.com 802.349.6388
CHA Consulting, Inc.	Consulting Engineer	Chris Einstein	ceinstein@chacompanies.com 518.453.4505
U.S. Department of Energy	Stakeholder	Melissa Pauley	melissa.pauley@hq.doe.gov
U.S. Army Corps of Engineers	Stakeholder	Stephan Ryba	Stephan.a.ryba@usace.army.mil
New York State Historic Preservation Office (NYSHPO)	Stakeholder	Nancy Herter	Nancy.herter@parks.ny.gov 518.268-2179
New York DPS	Stakeholder	Matthew Smith	matthew.smith@dps.ny.gov
Hartgen Archeological Associates	Consulting Archeologist	Matthew Kirk	mkirk@hargen.com 518.283.0534 518.300.5940
Transmission Developers Inc.	Applicants/Owner	Ayokunle "Kunle" Kafi, PE, CEM	Ayokunle.kafi@transmissiondevelopers.com 347.920.6550
Delaware Nation	Tribal Nation	Carissa Speck	(405) 247-2448, Ext. 1403 cspeck@delawarenation-nsn.gov
Delaware Tribe of Indians	Tribal Nation	Susan Bachor	610.761.7452 sbachor@delawaretribe.org
Shinnecock Nation	Tribal Nation	Jeremy Dennis	631.283.6143 adminoffice@shinnecock.org jeremynative@gmail.com
St. Regis Mohawk Tribe	Tribal Nation	Darren Bonaparte	518.358.2272, ext. 2163 darren.bonaparte@srmt-nsn.gov
Stockbridge-Munsee Community	Tribal Nation	Jeff Bendremer	413.884.6029 thpo@mohican-nsn.gov
National Park Service	Stakeholder	Kathy Schlegel	215.597.1726 kathy_schlegel@nps.gov

Agency/Organization	Role	Contact person	Contact information
Advisory Council on Historic Preservation	Stakeholder	Stephanie Stevens	202.354.2102 stephanie_stephens@nps.gov

8 Summary of Recommended Archeological Effort

In Package 6 of Segment 10, there is high archeological potential for both historic archeological sites and deposits and precontact archeological sites. A number of precontact sites are known to be within or immediately adjacent to the proposed cable route, access road, and associated splice locations and HDD pits and work areas (Table 6). Since the route deviates outside the permitted route in many locations, it is anticipated that additional archeological sites will be encountered (Table 5).

It is recommended that the following resource be tested in advance of construction to better evaluate its archeological potential:

- Possible Mound (NYSM 432).

In terms of length along the Project, most of the recommended archeology is associated with Excursion areas where the Project's Limits of Work extend outside the railroad ROW, onto locations which appear to have been undisturbed by the railroad, and to have archeological potential (Table 5). Archeological testing or monitoring is recommended for:

- S10-2 60085+50 to 60094+00
- S10-5 60144+00 to 60147+00
- S10-8 60254+00 to 60342+00
- S10-9 60355+00 to 60374+00
- S10-19 60633+00 to 60661+00
- S10-22 60691+00 to 60707+00
- S10-23 60712+00 to 61112+40

Off-site temporary access roads will typically be placed outside of the permitted route (Table 4). As such, these have not been fully evaluated for archeological potential. Many of these access roads occur north of the Village of Coxsackie but are often still in areas of high archeological potential. A smaller number occur within previously disturbed areas from informal access roads and staging yards related to the railroad and nearby cement industry. These access roads do not include parallel access roads along the railroad ROW, these deviations are summarized separately above.

The access roads in which archeological monitoring or testing are recommended include:

- 6-01 60039+00
- 6-02 60059+00
- 6-03 60081+00
- 6-06 60256+00
- 6-07 60331+50
- 6-14A 60444+00
- 6-17 60501+00
- 6-20 60570+00
- 6-22 60693+00
- 6-22A 60746+00
- 6-24 60837+00
- 6-25 60953+00

The Station numbers associated with the access roads refer to the connection of the cable route. The recommendations refer to the entire length of the LOW, or those parts of the length as noted above.

A smaller (in spatial extent) class of areas recommended for archeological effort are the work areas and crane pads of the Splice location and vaults which typically extend outside of the permitted route. Similarly, the HDD pits are often in or near the permitted route, but their associated work areas and access roads often extended outside of the permitted route or areas of previous disturbance.

