APPENDIX B

ENVIRONMENTAL INFORMATION

Social, Economic and Environmental Review Checklist

PIN: 4BNY.62	PROJECT TITLE: Carney Hollow Road (CR-60) over Carney Hollow Creek Culvert Replacement	
PROJECT DESCRIPTION / SCOPE / LIMITS: The project includes the replacement of the culvert with approach work in necessary areas		
MUNICIPALITY(IES): Town of Springwater		
COUNTY(IES): Livingston		
NEPA CLASSIFICATION: Class II - Cat Ex		
SEQRA TYPE: Statewide SEQRA - 6 NYCRR Part 617	617 - Type II	DATE: 7/26/2024

SOCIAL			
RESOURCE:		APPLICABLE	COMMENT AND/OR DAD SECTION IN WHICH TOPIC IS DISCUSSED.
1	Land use change?	No	
2	Occurs in an area with regional/local comprehensive and transportation plans?	No	
3	Occurs in an area with planned future development?	No	
4	Effects to neighborhood character?	No	
5	Residential or commercial relocations?	No	
6	Effects to transportation options/patterns? (e.g., transit, walking/pedestrian facilities, bicycling and access to schools, recreational areas, places of worship, health care facilities, effects to emergency services; consider elderly and disabled populations)	Yes	Refer to Chapter 3 of the Design Approval Document -3.2.1 Community Services
7	Will the project divide or isolate portions of a community or impact community resources?	No	
8	Occurs within an area containing minority or low income populations per Environmental Justice EO 12898 definitions/guidance *See TEM 4.1.1 App. D*	No	Refer to Chapter 3 of the Design Approval Document -3.2.2 Low Income, Minority and Ethnic Groups (Environmental Justice)
9	Occurs on Tribal Nation Lands/Territories (not 'areas of interest' related to Section 106)	No	
ECONOMIC			
RESOURCE:		APPLICABLE	COMMENT AND/OR DAD SECTION IN WHICH TOPIC IS DISCUSSED.
10	Effects to local or regional businesses?	No	
11	Is the project in a business district?	No	
11A	Will the project divert traffic away from businesses?	No	
11B	Changes to parking and/or deliveries?	No	
11C	Effects to transportation options to access businesses?	No	
12	Changes in access control?	No	
13	Displacement of occupants or acquisition of dwelling or business?	No	
14	Temporary or permanent right-of-way acquisition?	No	

ENVIRONMENTAL				
RESOURCE:		RESOURCE PRESENT	RESOURCE AFFECTED	COMMENT AND/OR DAD SECTION IN WHICH TOPIC IS DISCUSSED.
Water & Land				
15	Wetlands – State: Choose an item. *See TEM 4.4.1.11*	No	No	Refer to Chapter 3 of the Design Approval Document -3.2.4 Wetlands
16	Wetlands – Federal EO 11990 may apply *See TEM 4.4.1.11*	Yes	No	Refer to Chapter 3 of the Design Approval Document -3.2.4 Wetlands
17	Surface waterbodies & watercourses – State or Federal *See TEM 4.4.1.11*	Yes	No	Refer to Chapter 3 of the Design Approval Document -3.2.3 Surface Waters
18	Wild, Scenic and/or Recreational Rivers – State or Federal *See TEM 4.4.3*	No	No	
19	Navigable Waters subject to NYS Protection of Water Program (Article 15), Rivers and Harbors Management Act (Section 10), or US Coast Guard *See TEM 4.4.1.11*	Yes	No	Refer to Chapter 3 of the Design Approval Document -3.2.3 Surface Waters
20	Coastal Area or Designated Inland Waterway *See TEM 4.4.6*	No	No	
21	Coastal Special Management Area(s) (Approved/Pending Local Waterfront Revitalization Program Areas, Significant Coastal Fish and Wildlife Habitats, Scenic Areas of Statewide Significance, or areas with Harbor Management Plans) *See TEM 4.4.6*	No	No	
22	State Coastal Erosion Hazard Area *See TEM 4.4.6*	No	No	
23	Federal Coastal Barrier Resource System *See TEM 4.4.6*	No	No	
24	Over sole source, principal, or primary aquifers; or adjacent to drinking water supply source *See EPM 4.4*	No	No	
25	SPDES/NPDES permit required *See Stormwater page*	No	No	
26	Change of stormwater drainage patterns/outfalls within an MS4 area *See Stormwater page*	No	No	
27	Flood zones, floodplains, or floodways – EO 11988 and/or 6 NYCRR 502 *See TEM 4.4.5*	No	No	Refer to Chapter 3 of the Design Approval Document -3.2.5 FEMA Floodplain
28	Section 408 USACE Civil Works Project or NYS Article 16 Flood Control Lands *See TEM 4.4.1.11*	No	No	
General Ecology & Wildlife Resources				
29	Federal – Threatened & Endangered Species (ESA Section 7) Tree Cutting Proposed: Yes *See TEM 4.4.9.3*	Yes	No	Refer to Chapter 3 of the Design Approval Document -3.2.6 Endangered Species
30	State – Threatened & Endangered Species *See TEM 4.4.9.3*	No	No	Refer to Chapter 3 of the Design Approval Document -3.2.6 Endangered Species
31	NYSDEC mussel waterbody: Choose an item. *See TEM 4.4.9.3*	No	No	
32	Identified invasive species (EO 13112) *See EPM 4.8*	No	No	
33	Known breeding habitat or nests present (Migratory Bird Treaty Act)	No	No	

Historic Resources & Parkland *See TEM 4.4.12 and 4.4.13*				
34	Historic and/or cultural resources: Choose an item. *See TEM 4.4.12 Appendix G*	No	No	Refer to Chapter 3 of the Design Approval Document -3.2.7 Section 14 Historic Resources
35	Parks and/or recreational resources	No	No	
35A	Resources w/ LWCF grants (Section 6(f))	No	No	
35B	Section 1010 – City Urban Park and Recreation Recovery Act	No	No	
36	Any Section 4(f) properties (parks, recreation areas, wildlife and waterfowl refuges, historic sites) *See Section 4(f) Policy Paper*	No	No	
Farmlands *See TEM 4.4.15*				
37	Agricultural districts – State	No	No	
38	FPPA soils – Federal	No	No	
Air Quality/Greenhouse Gases (if analysis required check yes) *See EPM 1.1*				
39	Mobile Source Air Toxics (MSAT)	No	No	
40	Mesoscale: Choose an item.	No	No	
41	Microscale/Hot Spot	No	No	
42	Energy and greenhouse gases	No	No	
Asbestos and Hazardous / Contaminated Materials *See TEM 4.4.19 and 4.4.20*				
43	Asbestos-containing materials (ACMs)	TBD - Analysis Req'd	TBD	Refer to Chapter 3 of the Design Approval Document -3.2.8 Asbestos Containing Materials
44	Lead-based bridge paint/coatings	No	No	No bridge present
45	Remediation sites, including National Priority List, Brownfield sites, etc.	No	No	Refer to Chapter 3 of the Design Approval Document -3.2.9 Hazardous Waste/Contaminated Materials
46	Materials requiring special handling or disposal (e.g., petroleum-based contamination, PCB-contaminated gas mains, treated wood products, polymer concrete slurries, medical/bio wastes, etc.)	No	No	
Other				
47	Noise type per 23 CFR 772/NYSDOT Noise Policy: Choose an item. *See TEM 4.4.18*	No	No	
48	Critical Environmental Areas *See mapper*	No	No	
49	Visual Resources *See PDM Chapter 3.2.2.2*	No	No	
50	Scenic Byways *See Scenic Byway page*	No	No	
51	Wildlife and Waterfowl Refuges	No	No	
Regional Specific Resources				
52	Adirondack or Catskill Parks or NYS Forest Preserve (only Regions 1, 2, 7 8 & 9)	No	No	
53	NYC Watershed (only Regions 1, 8 & 9)	No	No	
54	NYC-owned land (only Regions 1, 8 & 9)	No	No	
55	Regional Plans or Programs	No	No	

PREPARED BY: (Bryan Bancroft, CPESC)

CERTIFICATION:
I certify that the information provided above is true and accurate based on my review.

Regional Environmental Unit Supervisor or Main Office Environmental Lead ×_____ Date: _____

Print Name and Title: _____

MEMORANDUM

TO: Jon Harman, Local Project Liaison

FROM: Chris Caraccilo, Regional Cultural Resource Coordinator

SUBJECT: Section 14.09 Assessment
PIN 4BNY.62
Carney Hollow Road(CR-60) Culvert over Carney Hollow Creek
Town of Springwater, Livingston County

DATE: May 1, 2024

Livingston County is proposing a project to replace the Carney Hollow Road (CR-60) culvert over Carney Hollow Creek. The project is funded by the State and is therefore subject to review under Section 14.09 of the NYS Historic Preservation Act.

The project proposes to replace the existing culvert on the same alignment.

As a result of coordination between the New York State Office of Parks, Recreation and Historic Preservation and the New York State Department of Transportation, activities that meet the *Interim Procedures for Activities that are Undertakings with No Potential to Cause Effects on Historic Properties* (as implemented January 25, 2022) with which there is no Federal Highway Administration action can be considered *undertakings which are not subject to review under 14.09.*

Based on a review of the project information, the CRC confirmed that the following criteria are met:

- The Project limits are entirely within the existing right of way.
- All proposed earth work will occur in disturbed soils.
- The project is not located within or immediately adjacent to any individual property of historic district designated as a National Historic Landmark.
- The project is not located on tribal lands.

As noted in the project description, the project is limited to activities in the applicable List B: work within or adjacent to a historic district. Based on this review, the CRC recommends that the proposed project is classified as an undertaking which is not subject to review under Section 14.09, in accordance with 9 NYCRR Part 428.12.

In the event of future project modifications, refinements, or new project elements, the project must be reevaluated by the NYSDOT Regional Cultural Resource Coordinator to determine whether this recommendation remains valid.

For the Design Report:

Historic and Cultural Resources

The NYS DOT Regional Cultural Resource Coordinator completed a review of the project information and completed a screening of the project site and file search; and determined that a Cultural Resource Survey was not warranted. The project will involve acquisition of minor right-of-way and does not result in the disturbance of soils previously undisturbed by recent construction.

As a result of coordination between the New York State Office of Parks, Recreation and Historic Preservation and the New York State Department of Transportation, activities that meet the *Interim Procedures for Activities that are Undertakings with No Potential to Cause Effects on Historic Properties* (as implemented January 25, 2022) with which there is no Federal Highway Administration action can be considered *undertakings which are not subject to review under 14.09.*

Based on a review of the project information, the CRC confirmed that the following criteria are met:

- The Project limits are entirely within the existing right of way; or minor ROW takes.
- All proposed earth work will occur in disturbed soils.
- The project is not located within or immediately adjacent to any individual property of historic district designated as a National Historic Landmark.
- The project is not located on tribal lands.

As noted in the project description, the project is limited to activities in the applicable List B: Work within or adjacent to known or potential historic district. Based on this review, the CRC recommends that the proposed project is classified as an undertaking which is not subject to review under Section 14.09, in accordance with 9 NYCRR Part 428.12. No further work is required.

Carney Hollow Road (CR-60) Culvert over Carney Hollow Road

TOWN OF SPRINGWATER
LIVINGSTON COUNTY, NEW YORK

Hazardous Waste/Contaminated Materials
Technical Memorandum

May 2024

Prepared by:

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL
280 East Broad Street, Suite 170
Rochester, New York 14604
Ph 585.385.7417

INTRODUCTION

Lu Engineers has performed a Hazardous Waste/Contaminated Materials screening for the County's proposed Carney Hollow Road (CR-60) Culvert over Carney Hollow Creek Project in the Town of Springwater, Livingston County, New York.

This project involves the replacement the Carney Hollow Road (CR-60) Culvert over Carney Hollow Creek and associated pavement approach reconstruction. See Figure 1 for the Project Location Map.

The New York State Department of Transportation's (NYSDOT) *The Environmental Manual (TEM)* Section 4.4.20, was utilized for guidance during this assessment.

The purpose of this assessment is to identify potential contaminant locations that may be encountered during construction. This assessment is necessary for the County to avoid hazardous waste and hazardous materials, to contemplate disposal alternatives for excavated soils and to identify health and safety concerns that could affect contractors and the surrounding community.

METHODOLOGY

This assessment included site observation, past and current land use research, review of published databases and government records, including Inactive Hazardous Waste Site Registry, Chemical and Petroleum Bulk Storage records, waste incident/chemical releases reports, and other federal, state, county, and local sources of information. The review of published databases was conducted by NETROnline, Inc. and is summarized in an Environmental Database Report. The report documenting the findings of the searches is provided in Attachment C.

Site Inspection

A walkover of the project culvert was conducted on April 18, 2024. The site visit involved the observation of the entire project area, and research of public records and past land use focused on areas where there is potential for excavation.

Items of significant concern that were looked for during the site walkover include, but were not limited to: discolored soil, evidence of previous fires, stressed or dead vegetation, spills, leaks, leachate or discolored water, air emissions or odors, oil sheen on water, seeps or discolored springs, fill vents or pipes/underground tanks, aboveground tanks, hills, mounds or depressions, lagoons or impoundments, sumps, drums, ponds or basins, landfill or dump sites, pipelines or pipes, dumpsters/bulk wastes, berms or dikes, air stacks, posted signs, sewers or manholes, railroad tracks, drainage ditches, floor drains or riser pipes from monitoring wells, stored hazardous materials, transformers or electrical equipment.

Review of Tank and Waste Incident Reports

A database search for locations and properties of environmental concern was conducted by NETROnline, Inc. Review of NYSDEC and other environmental database searches were focused on those areas that will require excavation and potential exposure of contaminated soil. The report documenting the findings of the searches is provided in Attachment C.

FINDINGS

General Site Description

The project is located in the Town of Springwater, Livingston County, New York (Figure 1). The proposed project will consist of culvert replacement; also including approach work.

The project culvert is located in a mostly rural area. Surrounding land use is primarily agricultural and residential. The topography of the project corridor is sloping with the low point at the tributary at the center of the culvert site.

The general groundwater flow direction within the project corridor is most likely to the west, as suggested by the general topography of the surrounding area. Observed surface water flow is generally in a westward direction.

Locations of Potential Concern

The environmental record review identified one location or property where a historical spill took place, but this incident is not expected to have an affect on the culvert replacement project. The environmental search report is provided in the Appendices.

CONCLUSIONS

Based on the information obtained during this assessment, one location of potential concern that has the potential to impact project activities were identified in the Database review. This area is not expected to have any effect on the culvert replacement project and are not likely to be encountered during the project.

RECOMMENDATIONS

Based on the information presented in this memorandum, Lu Engineers recommends that no further studies to document the presence of hazardous waste and contaminated materials are required for the project.

If contaminated materials or petroleum products are encountered during the construction phase of the project, the EIC should notify NYSDOT. The current New York State Department of Transportation Standard Specifications, Section 205- Contaminated Soil can be used for the project in the event of potential contamination observations. Specifications for organic vapor screening, staging, sampling, and disposal of VOC-contaminated soil in the event of observations or evidence of potential contamination should also be utilized for the project in such event.

It is noted that the findings presented in this study are based on the proposed project activities, the observations the inspectors noted at the dates of the site visits, and the accuracy and timeliness of the published databases and government records. Should any of this information change, so may the findings of this report.

Prepared by:

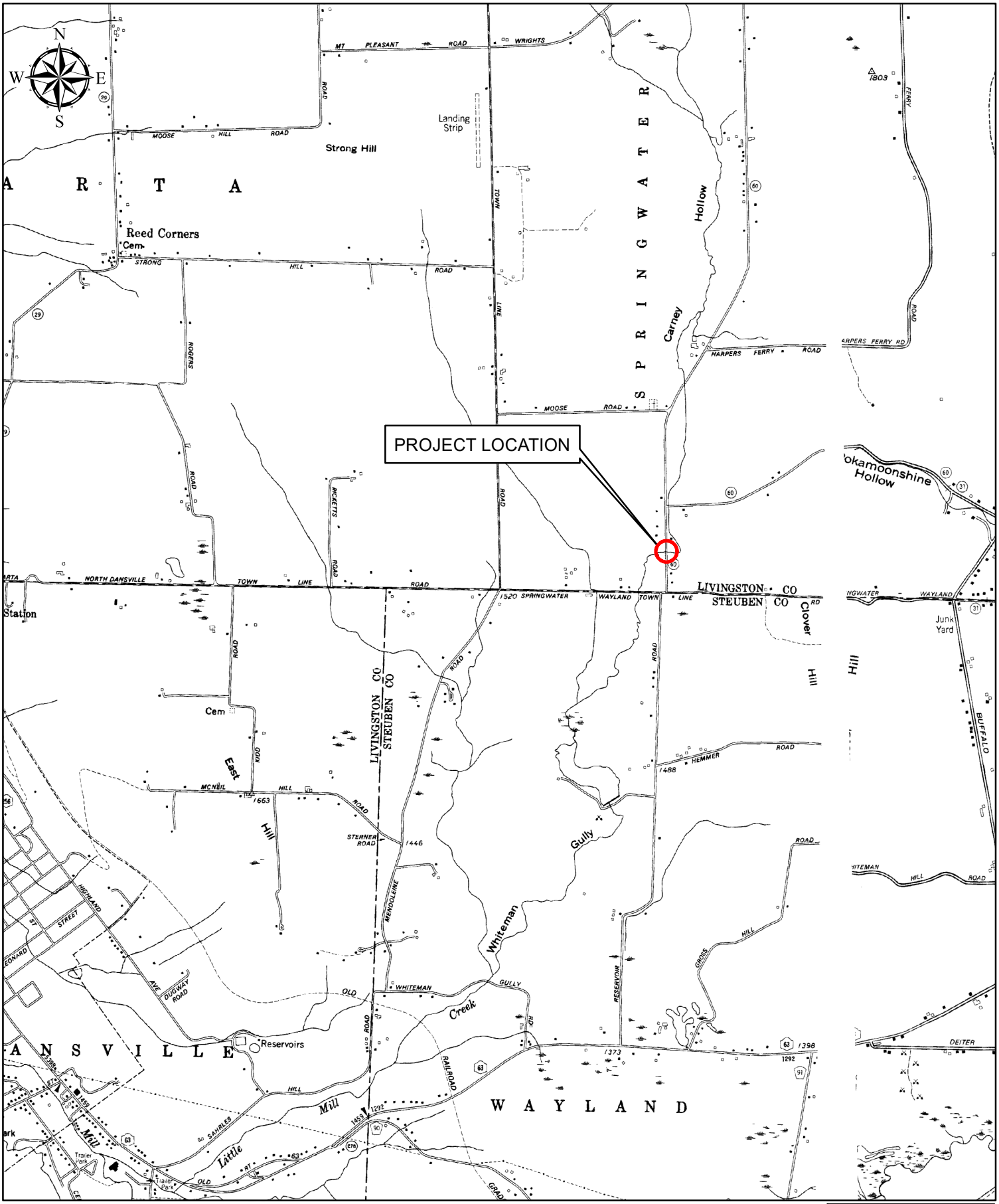
Lu Engineers

Bryan C. Bancroft

May 20, 2024
Date

FIGURES

Figure 1: Site Location Map



Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

PROJECT LOCATION MAP

Carney Hollow Road (CR-60) Culvert over Carney Hollow Creek
PIN 4BNY.62
Town of Springwater, Livingston County

April 2024
SCALE: 1 inch = 2,750 feet
DRAWN/CHECKED: BAK/BCB
DATA SOURCE: NYS GIS Clearinghouse

ATTACHMENT A

Historic Mapping

Livingston County 1902, New York

Published by Century Map Co. in 1902

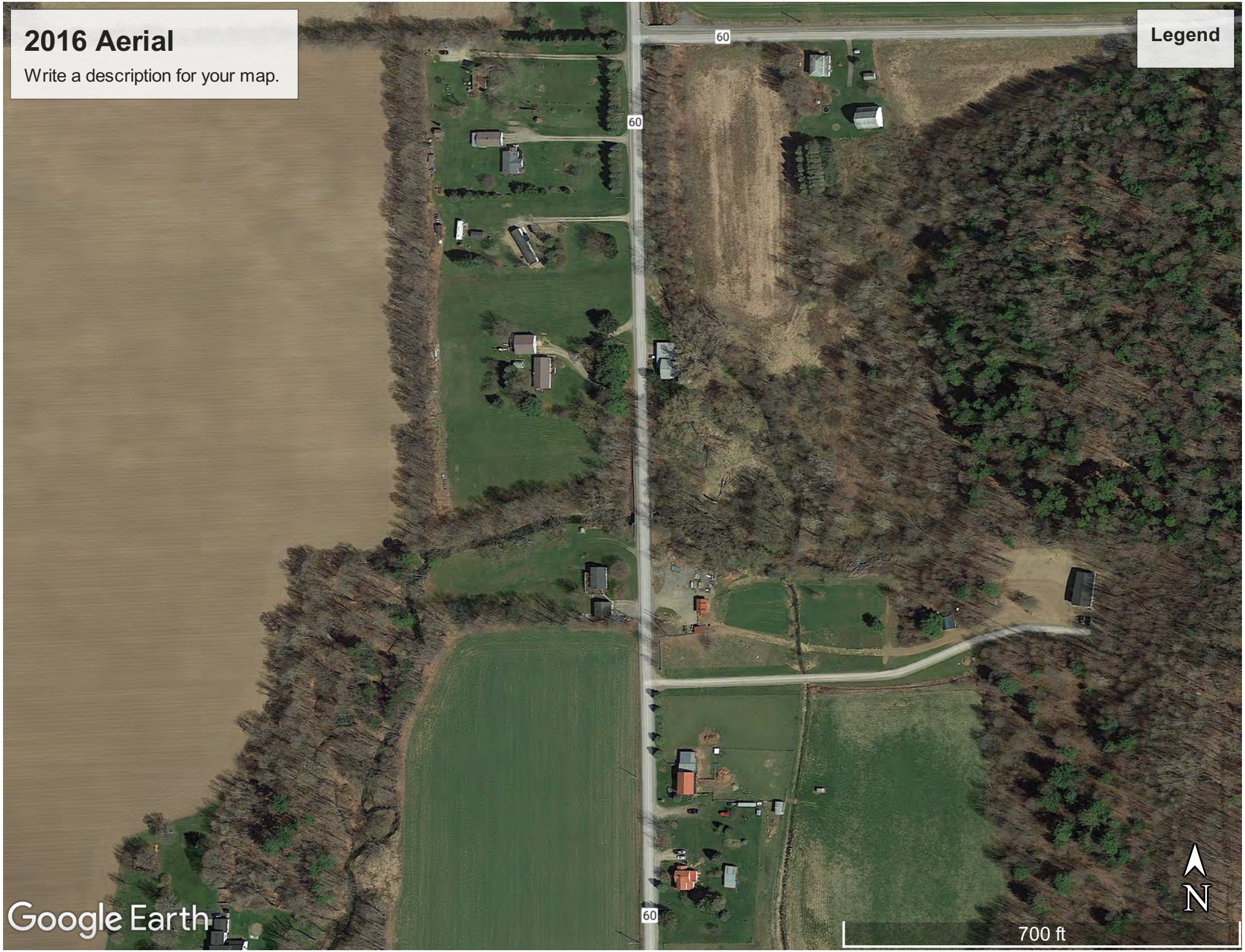
Source: Historic Map Works

ATTACHMENT B

Historic Aerial Photography (1994, 2011, and 2016)


1994 Aerial
Write a description for your map.
Legend
60
60
60
Google Earth
Image U.S. Geological Survey
N
700 ft


2011 Aerial
Write a description for your map.
Legend
60
60
60
Google Earth
700 ft
N


2016 Aerial
Write a description for your map.
Legend
60
60
60
Google Earth
N
700 ft

ATTACHMENT C

NETROnline Database Report

Site Name: CR-60 over Carney Hollow Creek
Location: Springwater NY
Prepared for: bking@luengineers.com
Ref: Springwater NY
Center Coordinates: 42.58276,-77.637543
Prepared Date: Fri Apr 19 2024 17:45:40 GMT+0000 (Coordinated Universal Time)

ENVIRONMENTAL RADIUS REPORT

ASTM E1527-21

NETR Online

2055 E. Rio Salado Pkwy, Tempe, AZ 85381 | 480-967-6752

Summary

Federal	< 1/4	1/4 - 1/2	1/2 - 1
Lists of Federal NPL (Superfund) sites	0	0	0
Lists of Federal Delisted NPL sites	0	0	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders	0	0	0
Lists of Federal CERCLA sites with NFRAP	0	0	0
Lists of Federal RCRA facilities undergoing Corrective Action	0	0	0
Lists of Federal RCRA TSD facilities	0	0	0
Lists of Federal RCRA generators	0	0	0
Federal institutional control/engineering control registries	0	0	0
Federal ERNS list	0	0	0

State	< 1/4	1/4 - 1/2	1/2 - 1
Lists of state and tribal Superfund equivalent sites	0	0	0
Lists of state and tribal hazardous waste facilities	0	0	0
Lists of state and tribal landfills and solid waste disposal facilities	0	0	0
Lists of state and tribal leaking storage tanks	0	0	0
Lists of state and tribal registered storage tanks	0	0	0
State and tribal institutional control/engineering control registries	0	0	0
Lists of state and tribal voluntary cleanup sites	0	0	0
Lists of state and tribal brownfields sites	0	0	0

Other	< 1/4	1/4 - 1/2	1/2 - 1
State and/or tribal lists of sites requiring further investigation / remediation	0	0	0
State list of Significant Environmental Hazards (SEH)	0	0	0
Lists of state and tribal mine sites requiring further investigation and/or remediation	0	0	0
State and/or tribal lists of spills and spill responses	0	1	0
State and/or tribal lists of emergency responses	0	0	0
State and/or tribal lists of dry cleaners	0	0	0
State and/or tribal lists of clandestine laboratory cleanups	0	0	0
State and/or tribal lists of scrap/used tire processing facilities	0	0	0
State and/or tribal lists of underground injection control sites	0	0	0
State and/or tribal listings of permitted drywells	0	0	0
Automobile salvage yards	0	0	0
Livestock Waste Control sites	0	0	0
Controlled Animal Feeding Operations (CAFOs)	0	0	0
State and/or tribal lists of registered aboveground storage tanks (ASTs)	0	0	0
C.A.A. Permitted Facilities	0	0	0
NPDES Permitted Facilities	0	0	0
Onsite Wastewater Treatment sites	0	0	0
State and/or tribal lists of permitted facilities	0	0	0
Resource Conservation and Recovery Act Information (RCRAInfo)	0	0	0
U.S. EPA Enforcement, Compliance History Online (ECHO)	0	0	0
U.S. EPA Underground Storage Tanks (UST)	0	0	0
U.S. EPA Toxic Substances Control Act (TSCA) database	0	0	0
U.S. EPA Toxic Release Inventory System (TRIS)	0	0	0

Lists of Federal NPL (Superfund) sites

The National Priorities List (NPL) is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. The NPL is updated periodically, as mandated by CERCLA.
There were no Federal NPL sites found within a one-mile radius of the target property.

Lists of Federal Delisted NPL sites

The EPA may delete a final NPL site if it determines that no further response is required to protect human health or the environment. Under Section 300.425(e) of the NCP (55 FR 8845, March 8, 1990), a site may be deleted when no further response is appropriate if EPA determines that one of the following criteria has been met: 1) EPA, in conjunction with the state, has determined that responsible parties have implemented all appropriate response action required, 2) EPA, in consultation with the state, has determined that all appropriate Superfund-financed responses under CERCLA have been implemented and that no further response by responsible parties is appropriate, 3) A remedial investigation/feasibility study (RI/FS) has shown that the release poses no significant threat to public health or the environment and, therefore, remedial measures are not appropriate.

There were no Federal Delisted NPL sites found within a half-mile radius of the target property.

Lists of Federal sites subject to CERCLA removals and CERCLA orders

CERCLA identifies the classes of parties liable under CERCLA for the cost of responding to releases of hazardous substances. In addition, CERCLA contains provisions specifying when Federal installations must report releases of hazardous substances and the cleanup procedures they must follow. Executive Order No. 12580, Superfund Implementation, delegates response authorities to EPA and the Coast Guard. Generally, the head of the Federal agency has the delegated authority to address releases at the Federal facilities in its jurisdiction.

There were no Federal sites subject to CERCLA removals and/or orders found within a half-mile radius of the target property.

Lists of Federal CERCLA sites with NFRAP

No Further Remedial Action Planned (NFRAP) is a decision made as part of the Superfund remedial site evaluation process to denote that further remedial assessment activities are not required and that the facility/site does not pose a threat to public health or the environment sufficient to qualify for placement on the National Priorities List (NPL) based on currently available information. These facilities/sites may be re-evaluated if EPA receives new information or learns that site conditions have changed. A NFRAP decision does not mean the facility/site is free of contamination and does not preclude the facility/site from being addressed under another federal, state or tribal cleanup program.

There were no Federal CERCLA sites with No Further Remedial Action Planned (NFRAP) decisions found within a half-mile radius of the target property.

Lists of Federal RCRA facilities undergoing Corrective Action

Corrective action is a requirement under the Resource Conservation and Recovery Act (RCRA) that facilities that treat, store or dispose of hazardous wastes investigate and cleanup hazardous releases into soil, ground water, surface water and air. Corrective action is principally implemented through RCRA permits and orders. RCRA permits issued to TSDFs must include provisions for corrective action as well as financial assurance to cover the costs of implementing those cleanup measures. In addition to the EPA, 44 states and territories are authorized to run the Corrective Action program.

There were no Federal RCRA facilities undergoing corrective action(s) found within a one-mile radius of the target property.

Lists of Federal RCRA TSD facilities

The final link in RCRA's cradle-to-grave concept is the treatment, storage, and disposal facility (TSDF) that follows the generator and transporter in the chain of waste management activities. The regulations pertaining to TSDFs are more stringent than those that apply to generators or transporters. They include general facility standards as well as unit-specific design and operating criteria.
There were no Federal RCRA treatment, storage and disposal facilities (TSDFs) found within a half-mile radius of target property.

Lists of Federal RCRA generators

A generator is any person who produces a hazardous waste as listed or characterized in part 261 of title 40 of the Code of Federal Regulations (CFR). Recognizing that generators also produce waste in different quantities, EPA established three categories of generators in the regulations: very small quantity generators, small quantity generators, and large quantity generators. EPA regulates hazardous waste under the Resource Conservation and Recovery Act (RCRA) to ensure that these wastes are managed in ways that protet human health and the environment. Generators of hazardous waste are regulated based on the amount of hazardous waste they generate in a calendar month, not the size of their business or facility.

There were no Federal RCRA generators found at the target property and/or adjoining properties.

Federal institutional control/engineering control registries

Institutional Controls (IC) are defined as non-engineered and/or legal controls that minimize the potential human exposure to contamination by limiting land or resource use. Whereas, Engineering Controls (EC) consist of engineering measures (e.g, caps, treatment systems, etc.) designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants through environmental media.

There were no Federal institutional or engineering controls found at the target property.

Federal ERNS list

The Emergency Response Notification System (ERNS) is a database used to store information on notification of oil discharges and hazardous substances releases. The ERNS program is a cooperative data sharing effort encompassing the National Response Center (NRC), operated by the US Coast Guard, EPA HQ and EPA regional offices. ERNS data is used to analyze release notifications, track EPA responses and compliance to environmental laws, support emergency planning efforts, and assist decision-makers in developing spill prevention programs.

There were no Federally recorded releases of oil and/or hazardous substances at the target property.

Lists of state and tribal Superfund equivalent sites

In order to maintain close coordination with the states and tribes in the NPL listing decision process, the EPA's policy is to determine the position of states and tribes on sites that EPA is considering for listing. Consistent with this policy, since 1996, it has been the EPA's general practice to seek the state or tribe's position on sites under consideration for NPL listing by submitting a written requiest to the governor/state environmental agency or tribe. Various states may have their own program for identifying, investigating and cleaning up sites where consequential amounts of hazardous waste may have been disposed that work in conjunction with the EPA's Superfund remedial program.

There were no State and/or tribal Superfund equivalent sites found within a one-mile radius of target property.

Lists of state and tribal hazardous waste facilities

EPA established basic hazardous waste management standards for businesses who produce hazardous waste and categorized three businesses based on the volume of hazardous waste produced in a calendar month. On the federal level, there are three generator categories: large quantity generator, small quantity generator, and conditionally exempt small quantity generator. Some states are authorized to establish generator categories that are different from those that federal EPA set up. State regulatory requirements for generators of hazardous waste may be more stringent than the federal program.

There were no State and/or tribal hazardous waste facilities found within a half-mile radius of the target property.

Lists of state and tribal landfills and solid waste disposal facilities

Title 40 of the CFR parts 239 through 259 contain the regulations for non-hazardous solid waste programs set up by the states. EPA has requirements for state solid waste permit programs, guidelines for the processing of solid waste, guidelines for storage and collection of commercial, residential and institutional solid waste, and the criteria for municipal solid waste landfills. State solid waste programs may be more stringent than the federal code requires.

There were no State and/or tribal landfills or solid waste disposal facilities found within a half-mile radius of the target property.

Lists of state and tribal leaking storage tanks

A typical leaking underground storage tank (LUST) scenario involves the release of a fuel product from an underground storage tank (UST) that can contaminate surrounding soil, groundwater, or surface waters, or affect indoor air spaces. Once a leak is confirmed, immediate response actions must be taken to minimize or eliminate the source of the release and to reduce potential harm to human health, safety, and the environment. Each state has unique requirements for initiating responses to a release, and it is up to the UST owner or operator to conduct actions in compliance with his/her local rules.

There were no State and/or tribal leaking storage tanks found within a half-mile radius of the target property.

Lists of state and tribal registered storage tanks

EPA initially issued UST regulations in 1988. In 2015, EPA modified the UST regulation, which was effective October 13, 2015 in Indian Country and states without State Program Approval. EPA recognizes that, because of the size and diversity of the regulated community, state and local governments are in the best position to oversee USTs: 1) State and local authorities are closer to the situation in their domain and are in the best position to set priorities, 2) Subtitle I of the Solid Waste Disposal Act allows state UST programs approved by EPA to operate in lieu of the federal program, 3) the state program approval (SPA) regulations set criteria for states to obtain the authority to operate in lieu of the federal program. State programs must be at least as stringent as EPA's. A complete version of the law that governs USTs can be found in U.S. Code, Title 42, Chapter 82, Subchapter IX.

There were no State and/or tribal registered storage tanks found at subject and adjoining properties.

State and tribal institutional control/engineering control registries

Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Engineering controls consist of engineering measures (e.g, caps, treatment systems, etc.) designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants through environmental media. It is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable.

There were no State and/or tribal institutional and/or engineering controls found filed against the target property.

Lists of state and tribal voluntary cleanup sites

State cleanup programs play a significant role in assessing and cleaning up contaminated sites. State cleanup programs typically are programs authorized by state statutes to address brownfields and other lower-risk sites that are not of federal interest. The EPA has historically supported the use of state cleanup programs and continues to provide grant funding to establish and enhance the programs. This approach was codified in 2002 as Section 182 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

There were no State and/or tribal voluntary cleanup sites found within a half-mile radius of the target property.

Lists of state and tribal brownfields sites

Since its inception in 1995, EPA's Brownfields and Land Revitalization Program has grown into a proven, results-oriented program that has changed the way communities address and manage contaminated property. The program is designed to empower states, tribes, communities, and other stakeholders to work together to prevent, assess, safely clean up, and sustainably reuse brownfields. Beginning in the mid-1990s, EPA provided small amounts of seed money to local governments that launched hundreds of two-year Brownfields pilot projects and developed guidance and tools to help states, communities and other stakeholders in the cleanup and redevelopment of brownfields sites.

There were no State and/or tribal brownfields sites found within a half-mile radius of the target property.

State and/or tribal lists of sites requiring further investigation / remediation

No records found

State list of Significant Environmental Hazards (SEH)

No records found

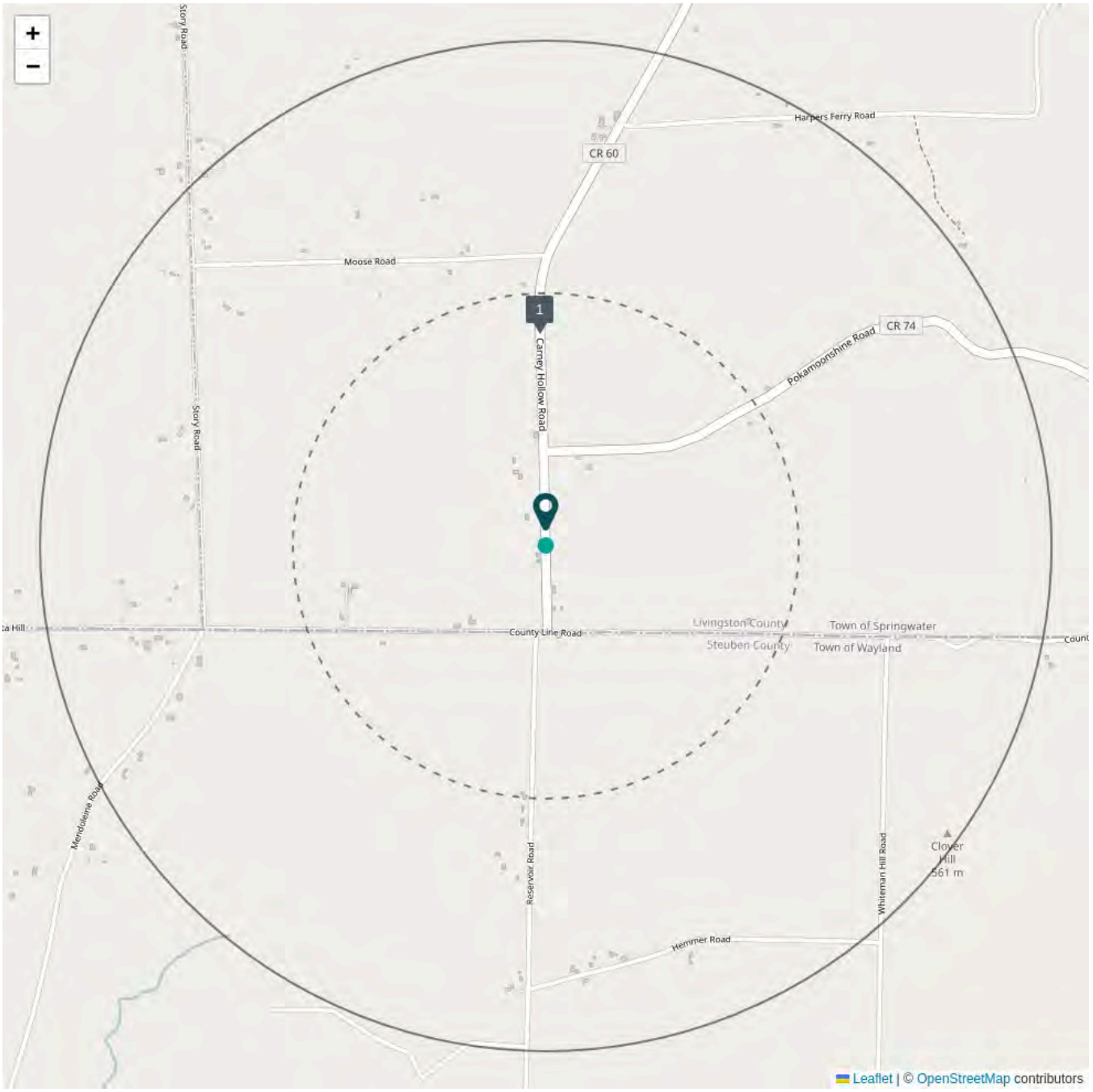
Lists of state and tribal mine sites requiring further investigation and/or remediation

No records found

State and/or tribal lists of spills and spill responses

NYSDEC - SPILL INCIDENTS

The New York State Department of Environmental Conservation (NYSDEC) Spill Response Program maintains a Spill Incidents Database which contains reports of hazardous material spills occurring anywhere in New York State. The Spills Incidents Database was searched to return all spill sites within a half-mile of the target property.



center: 42.58276,-77.637543

0.5 Miles 1.0 Miles

1

LANDSCHOOT RESIDENCE

Site Address Not Available

Spill Number: 0210522
Site ID: 299561
Program Type: ER
DER Facility ID: 242337
Locality: WAYLAND
SWIS Code: 5174
Spill Date: 2003-01-19 12:20:00
Received Date: 2003-01-19 13:13:00
Contributing Factor: Equipment Failure
Source: Private Dwelling
MeetsStd: False
UST Trust: False
Close Date: 2003-06-19 00:00:00
Spiller Name: MRS LANDSCHOOT
Spiller Company: LANDSCHOOT RESIDENCE
Program Facility Name: LANDSCHOOT RESIDENCE
Distance From Center (Miles): 0.4186
Site Source: last updated 02-25-2022 from NYDEC-SPILLS

State and/or tribal lists of emergency responses

No records found

State and/or tribal lists of dry cleaners

No records found

State and/or tribal lists of clandestine laboratory cleanups

No records found

State and/or tribal lists of scrap/used tire processing facilities

No records found

State and/or tribal lists of underground injection control sites

No records found

State and/or tribal listings of permitted drywells

No state and/or tribal permitted drywells were found within a half-mile radius of the target property.

Automobile salvage yards

No records found

Livestock Waste Control sites

No records found

Controlled Animal Feeding Operations (CAFOs)

No records found

State and/or tribal lists of registered aboveground storage tanks (ASTs)

No records found

C.A.A. Permitted Facilities

No records found

NPDES Permitted Facilities

No records found

Onsite Wastewater Treatment sites

No records found

State and/or tribal lists of permitted facilities

No State and/or tribal permitted facilities found within a half-mile of the target property.

Resource Conservation and Recovery Act Information (RCRAInfo)

No records found

U.S. EPA Enforcement, Compliance History Online (ECHO)

No records found

U.S. EPA Underground Storage Tanks (UST)

No records found

U.S. EPA Toxic Substances Control Act (TSCA) database

No records found

U.S. EPA Toxic Release Inventory System (TRIS)

No records found

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Spill Incidents Database Search Details

Spill Record

Administrative Information

DEC Region: 8
Spill Number: 0210522

Spill Date/Time

Spill Date: 01/19/2003 **Spill Time:** 12:20:00 PM
Call Received Date: 01/19/2003 **Call Received Time:** 01:13:00 PM

Location

Spill Name: LANDSCHOOT RESIDENCE
Address: 8651 CARNEY HOLLOW ROAD
City: WAYLAND **County:** Steuben

Spill Description

Material Spilled	Amount Spilled	Resource Affected
#2 fuel oil	8 Gal.	Soil

Cause: Equipment Failure
Source: Private Dwelling
Waterbody:

Record Close

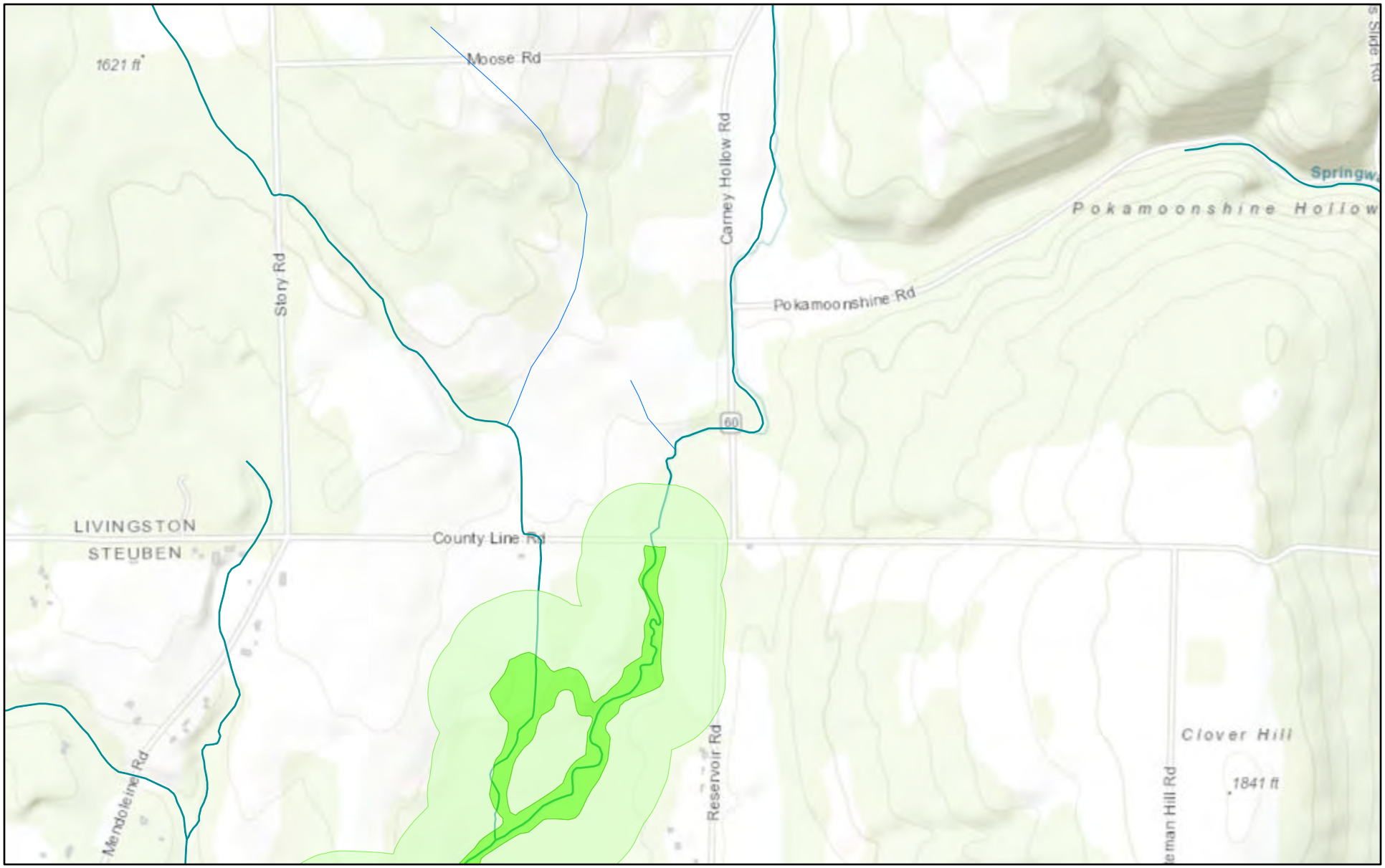
Date Spill Closed: 06/19/2003

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the Regional Office where the incident occurred.

Refine This Search

CR 60 over Carney Hollow Creek



April 17, 2024

1:18,056

0 0.1 0.2 0.4 mi

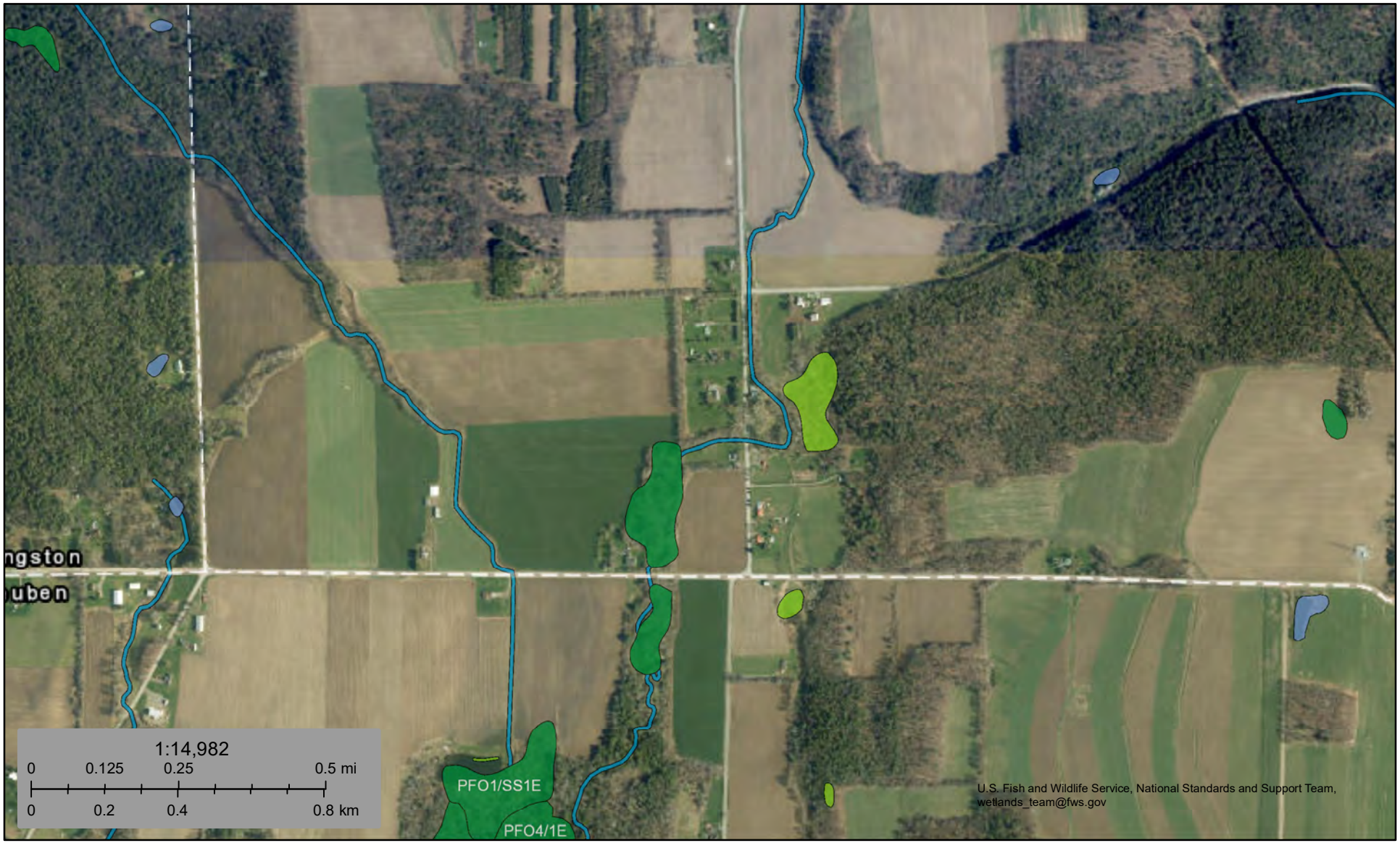
0 0.17 0.35 0.7 km

NYS Department of Environmental Conservation

Not a legal document

U.S. Fish and Wildlife Service
National Wetlands Inventory

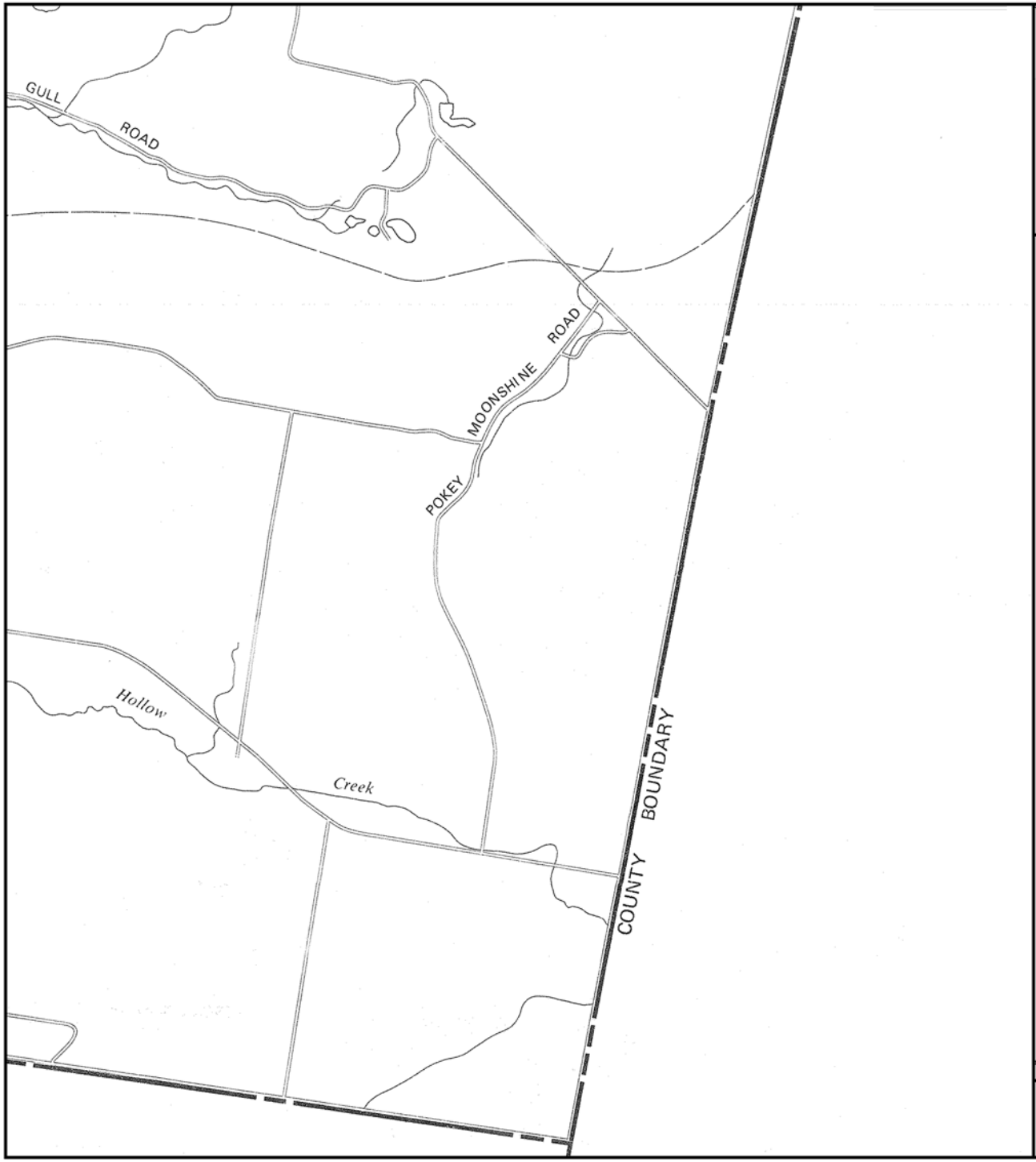
CR 60 over Carney Hollow Creek



April 17, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



N

APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

TOWN OF
SPRINGWATER,
NEW YORK
LIVINGSTON COUNTY

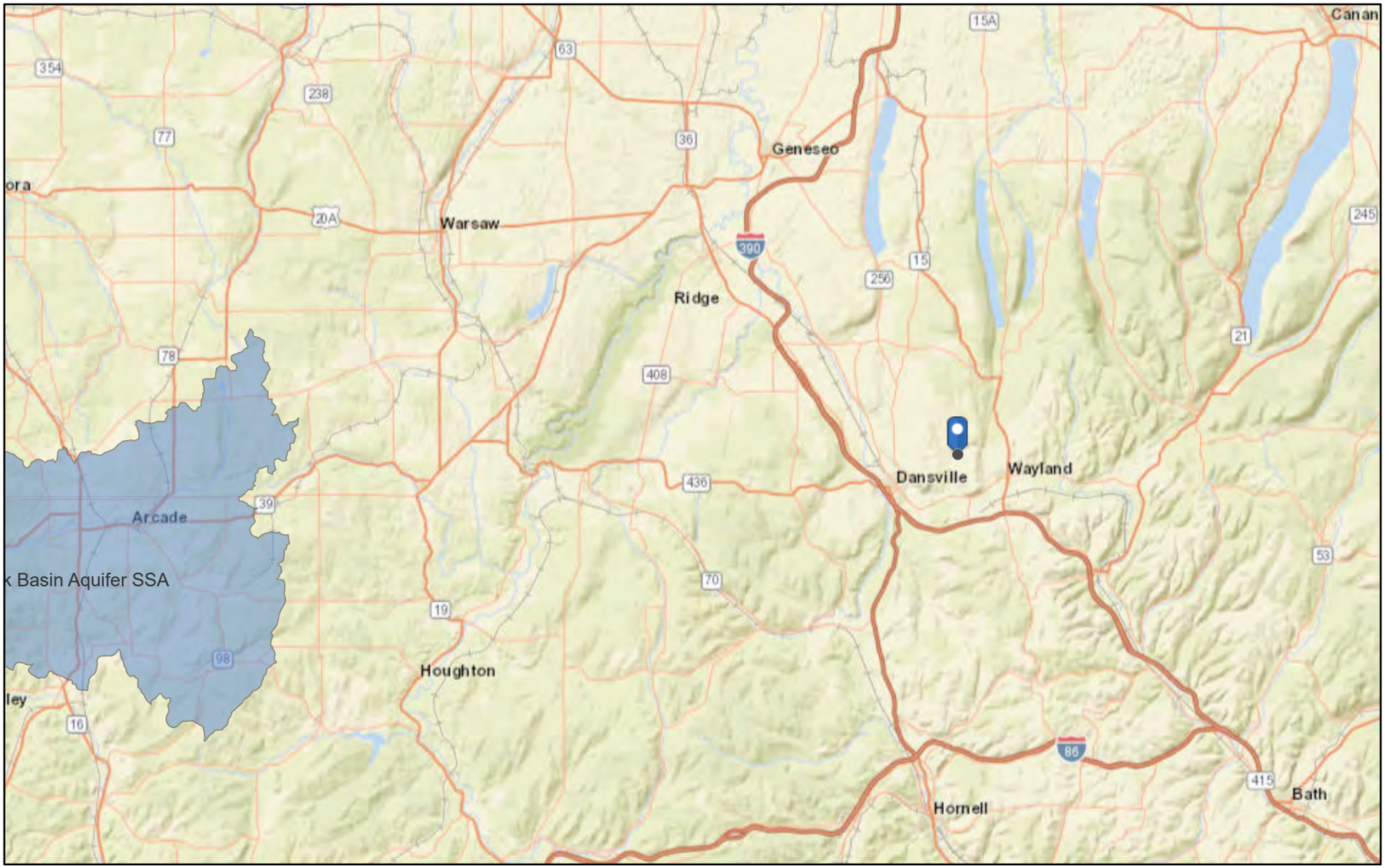
ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
360390 0005 B

EFFECTIVE DATE:
AUGUST 24, 1984

Federal Emergency Management Agency

CR-60 over Carney Hollow Creek



4/19/2024, 1:26:14 PM

Sole_Source_Aquifers

1:577,791

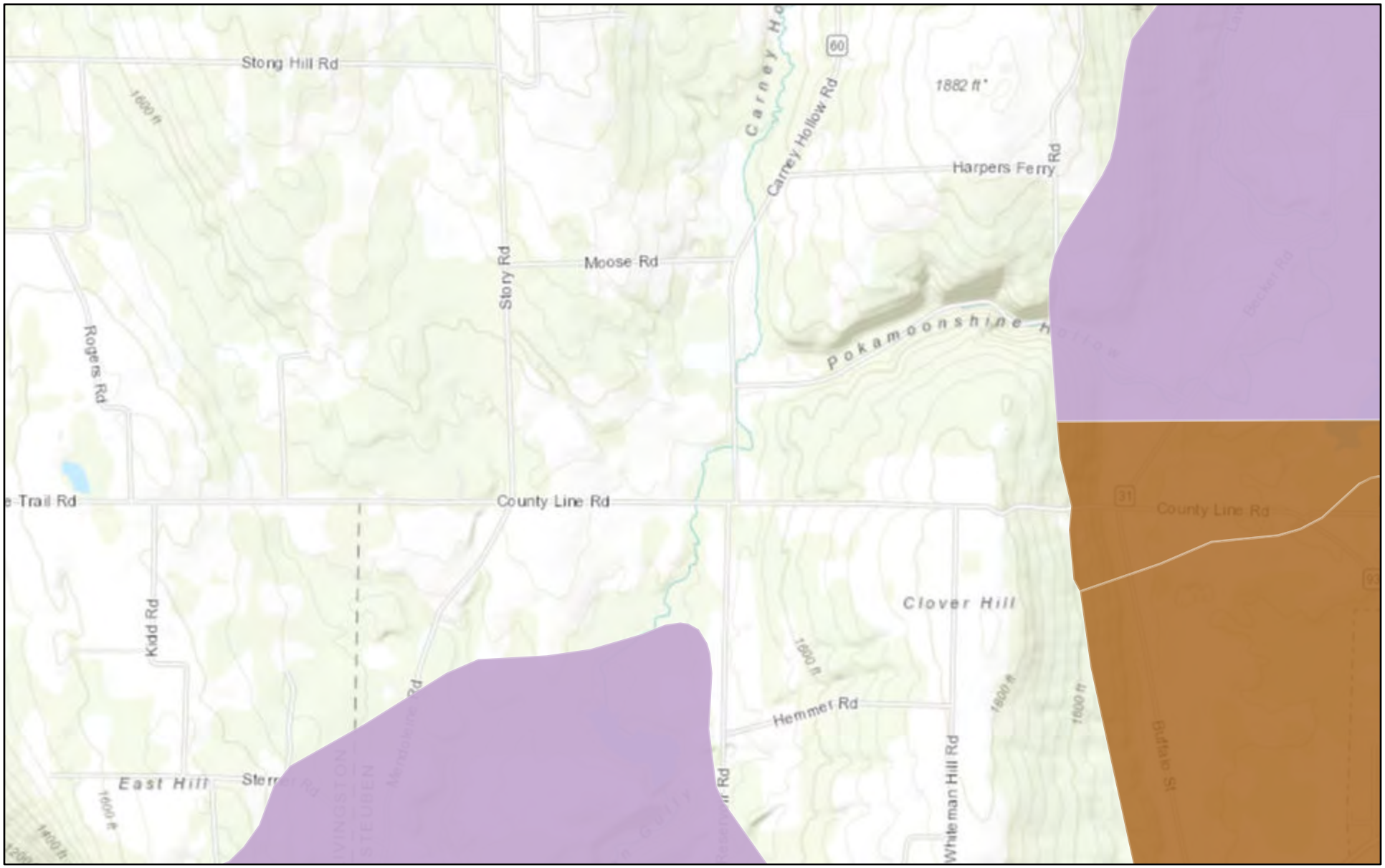
0 3.5 7 14 mi

0 5 10 20 km

Esri, HERE, Garmin, NGA, USGS, NPS

U.S. Environmental Protection Agency

CR-60 over Carney Hollow Road



4/19/2024, 1:32:08 PM

Principal Aquifers

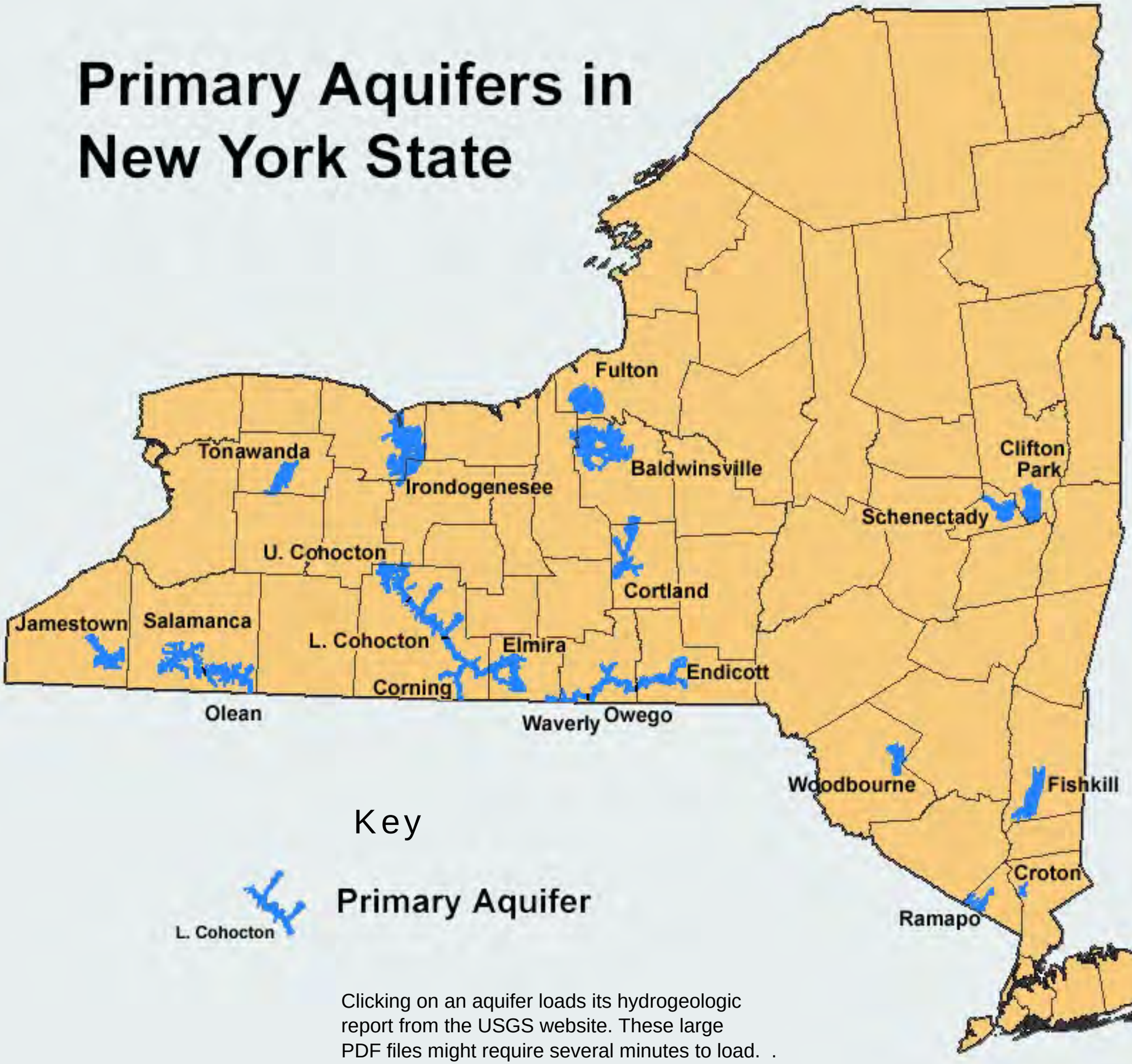
Primary Aquifers

1:36,112

0 0.23 0.45 0.9 mi

0 0.35 0.7 1.4 km

Primary Aquifers in New York State

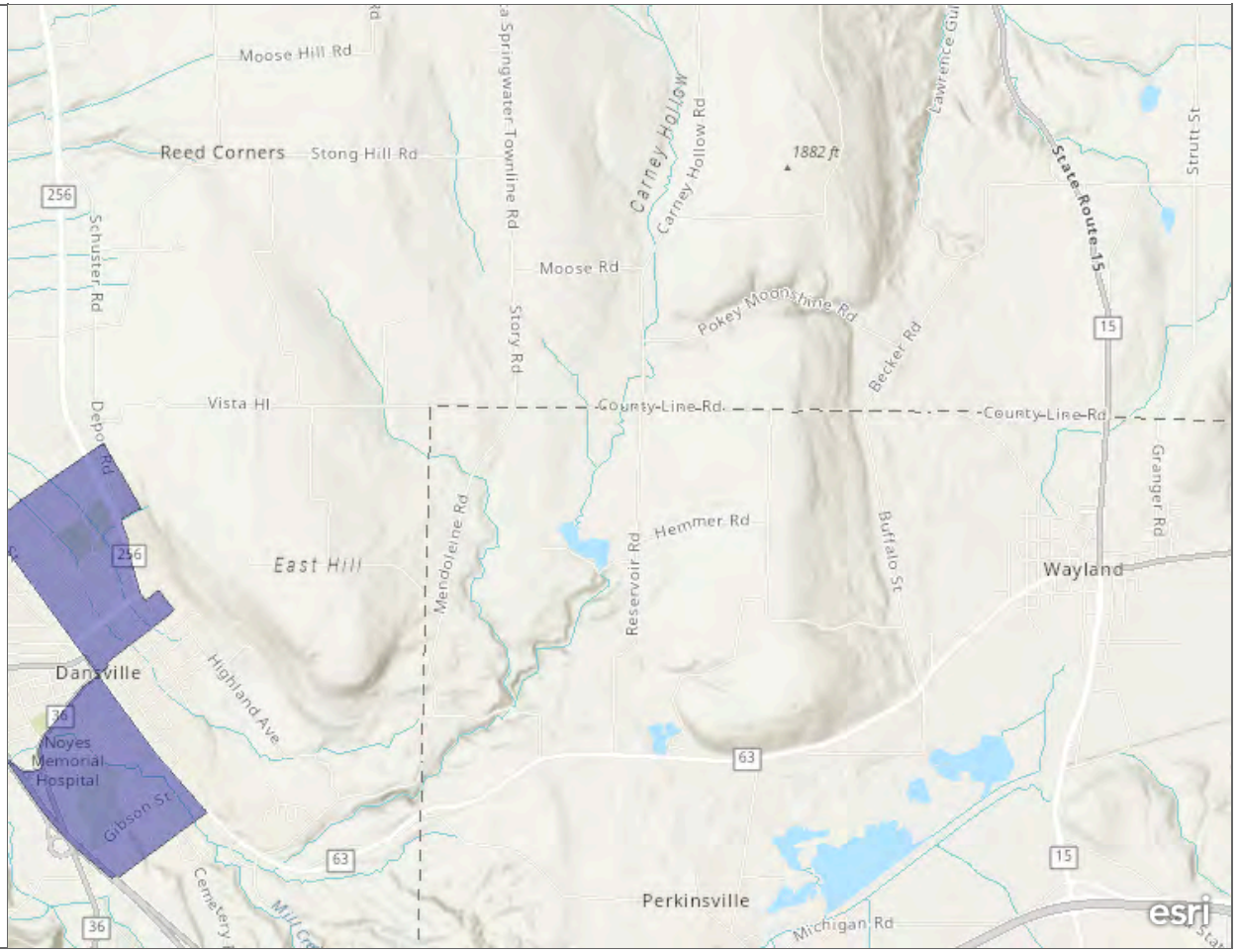


Baldwinsville
Clifton Park
Cohocton, Lower
Cohocton, Upper
Corning Cortland
Croton
Elmira Endicott
Fishkill
Fulton
Irondogenesee
Jamestown Olean
Owego Ramapo
Salamanca
Schenectady
Tonawanda
Waverly
Woodbourne

Clicking on an aquifer loads its hydrogeologic report from the USGS website. These large PDF files might require several minutes to load. .