For the Splice locations, 32 areas are recommended for archeological monitoring or testing, these include:

- 195 60035+00
- 198 60122+35
- 203 60273+75
- 204 60306+00
- 205 60328+00
- 209 60448+00
- 210 60479+50
- 210A 60500+00
- 211 60532+65, in level areas only.
- 212 60551+50
- 213 60567+00
- 214 60591+50
- 215 60619+00
- 216 60651+00
- 217 60683+25
- 218 60700+00
- 219 60731+50
- 219.A 60754+00
- 220 60785+00
- 220.A 60809+00
- 221 60840+50
- 222 60863+00
- 223 60886+00
- 224 60914+00
- 225 60925+00
- 225.A 60949+00
- 226 60979+00
- 227 61000+00
- 228 61028+00
- 228A 61060+00
- 229 61082+00
- 229.A 61111+00

For the HDD locations, the following 16 locations are recommended for archeological monitoring of the pits and associated work areas and temporary access roads that fall outside of the permitted route:

- HDD 92/92.A 60092+00 to 60120+00
- HDD 96.XX 60331+00 to 60353+00, north work area only
- HDD 96.A and 96.B 60375+00 to 60390+00

- HDD 97.A 60428+50 to 60445+50, south work area only
- HDD 98 60468+50 to 60479+00
- HDD 99 604801+50 to 60497+00
- HDD 99.A 60503+00 to 60530+00
- HDD 101.A 60575+50 to 60582+50, south turnaround
- HDD 102 60595+50 to 60615+00, south work area only
- HDD 105 60867+00 to 60692+00, north work area only
- HDD 106 & 107 60706+50 to 60718+50, south pit and work area only
- HDD 108 60812+00 to 60837+50.
- HDD 109 60917+50 to 60922+50.
- HDD 110 60934+50 to 60946+00.
- HDD 111 60953+00 to 60964+00.
- HDD 111.A 61083+00 to 61105+00.

Table 8. Summary of Activities and Stations where Archeological Testing or Monitoring is Recommended.

Splice	Stations	HDD	Stations	Excursion	Stations	Access Roads	Stations
195	60035+00	92/92.A	60092+00 to 60120+00	2	60085+50 to 60094+00	6-01	60039+00
198	60122+35	96.XX	60331+00 to 60353+00	5	60144+00 to 60147+00	6-02	60059+00
203	60273+75	96.A & 96.B	60375+00 to 60390+00	8	60254+00 to 60342+00	6-03	60081+00
204	60306+00	97.A	60428+50 to 60445+50	9	60355+00 to 60374+00	6-06	60256+00
205	60328+00	98	60468+50 to 60479+00	19	60633+00 to 60661+00	6-07	60331+50
209	60448+00	99	60480+50 to 60497+00	22	60691+00 to 60707+00	6-14A	60416+00
210	60479+50	99.A	60503+00 to 60530+00	23	60712+00 to 61112+40	6-17	60501+00
210.A	60500+40	101.A	60575+50 to 60582+50			6-20	60570+00
211	60532+65	102	60595+50 to 60615+00			6-22	60693+00
212	60551+50	105	60867+00 to 60692+00			6-22A	60746+00
213	60567+00	106 & 107	60706+50 to 60718+50			6-24	60837+00
214	60591+00	108	60812+00 to 60837+50.			6-25	60953+00
215	60619+00	109	60917+00 to 60922+50				
216	60651+00	110	60934+50 to 60946+00				
217	60683+25	111	60953+00 to 60964+00				
218	60700+00	111.A	61083+50 to 61105+50				
219	60731+50						
219.A	60754+00						
220	60785+00						
220.A	60809+00						
221	60840+50						
222	60863+00						
223	60886+00						
224	60914+00						
225	60925+00						
225.A	60949+00						
226	60979+90						
227	61000+00						
228	61028+00						
228.A	61060+00						
229	61082+00						
229.A	61111+00						

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**Appendix 1: Champlain Hudson Power Express Cultural Resources Management Plan
(TRC 2021)**