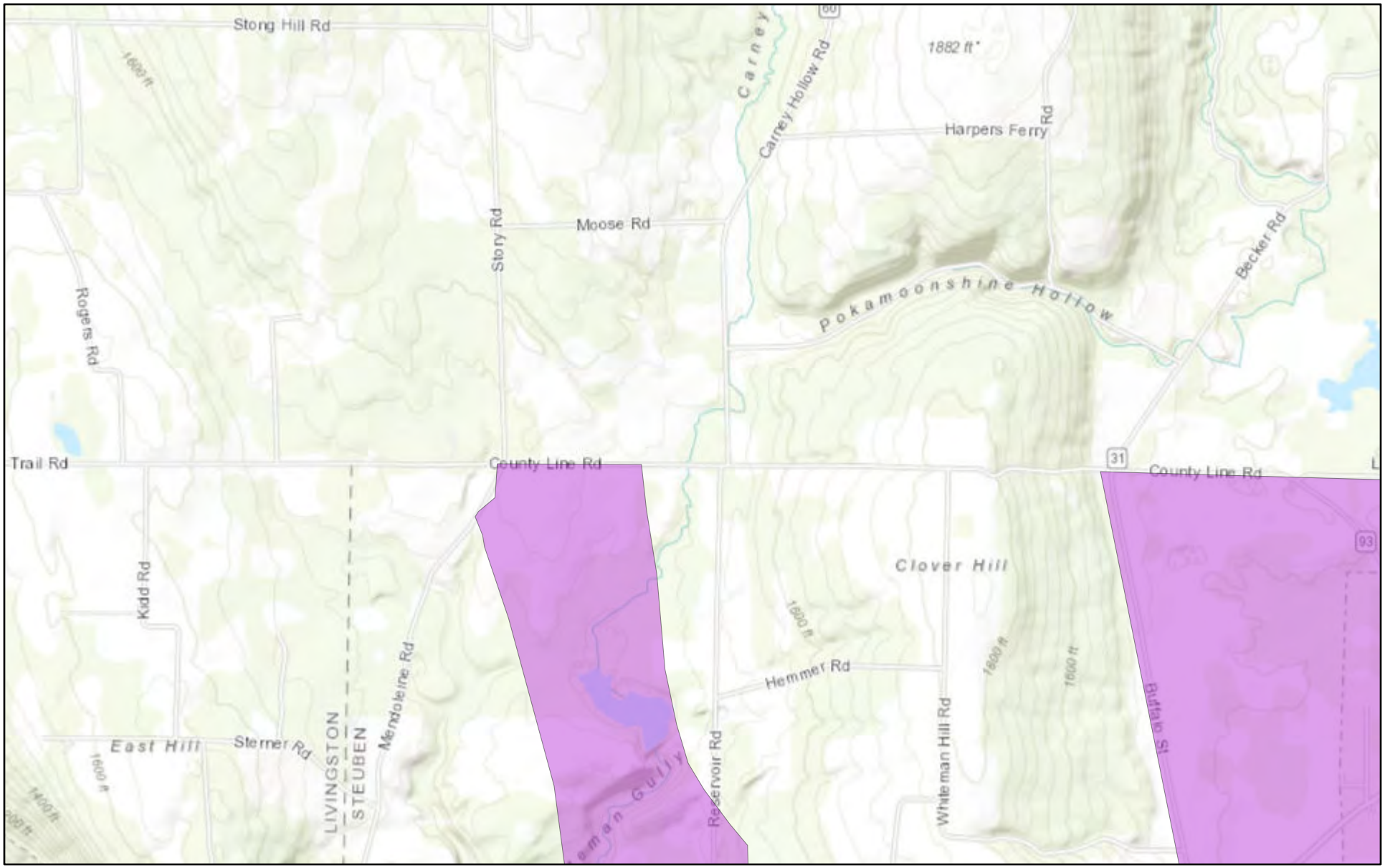
My Map

Potential_Environmental_Justice_Area__PEJA__Communities - Potential Environmental Justice Area (PEJA) Communities



Esri, NASA, NGA, USGS, FEMA | Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS | Data collection: US Census Bureau
Data analysis: David E. Witt, New York State Department of Environmental Conservation, Office of Environmental Justice (OEJ) Funding: NYS Taxpayers

CR 60 over Carney Hollow Creek



April 19, 2024

DECinfo Locator Legend (Active Layers)

Environmentally Sensitive Areas

Critical Environmental Areas

Reference Layers

DEC Regional Offices

County Boundaries

1:36,112

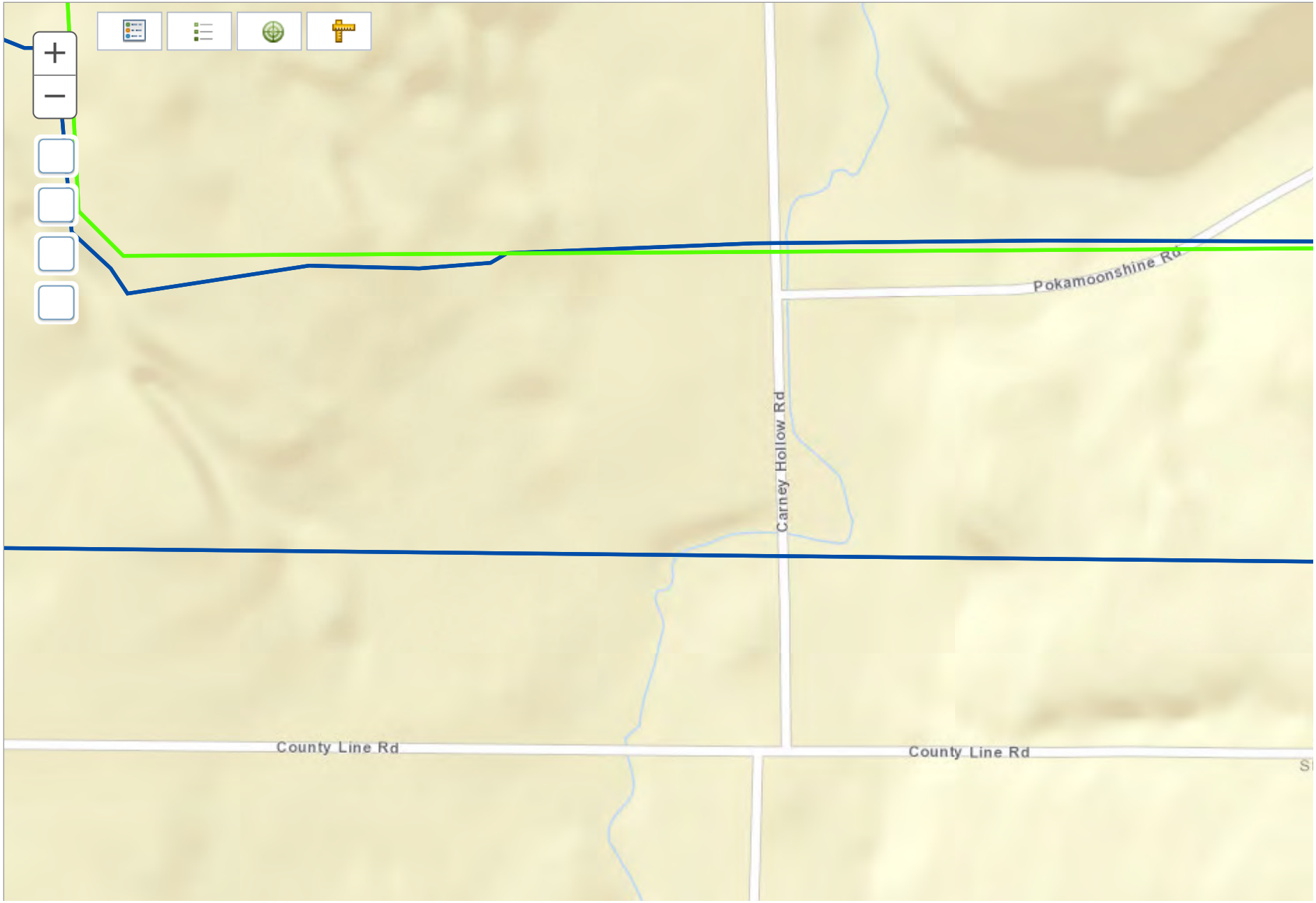
0 0.23 0.45 0.9 mi

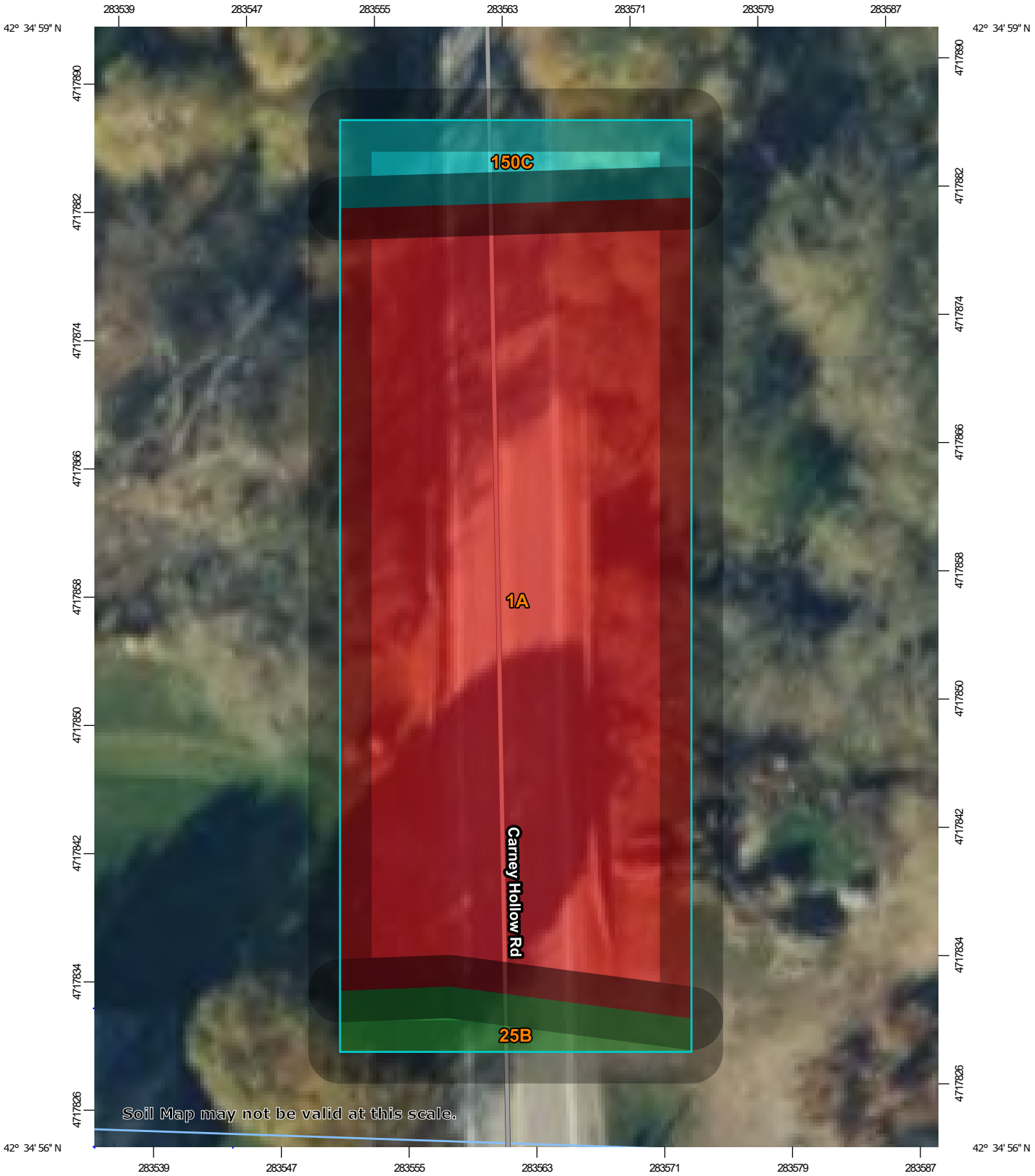
0 0.35 0.7 1.4 km

Province of Ontario, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

NYS Department of Environmental Conservation

Not a legal document


Pokamoonshine Rd
Carney Hollow Rd
County Line Rd
County Line Rd



Map Scale: 1:340 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 5 10 20 30

Feet: 0 15 30 60 90

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

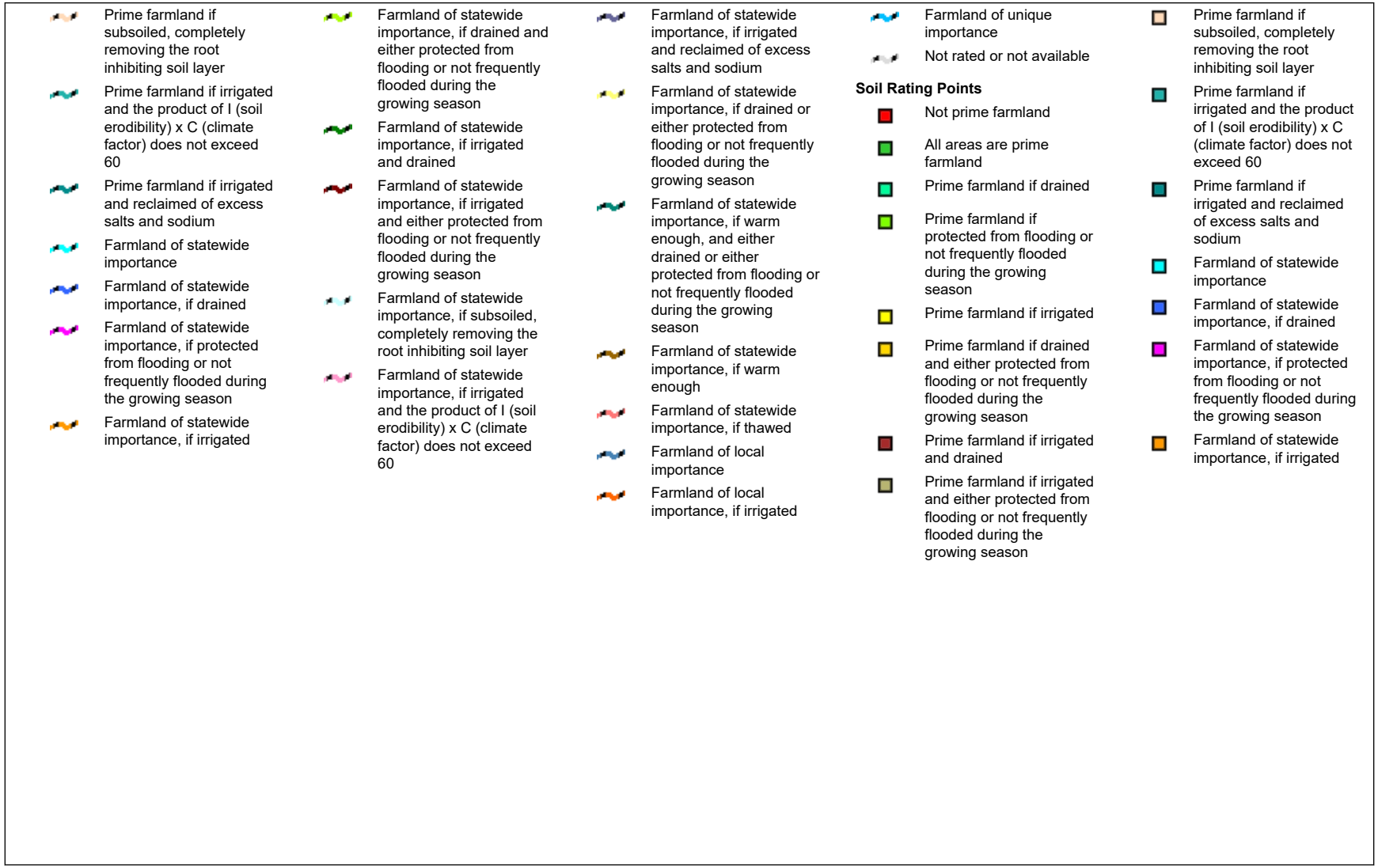
Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season


Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Points
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Livingston County, New York
Survey Area Data: Version 21, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 3, 2021—Nov 7, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1A	Udifluvents and Fluvaquents, 0 to 3 percent slopes, frequently flooded	Not prime farmland	0.3	85.3%
25B	Chenango gravelly loam, 3 to 8 percent slopes	All areas are prime farmland	0.0	5.8%
150C	Valois gravelly loam, cool, 8 to 15 percent slopes	Farmland of statewide importance	0.0	8.9%
Totals for Area of Interest			**0.3**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Livingston County, New York

Local office

New York Ecological Services Field Office

(607) 753-9334
(607) 753-9699
fw5es_nyfo@fws.gov

3817 Luker Road
Cortland, NY 13045-9385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis Wherever found This species only needs to be considered if the following condition applies: • This species only needs to be considered if the project includes wind turbine operations. No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

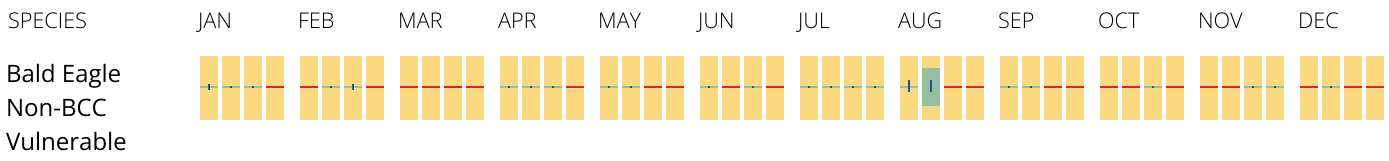
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

Black-billed Cuckoo Coccyzus erythropthalmus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Black-capped Chickadee Poecile atricapillus practicus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Jul 31
Bobolink Dolichonyx oryzivorus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler Cardellina canadensis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Chimney Swift Chaetura pelagica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Wood Thrush Hylocichla mustelina This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
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Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
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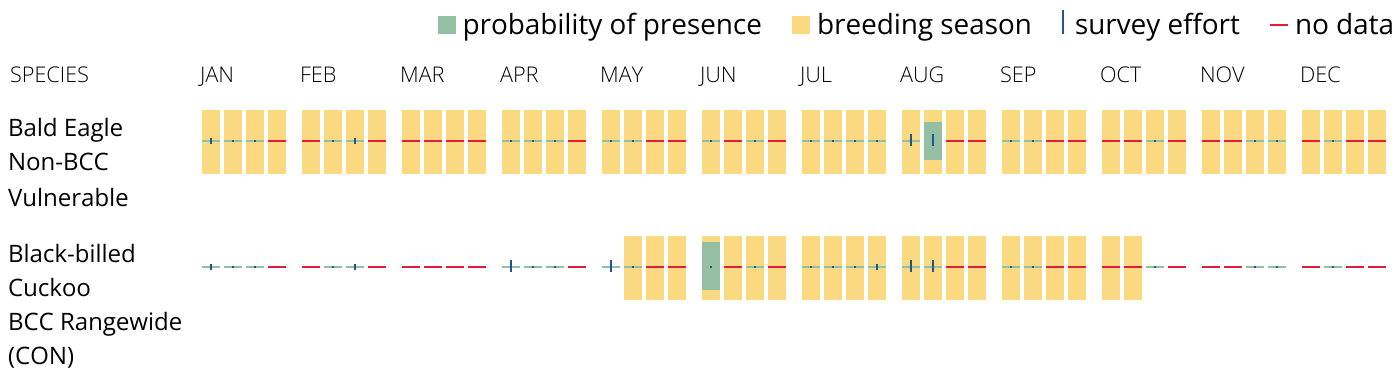
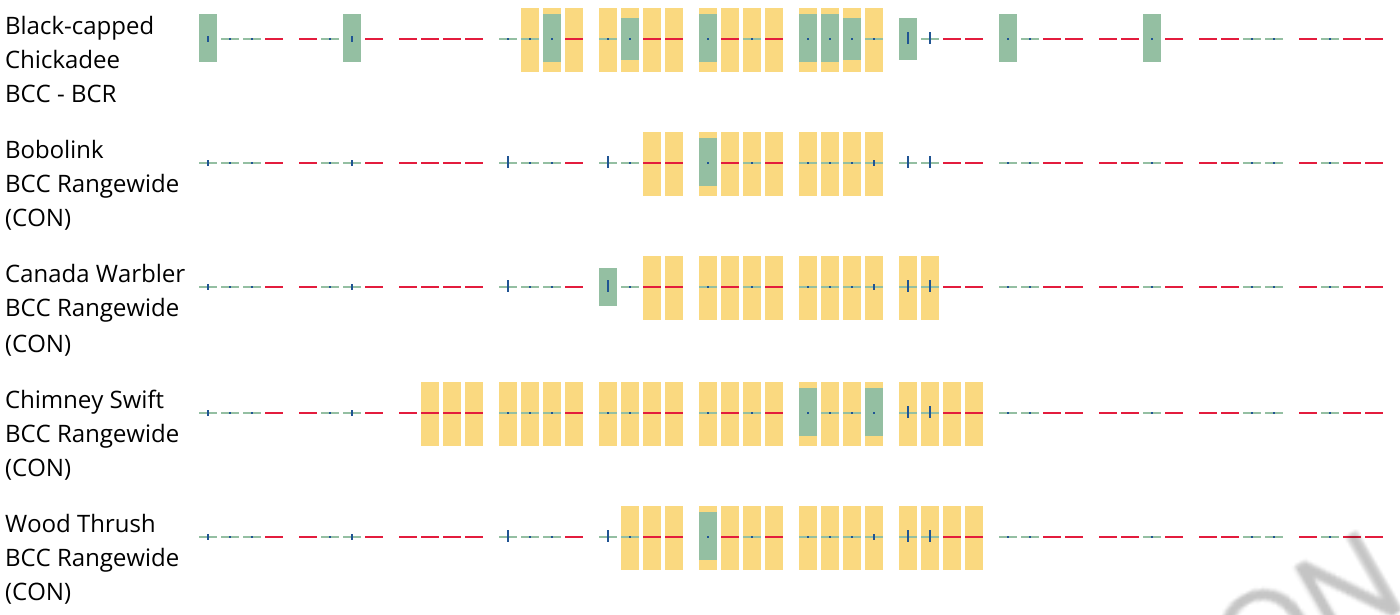
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R5UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and

nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Heritage Program

625 Broadway, Fifth Floor, Albany, NY 12233-4757
Phone: (518) 402-8935 | Fax: (518) 402-8925
www.dec.ny.gov

04/19/2024

The attached report from the Environmental Resource Mapper includes information from the New York Natural Heritage Program database with respect to the location indicated on the map below. This letter, together with the attached report from the Environmental Resource Mapper, is equivalent to, and carries the same validity, as a letter from the New York Natural Heritage Program, including for projects where a Natural Heritage letter is required.

If your location of interest does not fall within an area covered by the Rare Plants and Rare Animals layer or in the Significant Natural Communities layer, then New York Natural Heritage has no records to report in the vicinity of your project site. Submitting a project screening request to NY Natural Heritage is not necessary.

If the attached report lists that your location of interest is in the vicinity of state-listed animals, including state-listed bats, please consult the **EAF Mapper** to obtain a list of the species involved. (You do not have to be filling out an Environmental Assessment Form in order to use the EAF Mapper). Then consult the appropriate **NYSDEC Regional Office** for information on any project requirements or permit conditions.

If the attached report lists unlisted animals, rare plants, or significant natural communities, and if you would like more information on these, please submit a project screening request to **New York Natural Heritage**. For more information, please see the DEC webpage **Request Natural Heritage Information for Project Screening**.

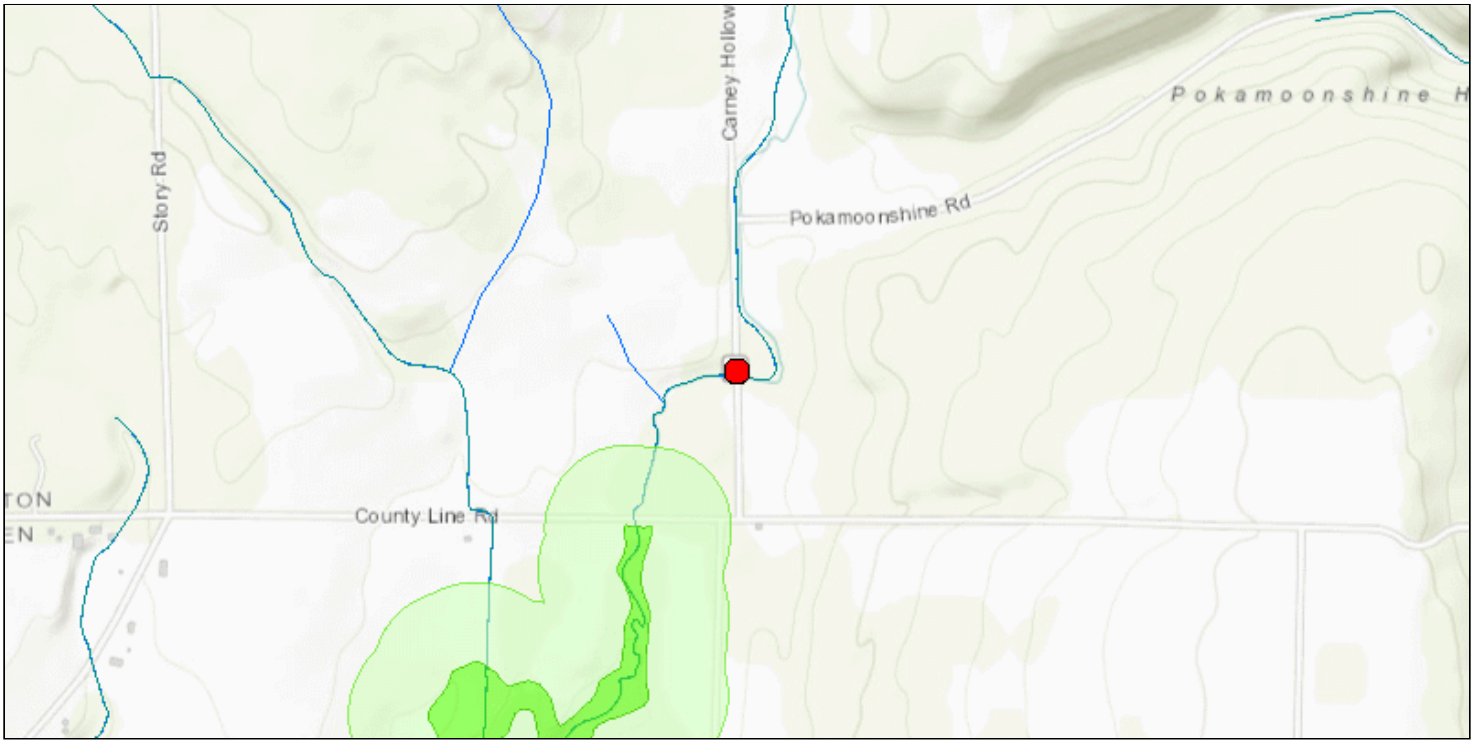
The absence of data does not necessarily mean that rare or state-listed species, significant natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, NYNHP files currently do not contain information that indicates their presence. For most sites, comprehensive field surveys have not been conducted. NYNHP cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources from a proposed project.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities, and other significant habitats maintained in the NYNHP database.

New York Natural Heritage Program

https://www.nynhp.org/.

Environmental Resource Mapper



The coordinates of the point you clicked on are:

UTM 18	**Easting:**	283564.4428438243	**Northing:**	4717863.363555576
Longitude/Latitude	**Longitude:**	-77.6375282972041	**Latitude:**	42.58284555632972

The approximate address of the point you clicked on is:
9101-9139 Carney Hollow Rd, Wayland, New York, 14572

County: Livingston
Town: Springwater
USGS Quad: DANSVILLE

Waterbody Classifications for Rivers/Streams

Regulation: 821-242
Standard: AA
Classification: AA

303D River and Stream Construction

Waterbody Name: Little Mill Creek and tribs
PWL ID: 0404-0024
Basin: Genesee River
Description: entire stream and tribs

National Wetands Inventory

Attribute: R5UBH
Type: Riverine
Acres: 24.099910932291593

For more information about the National Wetands Inventory wetlands visit **http://www.fws.gov/wetlands/**

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (ie. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

Disclaimer: If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

Print Preview

Smart Growth Screening Tool

PIN **4BNY.62**

Prepared By:Lu Engineers

Smart Growth Screening Tool (STEP 1)

NYSDOT & Local Sponsors – Fill out the Smart Growth Screening Tool until the directions indicate to **STOP** for the project type under consideration. For all other projects, complete answering the questions. For any questions, refer to Smart Growth Guidance document.

Title of Proposed Project: Carney Hollow Road (CR-60) Culvert over Carney Hollow Creek

Location of Project: Livingston County - Town of Springwater

Brief Description: Replacing existing culvert structure with a new structure.

A. Infrastructure:

Addresses SG Law criterion a. –
(To advance projects for the use, maintenance or improvement of existing infrastructure)

1. Does this project use, maintain, or improve existing infrastructure?

Yes ☒ **No** ☐ **N/A** ☐

Explain: (use this space to expand on your answers above – the form has no limitations on the length of your narrative)

The project will replace the existing culvert structure with a new structure.

Maintenance Projects Only

a. Continue with screening tool for the four (4) types of maintenance projects listed below, as defined in **NYSDOT PDM Exhibit 7-1 and described in 7-4:**
https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm

- Shoulder rehabilitation and/or repair;
- Upgrade sign(s) and/or traffic signals;
- Park & ride lot rehabilitation;

- 1R projects that include single course surfacing (inlay or overlay), per Chapter 7 of the NYSDOT Highway Design Manual.

b. For all other maintenance projects, **STOP here.** Attach this document to the programmatic Smart Growth Impact Statement and signed Attestation for Maintenance projects.

For all other projects (other than maintenance), continue with screening tool.

B. Sustainability:

NYSDOT defines Sustainability as follows: A sustainable society manages resources in a way that fulfills the community/social, economic and environmental needs of the present without compromising the needs and opportunities of future generations. A transportation system that supports a sustainable society is one that:

- Allows individual and societal transportation needs to be met in a manner consistent with human and ecosystem health and with equity within and between generations.
- Is safe, affordable, and accessible, operates efficiently, offers choice of transport mode, and supports a vibrant economy.
- Protects and preserves the environment by limiting transportation emissions and wastes, minimizes the consumption of resources and enhances the existing environment as practicable.

For more information on the Department's Sustainability strategy, refer to Appendix 1 of the Smart Growth Guidance and the NYSDOT web site, www.dot.ny.gov/programs/greenlites/sustainability

(Addresses SG Law criterion j **:** to promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain and implement.)