THIS DOCUMENT IS CONSIDERED PRIVILEGED AND CONFIDENTIAL AND NOT INCLUDED

Appendix 2: NYSHPO Human Remains Protocol 2021

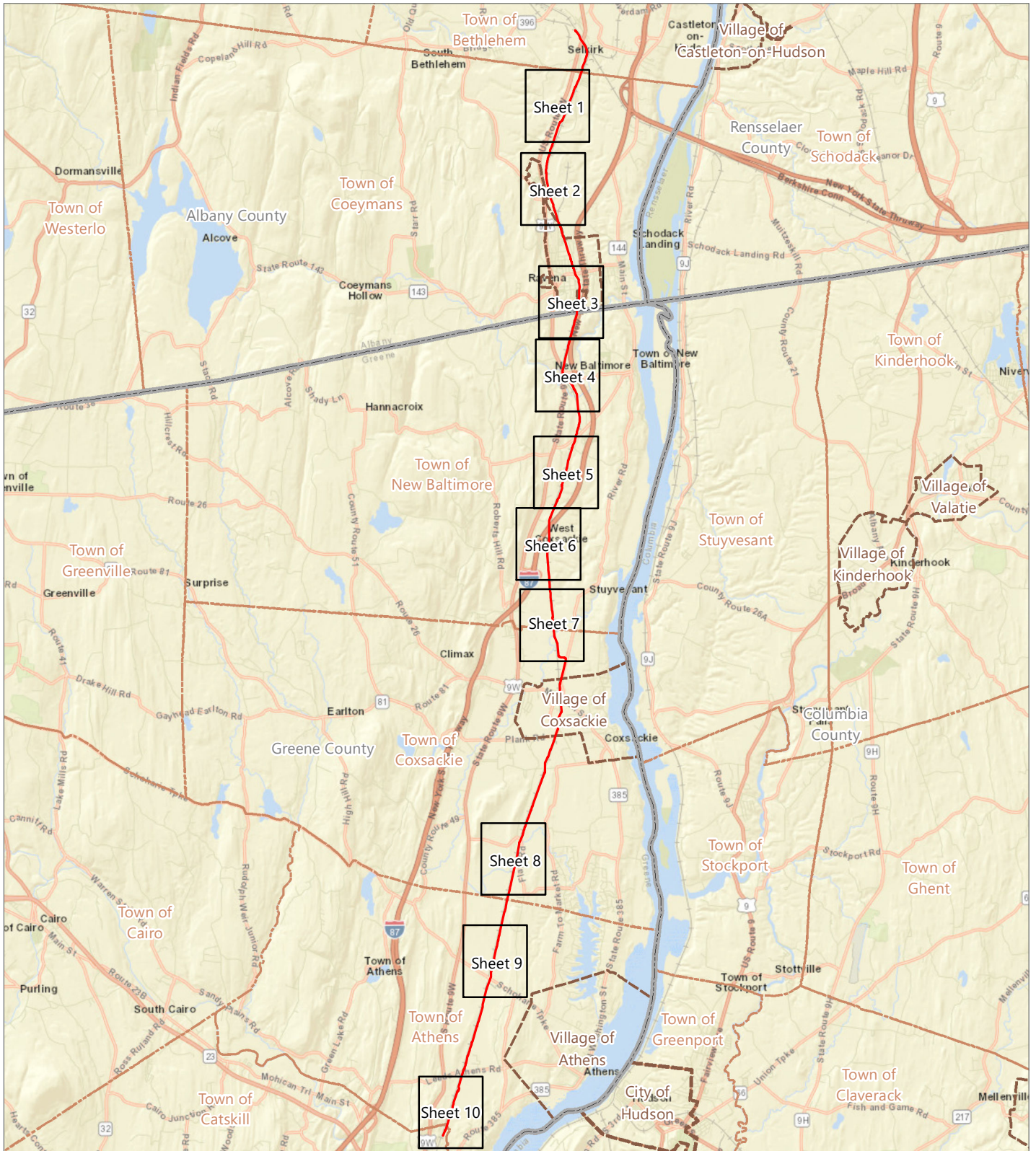
**State Historic Preservation Office/
New York State Office of Parks, Recreation and Historic Preservation
Human Remains Discovery Protocol
(January 2021)**

If human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented.

- Human remains shall be treated with dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.
- If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.
- If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.
- If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.
- If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.
- The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.

Appendix E

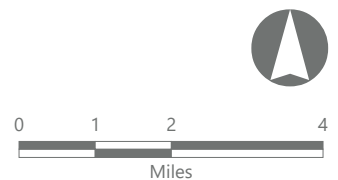
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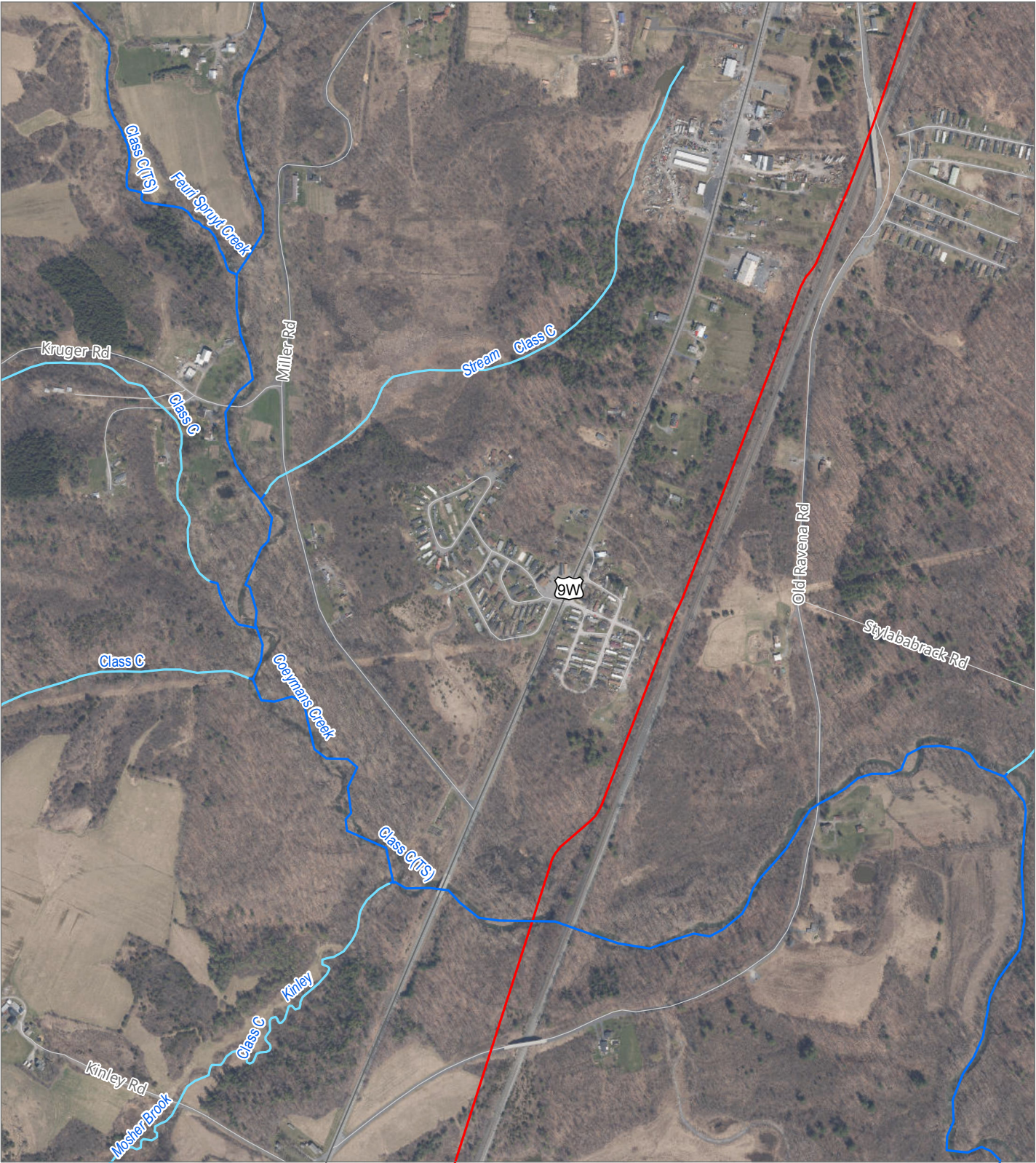
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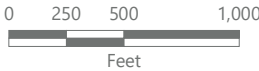
CHPE EM&CP

Albany and Greene Counties, New York

SWPPP Report

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- Class C or D Stream
- Package 6





CHPE EM&CP

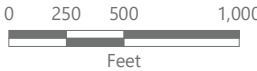
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SWPPP Report



NYSDEC Mapped Stream

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- Class C or D Stream
- Waterbody
- Package 6



Prepared September 27, 2023
Basemap: NYS DOP "2021" orthoimagery map service



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Albany and Greene Counties, New York