1. Will this project promote sustainability by strengthening existing communities?

   Yes ☐ **No** ☐ **N/A** ☒

2. Will the project reduce greenhouse gas emissions?

   Yes ☐ **No** ☐ **N/A** ☒

   Explain: (use this space to expand on your answers above)

C. Smart Growth Location:

Plans and investments should preserve our communities by promoting its distinct identity through a local vision created by its citizens.

(Addresses SG Law criteria b and c**:** to advance projects located in municipal centers; to advance projects in developed areas or areas designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan.)

1. Is this project located in a developed area?

   Yes ☐ **No** ☒ **N/A** ☐

2. Is the project located in a municipal center?

   Yes ☐ **No** ☒ **N/A** ☐

3. Will this project foster downtown revitalization?

   Yes ☐ **No** ☐ **N/A** ☒

4. Is this project located in an area designated for concentrated infill development in a municipally approved comprehensive land use plan, waterfront revitalization plan, or Brownfield Opportunity Area plan?

   Yes ☐ **No** ☐ **N/A** ☒

Explain: (use this space to expand on your answers above)

The culvert is located in a rural area in the Town of Springwater. The location does not present opportunities to affect a business district or contribute to a development plan.

D. Mixed Use Compact Development:

Future planning and development should assure the availability of a range of choices in housing and affordability, employment, education transportation and other essential services to encourage a jobs/housing balance and vibrant community-based workforce**.**

(Addresses SG Law criteria e and i: to foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial

development and the integration of all income groups; to ensure predictability in building and land use codes.)

1. Will this project foster mixed land uses?

   Yes ☐ No ☐ N/A ☒

2. Will the project foster brownfield redevelopment?

   Yes ☐ No ☐ N/A ☒

3. Will this project foster enhancement of beauty in public spaces?

   Yes ☐ No ☐ N/A ☒

4. Will the project foster a diversity of housing in proximity to places of employment and/or recreation?

   Yes ☐ No ☐ N/A ☒

5. Will the project foster a diversity of housing in proximity to places of commercial development and/or compact development?

   Yes ☐ No ☐ N/A ☒

6. Will this project foster integration of all income groups and/or age groups?

   Yes ☐ No ☐ N/A ☒

7. Will the project ensure predictability in land use codes?

   Yes ☐ No ☐ N/A ☒

8. Will the project ensure predictability in building codes?

   Yes ☐ No ☐ N/A ☒

Explain: (use this space to expand on your answers above)

The location and nature of the project will not have any effects on these criteria.

E. Transportation and Access:

NYSDOT recognizes that Smart Growth encourages communities to offer a wide range of transportation options, from walking and biking to transit and automobiles, which increase people's access to jobs, goods, services, and recreation.

(Addresses SG Law criterion f: to provide mobility through transportation choices including improved public transportation and reduced automobile dependency.)

1. Will this project provide public transit?

   Yes ☐ **No** ☒ **N/A** ☐

2. Will this project enable reduced automobile dependency?

   Yes ☐ **No** ☒ **N/A** ☐

3. Will this project improve bicycle and pedestrian facilities (such as shoulder widening to provide for on-road bike lanes, lane striping, crosswalks, new or expanded sidewalks or new/improved pedestrian signals)?

   Yes ☐ **No** ☒ **N/A** ☐

   (Note: Question 3 is an expansion on question 2. The recently passed Complete Streets legislation requires that consideration be given to complete street design features in the planning, design, construction, reconstruction and rehabilitation, but not including resurfacing, maintenance, or pavement recycling of such projects.)

   Explain: (use this space to expand on your answers above)

F. Coordinated, Community-Based Planning:

Past experience has shown that early and continuing input in the transportation planning process leads to better decisions and more effective use of limited resources. For information on community based planning efforts, the MPO may be a good resource if the project is located within the MPO planning area.

(Addresses SG Law criteria g and h: to coordinate between state and local government and inter-municipal and regional planning; to participate in community based planning and collaboration.)

1. Has there been participation in community-based planning and collaboration on the project?

   Yes ☐ **No** ☐ **N/A** ☒

2. Is the project consistent with local plans?

   Yes ☒ **No** ☐ **N/A** ☐

3. Is the project consistent with county, regional, and state plans?

   Yes ☒ **No** ☐ **N/A** ☐

4. Has there been coordination between inter-municipal/regional planning and state planning on the project?

Yes ☒ **No** ☐ **N/A** ☐

Explain: (use this space to expand on your answers above)

The culvert replacement is consistent with local and county plans to improve the roadway and provide a standard roadway width.

G. Stewardship of Natural and Cultural Resources:

Clean water, clean air and natural open land are essential elements of public health and quality of life for New York State residents, visitors, and future generations. Restoring and protecting natural assets, and open space, promoting energy efficiency, and green building, should be incorporated into all land use and infrastructure planning decisions.

(Addresses SG Law criterion d :To protect, preserve and enhance the State's resources, including agricultural land, forests surface and ground water, air quality, recreation and open space, scenic areas and significant historic and archeological resources.)

1. Will the project protect, preserve, and/or enhance agricultural land and/or forests?

Yes ☐ **No** ☐ **N/A** ☒

2. Will the project protect, preserve, and/or enhance surface water and/or groundwater?

Yes ☒ **No** ☐ **N/A** ☐

3. Will the project protect, preserve, and/or enhance air quality?

Yes ☐ **No** ☐ **N/A** ☒

4. Will the project protect, preserve, and/or enhance recreation and/or open space?

Yes ☐ **No** ☐ **N/A** ☒

5. Will the project protect, preserve, and/or enhance scenic areas?

Yes ☐ **No** ☐ **N/A** ☒

6. Will the project protect, preserve, and/or enhance historic and/or archeological resources?

Yes ☐ **No** ☐ **N/A** ☒

Explain: (use this space to expand on your answers above)

The project will protect the tributary during construction by providing NYSDEC approved erosion and sediment control practices.

Smart Growth Impact Statement (STEP 2)

NYSDOT: Complete a Smart Growth Impact Statement (SGIS) below using the information from the Screening Tool.

Local Sponsors: The local sponsors are **not** responsible for completing a Smart Growth Impact Statement. Proceed to **Step 3**.

Smart Growth Impact Statement

PIN: 4BNY.62

Project Name: Carney Hollow Road Culvert (CR-60) over Carney Hollow Creek

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act. This project has been determined to meet the relevant criteria, to the extent practicable, described in ECL Sec. 6-0107. Specifically, the project:

-
-
-
-
-
-

This publically supported infrastructure project complies with the state policy of maximizing the social, economic and environmental benefits from public infrastructure development. The project will not contribute to the unnecessary costs of sprawl development, including environmental degradation, disinvestment in urban and suburban communities, or loss of open space induced by sprawl.

Review & Attestation Instructions (STEP 3)

Local Sponsors: Once the Smart Growth Screening Tool is completed, the next step is to submit the project certification statement **(Section A)** to Responsible Local Official for signature. After signing the document, the completed Screening Tool and Certification statement should be sent to NYSDOT for review as noted below.

NYSDOT: For state-let projects, the Screening Tool and SGIS is forwarded to Regional Director/ RPPM/Main Office Program Director or designee for review, and upon approval, the attestation is signed **(Section B.2).** For locally administered projects, the sponsor's submission and certification statement is reviewed by NYSDOT staff, the appropriate box **(Section B.1)** is checked, and the attestation is signed (Section B.2).

A. CERTIFICATION (LOCAL PROJECT)

I HEREBY CERTIFY, to *the best of my knowledge, all of the above to be true and correct.*

Preparer of this document:

Signature	Date
Natural resources Group leader- Consultant Title	Bryan Bancroft Printed Name

Responsible Local Official (for local projects):

Signature	Date
Title	Printed Name

B. ATTESTATION (NYSDOT)

1. ***I HEREBY:***

   ☐ *Concur with the above certification, thereby attesting that this project is in compliance with the State Smart Growth Public Infrastructure Policy Act*

   ☐ *Concur with the above certification, with the following conditions (information requests, confirming studies, project modifications, etc.):*

   (Attach additional sheets as needed)

   ☐ do not concur with the above certification, thereby deeming this project ineligible to be a recipient of State funding or a subrecipient of Federal funding in accordance with the State Smart Growth Public Infrastructure Policy Act.

2. ***NOW THEREFORE,*** pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act, to the extent practicable, as described in the attached Smart Growth Impact Statement.

NYSDOT Commissioner, Regional Director, MO Program Director,
Regional Planning & Programming Manager (or official designee):

Signature	Date
Title	Printed Name

PIN:	4BNY.62	**Project Location:**	Town of Springwater, Livingston County, NY
Context:	○ **Urban / Village** ○ **Suburban** ◉ **Rural**		
Project Title:	Carney Hollow Road (CR-60) Culvert over Carney Hollow Road		

STEP 1- APPLICABILITY OF CHECKLIST

1.1	Is the project located entirely on a facility where bicyclists and pedestrians are prohibited by law and the project does not involve a shared use path or pedestrian/bicycle structure? *If **no**, continue to question 1.2. If **yes**, stop here.*	○ **Yes** ◉ **No**
1.2	a. Is this project a 1R* Maintenance project? *If **no**, continue to question 1.3. If **yes**, go to part b of this question.*	○ **Yes** ◉ **No**
1.2	b. Are there opportunities on the 1R project to improve safety for bicyclists and pedestrians with the following Complete Street features? • Sidewalk curb ramps and crosswalks • Shoulder condition and width • Pavement markings • Signing *Document opportunities or deficiencies in the IPP and **stop here.*** ** Refer to Highway Design Manual (HDM) Chapter 7, Exhibit 7-1 "Resurfacing ADA and Safety Assessment Form" under ADA, Pavement Markings and Shoulder Resurfacing for guidance.*	○ **Yes** ○ **No**
1.3	Is this project a Cyclical Pavement Marking project? *If **no**, continue to question 1.4. If **yes**, review EI 13-021* and identify opportunities to improve safety for bicyclists and pedestrians with the following Complete Streets features:* • Travel lane width • Shoulder width • Markings for pedestrians and bicyclists *Document opportunities or deficiencies in the IPP and **stop here.*** ** EI 13-021, "Requirements and Guidance for Pavement Marking Operations - Required Installation of CARDS and Travel Lane and Shoulder Width Adjustments".*	○ **Yes** ◉ **No**
1.4	Is this a Maintenance project *(as described in the "Definitions" section of this checklist)* and different from 1.2 and 1.3 projects? *If **no**, continue to Step 2. If **yes,** the Project Development Team should continue to look for opportunities during the Design Approval process to improve existing bicycle and pedestrian facilities within the scope of project. Identify the project type in the space below and **stop here.***	○ **Yes** ◉ **No**

STEP 1 prepared by: Bryan Bancroft, CPESC Date: 4/22/2024

STEP 2 - IPP LEVEL QUESTIONS (At Initiation)	**Comment / Action**

2.1	Are there public policies or approved known development plans (e.g., community Complete Streets policy, Comprehensive Plan, MPO Long Range and/or Bike/Ped plan, Corridor Study, etc.) that call for consideration of pedestrian, bicycle or transit facilities in, or linking to, the project area? *Contact municipal planning office, Regional Planning Group and Regional Bicycle/Pedestrian Coordinator.*	○ Yes ◉ No	
2.2	Is there an existing or planned sidewalk, shared use path, bicycle facility, pedestrian-crossing facility or transit stop in the project area?	○ Yes ◉ No	
2.3	a. Is the highway part of an existing or planned State, regional or local bicycle route? *If **no**, proceed to question 2.4. If **yes**, go to part b of this question.* b. Do the existing bicycle accommodations meet the minimum standard guidelines of HDM Chapter 17 or the AASHTO "Guide for the Development of Bicycle Facilities"? * *Contact Regional Bicycle/Pedestrian Coordinator* ** Per HDM Chapter 17- Section 17.4.3, Minimum Standards and Guidelines.*	○ Yes ◉ No ○ Yes ○ No	
2.4	Is the highway considered important to bicycle tourism by the municipality or region?	○ Yes ◉ No	
2.5	Is the highway affected by special events (e.g., fairs, triathlons, festivals) that might influence bicycle, pedestrian or transit users? *Contact Regional Traffic and Safety*	○ Yes ◉ No	
2.6	Are there existing or proposed generators within the project area (*refer to the "Guidance" section*) that have the potential to generate pedestrian or bicycle traffic or improved transit accommodations? *Contact the municipal planning office, Regional Planning Group, and refer to the CAMCI Viewer, described in the "Definitions" section.*	○ Yes ◉ No	
2.7	Is the highway an undivided 4 lane section in an urban or suburban setting, with narrow shoulders, no center turn lanes, and existing Annual Average Daily Traffic (AADT) < 15,000 vehicles per day? *If **yes**, consider a road diet evaluation for the scoping/design phase. Refer to the "Definitions" section for more information on road diets.*	○ Yes ◉ No	

2.8	Is there evidence of pedestrian activity (e.g., a worn path) and no or limited pedestrian infrastructure?	○ Yes ◉ No	

STEP 2 prepared by: Bryan Bancroft, CPESC Date: 4/22/2024

Bicycle/Pedestrian Coordinator has been provided an opportunity to comment: ○ Yes ○ No

ATTACH TO IPP AND INCLUDE RECOMMENDATIONS FOR SCOPING/DESIGN.

STEP 3 - PROJECT DEVELOPMENT LEVEL QUESTIONS (Scoping/Design Stage)			**Comment / Action**
3.1	Is there an identified need for bicycle/pedestrian/ transit or "way finding" signs that could be incorporated into the project?	○ Yes ◉ No	
3.2	Is there history of bicycle or pedestrian crashes in the project area for which improvements have not yet been made?	○ Yes ◉ No	
3.3	Are there existing curb ramps, crosswalks, pedestrian traffic signal features, or sidewalks that don't meet ADA standards per HDM Chapter 18?	○ Yes ◉ No	
3.4	Is the posted speed limit is 40 mph or more and the paved shoulder width less than 4' (1.2 m) (6' in the Adirondack or other State Park)? *Refer to EI 13-021.*	◉ Yes ○ No	No posted speed limit (55 mph) with narrow unpaved shoulders
3.5	Is there a perceived pedestrian safety or access concern that could be addressed by the use of traffic calming tools (e.g., bulb outs, raised pedestrian refuge medians, corner islands, raised crosswalks, mid-block crossings)?	○ Yes ◉ No	
3.6	Are there conflicts among vehicles (moving or parked) and bike, pedestrian or transit users which could be addressed by the project?	○ Yes ◉ No	
3.7	Are there opportunities (or has the community expressed a desire) for new/improved pedestrian-level lighting, to create a more inviting or safer environment?	○ Yes ◉ No	
3.8	Does the community have an existing street furniture program or a desire for street appurtenances (e.g., bike racks, benches)?	○ Yes ◉ No	

3.9	Are there gaps in the bike/pedestrian connections between existing/planned generators? *Consider locations within and in close proximity of the project area. (Within 0.5 mi (800 m) for pedestrian facilities and within 1.0 mi (1600 m) for bicycle facilities.)*	○ Yes ◉ No	
3.10	Are existing transit route facilities (bus stops, shelters, pullouts) inadequate or in inconvenient locations? (e.g., not near crosswalks) *Consult with Traffic and Safety and transit operator, as appropriate*	○ Yes ◉ No	
3.11	Are there opportunities to improve vehicle parking patterns or to consolidate driveways, (which would benefit transit, pedestrians and bicyclists) as part of this project?	○ Yes ◉ No	
3.12	Is the project on a “local delivery” route and/or do area businesses rely upon truck deliveries that need to be considered in design?	○ Yes ◉ No	
3.13	Are there opportunities to include green infrastructure which may help reduce stormwater runoff and/or create a more inviting pedestrian environment?	○ Yes ◉ No	
3.14	Are there opportunities to improve bicyclist operation through intersections and interchanges such as with the use of bicycle lane width and/or signing?	○ Yes ◉ No	

STEP 3 prepared by: Bryan Bancroft, CPESC Date: 4/22/2024

Additional comments, supporting documentation and clarifications for answers in step 1, 2 or 3:

APPENDIX C

TRAFFIC / ACCIDENT INFORMATION

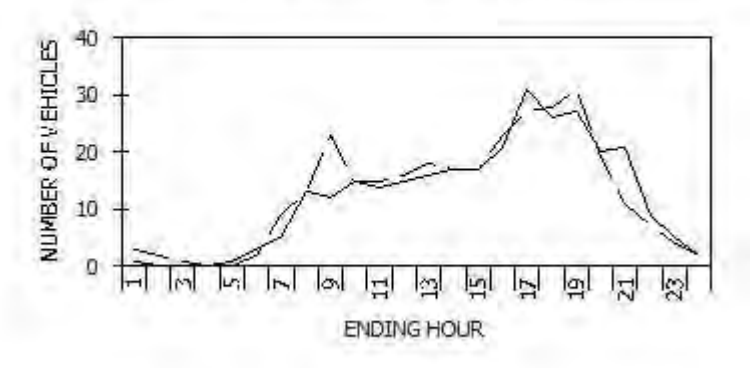
Livingston County
Classification Count Average Weekday Data Report

ROAD #: CR CR60 ROAD NAME: CARNEY HOLLOW R YEAR: 2022 STATION: 428113
COUNTY NAME: Livingston MONTH: September
REGION CODE: 4
FROM: STEUBEN CO LN
TO: MOOSE RD
REF-MARKER:
END MILEPOINT: 0074 NO. OF LANES: 2
FUNC-CLASS: 08 HPMS NO:
STATION NO: 8113 LION#:
COUNT TAKEN BY: ORG CODE: LIV INITIALS: JWF
PROCESSED BY: ORG CODE: LIV INITIALS: JWF BATCH ID: LIV-Output

DIRECTION	North	South	TOTAL
NUMBER OF VEHICLES	**291**	**303**	**594**
NUMBER OF AXLES	**597**	**614**	**1210**
% HEAVY VEHICLES (F4-F13)	**11.34%**	**7.92%**	**9.60%**
% TRUCKS AND BUSES (F3-F13)	**41.58%**	**38.61%**	**40.07%**
AXLE CORRECTION FACTOR	**0.97**	**0.99**	**0.98**

	VEHICLE CLASS	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	TOTAL
	NO. OF AXLES	2	2	2	2.5	2	3	4	3.5	5	6	5	6	8.75	
ENDING HOUR	1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
	2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	5:00	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
	6:00	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
	7:00	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
	8:00	0	7	4	1	1	0	0	0	0	0	0	0	0	**13**
	9:00	0	8	3	0	1	0	0	0	0	0	0	0	0	**12**
	10:00	0	7	4	2	1	1	0	0	0	0	0	0	0	**15**
DIRECTION	11:00	0	8	4	1	0	1	0	0	0	0	0	0	0	**14**
North	12:00	0	8	5	0	1	1	0	0	0	0	0	0	0	**15**
	13:00	0	9	5	0	1	1	0	0	0	0	0	0	0	**16**
	14:00	0	8	7	0	1	1	0	0	0	0	0	0	0	**17**
	15:00	0	9	6	0	1	1	0	0	0	0	0	0	0	**17**
	16:00	0	11	6	1	1	2	0	0	0	0	0	0	0	**21**
	17:00	0	17	9	2	1	2	0	0	0	0	0	0	0	**31**
	18:00	1	16	6	0	2	1	0	0	0	0	0	0	0	**26**
	19:00	0	17	8	0	2	0	0	0	0	0	0	0	0	**27**
	20:00	0	14	6	0	0	0	0	0	0	0	0	0	0	**20**
	21:00	0	13	7	0	1	0	0	0	0	0	0	0	0	**21**
	22:00	0	5	4	0	0	0	0	0	0	0	0	0	0	**9**
	23:00	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
	24:00	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
	TOTAL VEHICLES	**1**	**169**	**88**	**7**	**15**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**291**
	TOTAL AXLES	2	338	176	18	30	33	0	0	0	0	0	0	0	597
	1:00	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
ENDING HOUR	2:00	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
	3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
	4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	6:00	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
	7:00	0	6	3	0	0	0	0	0	0	0	0	0	0	**9**
	8:00	0	8	3	0	2	0	0	0	0	0	0	0	0	**13**
	9:00	0	15	7	1	0	0	0	0	0	0	0	0	0	**23**
	10:00	0	9	4	1	1	0	0	0	0	0	0	0	0	**15**
	11:00	0	8	5	1	1	0	0	0	0	0	0	0	0	**15**
DIRECTION	12:00	0	8	6	0	1	1	0	0	0	0	0	0	0	**16**
South	13:00	0	10	6	0	1	0	0	1	0	0	0	0	0	**18**
	14:00	0	10	6	0	1	0	0	0	0	0	0	0	0	**17**
	15:00	0	9	7	0	1	0	0	0	0	0	0	0	0	**17**
	16:00	0	13	8	0	1	1	0	0	0	0	0	0	0	**23**
	17:00	1	13	7	2	3	1	0	0	0	0	0	0	0	**27**
	18:00	1	17	8	1	0	1	0	0	0	0	0	0	0	**28**
	19:00	1	20	9	0	1	0	0	0	0	0	0	0	0	**31**
	20:00	0	15	4	0	0	0	0	0	0	0	0	0	0	**19**
	21:00	0	8	3	0	0	0	0	0	0	0	0	0	0	**11**
	22:00	0	5	2	0	0	0	0	0	0	0	0	0	0	**7**
	23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
	24:00	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
	TOTAL VEHICLES	**3**	**183**	**93**	**6**	**13**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**303**
	TOTAL AXLES	6	366	186	15	26	12	0	4	0	0	0	0	0	614
	GRAND TOTAL VEHICLES	**4**	**352**	**181**	**13**	**28**	**15**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**594**
	GRAND TOTAL AXLES	8	704	362	32	56	45	0	4	0	0	0	0	0	1211

TRAFFIC FLOW BY DIRECTION



--- North - -South

PEAK HOUR DATA

DIRECTION	HOUR	COUNT	2-WAY	HOUR	COUNT
North	**17**	**31**	**A.M.**	**9**	**35**
South	**19**	**31**	**P.M.**	**17**	**58**

VEHICLE CLASSIFICATION CODES:

F1. Motorcycles
F2. Autos*
F3. 2 Axle, 4-Tire Pickups, Vans, Motorhomes*
F4. Buses
F5. 2 Axle, 6-Tire Single Unit Trucks
F6. 3 Axle Single Unit Trucks
F7. 4 or More Axle Single Unit Trucks
F8. 4 or Less Axle Vehicles, One Unit is a Truck
F9. 5 Axle Double Unit Vehicles, One Unit is a Truck
F10. 6 or More Double Unit Vehicles, One Unit is a Truck
F11. 5 or Less Axle Multi-Unit Trucks
F12. 6 Axle Multi-Unit Trucks
F13. 7 or More Axle Multi-Unit Trucks

* INCLUDING THOSE HAULING TRAILERS

FUNCTIONAL CLASS CODES:

RURAL	URBAN	SYSTEM
01	11	PRINCIPAL ARTERIAL-INTERSTATE
02	12	PRINCIPAL ARTERIAL-EXPRESSWAY
02	14	PRINCIPAL ARTERIAL-OTHER
06	16	MINOR ARTERIAL
07	17	MAJOR COLLECTOR
08	17	MINOR COLLECTOR
09	19	LOCAL SYSTEM

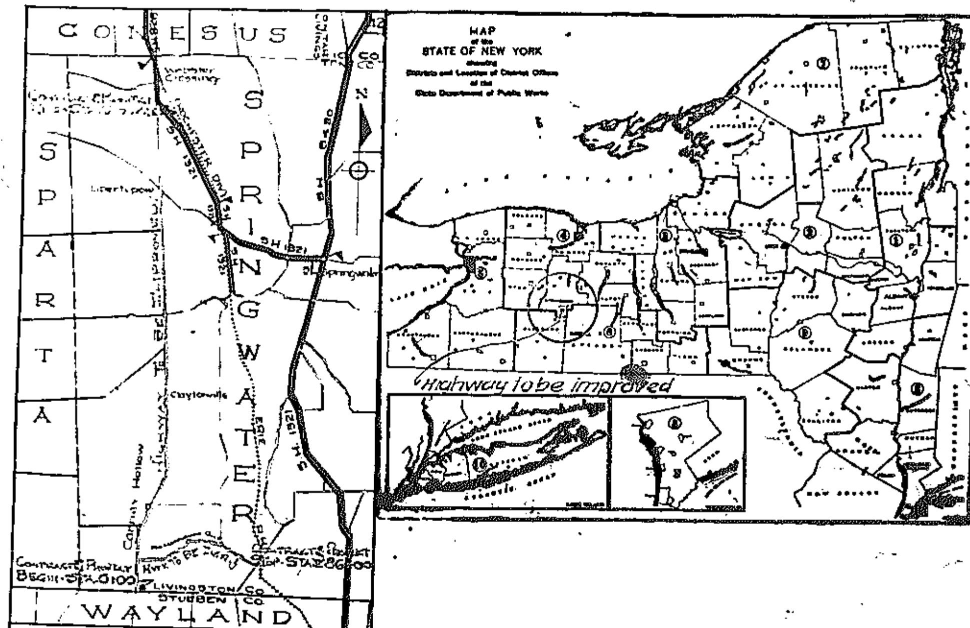
SOURCE: NYSDOT DATA SERVICES BUREAU

APPENDIX D

STRUCTURES INFORMATION

FAS-SS 37-30

FED. RD. DIST. No	STATE OF	FED. AID PROJ. No	FISCAL YEAR	SHEET No	TOTAL SHEETS
9	N.Y	FAS-16A		1	20
CARNEY HOLLOW - POKAMOONSHINE ROAD					



PLANS AS BUILT

1R

STATE OF NEW YORK
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

PLANS FOR IMPROVING, WITH FEDERAL AID, THE

CARNEY HOLLOW-POKAMOONSHINE ROAD
FARM TO MARKET ROAD

From Steuben County Line, northerly through the Hamlet of Claytonville to State Highway No. 1321 about one-half mile south of Webster Crossing; also from Station E18+86.55 easterly, along Pokamoonshine Gulf, to Station E86+00, a total length of 7.15 miles in the Town of Springwater

20 Sheets   *Project No. F.A.S. 16-A*   *Contract No. F.A.S.-S.S. 37-30*

LIVINGSTON COUNTY

Date of Contract	November 24 1937
" " Starting	November 29 1937
" " Completion	October 15 1938
District Engineer	Howard E. Smith
Engineer in charge	R. C. Henderson
Contractor	Harry J. Suits

TYPE OF CONSTRUCTION

Gravel, Surfacing Bituminous Treated 7.15 Miles

Standard Structure Sheets

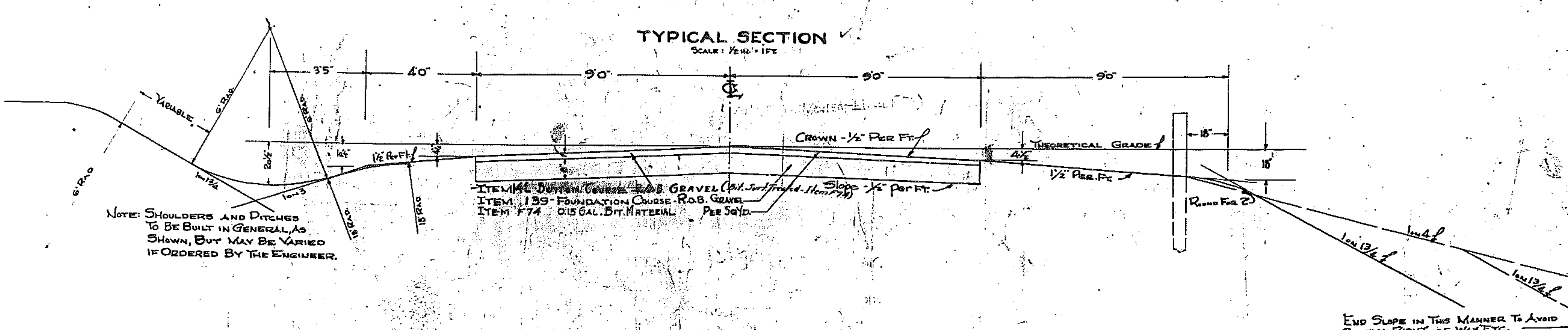
37-1, 37-2, 36-6, 36-7

All work contemplated under this contract to be covered by and in conformity with the specifications adopted January 2, 1935, except as modified on these plans and in the Itemized Proposal

Pavement							
Test No.	Type	Measured Ft.	Length Miles	Depth	Width Metal	Width Roadway	Sq. Ft.
38-G-86	R.O.B. Gravel	Horiz. 37737.11	7.148	8" Foundation	18	30	76273
	Oiled	Slope 37739.65	7.1477	4" Bottom	18	30	[illegible]

TYPICAL SECTION

SCALE: ½ IN. = 1 FT.



Approved crushed gravel may be used as coarse aggregate for all concrete

Approved Oct. 18 1937.
R. G. Lawton
Assistant Commissioner.

Approved by official order of the Division of Highways, pursuant to the Highway Law.
Arthur W. Brandt
Commissioner.
Oct. 14 1937

Recommended for approval ...., 19...
U. S. District Engineer.

Approved ...., 19...
U. S. Bureau of Public Roads, Chief Engineer.

Examined and recommended
Engineer, District 4

Made By Walter   Traced By Walter   Checked By Robinson

FAS-SS 37-30

2R

Fed. Rd. Dist No	State of	Fed. Aid Proj. No.	Fiscal Year	Sheet No.	Total Sheets
9	N.Y.	FAS-16A		2	20

CARNEY HOLLOW - POKAMOONSHINE ROAD

STRUCTURES

STATION	PRESENT STRUCTURE	NEW STRUCTURE
1+75	None	Relay 26' of 12" Pipe from Sta. 22+79 And 14' from Sta. 96+66
9+14	65 Boiler Pipe, 26' long	Remove and Relay at Sta. 'E' 54+04
9+20		Build New Double 10' Closed Box Bridge No. 1 See Culvert Sheet No.
22+79	12" C.I.P. 26' long	Relay 48' of 54" Pipe from Sta. 40+00± Rt (From Old Town Road, to be Abandoned). Build Hdw. on Lt. Relay Old 12" C.I.P. at Sta. 1+75
40+00±	None	New 18" Pipe Culv. 44' long
45+90±	None	Build New Double 10' Closed Box Bridge No. 2 See Culvert Sheet No.
50+45	18" C.I.P. 24' long (On Old Road)	To Remain
54+80±	None	New 18" Pipe Culv. 40' long. ~~Build Hdw. on Right.~~
54+90± Rt to 55+30±	None	Build 12" Pipe Side Culv. 48' long, with 24' Relaid from Sta. 148+15 and 24' Relaid from Sta. 151+11
56+50	None	New 18" Pipe Culv. 40' long
58+19.5	24" Boiler Pipe, 20.4' long	" 24" " " 52' " 60'
74+31	20" " " , 25.5' "	" " " " 72' "
87+75±	None	~~" 18" " " 40'~~
90+36	18" C.I.P. 24' long	" 24" " " 48' "
96+66	12" " " "	" 18" " " 40' " . Relay 14' of Old 12" Pipe at Sta. 1+75
101+17	1x1 Stone Box, 23' long	" 18" " " 48' "
103+55	8" C.I.P. 21.5' long	" 12" " " 60' 52'
111+26	18" Boiler Pipe. 20.5' long	" 24" " " 48' "
116+41	" " " 24' "	" 18" " " 40' "
122+79	16" " " 19' "	" 18" " " 44' " . On Skew
148+15	12" C.I.P. 24' long	" 18" " " 52' " . Relay Old 12" C.I.P. at Sta. 54+90 Rt. to 55+30 R
151+11	" " 24' "	" 18" " " 44' " . " " " " " " " " " "
159+63	1' A Iron Pipe 24' long	" 18" " " 44' "
168+20±	None	" 24" " " 40'
171+46	2x2 Conc. Culv.	Remove
176+69 Lt. to 176+94 Lt.	12" C.I.P. Side Culv. Lt. 25' long	To Remain
179+23	10" Boiler Pipe, 22' long	New 12" Pipe Culv. 44' long
181+00		" 18" " " 52' 48'
195+78	1x1 A Iron Pipe 24' long	" 18" " " 52' "
~~202+50±~~	~~None~~	~~" 12" " " 40' "~~
210+94	15" Iron Pipe, 18' long	" 18" " " 56' "
229+98 Lt. to 230+54 Lt.	24" Iron Pipe	Relay Present Pipe. Build Hdw. at Inlet.
239+46±	28 Iron Pipe 23 long at Sta. 239+49.5	Remove Present Culv. Build New 36" Pipe Culv. on Skew 52' 48 long, with Hdw. on Lt.
248+80±	24" Corr. Pipe 22.5' long at Sta. 248+91	Remove and Relay on 30° Skew with 26' of New Pipe. ~~Build Hdw. on Lt.~~
254+28 Lt. to 254+78 Lt.	12" Iron Pipe Side Culv. Lt.	" " " " " 6' further from ℄ of Improvement
256+95	18" Boiler Pipe 17' long at Sta. 257+05	Remove Present Culv. Build New 24" Pipe Culv. on Skew. 44' long, with Hdw. on Lt.
262+74	2x2 Conc. Culv. 23' long	New 30" Pipe Culv. 40' long
266+18	20" Boiler Pipe 32' long	" 18" " " 66' "
280+52	2x2 Conc. Culv. 24' long	" 30" " " 56' "
281+60 Rt.	12" Pipe Culvert - 20' long	Relay 12" Pipe Culv. 20' long
287+11	12" C.I.P. Lt. V.C.P. Rt. Total 36' lg.	" 18" " " 48' "
300+39 Lt.	18" C.I.P. 22' long	To Remain
301+88±	None	New 18" Pipe Culv. 52' long, on Skew
306+50 Rt. to 308+50 Rt.	None	New 12" Sewer Pipe Opt. 200' long. Outlet for Ditch 134
308+62	15" Corr. Pipe 40' long	Relay with 8' Additional Pipe. 45 S.Y. Gutter at Outlet
309+35± Lt. to 310+47 Lt.	24" Iron Pipe Lt.	To Remain. Dig Inlet Ditch
310+52	2x2 Conc. Culv. 51.6' long	To Remain
'E' LINE STRUCTURES		
'E' 19+10	72" Boiler Pipe, 30.2' long	Remove and Relay at Sta. E 54+04
'E' 19+30		Build New Double 10' Closed Box Bridge No. 3 See Culv. Sheet No.
'E' 30+50±	None	New 18" Pipe Culv. 52' long
'E' 37+60±		" 18" " " 40' " ~~Build Hdw. on Rt.~~
'E' 43+43.5	12" Iron Pipe, 20' long	" 18" " " 44' "
'E' 49+86	6" " " 19.7 long	Remove
'E' 54+04	60" Boiler Pipe, 24' long	Relay 60" Boiler Pipe 24' long, and from E 19+10 - 30' of 72" Pipe and from 9+14 Ml 26' of 78" Pipe Dig Outlet and Inlet Channels
'E' 57+82.5	20" Boiler Pipe, 32.5 long	New 18" Pipe Culv. 44' long with Hdw. on Lt.
'E' 64+50±	None	" 18" " " 48' " " " "
'E' 64+10	8" Iron Pipe, 31.4 long	Remove
'E' 69+00	10" " " 29.0' long	New 18" Pipe Culv. 48' long with Hdw. on Lt.
'E' 73+80	12" " " 25' long	" 18" " " 48' "
'E' 75+00±	None	" 18" " " 36' " — Dig Outlet Ditch
'E' 79+66	12" Iron Pipe, 29' long	" 18" " " 52' "
'E' 83+50	None	" 18" " " 48' "
'E' 84+29.5	10" Iron Pipe, 25' long	Remove
'E' 77+[illegible]	None	New 12" RCP 40'

NOTE: Pipe Culverts to be built without Headwalls, except where otherwise indicated.