SWPPP Report

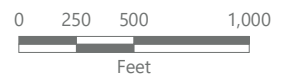
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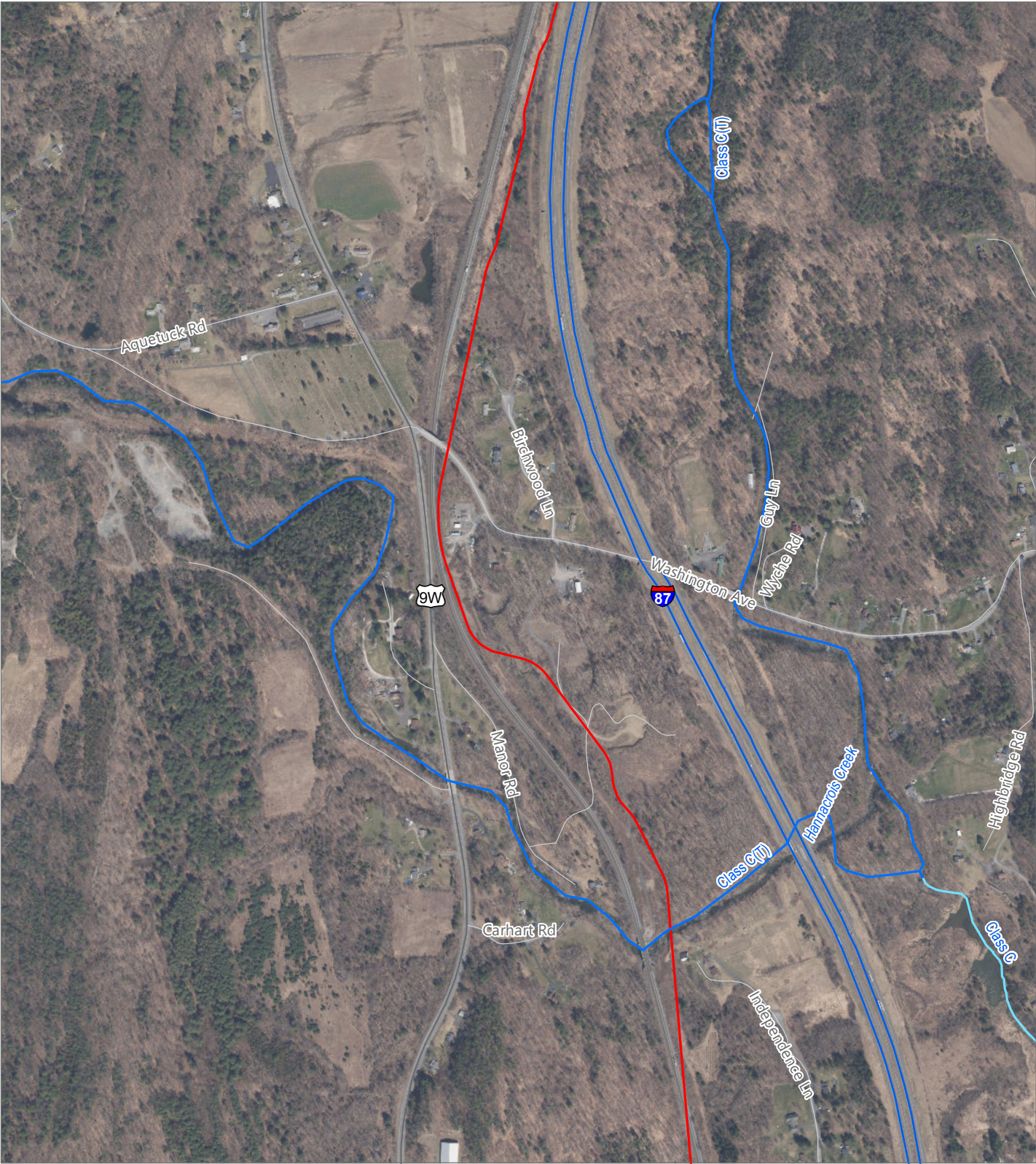
— Class A, B, C(TS), or C(T) Stream

— Class C or D Stream

— Waterbody

— Package 6





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SWPPP Report

NYSDEC Mapped Stream

- Class A, B, C(TS), or C(T) Stream
- Class C or D Stream
- Package 6