GUIDE POSTS

STATION TO STATION	SIDE	SPACING	NO.
12+80 to 18+20	Rt	20	28
19+40 - 23+00	"	20	19
57+50 - 58+50	Lt	10	11
85+75 - 87+75	"	10	21
90+00 - 91+00	"	10	11
96+65 Culv.	"	10	2
101+19 "	Rt. & Lt.	10	4
103+10 to 104+10	Lt	10	11
110+50 - 111+70	"	10	13
147+20 - 149+00	"	10	19
150+20 - 155+30	"	10	52
158+30 - 159+80	"	10	16
195+20 - 196+50	Rt.	10	14
207+80 - 212+00	"	10	43
239+49 Culv.	Rt & Lt	10	6
265+20 to 266+80	Rt	10	17
265+80 - 266+80	Lt	10	11
279+50 - 281+20	Rt	10	18
280+20 - 282+00	Lt.	10	19
'E' LINE			
31+50 to 43+70	Lt	10	123
45+70 - 54+40	"	10	88
53+80 - 75+10	Rt	10	214
78+80 - 79+80	"	10	11
84+00 - 85+80	"	10	19

CABLE GUARD RAILING

STATION TO STATION	SIDE	LIN. FEET
8+10 to 9+80	Rt.	190
8+70 - 9+80	Lt.	130
45+00 - 49+70	Rt.	490
45+50 - 50+20	Lt.	490
73+20 - 75+90	Lt.	290
229+00 - 230+00		120
307+00 - 309+00	Rt.	220
'E' LINE		
18+70 to 19+90	Rt.	140
18+70 - 19+90	Lt.	140

CABLE GUARD RAILING

STATION TO STATION	SIDE	LIN. FEET
8+24 - 10+17	Rt	223
8+66 - 11+54	Lt	323
18+28 - 'E' 19+44	Rt	162
19+34 - 'E' 19+64	Rt	144
44+26 - 49+50	Rt.	552
44+65 - 49+94	Lt	554
73+00 - 75+33	Rt	263

BENCH MARKS

NO.	STATION	SIDE	ELEVATION	DESCRIPTION
MAIN LINE				
1	2+90	L	1514.64	Spike in root of Maple
2	9+50	L	1504.44	" " " " Elm
3	20+00	L	1513.93	" " " " Maple
4	30+15	L	1525.00	" " " " "
5	39+50	L	1538.87	S.E. Cor. of Church Porch
6	47+00	L	1542.48	Spike in Elm
7	53+80	L	1572.43	" " Maple, 100' from ℄
8	62+25	R	1625.18	Top of Boulder
9	70+00	R	1665.88	Root of Maple
10	80+00	L	1662.04	Spike in root of Cherry
11	91+00	L	1640.33	" " " " Maple
12	100+80		1667.29	" " " " "
13	114+55	L	1675.48	" on Top of Stump
14	124+00	L	1695.43	" in root of Maple
15	132+50	L	1739.82	" " Cor. of Barn
16	145+80	R	1765.31	Top of Large Boulder
17	156+50	L	1781.73	Spike in root of Pine
18	166+50	R	1803.16	" " " " Maple
19	178+35	L	1825.94	" " " " "
20	189+75	R	1824.66	" " " " Oak
21	198+90	R	1827.15	" " " " Maple
22	211+00	L	1787.63	" " " " "
23	221+35	L	1766.53	" " " " "
24	230+98	R	1690.47	" " " " Red Oak
25	236+35	R	1643.83	" " Maple
26	247+35	L	1607.32	" " root of Maple
27	256+50	R	1576.43	N.W. Cor. Conc. Platform of School House
28	269+20	R	1548.79	Spike in Gate Post
29	280+55	R	1491.63	" " root of Butternut
30	290+10	L	1482.77	" " Maple
31	300+20	L	1447.61	" " "
32	310+15		1357.91	N.W. Cor. of West Headwall
13 On S.H. 1321			1364.63	Spike in Pine
USGM			1362.11	Bronze Tablet Stamped "136" on Hill's Store
'E' LINE				
E4	21+90	L	1513.96	Spike in root of Elm
E5	34+75	L	1522.76	" " " " Maple
E6	44+85	L	1518.48	" " " " Pine
E7	54+15	L	1504.82	Spike in Pine
E8	60+80	R	1501.57	" " Birch
E9	70+40		1491.23	" " Cherry
E10	81+50	L	1477.76	" " Beech
E11	91+80	R	1456.29	" " Maple
E12	101+00	L	1425.35	" " Tel. Pole
[illegible]	109+50	R	[illegible]	Top of Large Boulder

UNCLASSIFIED EXCAVATION

STATION TO STATION	EXC.	EMB.	BAL.	BORROW	REMARKS
0+00 to 13+00	607	2222		1948	
13+00 - 28+90	5	6786		7801	
28+90 - 35+50		2943			Haul 3385 C.Y. from Sta. 68+25
35+50 - 54+67	8433	7184	1.17		
54+67 - 64+00	1948	1669	1.17		
64+00 - 71+50	3552	145			
71+50 - 89+50	4612	3951	1.17		
89+50 - 114+00	1585	2312		1074	
114+00 - 123+00	696	594	1.17		
123+00 - 138+00	1505	1292	1.16		
138+00 - 143+50	122	665		642	
143+50 - 159+00	2422	2071	1.17		
159+00 - 179+00	466	1955		1782	
179+00 - 182+00		705			Haul 810 C.Y. from Sta. 304+00
182+00 - 188+50	656	572	1.15		
188+50 - 204+55	2772	2382	1.16		
204+55 - 221+00	3700	2993	1.23		
221+00 - 231+00	451	1337			Haul 1087 C.Y. from Sta. 304+00
231+00 - 248+00	796	2647			" 1558 C.Y. " " "
248+00 - 265+50	1719	1456	1.18		
265+50 - 268+10	173	1140			Haul 1139 C.Y. from Sta. 304+00
268+10 - 277+50	782	676	1.16		
277+50 - 282+50	25	2437			Haul 2778 C.Y. from Sta. 304+00
282+50 - 299+50	2752	2394	1.17		
299+50 - 310+50	19,505	64			Waste - 12,089 C.Y.
	59,262	51,932		13,247	
'E' LINE					
E 19+00 to E 22+00		879		1010	
E 22+00 - E 40+00	2880	2491	1.16		
E 40+00 - E 53+50	5202	4552	1.14		
E 53+50 - E 70+00	2542	3650			Haul 1655 C.Y. from Creek Channel (Sta. 56+50 - 70+00)
E 70+00 - E 86+00	1769	2526		896	" 240 C.Y. " " " (Sta. 70+00 - 74+50)
Channel Exc. 56+50 to 70+00	1655				
Channel Exc. 70+00 - 74+50	240				
	14,288	14,098		1906	

Roadway Excavation 73,550 82,854
Borrow 15,153 15,403
Drainage Ditches 99
Sod Excavation 400 650
Base + Extra Founda Main Course 4,054
Bridge No. 1
" " 2
" " 3
Rounding 8788
98000 102,411 C.Y.

GUIDE POSTS

Station to Station	Side	Spacing	No.	Station to Station	Side	Spacing	No.
E 29+90 - E 21+20	R	12	15	[illegible]	R	20	11
31+20 - 43+70	L	10	[illegible]	146+45 - 148+95	L	20	11
45+02 - 53+52	L	10	[illegible]	[illegible]	L	20	33
53+80 - 75+10	R	10	209	[illegible]	L	10	11
77+60 - 80+00	L	10	25	[illegible]	A	20	11
78+50 - 79+90	R	10	15	[illegible]	R	10	51
15+20 - 16+20	R	20	21	209+65 - [illegible]	L	10	11
14+40 - 22+20	R	20	15	[illegible]	R	20	4
51+05 - 56+05	L	20	7	230+30 Intersection	L	12	[illegible]
57+85 - 59+85	R	[illegible]	11	[illegible]	L	10	[illegible]
73+30 - 76+00	L	10	28	237+10 - [illegible]	R	14	7
85+50 - 87+70	L	10	13	[illegible]	[illegible]	10	[illegible]
90+60 - [illegible]	L	10	6	[illegible]	L	10	[illegible]
50+06 - [illegible]	R	10	6	[illegible]	[illegible]	10	10
96+60 - [illegible]	R	10	[illegible]	278+25 - [illegible]	[illegible]	10	[illegible]
96+60 - 96+70	L	10	[illegible]	[illegible]	R	10	[illegible]
[illegible]	L	10	[illegible]	[illegible]	L	[illegible]	[illegible]
101+15 - [illegible]	R	10	[illegible]	[illegible]	L	[illegible]	[illegible]
103+10 - [illegible]	L	10	2	[illegible]	L	[illegible]	[illegible]
110+60 - 111+80	L	20	7	[illegible]	R	[illegible]	[illegible]
111+20 - 111+30	R	10	[illegible]				

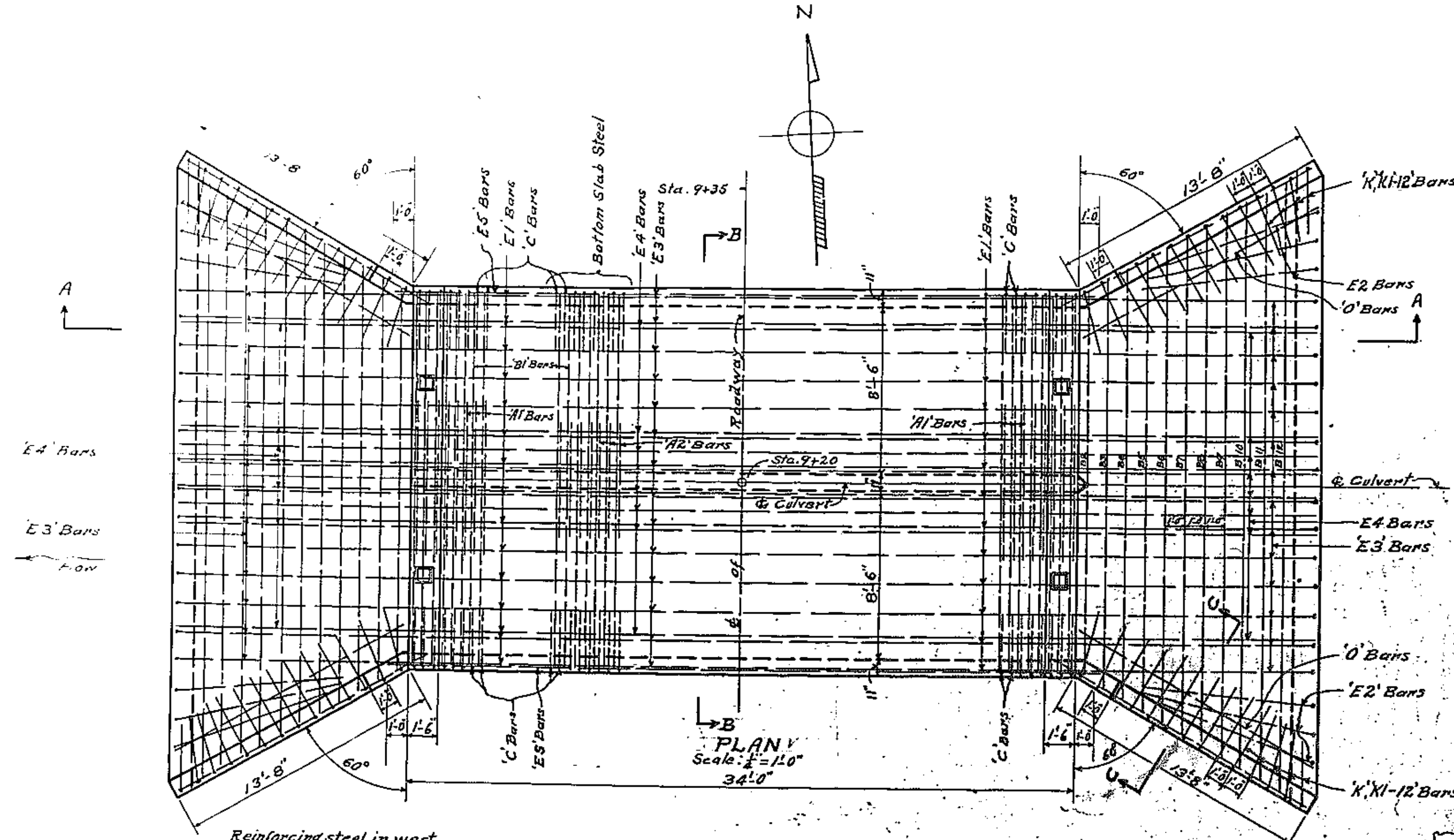
Made by Walter
Traced by Walter
Checked by Saunders & Eckler

PREPARED PURSUANT TO THE HIGHWAY LAW AND RECOMMENDED BY
July 19, 1937
ENGINEER, DISTRICT 4

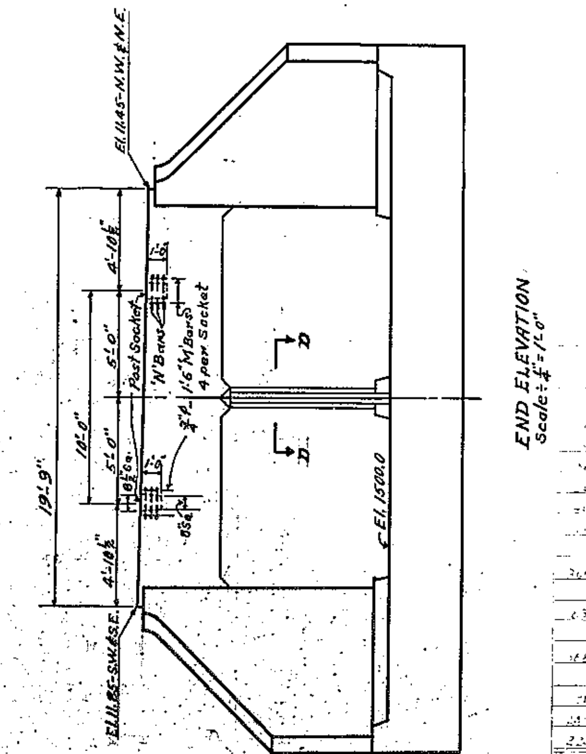
FAS-SS 37-30

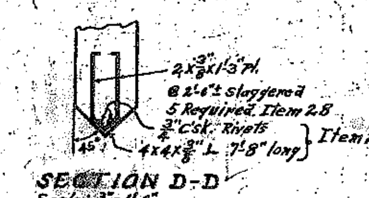
Fed. Rd. Dist. No.	State	Fed. Aid Proj. No.	Fiscal Year	Sheet No.
0	N.Y.	FAS-16A		

CARNEY HOLLOW-POKAMOONSHINE ROAD



Reinforcing steel in west apron and wings same as in east apron and wings





No	Mark	Size	Length	Location
68	A1	3/4" φ	8'-0"	Top of Top Slab
68	A2	1/2" φ	6'-0"	Bottom of Bottom Slab
138	B1	3/4" φ	19'-4"	Top & Bottom Slabs
	B2		19'-9"	Apron Slab-Up and Down
22	to	3/4" φ	to	Stream Ends-Lengths
	B12		31'-5"	Vary by 1'-2"
272	C	1/2" φ	8'-2"	Bent-Sidewalls
68	D	1/2" φ	9'-4"	Vert.-Center Wall
22	E1	3/4" φ	33'-7"	Top Slab
12	E2	3/4" φ	11'-4"	Bent-Bottom Slab-Up and
				Downstream Ends
4	G1	1/2" φ	7'-2"	
4	G2	1/2" φ	9'-10"	Side Walls-Up and
4	G3	1/2" φ	12'-10"	Downstream Ends
12	G4	1/2" φ	14'-5"	
8	H	1/2" φ	19'-10"	Tops of Wings
28	L	1/2" φ	3'-0"	Vert.-Headwalls
16	M	3/4" φ	1'-6"	Vert.-Post Sockets
12	N	1/2" φ	5'-0"	Hoops-Post Sockets
8	K	1/2" φ	14'-9"	Vert.-Wingwalls
	K1		14'-2"	
48	to	1/2" φ	to	Vert.-Wingwalls
	K12		8'-8"	Lengths vary by 6"
4	O	3/4" φ	13'-10"	Apron Slab-Up & Down St.
				Ends
28	E3	3/4" φ	33'-0"	Bent-Bottom Slab
				Up & Downstream Ends
16	E4	3/4" φ	30'-5"	Bottom of Bottom Slab
10	E5	1/2" φ	36'-0"	Side Walls
10	E6	1/2" φ	33'-7"	Center Wall

BAR LIST — Details

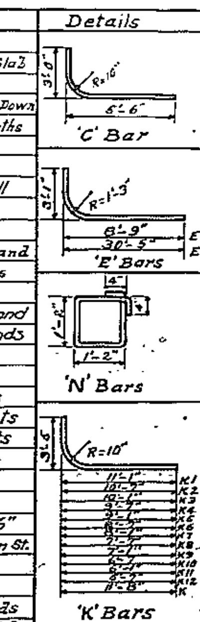
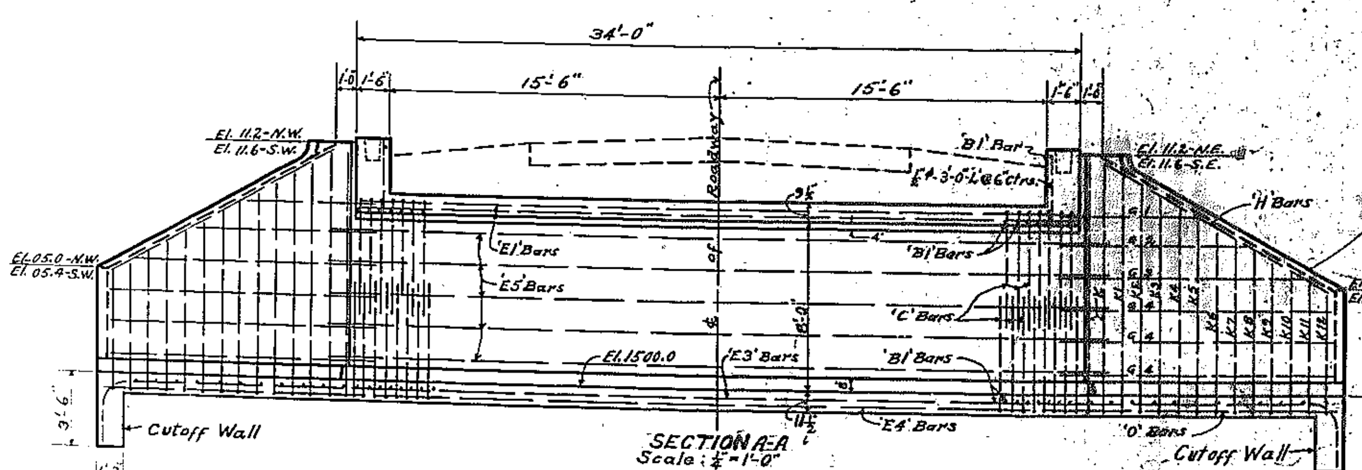
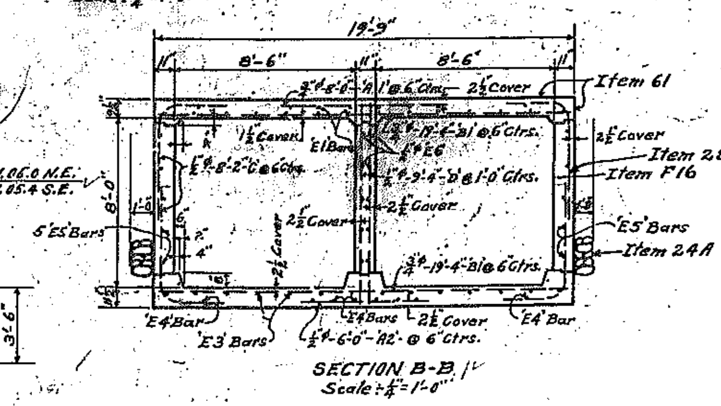


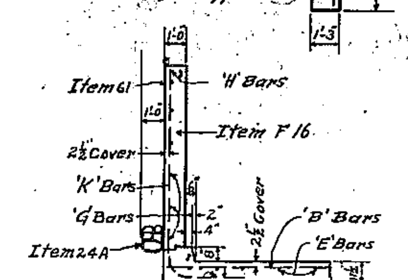
TABLE OF QUANTITIES

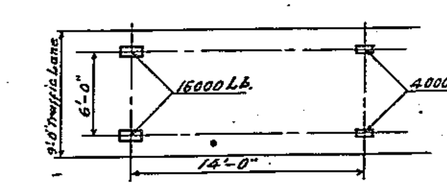
Item No	Description of Item	Unit	Quantities Plan	Quantities Final
F16	Concrete For Structures 1:2:3½	C.Y.	126	
24A	Loose Stone Backing	C.Y.	37	
28	Bar Reinforcement For Structures	Lb.	12800	
61	Bituminous Material Waterproofing	Gal.	70	
F80	Dry Rip Rap	C.Y.	105	



The bottom of the bottom slab must be formed and the sides of the cut off trenches sheeted. Cost of forms and sheeting shall be included in the price bid for Item F16







LOADING DIAGRAM 20 TON TRUCKS.

Dry rip rap Item F80 shall be placed where and as directed by Engineer.

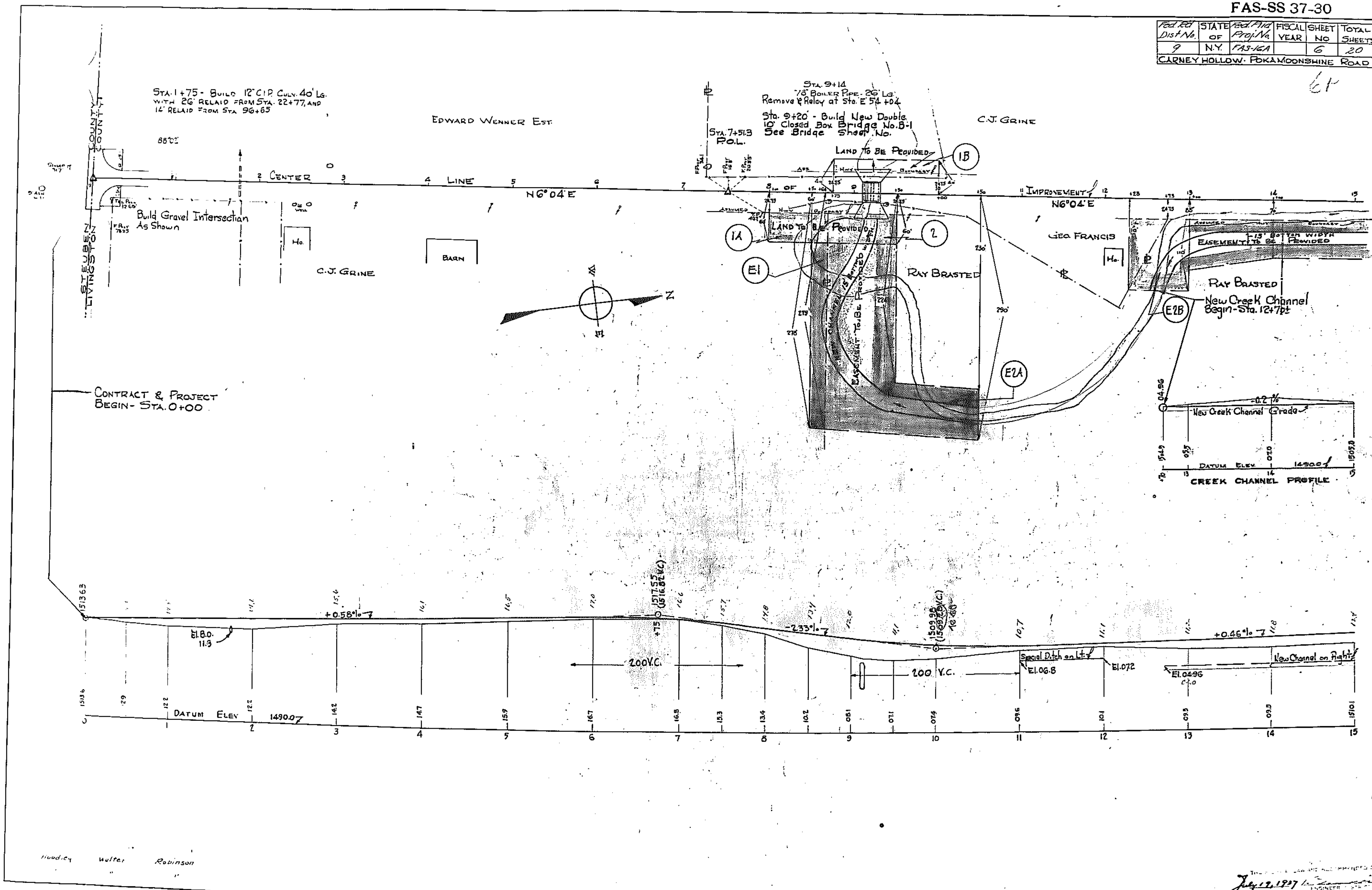
APPROVED

STATE OF NEW YORK DIVISION OF HIGHWAYS
FARM TO MARKET ROAD LIVINGSTON COUNTY
CARNEY HOLLOW-POKAMOONSHINE RD
CULVERT #1 STA. 9+20

FAS-SS 37-30

Fed. Rd. Dist. No.	STATE OF	Fed. Aid Proj. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	N.Y.	FAS-IGA		6	20

CARNEY HOLLOW - POKAMOONSHINE ROAD



Sta. 1+75 - Build 12" C.I.P. Culv. 40' Lg. with 26' Relaid from Sta. 22+77, and 14' Relaid from Sta. 96+85
Edward Wenner Est.
C.J. Grine
Sta. 9+14 7/8" Boiler Pipe - 26' Lg. Remove & Relay at Sta. E 54+04
Sta. 9+20 - Build New Double 10' Closed Box Bridge No. B-1 See Bridge Sheet No.
Sta. 7+51.3 P.O.L.
Land To Be Provided
Center Line
N6°04'E
Improvement
Build Gravel Intersection As Shown
Steuben County
Livingston County
Ho.
Barn
C.J. Grine
Land To Be Provided
Ray Brasted
Geo Francis
Easement To Be Provided
New Channel
Ray Brasted
New Creek Channel Begin - Sta. 12+70±
Contract & Project Begin - Sta. 0+00
New Creek Channel Grade
Datum Elev 1490.0
Creek Channel Profile
+0.58%
-2.33%
+0.46%
200 V.C.
200 V.C.
Special Ditch on Lt.
El. 06.8
El. 07.2
El. 04.96
New Channel on Right
Datum Elev 1490.0
Hoadley
Walter
Robinson
July 19, 1937

Culvert Inspection Report

CR-Sec: 60 Road Name: Carney Hollow Rd Inspector: JWF

Station: 009+11 CIN: C60000911 Inspection Date: 11/3/22

Inlet/Outlet Items:

	Inlet End Rating	Inlet End Comments	Outlet End Rating	Outlet End Comments
Headwall:	3		5	
Wingwall:	3	Spalling	2	N-2,Spalling, S has been replaced
Scour: (Circle One)	None Minor Moderate Severe		None Minor (Moderate) Severe	
Channel:	4		4	
Percent Full:	5%		0	

	Inlet End		Outlet End	
Silt:		Rock/Gravel: X	Silt:	Rock/Gravel:
Vegetation:	X	Other Debris:	Vegetation:	Other Debris:
Standing Water:	X	Inlet Marker:	Standing Water:	Outlet Marker:

Overall Inlet Condition: 3 **Overall Outlet Condition:** 3

Span Items:

	Rating	Comments		Rating	Comments
Invert:	9	Underwater/veg-unable to rate	Abutment:	4	
Ceiling:	4		Extension:	8	

Overall Span Condition: 4 General Spalling

Road Items:

	Rating	Comments		Rating	Comments
Pavement:	5		Shoulder:	4	
Embankment:	4	Minor loss behind wings			

Overall Road Condition: 4

Overall Rating:

General Culvert Rating: 4

Recommended Work: X Replacement ☐ Major Rehab ☐ Corrective Maint. ☐ Cyclical Maint.

Environmental Considerations:

General Comments: Exposed rebar, spalling all over fascia. Stackable wingwall repair holding.

APPENDIX E

GEOTECHNICAL INFORMATION

Carney Hollow Road Bridge Replacement
9163 Carney Hollow Road | Town of Springwater, New York
Terracon Project No. J5245107

70 Vantage Point Dr, Ste 1
Rochester, NY

Boring Log No. B-1

Location: See Exploration Plan

Latitude: 42.5829° Longitude: -77.6375°

Depth (Ft.)	Material Description	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (tsf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL-PL-PI
0.1	**TOPSOIL**									
	FILL - SILTY SAND WITH GRAVEL, brown			3-3-3-5 N=6						
				4-4-5-4 N=9						
5				3-7-9-5 N=16						
				7-6-5-6 N=11						
8.0	**SANDY SILT WITH GRAVEL (ML)**, brown, stiff			9-9-5-7 N=14						
10.0		▽								
10	**WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)**, gray and brown, loose to dense			30-19-26-29 N=45						
				20-7-8-10 N=15						
15				5-2-2-2 N=4						
				13-17-13-12 N=30						
				7-15-15-8 N=30						
20				6-9-18-14 N=27						
				7-6-9-14 N=15						
24.0	**SILTY SAND WITH GRAVEL (SM)**, brown, dense to very dense			12-20-24-51 N=44						
25				9-21-33-41 N=54						
				9-18-21-36 N=39						
30				6-11-45-50/4" N=56						
				42-50/2"						
34.0										
	LIMESTONE, gray, Limestone bolder present									
36.0										
35	**SILTY SAND WITH GRAVEL (SM)**, brown, dense to very dense			7-19-30-50/4" N=49						
				20-37-44-50/5" N=81						
40										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
▽ Groundwater encountered at 10' BGS while sampling

Drill Rig

Hammer Type
Automatic

Driller

Notes

Advancement Method
3.25 inch ID Hollow Stem Augers and 2 inch OD Split Barrel Sampler

Abandonment Method
Boring backfilled with Auger Cuttings and Pea gravel.

Logged by
P. Valenti

Boring Started
06-10-2024

Boring Completed
06-11-2024

70 Vantage Point Dr, Ste 1
Rochester, NY

Boring Log No. B-1

Location: See Exploration Plan

Latitude: 42.5829° Longitude: -77.6375°

Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (tsf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL-PL-PI
	SILTY SAND WITH GRAVEL (SM), brown, dense to very dense *(continued)*									
	45			43-40-47-50/5" N=87						
				38-50/5"						
	50									
				55-50/4"						
	55									
	Becomes gray			60-50/2"						
	60									
				82-50/1"						
	65									
				100/2"						
	70									
	73.3			100/4"						
	Split spoon sampler refusal at 73.3 Feet									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
Groundwater encountered at 10' BGS while sampling

Drill Rig

Hammer Type
Automatic

Driller

Notes

Advancement Method
3.25 inch ID Hollow Stem Augers and 2 inch OD Split Barrel Sampler

Abandonment Method
Boring backfilled with Auger Cuttings and Pea gravel.

Logged by
P. Valenti

Boring Started
06-10-2024

Boring Completed
06-11-2024

70 Vantage Point Dr, Ste 1
Rochester, NY

Boring Log No. B-2

Location: See Exploration Plan

Latitude: 42.5827° Longitude: -77.6375°

Depth (Ft.)	Graphic Log	Material Description	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (tsf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL-PL-PI
0.5		**ASPHALT**									
		FILL - SILTY SAND WITH GRAVEL, brown			3-2-3-3 N=5						
11.0		**SILTY SAND WITH GRAVEL (SM)**, brown, medium dense to very dense, Cobble/rock fragments present	▽		3-4-5-4 N=9						
					2-3-10-10 N=13						
					5-7-7-7 N=14						
					5-10-14-13 N=24						
					13-50 N=						
21.0		**WELL GRADED GRAVEL WITH SILT AND SAND**, brown, medium dense to dense, Cobble/rock fragments present	▽		10-17-13-18 N=30						
					11-29-10-7 N=39						
					1-3-8-7 N=11						
29.0		**SILTY SAND WITH GRAVEL (SM)**, brown and reddish brown, very dense, Cobble/rock fragments present			5-10-7-6 N=17						
					7-7-8-21 N=15						
					12-22-26-43 N=48						
					11-53-34-35 N=87						
					17-32-37-37 N=69						
					9-27-26-34 N=53						
					9-31-33-30 N=64						
					50-29-46-48						

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
▽ Groundwater encountered at 21' BGS while sampling.
▽ Groundwater encountered at 12.5' BGS after advancing the boring 30' BGS.

Drill Rig

Hammer Type
Automatic

Driller

Notes

Advancement Method
3.25 inch ID Hollow Stem Augers and 2 inch OD Split Barrel Sampler

Abandonment Method
Boring backfilled with Auger Cuttings and Pea gravel. Surface capped with no shrink grout.

Logged by
P. Valenti

Boring Started
06-12-2024

Boring Completed
06-12-2024

70 Vantage Point Dr, Ste 1
Rochester, NY

Boring Log No. B-2

Graphic Log	Location: See Exploration Plan Latitude: 42.5827° Longitude: -77.6375° Depth (Ft.)	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (tsf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL-PL-PI
	SILTY SAND WITH GRAVEL (SM), brown and reddish brown, very dense, Cobble/rock fragments present *(continued)*				N=75						
		45			12-23-37-50/4" N=60						
		50			21-50/4"						
	55.3	55			47-65-50/4"						
	Split spoon sampler refusal at 55.3 Feet										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
Groundwater encountered at 21' BGS while sampling.
Groundwater encountered at 12.5' BGS after advancing the boring 30' BGS.

Drill Rig

Hammer Type
Automatic

Driller

Notes

Advancement Method
3.25 inch ID Hollow Stem Augers and 2 inch OD Split Barrel Sampler

Abandonment Method
Boring backfilled with Auger Cuttings and Pea gravel. Surface capped with no shrink grout.

Logged by
P. Valenti

Boring Started
06-12-2024

Boring Completed
06-12-2024

APPENDIX F

HYDROLOGY / HYDRAULIC INFORMATION

JM Davidson Engineering, D.P.C.

753 Rowley Road, Suite 3
Victor, New York 14564
Phone: 716.453.1646

Memorandum

To:	Christopher Sichak, PE, Erdman Anthony
From:	Tiphaine Ketch, PE, CFM, JM Davidson Engineering, DPC
Date:	July 31, 2024
Subject:	PIN 4BNY.62 Carney Hollow Road Culvert over Carney Hollow Creek, Livingston County – Hydraulic Summary - DRAFT

JM Davidson Engineering, DPC (JMD) was subcontracted by Erdman Anthony to conduct a hydrologic and hydraulic analysis of the Carney Hollow Road culvert conveying Carney Hollow Creek, also known as Little Mill Creek, in the Town of Springwater, Livingston County. The culvert is located roughly 900 ft north of the intersection of Carney Hollow Road and County Line Road as shown in Figure 1. The existing culvert is deteriorating; therefore, it is being replaced as part of the BridgeNY program.

Figure 1: Project Location

Geomorphology

This segment of Carney Hollow Creek generally flows north to south within a small valley in the vicinity of the project. The creek meanders west to flow beneath Carney Hollow Road (a north-south roadway) before flowing south toward County Line Rd.

The land use around the culvert is rural-residential and agricultural land. The streambanks are heavily vegetated with trees and brush, with some fallen trees. The channel cross section is roughly trapezoidal with banks that are 3-5 ft high. The naturally armored channel substrate is comprised of gravel and cobble.

The existing culvert is a twin cell box culvert with two 8.0 ft high x 8.5 ft wide openings. There is some minor erosion at the downstream end of the invert slabs. Beyond the invert slabs, the channel exhibits a pool-riffle-pool pattern.

Photos of the project site are included in **Attachment A**.

Hydrology

According to USGS StreamStats, Carney Hollow Creek has a drainage area of 4.96 mi^2 to the project site, which is above the minimum 1.7 mi^2 drainage area for the Region 5[1] regression equations used by StreamStats. The drainage area is predominantly split between agricultural lands and wooded areas.

The flow results for StreamStats are shown in Table 1. In accordance with NYSDOT guidelines, the estimated peak discharges have been increased by 10% to account for future changes because of development and climate change.

The project area is not located within a Federal Emergency Management Agency (FEMA) Special Hazard Flood Area. No detailed FEMA information is available for use or comparison in the hydrologic or hydraulic analyses. Hydrologic calculations have been included in **Attachment B**.

Table 1: Estimated Peak Discharges

Return Interval	USGS StreamStats Discharges (cfs)	USGS StreamStats Discharges + 10% (cfs)	Design Discharges (cfs)
1.25-yr	183	201	**201**
2-yr	245	270	**270**
5-yr	441	485	**485**
10-yr	602	662	**662**
25-yr	831	914	**914**
50-yr	1030	1133	**1133**
100-yr	1230	1353	**1353**
500-yr	1780	1958	**1958**

[1] See Lumia, Freehafer, Smith, *"USGS Scientific Investigations Report 2006-5112 – Magnitude and Frequency of Floods in New York"*, 2006, Figure 18B, page 29.

Hydraulics

A hydraulic analysis was conducted for both the existing and proposed culvert structures using the US Army Corps of Engineers HEC-RAS hydraulics program, Version 6.3.1. The results were compared to the criteria and design requirements established in Chapter 8 of the NYSDOT Highway Design Manual.

The following criteria were established for the design of the culvert:

NYSDOT Culvert Design Criteria

- Non-Critical Highway
  - Design Storm – 50-yr
  - Check Storm – 100-yr
- Allowable Headwater/Depth (AHW/D) Ratio ≤ 1.0 @ Design Storm
- Headwater Elevation Below Subbase @ Check Storm

NYS Department of Environmental Conservation

- Minimum culvert span = 1.25 x active channel width (also USACE criteria)
- Minimum culvert embedment with channel bed material = 20% of rise

Existing Conditions

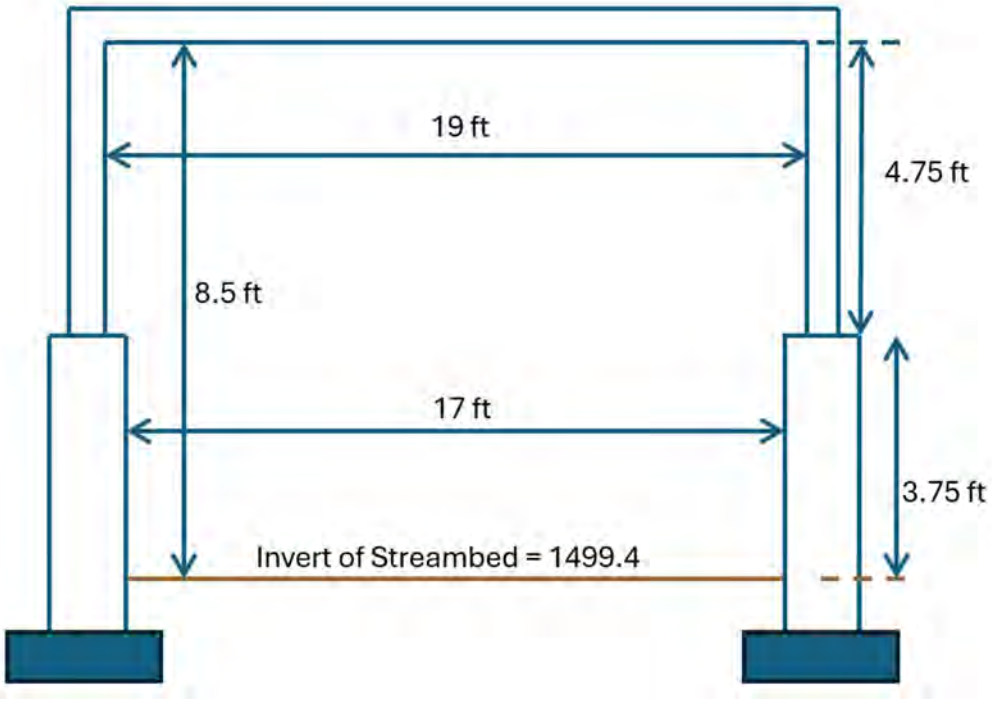
The hydraulic model for Carney Hollow Creek extends ~2,000 ft downstream and 900 ft upstream of the Carney Hollow Road culvert. Cross section topography was taken from 1-meter resolution Digital Elevation Models downloaded from the NYS GIS Clearinghouse and supplemented with project survey. The project culvert was modeled as a twin cell box culvert with two openings measuring 8.0 ft high and 8.5 ft wide, separated by 1 ft. The concrete headwall and wingwalls correspond to an Entrance Loss Coefficient of 0.5. The twin 4.5 ft diameter steel pipes conveying Carney Hollow Creek beneath County Line Road, ~1,400 ft downstream, were also included in the hydraulic model to account for any backwater that could affect the project site.

The results of the existing conditions analysis show that the culvert design storm (50-yr) does not meet NYSDOT AHW/D criteria with a HW/D ratio of 1.07. The check storm water surface elevation is just below the estimated bottom of the subbase. The culvert flows under outlet control for all flow conditions.

Proposed Conditions

The proposed conditions hydraulic model was created by duplicating the existing conditions model and modifying the Carney Hollow Road structure to reflect the preferred alternative of a precast three-sided rigid frame with a 19 ft span supported on concrete pedestal footings. The span between the concrete pedestals will be a minimum of 17 ft as shown in Figure 2. Since the span varies from 17-19 ft, the culvert span was modeled as 18 ft in HEC-RAS. All other parameters remain unchanged in the proposed conditions model.

Figure 2: Proposed Hydraulic Opening



The proposed hydraulic opening geometry results in a slight decrease to headwater elevations for both the design and check storms. The modeled events are conveyed through the proposed culvert and satisfy the design storm and check storm criteria in Chapter 8 of the Highway Design Manual.

Results

NYSDOT Culvert Criteria

Table 2 summarizes the hydraulic results of the existing and proposed culvert comparison with respect to NYSDOT Culvert Design Criteria.

Table 2: Hydraulic Results Comparison – NYSDOT Culvert Criteria

Design Parameter	Existing	Proposed
Shape	Twin Box	Box
Material	Concrete	Concrete
Span, ft	8.5 (single)/17 (combined)	19*
Rise, ft	8.0	8.5
Length, ft	34	34
Upstream Invert	1499.4	1499.4
Downstream Invert	1499.3	1499.3
Slope	0.294%	0.294%
Bottom of Subbase Elevation, ft	1509 (estimated)	1509 (estimated)
Design Storm – 50-yr		
Headwater WSEL	1507.92	1507.8
Headwater Depth	8.52	8.4
HW/D Ratio	1.07	0.99
AHW/D Ratio ≤ 1.0?	No	Yes
Outlet Velocity, ft/s	9.97	9.42
Check Storm – 100-yr		
Headwater WSEL	1508.96	1508.71
Headwater Depth, ft	9.56	9.31
Freeboard to Subbase, ft	0.04	0.29
Headwater below Subbase?	Yes	Yes
Outlet Velocity, ft/s	11.25	10.62

*17 ft minimum, 19 ft maximum. Modeled as 18 ft in HEC-RAS.

NYSDEC/USACE Criteria

The proposed three-sided frame culvert will have a natural bottom, which meets NYSDEC/USACE channel embedment criteria.

The proposed 17 ft span between the footing pedestals meets the 1.25 x ordinary high water width requirement. The ordinary high water width was determined in the field (by others) as 12 ft; therefore, a span length ≥ 15 ft will satisfy this criterion.

Scour Protection

Scour calculations will be included in the final version of the Hydraulic Summary Memo.

Summary

Based on the analyses conducted, the proposed three-sided, precast, rigid frame with a 19 ft span, supported on concrete footing pedestals with a minimum 17 ft span, meets NYSDOT culvert design criteria as shown in Table 2.

Headwater elevations and outlet velocities are slightly lowered as a result of the proposed culvert geometry. The culvert also meets NYSDEC/USACE criteria for a natural bottom and minimum span length based on the ordinary high water width for Carney Hollow Creek.

Attachment A

Photos

Photo 1: Looking upstream from culvert

Photo 2: Looking at upstream culvert elevation.

Photo 3: Looking downstream from culvert.

Photo 4: Looking at downstream culvert elevation.

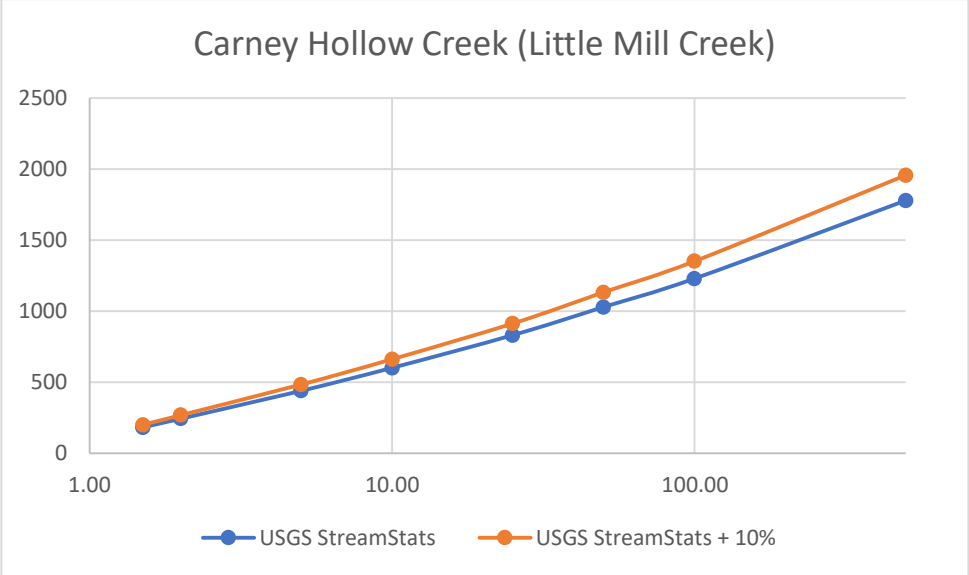
Photo 5: Upstream elevation of culvert pipes carrying County Line Road.

Attachment B

Hydrology Documentation

Carney Hollow Creek

Return Period (years)	StreamStats (cfs)	StreamStats + 10% (cfs)
1.50	183	201
2	245	270
5	441	485
10	602	662
25	831	914
50	1030	1133
100	1230	1353
500	1780	1958



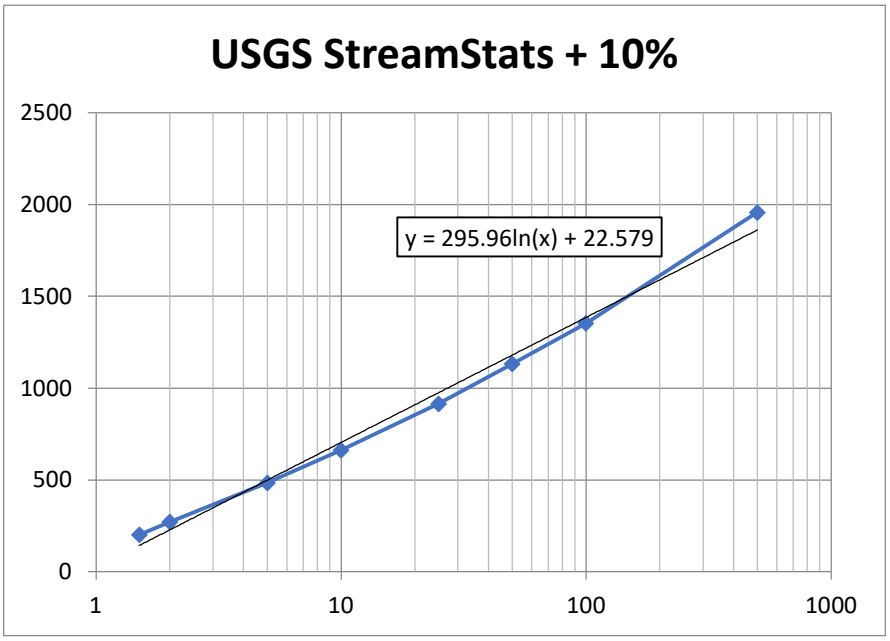
JMDavidson Engineering, D.P.C.

By: TAK Date: 7/9/2024

Regression Analysis for 2.33-yr Flow from USGS StreamStats + 10%

Return Period (yrs)	USGS Flow (cfs)
1.5	201
2	270
5	485
10	662
25	914
50	1133
100	1353
500	1958

2.33	**273**



StreamStats Report-Carney Hollow Road

Region ID: NY
Workspace ID: NY20231208184655746000
Clicked Point (Latitude, Longitude): 42.58277, -77.63757
Time: 2023-12-08 13:47:15 -0500

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPCM	Mean basin slope determined by summing lengths of all contours in basin mulitplying by contour interval and dividing product by drainage area	377	feet per mi
CENTROIDX	Basin centroid horizontal (x) location in state plane coordinates	283300.9	meters
CENTROIDY	Basin centroid vertical (y) location in state plane units	4721337.2	meters
CONTOUR	Total length of all elevation contours in drainage area in miles	18.7	miles
CSL1085LO	10-85 slope of lower half of main channel in feet per mile.	60	feet per mi
CSL1085UP	10-85 slope of upper half of main channel in feet per mile.	112	feet per mi
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	90.7	feet per mi
DRNAREA	Area that drains to a point on a stream	4.96	square miles
EL1200	Percentage of basin at or above 1200 ft elevation	100	percent
FOREST	Percentage of area covered by forest	47.1	percent
JULAVPRE	Mean July Precipitation	3.59	inches

Parameter Code	Parameter Description	Value	Unit
JUNAVPRE	Mean June Precipitation	4.23	inches
JUNMAXTMP	Maximum June Temperature, in degrees F	73.4	degrees F
LAGFACTOR	Lag Factor as defined in SIR 2006-5112	0.0632	dimensionless
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	3.38	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	0.29	percent
LENGTH	Length along the main channel from the measuring location extended to the basin divide	5.26	miles
MAR	Mean annual runoff for the period of record in inches	12.2	inches
MAYAVPRE	Mean May Precipitation	3.36	inches
MXSNO	50th percentile of seasonal maximum snow depth from Northeast Regional Climate Center atlas by Cember and Wilks, 1993	11.9	inches
OUTLETX	Basin outlet horizontal (x) location in state plane coordinates	283565	feet
OUTLETY	Basin outlet vertical (y) location in state plane coordinates	4717855	feet
PRECIP	Mean Annual Precipitation	31.5	inches
PRJUNAUG00	Basin average mean precip for June to August from PRISM 1971-2000	11.8	inches
SLOPERATIO	Ratio of main channel slope to basin slope as defined in SIR 2006-5112	0.24	dimensionless
SSURGOA	Percentage of area of Hydrologic Soil Type A from SSURGO	2.66	percent
SSURGOB	Percentage of area of Hydrologic Soil Type B from SSURGO	20.7	percent
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	0	percent

Peak-Flow Statistics

Peak-Flow Statistics Parameters [100.0 Percent (4.96 square miles) 2006 Full Region 5]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.96	square miles	1.7	4773
CSL10_85	Stream Slope 10 and 85 Method	90.7	feet per mi	2.76	222.55
PRECIP	Mean Annual Precipitation	31.5	inches	31.64	49.79

Peak-Flow Statistics Disclaimers [100.0 Percent (4.96 square miles) 2006 Full Region 5]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [100.0 Percent (4.96 square miles) 2006 Full Region 5]

Statistic	Value	Unit
80-percent AEP flood	141	ft^3/s

Statistic	Value	Unit
66.7-percent AEP flood	183	ft^3/s
50-percent AEP flood	245	ft^3/s
20-percent AEP flood	441	ft^3/s
10-percent AEP flood	602	ft^3/s
4-percent AEP flood	831	ft^3/s
2-percent AEP flood	1030	ft^3/s
1-percent AEP flood	1230	ft^3/s
0.5-percent AEP flood	1460	ft^3/s
0.2-percent AEP flood	1780	ft^3/s

Peak-Flow Statistics Citations

Lumia, Richard, Freehafer, D.A., and Smith, M.J.,2006, Magnitude and Frequency of Floods in New York: U.S. Geological Survey Scientific Investigations Report 2006–5112, 152 p. (http://pubs.usgs.gov/sir/2006/5112/)

Bankfull Statistics

Bankfull Statistics Parameters [Bankfull Region 6 SIR2009 5144]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.96	square miles	1.02	290

Bankfull Statistics Parameters [Appalachian Highlands D Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.96	square miles	0.07722	940.1535

Bankfull Statistics Parameters [Appalachian Plateaus P Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.96	square miles	0.081081	536.995602

Bankfull Statistics Parameters [USA Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.96	square miles	0.07722	59927.7393

Bankfull Statistics Flow Report [Bankfull Region 6 SIR2009 5144]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PIL	PIU
Bankfull Area	50.8	ft^2	19.2	135
Bankfull Depth	1.54	ft	0.628	3.78
Bankfull Streamflow	185	ft^3/s	33.1	1030
Bankfull Width	33.1	ft	12.7	86.1

Bankfull Statistics Flow Report [Appalachian Highlands D Bieger 2015]

Statistic	Value	Unit
Bieger_D_channel_width	29.5	ft
Bieger_D_channel_depth	1.78	ft
Bieger_D_channel_cross_sectional_area	53.2	ft^2

Bankfull Statistics Flow Report [Appalachian Plateaus P Bieger 2015]

Statistic	Value	Unit
Bieger_P_channel_width	31.3	ft
Bieger_P_channel_depth	1.79	ft
Bieger_P_channel_cross_sectional_area	55.5	ft^2

Bankfull Statistics Flow Report [USA Bieger 2015]

Statistic	Value	Unit
Bieger_USA_channel_width	21.8	ft
Bieger_USA_channel_depth	1.7	ft
Bieger_USA_channel_cross_sectional_area	40.6	ft^2

Bankfull Statistics Flow Report [Area-Averaged]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

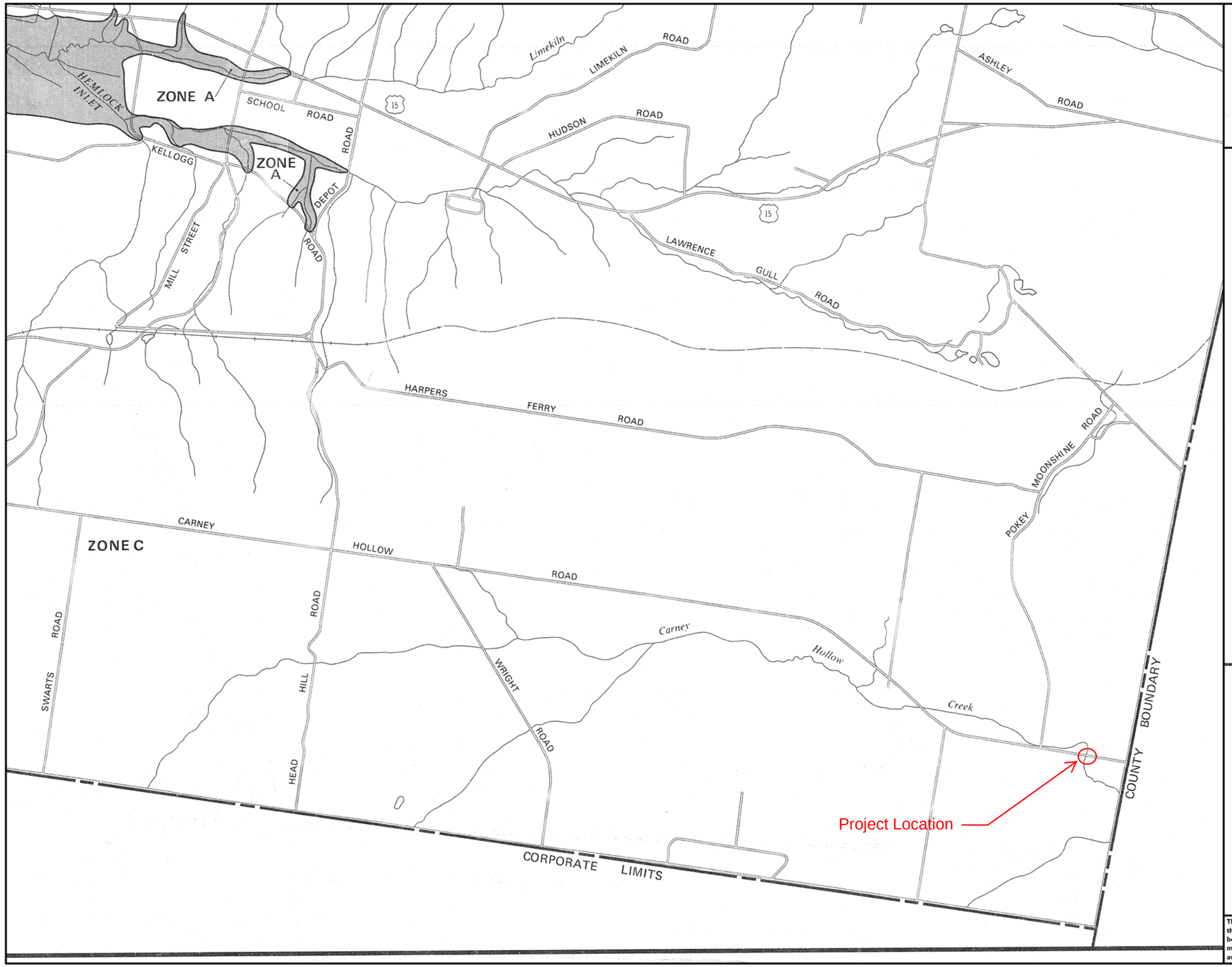
Statistic	Value	Unit	PIL	PIU
Bankfull Area	50.8	ft^2	19.2	135
Bankfull Depth	1.54	ft	0.628	3.78
Bankfull Streamflow	185	ft^3/s	33.1	1030
Bankfull Width	33.1	ft	12.7	86.1
Bieger_D_channel_width	29.5	ft		
Bieger_D_channel_depth	1.78	ft		
Bieger_D_channel_cross_sectional_area	53.2	ft^2		
Bieger_P_channel_width	31.3	ft		
Bieger_P_channel_depth	1.79	ft		
Bieger_P_channel_cross_sectional_area	55.5	ft^2		
Bieger_USA_channel_width	21.8	ft		
Bieger_USA_channel_depth	1.7	ft		
Bieger_USA_channel_cross_sectional_area	40.6	ft^2		

Bankfull Statistics Citations

Mulvihill, C.I., Baldigo, B.P., Miller, S.J. , and DeKoskie, Douglas,2009, Bankfull Discharge and Channel Characteristics of Streams in New York State: U.S. Geological Survey Scientific Investigations Report 2009-5144, 51 p. (http://pubs.usgs.gov/sir/2009/5144/)

Bieger, Katrin; Rathjens, Hendrik; Allen, Peter M.; and Arnold, Jeffrey G.,2015, Development and Evaluation of Bankfull Hydraulic Geometry Relationships for the Physiographic Regions of the United States, Publications from USDA-ARS / UNL Faculty, 17p. (https://digitalcommons.unl.edu/usdaarsfacpub/1515?utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign=PDFCoverPage

Application Version: 4.19.1
StreamStats Services Version: 1.2.22
NSS Services Version: 2.3.2



APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

TOWN OF
SPRINGWATER,
NEW YORK
LIVINGSTON COUNTY

ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
360390 0005 B

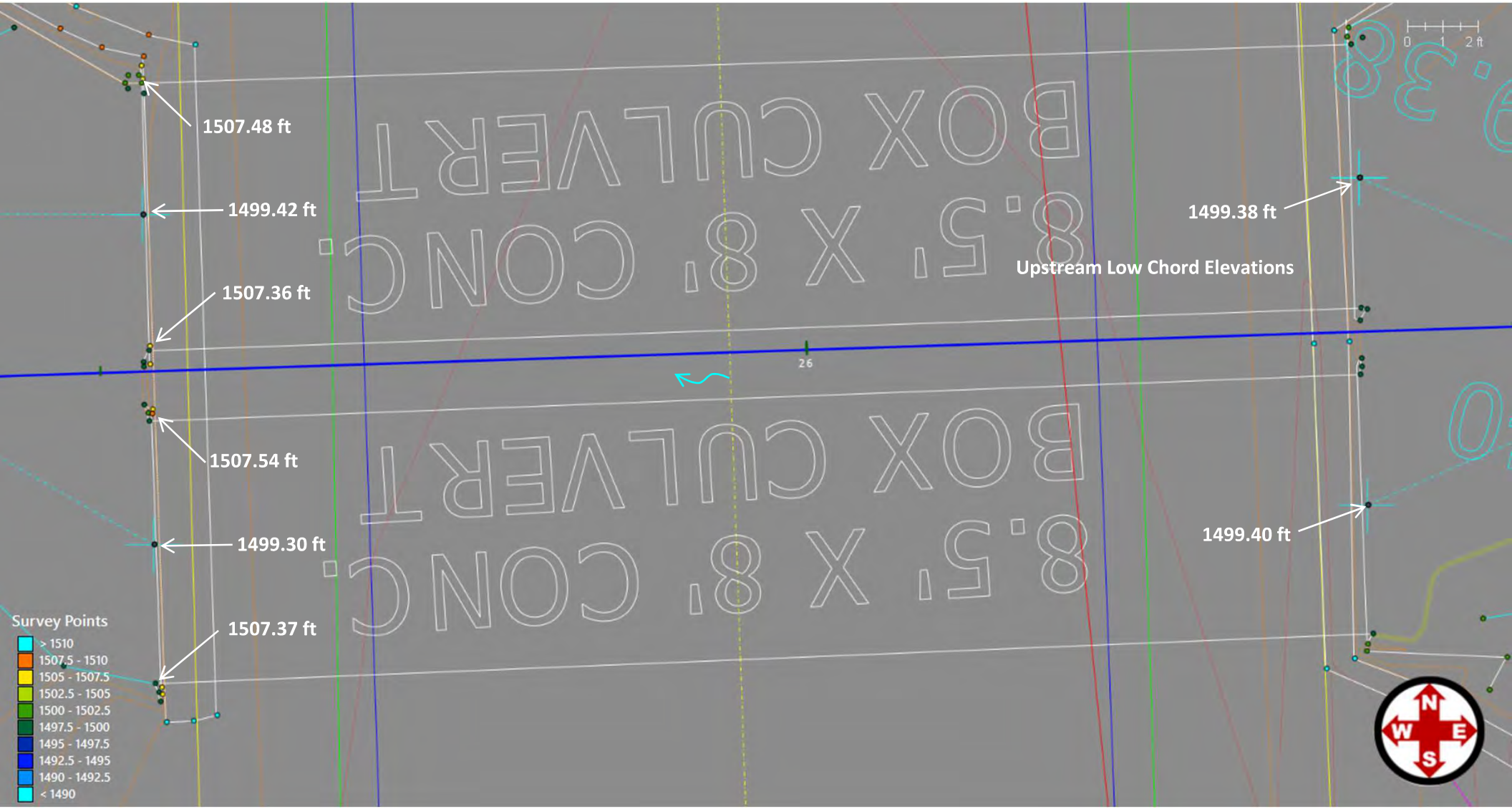
EFFECTIVE DATE:
AUGUST 24, 1984

Federal Emergency Management Agency

Attachment C

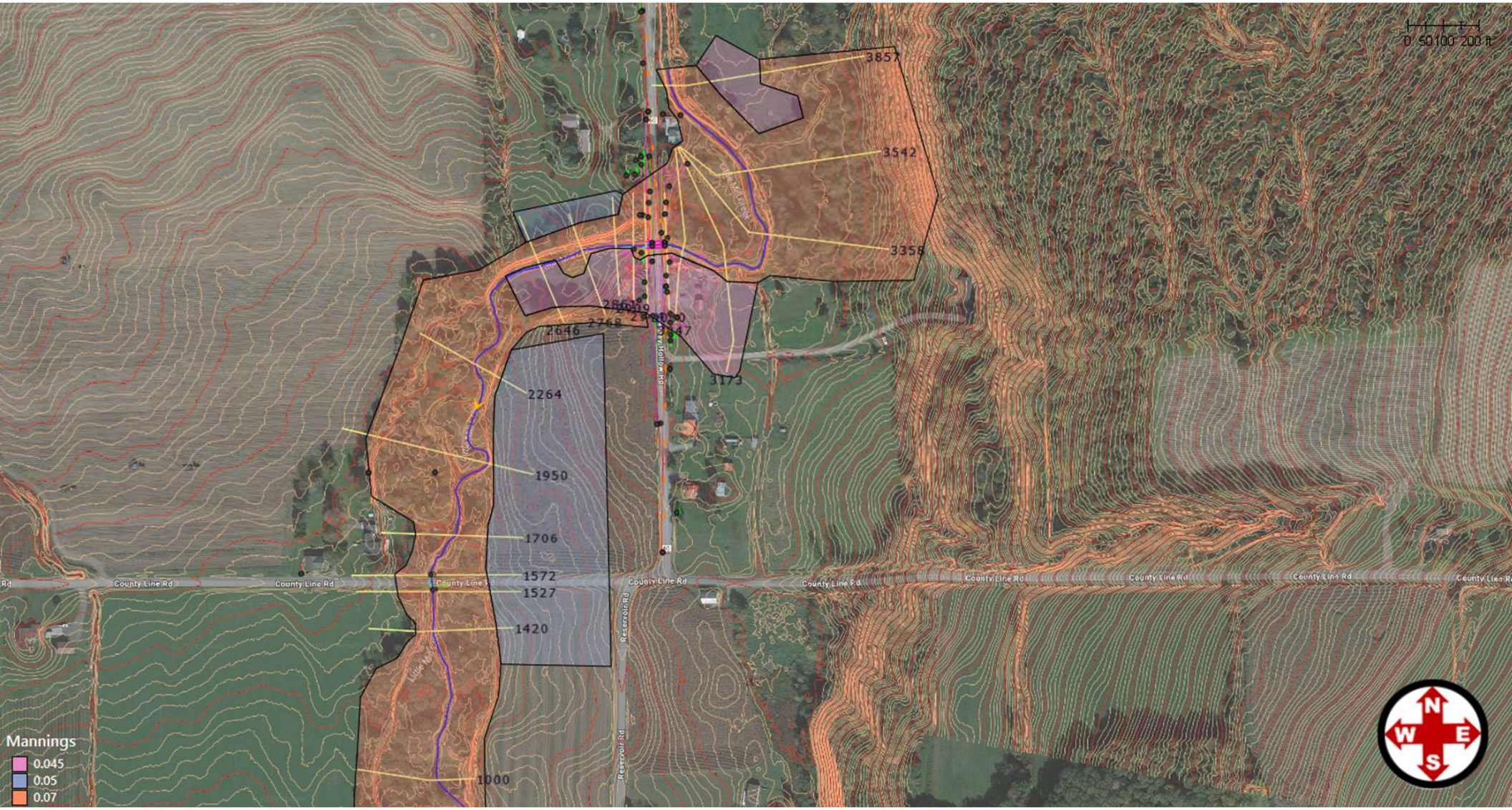
HEC-RAS Results

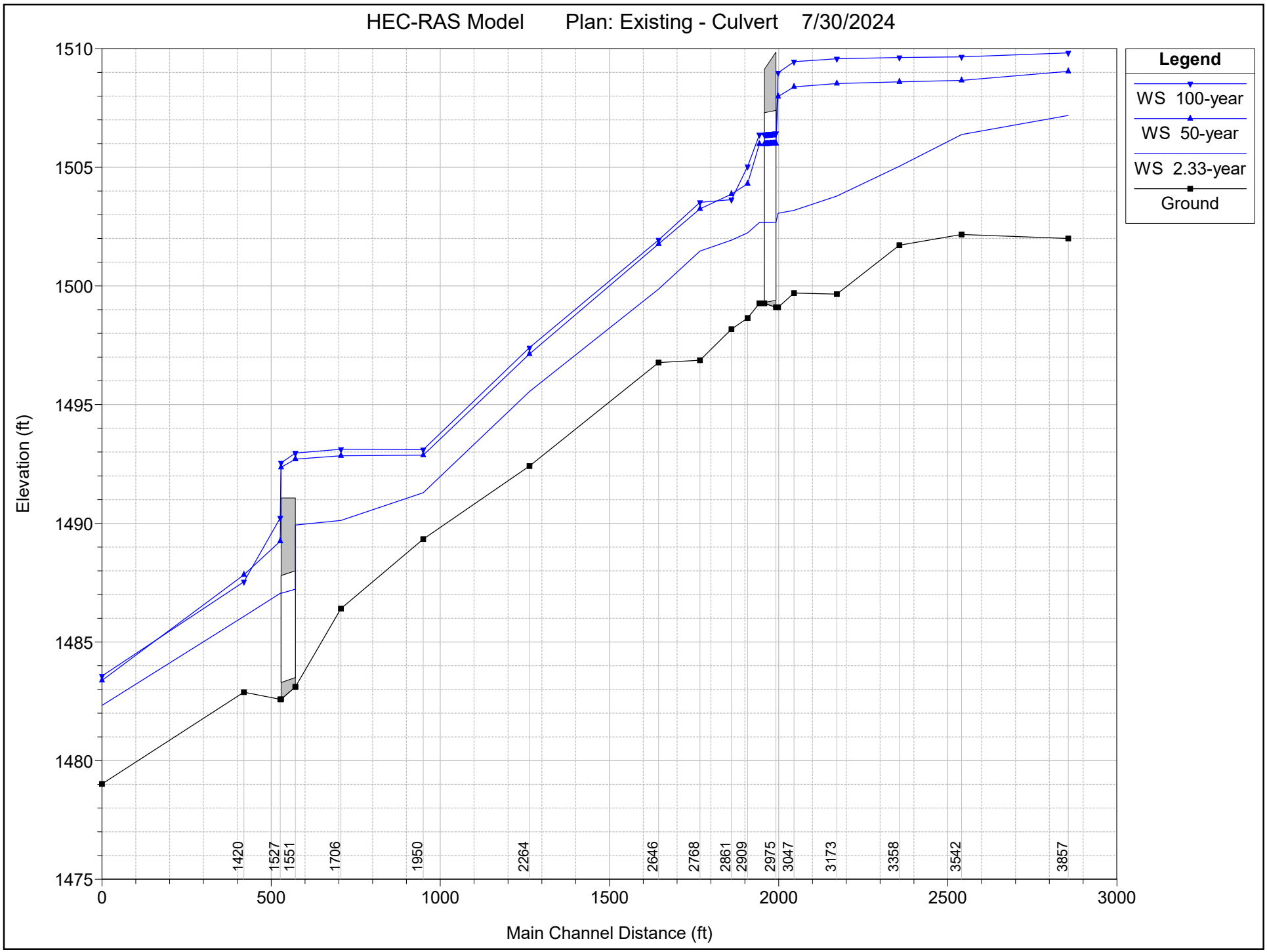
Survey Elevations at Structure



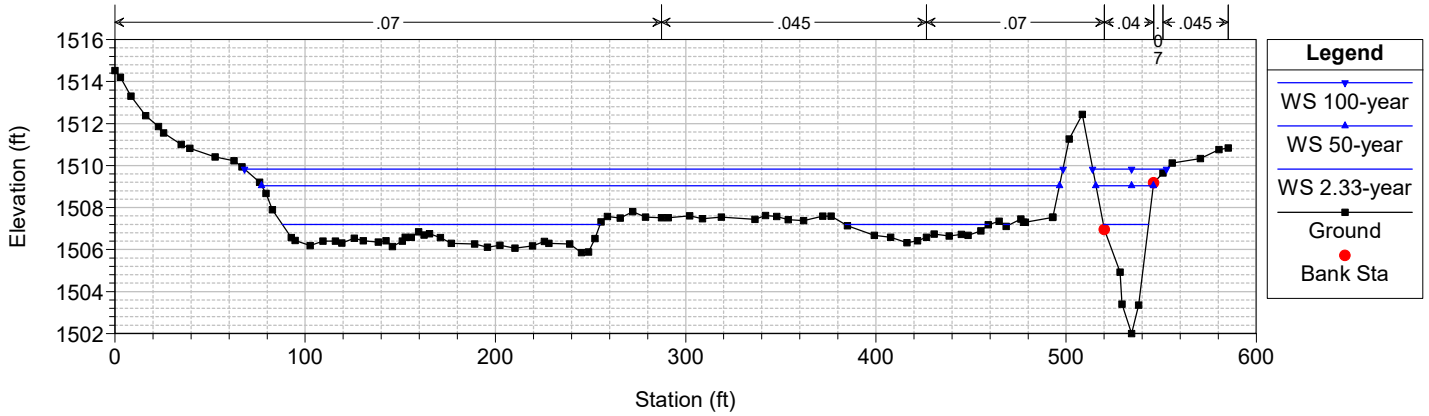
HEC-RAS Section Layout with 100-yr Floodplain & Ineffective Flow Lines (shown in red)

HEC-RAS Section Layout with Manning's "n" Definitions

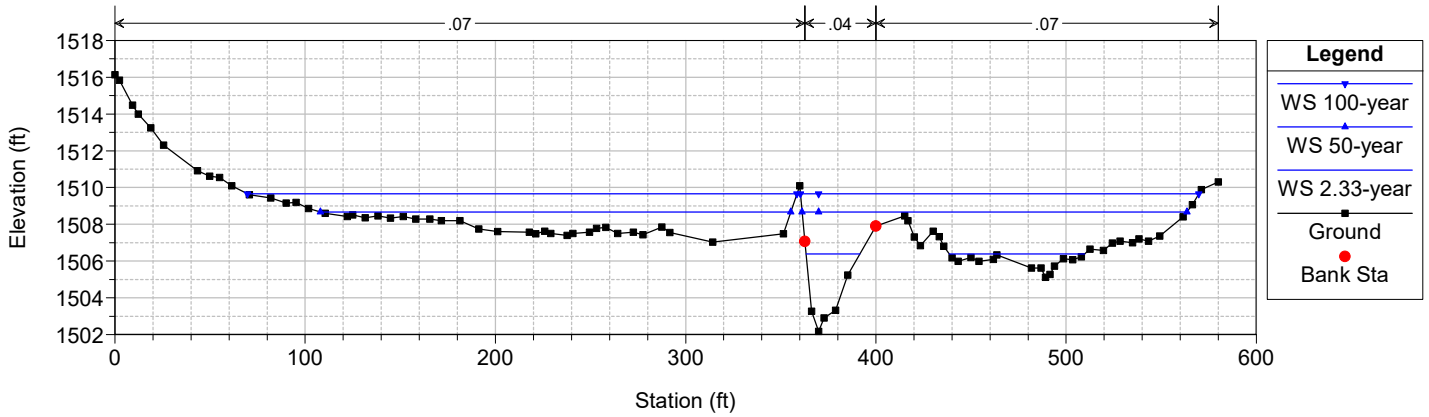



HEC-RAS Model Plan: Existing - Culvert 7/30/2024
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Elevation (ft)
Main Channel Distance (ft)
1510
1505
1500
1495
1490
1485
1480
1475
0
500
1000
1500
2000
2500
3000
1420
1527
1551
1706
1950
2264
2646
2768
2861
2909
2975
3047
3173
3358
3542
3857

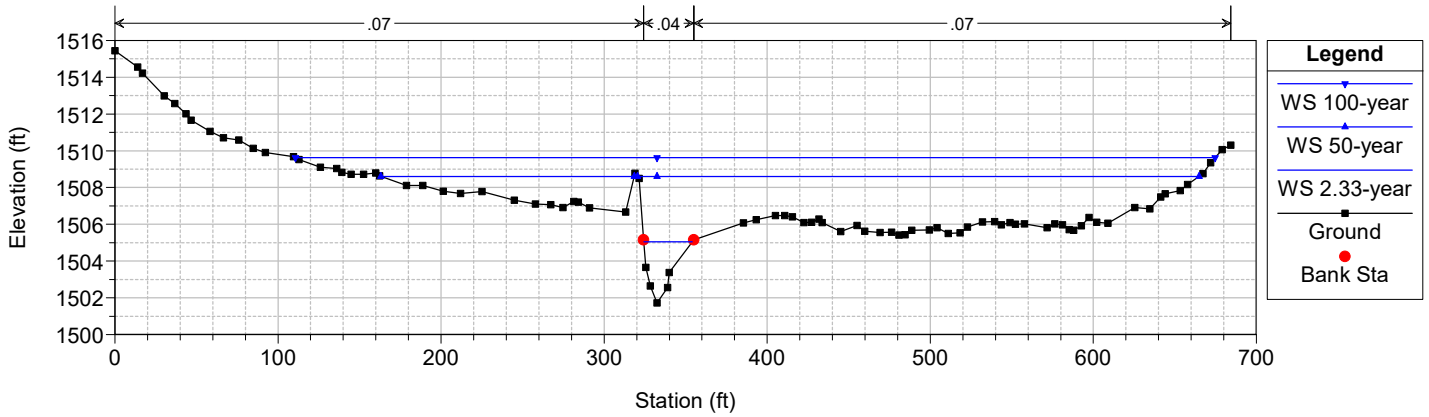
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



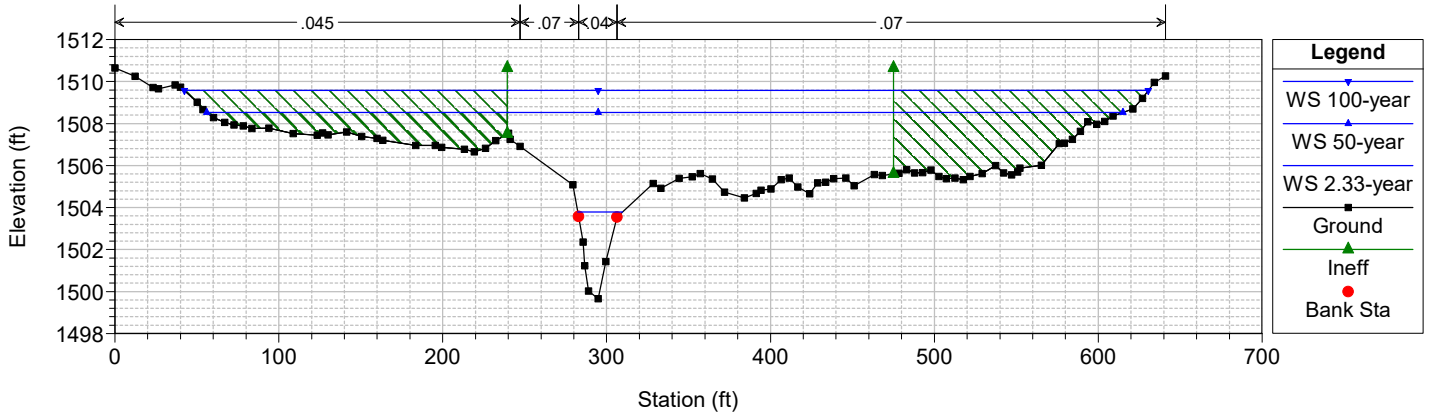
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



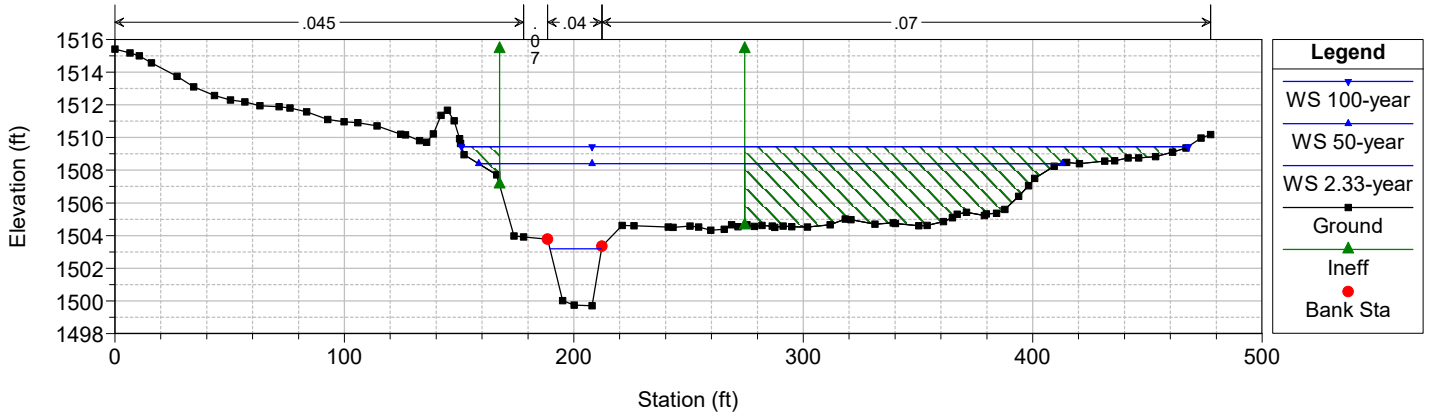
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



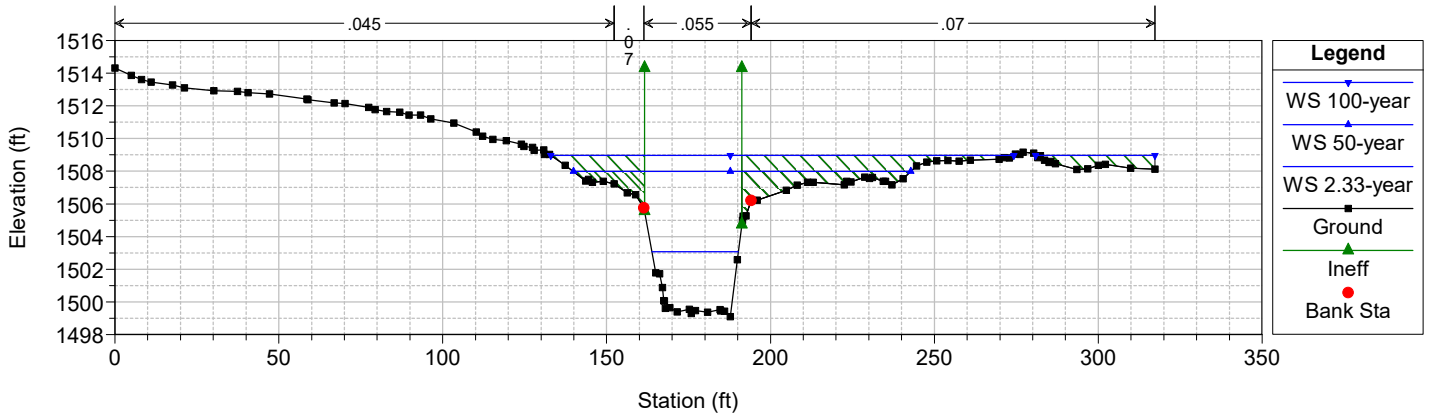
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



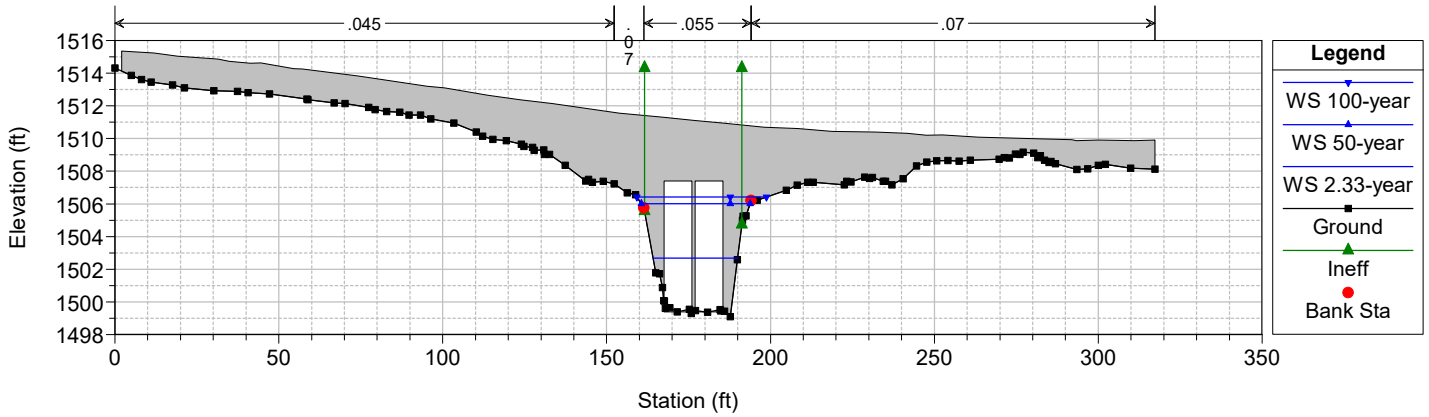
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



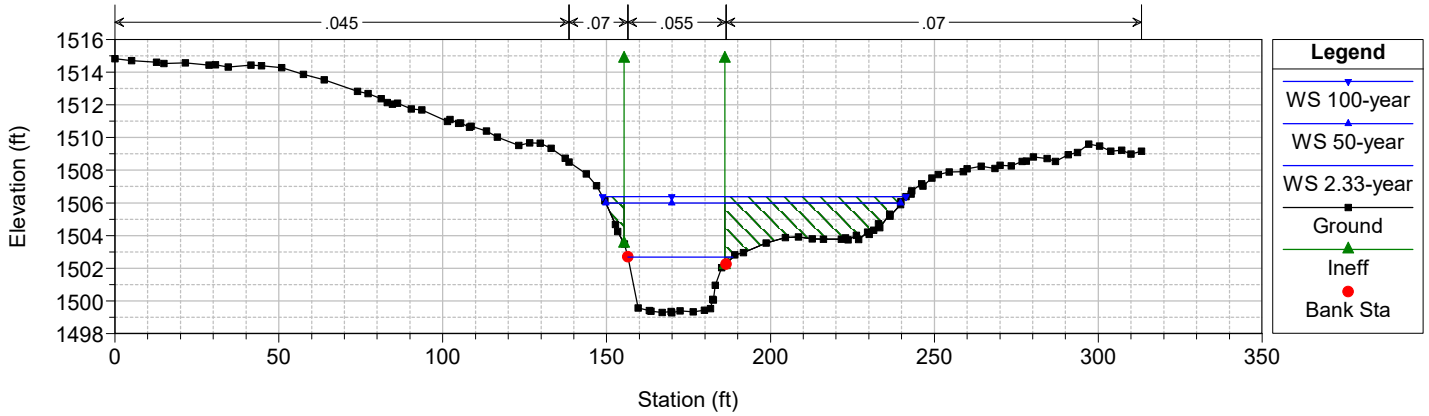
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



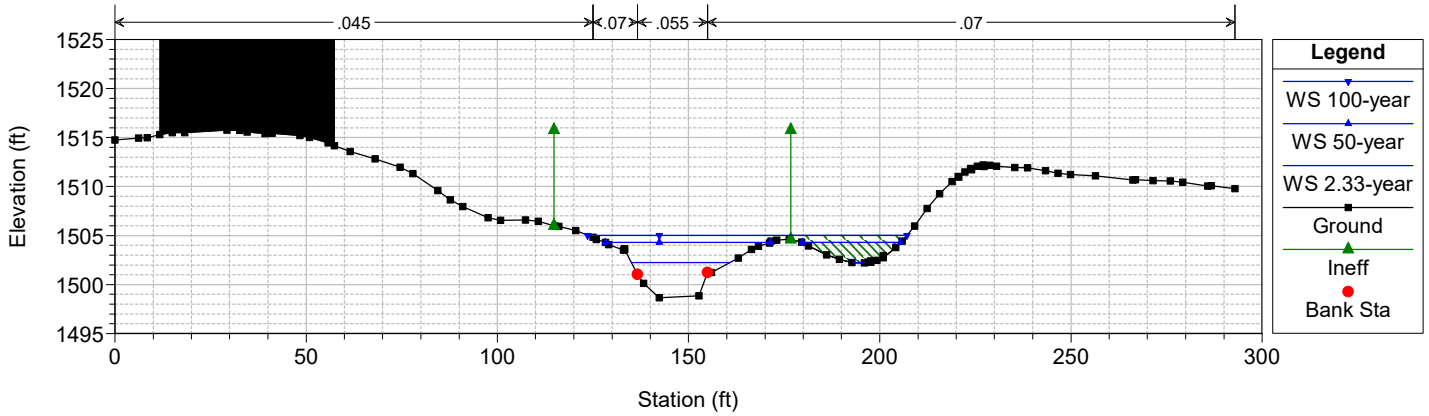
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



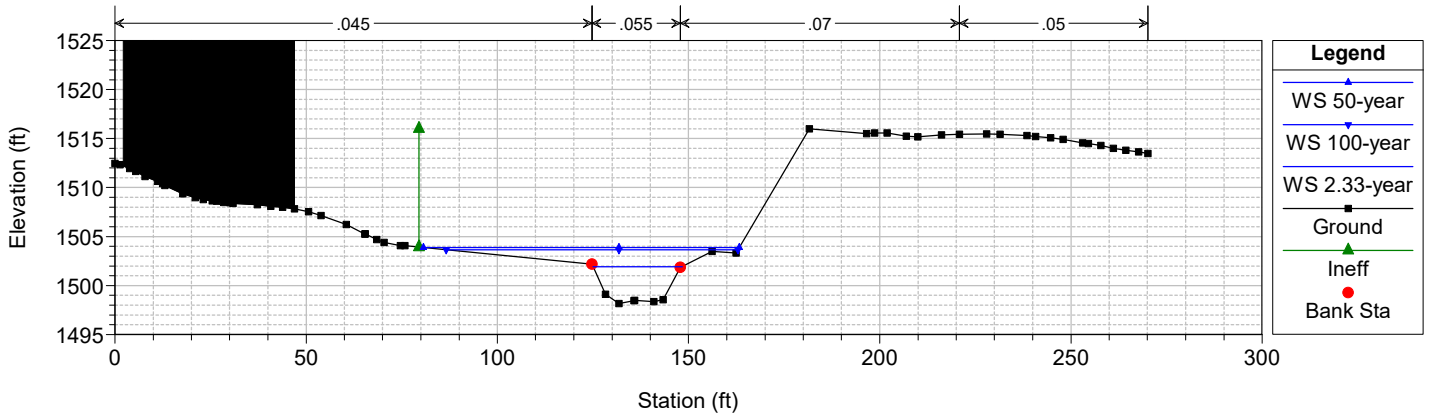
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



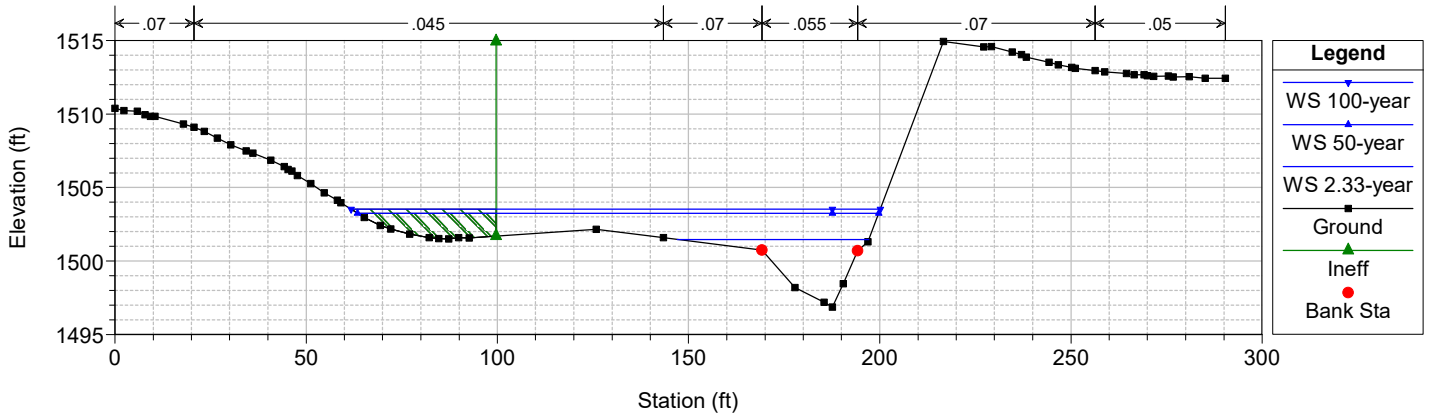
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



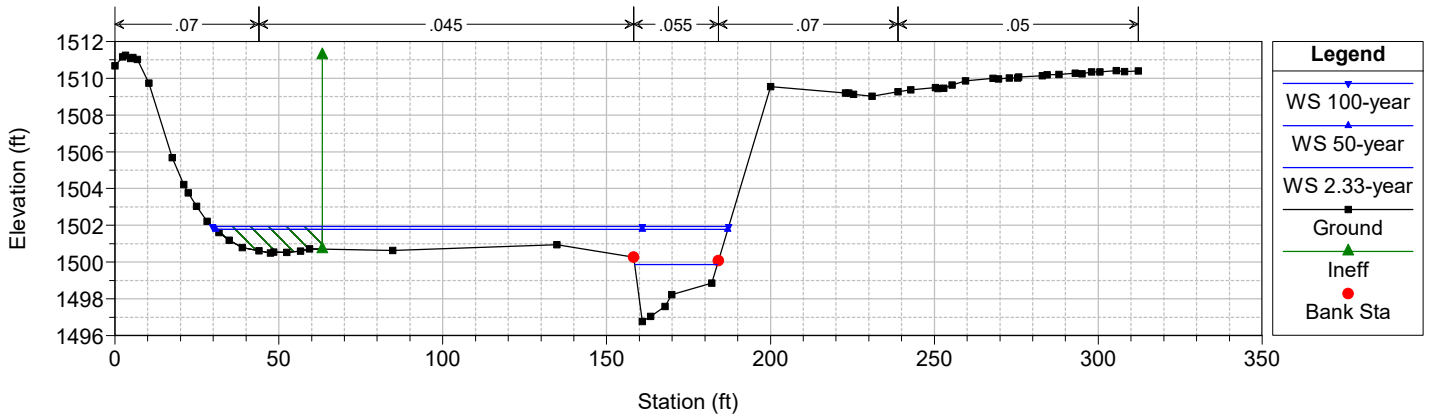
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



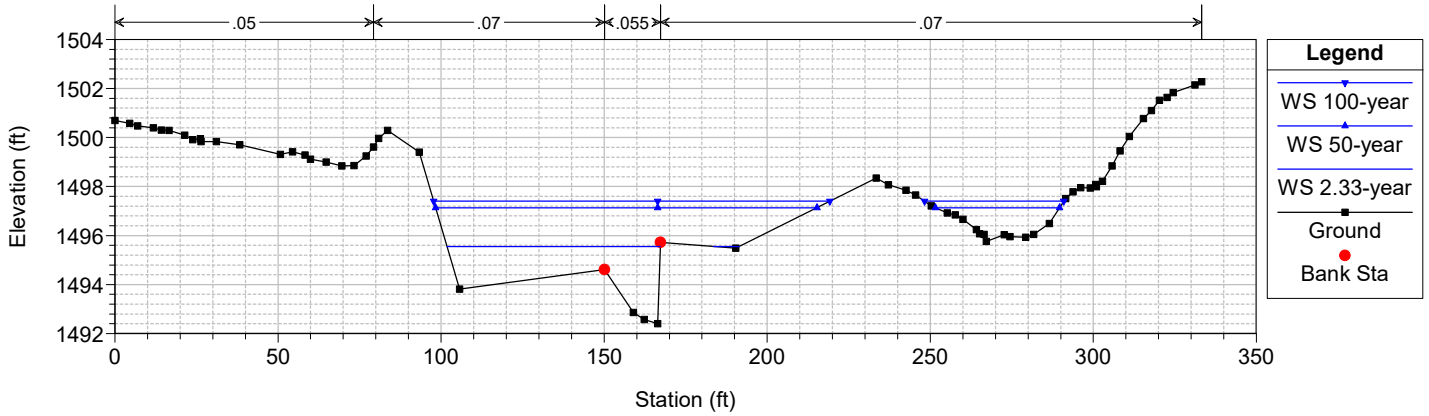
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



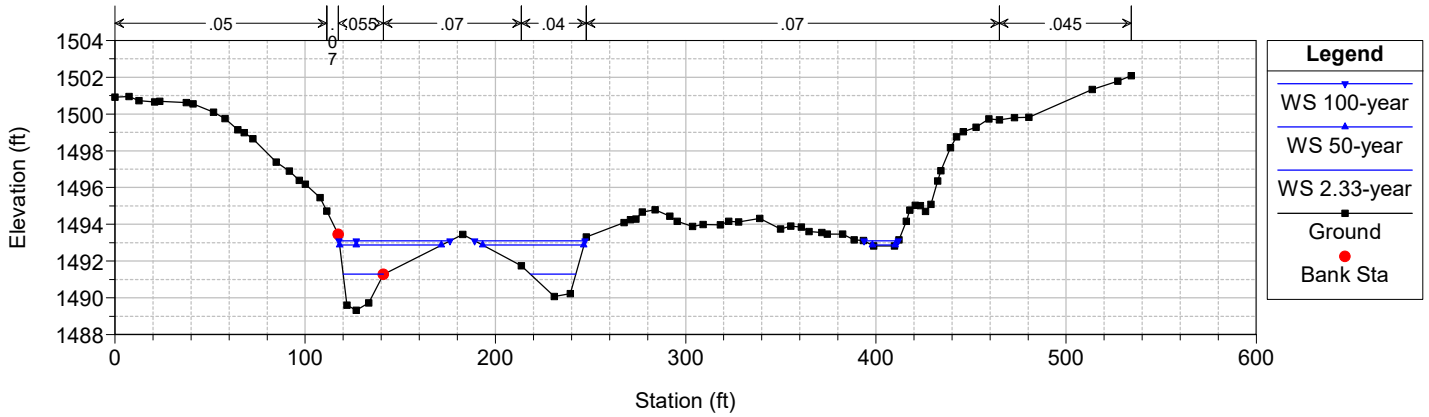
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



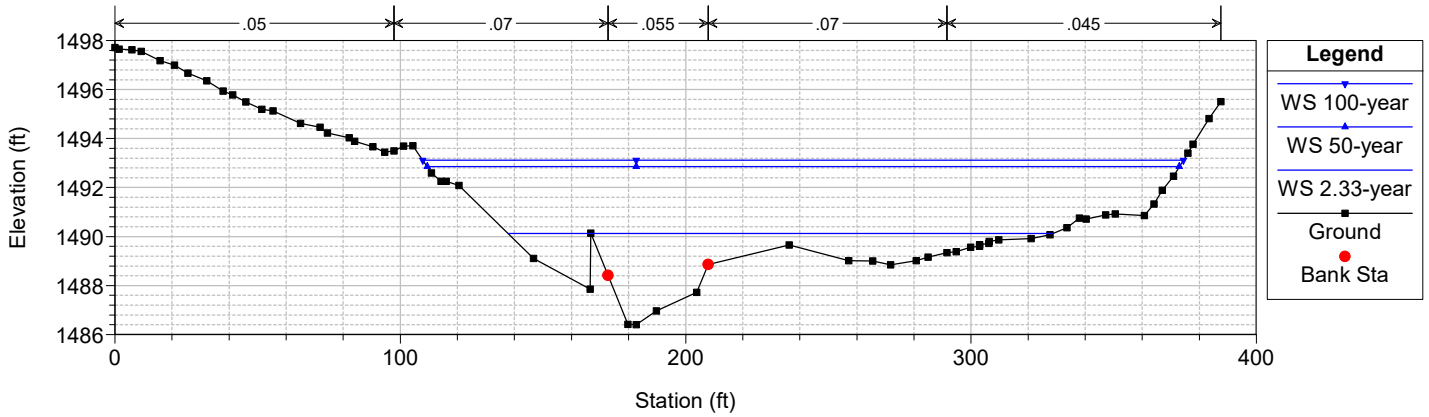
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



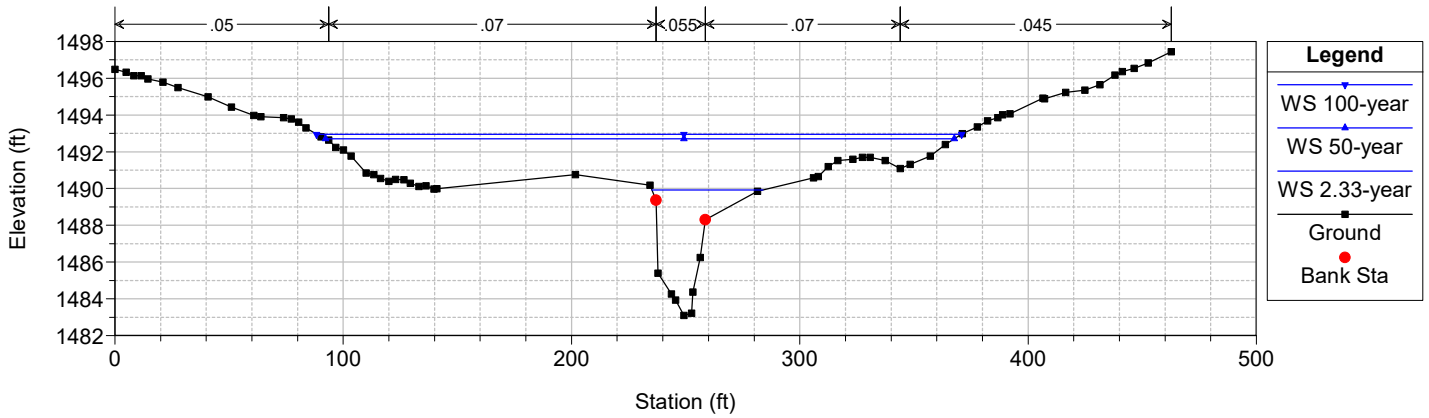
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



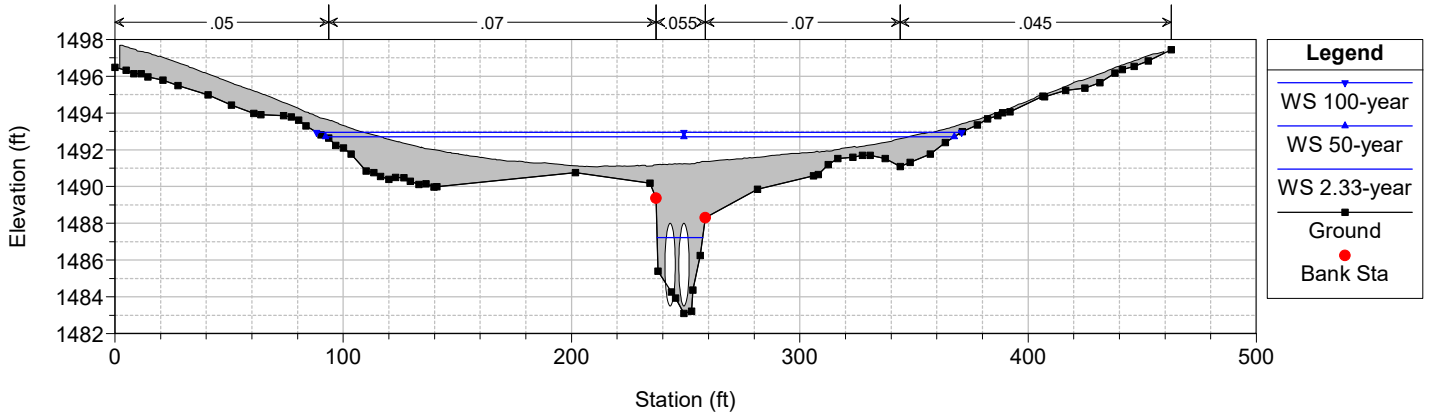
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



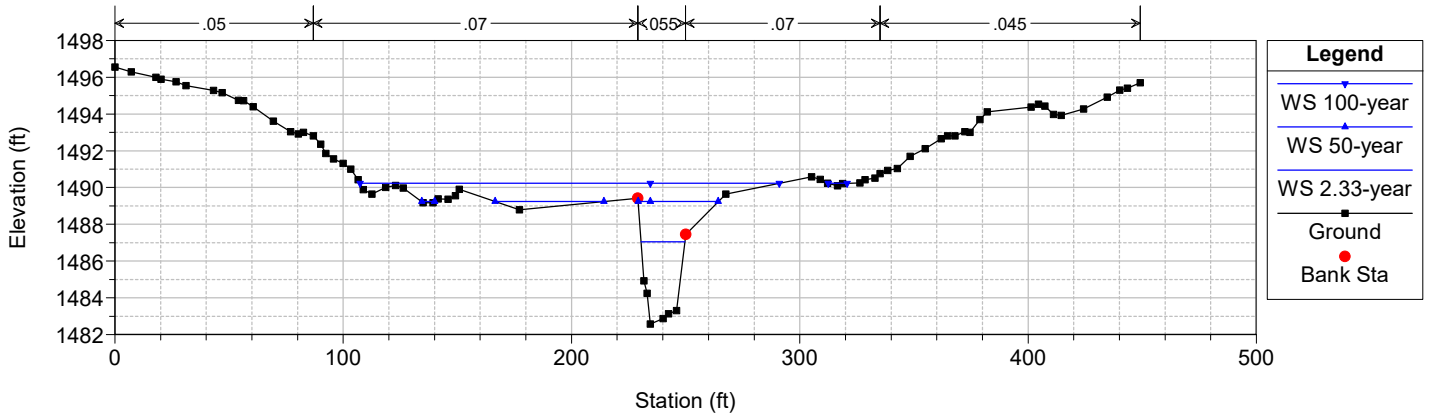
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



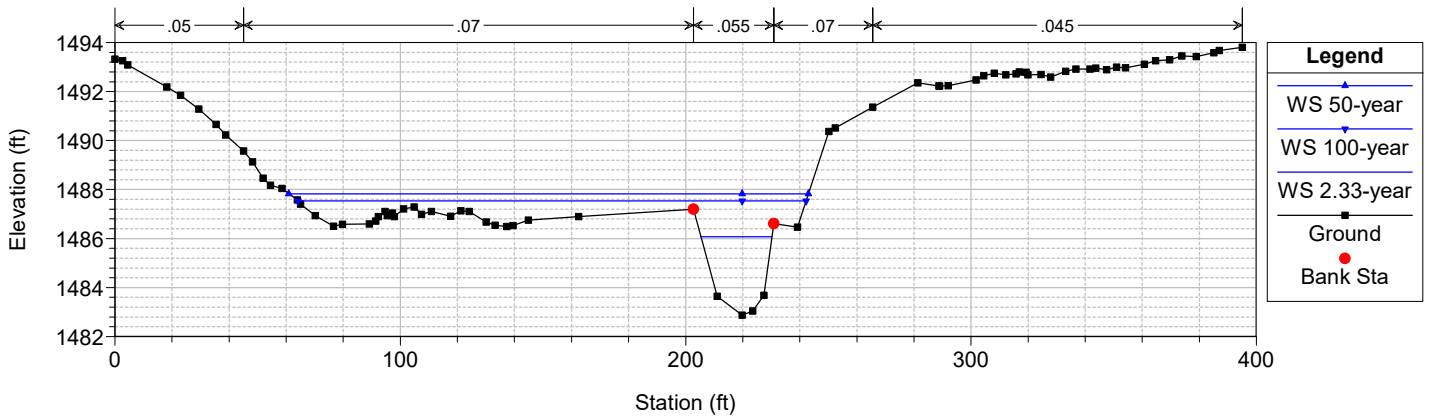
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



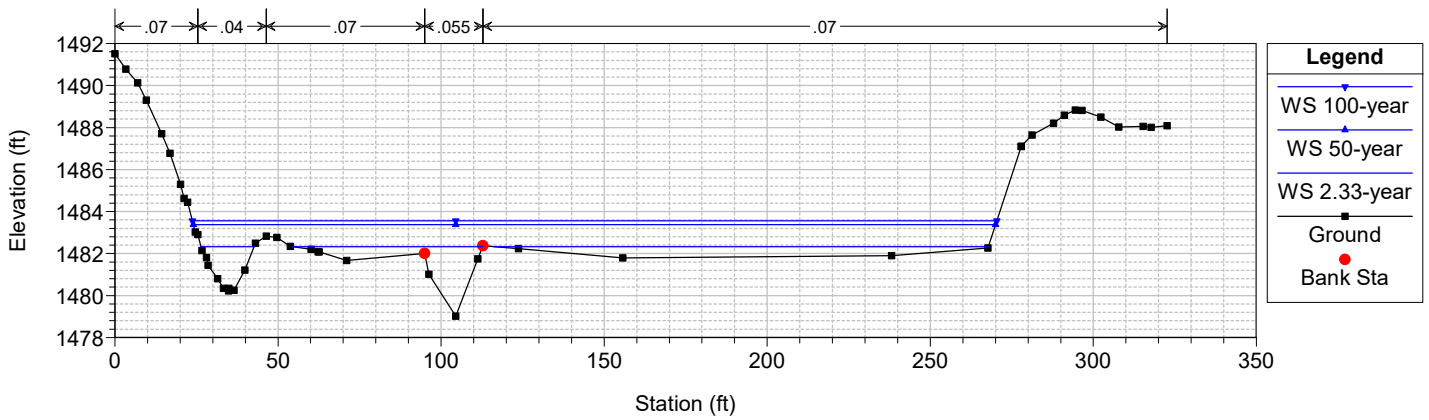
HEC-RAS Model Plan: Existing - Culvert 7/30/2024



HEC-RAS Model Plan: Existing - Culvert 7/30/2024



HEC-RAS Model Plan: Existing - Culvert 7/30/2024



Plan: Existing - Culvert Little Mill Crk Carney Hollow RS: 2975 Culv Group: Culvert #1 Profile: 2.33-ye

Q Culv Group (cfs)	273.00	Culv Full Len (ft)	
# Barrels	2	Culv Vel US (ft/s)	4.90
Q Barrel (cfs)	136.50	Culv Vel DS (ft/s)	4.75
E.G. US. (ft)	1503.24	Culv Inv El Up (ft)	1499.40
W.S. US. (ft)	1503.06	Culv Inv El Dn (ft)	1499.30
E.G. DS (ft)	1502.84	Culv Frctn Ls (ft)	0.02
W.S. DS (ft)	1502.68	Culv Exit Loss (ft)	0.19
Delta EG (ft)	0.40	Culv Entr Loss (ft)	0.19
Delta WS (ft)	0.39	Q Weir (cfs)	
E.G. IC (ft)	1502.54	Weir Sta Lft (ft)	
E.G. OC (ft)	1503.24	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	1502.68	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1502.68	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	1.96	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	2.00	Min El Weir Flow (ft)	1510.85

Plan: Existing - Culvert Little Mill Crk Carney Hollow RS: 2975 Culv Group: Culvert #1 Profile: 50-year

Q Culv Group (cfs)	1133.00	Culv Full Len (ft)	
# Barrels	2	Culv Vel US (ft/s)	10.08
Q Barrel (cfs)	566.50	Culv Vel DS (ft/s)	9.97
E.G. US. (ft)	1508.38	Culv Inv El Up (ft)	1499.40
W.S. US. (ft)	1507.99	Culv Inv El Dn (ft)	1499.30
E.G. DS (ft)	1506.57	Culv Frctn Ls (ft)	0.06
W.S. DS (ft)	1505.98	Culv Exit Loss (ft)	0.96
Delta EG (ft)	1.81	Culv Entr Loss (ft)	0.79
Delta WS (ft)	2.00	Q Weir (cfs)	
E.G. IC (ft)	1507.75	Weir Sta Lft (ft)	
E.G. OC (ft)	1508.38	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	1506.01	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1505.98	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	5.53	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	5.17	Min El Weir Flow (ft)	1510.85

Plan: Existing - Culvert Little Mill Crk Carney Hollow RS: 2975 Culv Group: Culvert #1 Profile: 100-yea

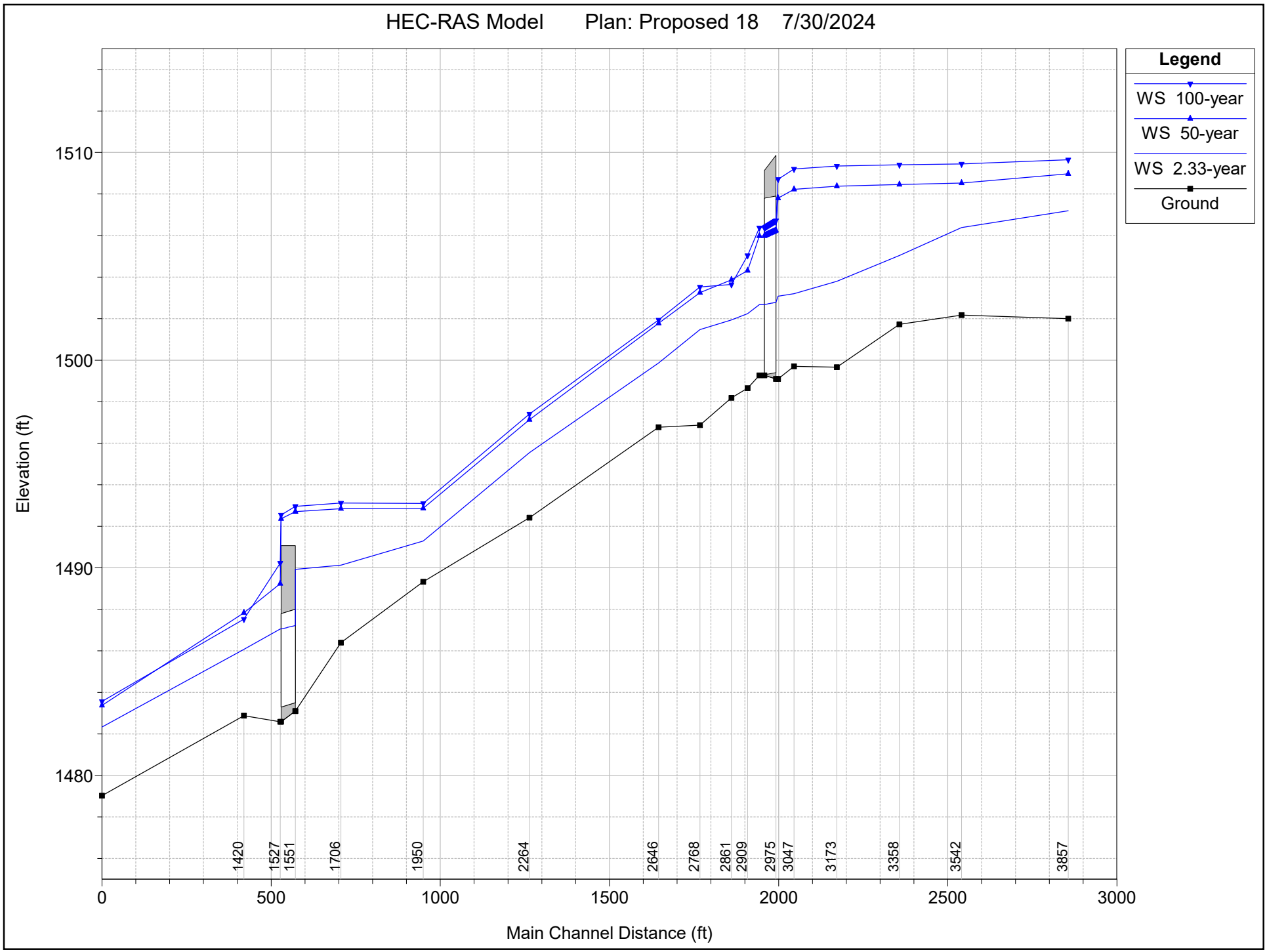
Q Culv Group (cfs)	1353.00	Culv Full Len (ft)	
# Barrels	2	Culv Vel US (ft/s)	11.33
Q Barrel (cfs)	676.50	Culv Vel DS (ft/s)	11.25
E.G. US. (ft)	1509.42	Culv Inv El Up (ft)	1499.40
W.S. US. (ft)	1508.98	Culv Inv El Dn (ft)	1499.30
E.G. DS (ft)	1507.12	Culv Frctn Ls (ft)	0.08
W.S. DS (ft)	1506.38	Culv Exit Loss (ft)	1.22
Delta EG (ft)	2.30	Culv Entr Loss (ft)	1.00
Delta WS (ft)	2.60	Q Weir (cfs)	
E.G. IC (ft)	1508.86	Weir Sta Lft (ft)	
E.G. OC (ft)	1509.42	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	1506.42	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1506.38	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	6.36	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	5.82	Min El Weir Flow (ft)	1510.85

HEC-RAS Plan: Existing - Culvert River: Little Mill Crk Reach: Carney Hollow

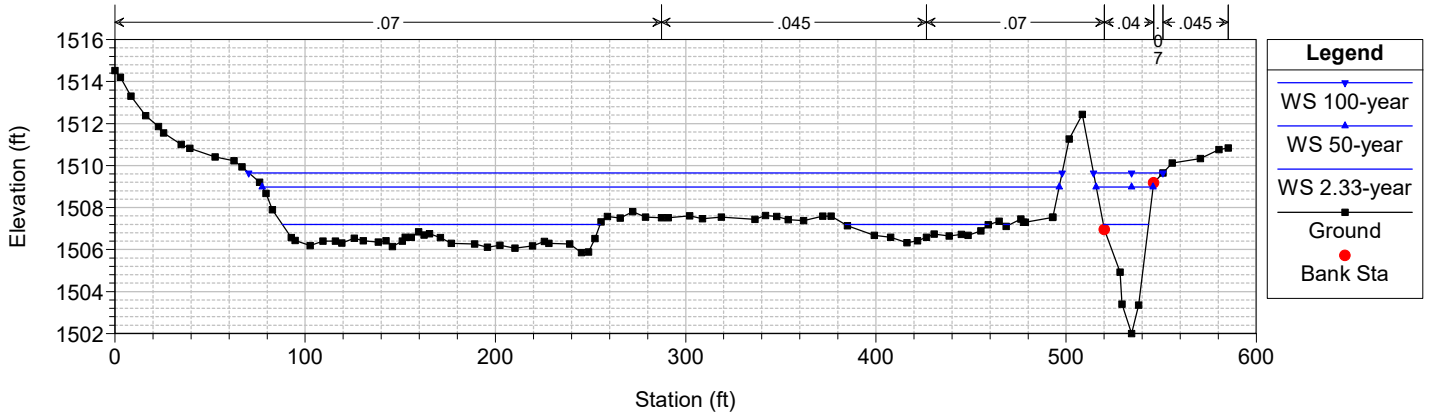
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Carney Hollow	3857	2.33-year	273.00	1502.00	1507.19	1505.74	1507.24	0.001317	2.43	240.74	269.45	0.26
Carney Hollow	3857	50-year	1133.00	1502.00	1509.04	1507.47	1509.07	0.000609	2.20	1008.15	449.77	0.19
Carney Hollow	3857	100-year	1353.00	1502.00	1509.82	1507.56	1509.84	0.000340	1.83	1365.37	468.88	0.15
Carney Hollow	3542	2.33-year	273.00	1502.17	1506.38		1506.59	0.003722	3.81	96.08	99.25	0.44
Carney Hollow	3542	50-year	1133.00	1502.17	1508.67		1508.78	0.001741	3.66	677.64	449.45	0.33
Carney Hollow	3542	100-year	1353.00	1502.17	1509.66		1509.70	0.000647	2.60	1145.64	498.21	0.21
Carney Hollow	3358	2.33-year	273.00	1501.72	1505.05		1505.50	0.011086	5.42	50.41	29.58	0.73
Carney Hollow	3358	50-year	1133.00	1501.72	1508.61		1508.64	0.000495	2.41	1102.46	499.72	0.19
Carney Hollow	3358	100-year	1353.00	1501.72	1509.63		1509.65	0.000242	1.90	1653.39	563.99	0.13
Carney Hollow	3173	2.33-year	273.00	1499.66	1503.79	1502.69	1504.13	0.005058	4.65	59.13	27.26	0.52
Carney Hollow	3173	50-year	1133.00	1499.66	1508.53	1505.99	1508.59	0.000415	2.70	866.31	559.00	0.18
Carney Hollow	3173	100-year	1353.00	1499.66	1509.57	1506.23	1509.61	0.000283	2.44	1111.68	588.20	0.15
Carney Hollow	3047	2.33-year	273.00	1499.70	1503.19	1502.02	1503.51	0.004673	4.58	59.57	22.42	0.50
Carney Hollow	3047	50-year	1133.00	1499.70	1508.39	1505.32	1508.52	0.000688	3.57	511.78	254.35	0.23
Carney Hollow	3047	100-year	1353.00	1499.70	1509.45	1505.66	1509.56	0.000543	3.46	624.69	316.75	0.21
Carney Hollow	3000	2.33-year	273.00	1499.10	1503.06	1501.21	1503.23	0.003897	3.29	82.93	26.38	0.33
Carney Hollow	3000	50-year	1133.00	1499.10	1507.99	1503.83	1508.38	0.002974	5.03	225.26	102.93	0.32
Carney Hollow	3000	100-year	1353.00	1499.10	1508.98	1504.33	1509.42	0.002818	5.31	254.64	177.61	0.32
Carney Hollow	2975		Culvert									
Carney Hollow	2944	2.33-year	273.00	1499.27	1502.68	1501.02	1502.84	0.003953	3.24	84.14	32.02	0.34
Carney Hollow	2944	50-year	1133.00	1499.27	1505.98	1503.42	1506.57	0.005132	6.18	185.14	89.93	0.44
Carney Hollow	2944	100-year	1353.00	1499.27	1506.38	1503.88	1507.12	0.005939	6.93	197.25	92.54	0.48
Carney Hollow	2909	2.33-year	273.00	1498.65	1502.24	1501.12	1502.59	0.008159	4.84	59.60	28.57	0.49
Carney Hollow	2909	50-year	1133.00	1498.65	1504.31	1504.30	1505.94	0.020316	10.81	127.35	68.86	0.84
Carney Hollow	2909	100-year	1353.00	1498.65	1505.04	1505.04	1506.56	0.016585	10.67	163.27	83.49	0.78
Carney Hollow	2861	2.33-year	273.00	1498.18	1501.93	1500.56	1502.21	0.006874	4.22	64.78	23.29	0.44
Carney Hollow	2861	50-year	1133.00	1498.18	1503.87	1503.87	1504.93	0.015213	8.82	160.12	82.58	0.71
Carney Hollow	2861	100-year	1353.00	1498.18	1503.64	1504.25	1505.51	0.027831	11.54	141.86	76.29	0.96
Carney Hollow	2768	2.33-year	273.00	1496.87	1501.47	1499.92	1501.67	0.004606	3.62	82.86	50.15	0.37
Carney Hollow	2768	50-year	1133.00	1496.87	1503.25	1502.70	1503.72	0.007491	6.33	239.37	136.31	0.51
Carney Hollow	2768	100-year	1353.00	1496.87	1503.53	1502.95	1504.04	0.007841	6.72	266.80	138.35	0.53
Carney Hollow	2646	2.33-year	273.00	1496.77	1499.87	1499.68	1500.48	0.029009	6.28	43.45	25.27	0.84
Carney Hollow	2646	50-year	1133.00	1496.77	1501.77	1501.77	1502.42	0.015797	7.52	195.27	156.29	0.70
Carney Hollow	2646	100-year	1353.00	1496.77	1501.94	1501.94	1502.67	0.016940	8.02	215.67	157.51	0.73
Carney Hollow	2264	2.33-year	273.00	1492.41	1495.55	1494.93	1495.69	0.007021	3.59	102.28	73.25	0.42
Carney Hollow	2264	50-year	1133.00	1492.41	1497.14	1496.35	1497.45	0.009306	5.83	295.20	155.02	0.52
Carney Hollow	2264	100-year	1353.00	1492.41	1497.40	1496.57	1497.74	0.009480	6.15	337.58	164.17	0.53
Carney Hollow	1950	2.33-year	273.00	1489.33	1491.29	1491.29	1491.81	0.033578	5.85	46.97	45.18	0.89
Carney Hollow	1950	50-year	1133.00	1489.33	1492.87	1492.87	1493.61	0.021572	7.48	165.63	118.67	0.80
Carney Hollow	1950	100-year	1353.00	1489.33	1493.10	1493.10	1493.87	0.021533	7.82	195.43	134.52	0.80
Carney Hollow	1706	2.33-year	273.00	1486.40	1490.12	1488.48	1490.16	0.001097	1.79	234.97	190.84	0.19
Carney Hollow	1706	50-year	1133.00	1486.40	1492.85	1490.13	1492.88	0.000501	1.89	872.34	263.52	0.14
Carney Hollow	1706	100-year	1353.00	1486.40	1493.12	1490.30	1493.15	0.000563	2.06	943.16	266.54	0.15
Carney Hollow	1572	2.33-year	273.00	1483.10	1489.92	1486.12	1490.00	0.001082	2.31	133.14	48.69	0.18
Carney Hollow	1572	50-year	1133.00	1483.10	1492.70	1489.36	1492.78	0.001058	3.03	697.00	275.41	0.19
Carney Hollow	1572	100-year	1353.00	1483.10	1492.96	1489.85	1493.04	0.001167	3.25	768.25	282.57	0.20
Carney Hollow	1551		Culvert									
Carney Hollow	1527	2.33-year	273.00	1482.58	1487.05		1487.34	0.006375	4.28	63.80	19.15	0.41
Carney Hollow	1527	50-year	1133.00	1482.58	1489.24	1488.67	1490.75	0.020669	10.04	131.80	88.43	0.78
Carney Hollow	1527	100-year	1353.00	1482.58	1490.23	1490.23	1491.07	0.011094	8.23	272.23	191.93	0.59
Carney Hollow	1420	2.33-year	273.00	1482.88	1486.07		1486.43	0.011206	4.78	57.05	24.90	0.56
Carney Hollow	1420	50-year	1133.00	1482.88	1487.83	1487.83	1488.47	0.014673	7.53	246.29	182.08	0.69
Carney Hollow	1420	100-year	1353.00	1482.88	1487.53	1488.00	1489.06	0.035276	11.04	192.86	177.99	1.05
Carney Hollow	1000	2.33-year	273.00	1479.02	1482.33	1482.11	1482.45	0.007978	3.54	128.53	226.33	0.45
Carney Hollow	1000	50-year	1133.00	1479.02	1483.38	1482.85	1483.55	0.007975	4.73	380.22	246.00	0.49

HEC-RAS Plan: Existing - Culvert River: Little Mill Crk Reach: Carney Hollow (Continued)

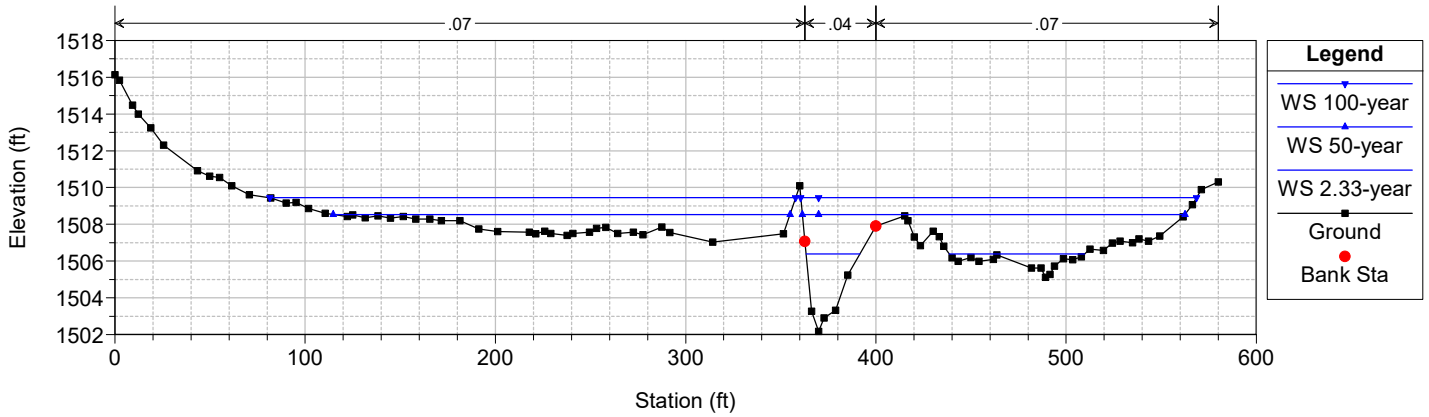
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Carney Hollow	1000	100-year	1353.00	1479.02	1483.56	1482.98	1483.75	0.007981	4.93	426.53	246.70	0.49


HEC-RAS Model Plan: Proposed 18 7/30/2024
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Elevation (ft)
1510
1500
1490
1480
0
500
1000
1500
2000
2500
3000
Main Channel Distance (ft)
1420
1527
1551
1706
1950
2264
2646
2768
2861
2909
2975
3047
3173
3358
3542
3857

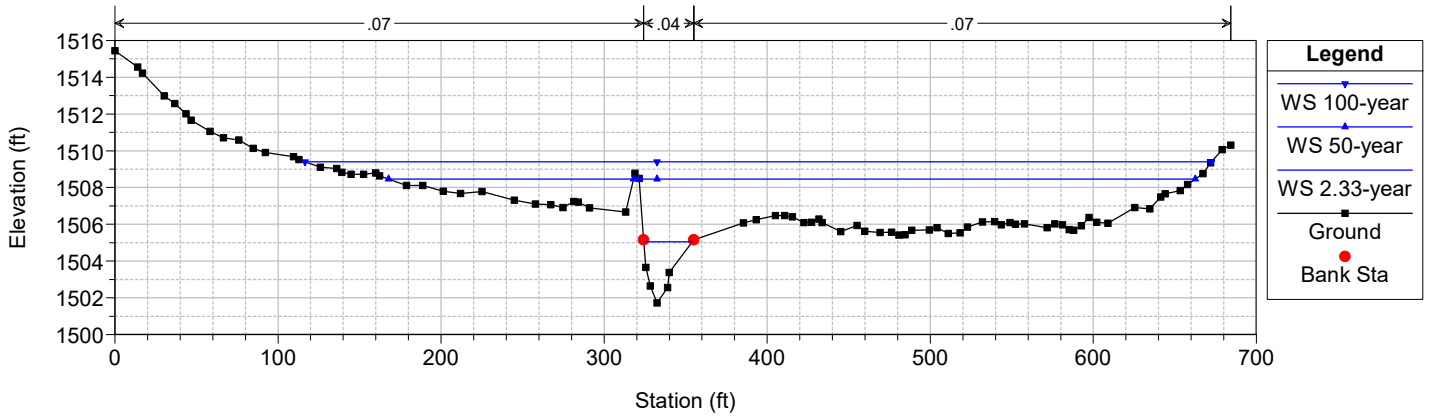
HEC-RAS Model Plan: Proposed 18 7/30/2024



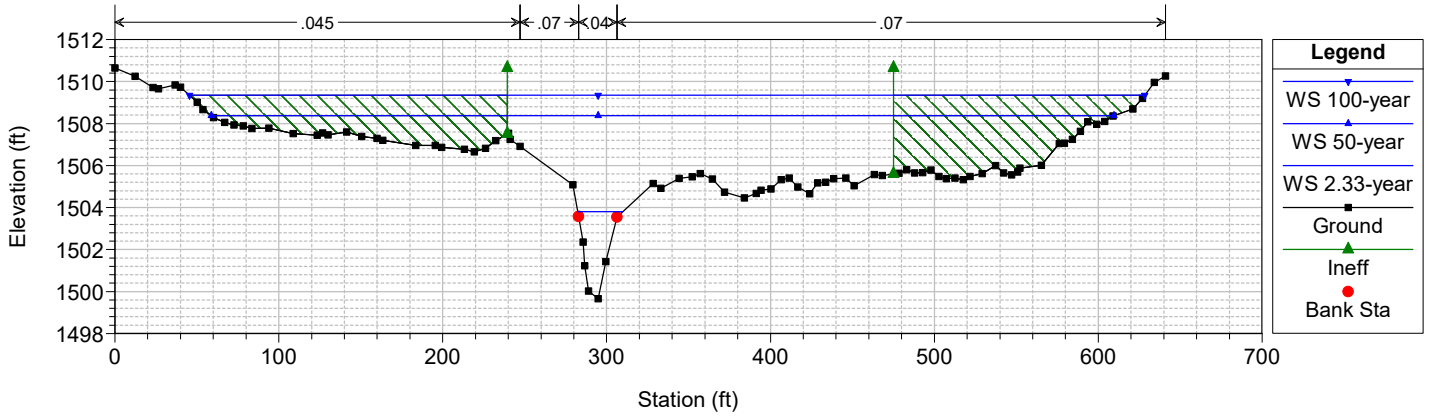
HEC-RAS Model Plan: Proposed 18 7/30/2024

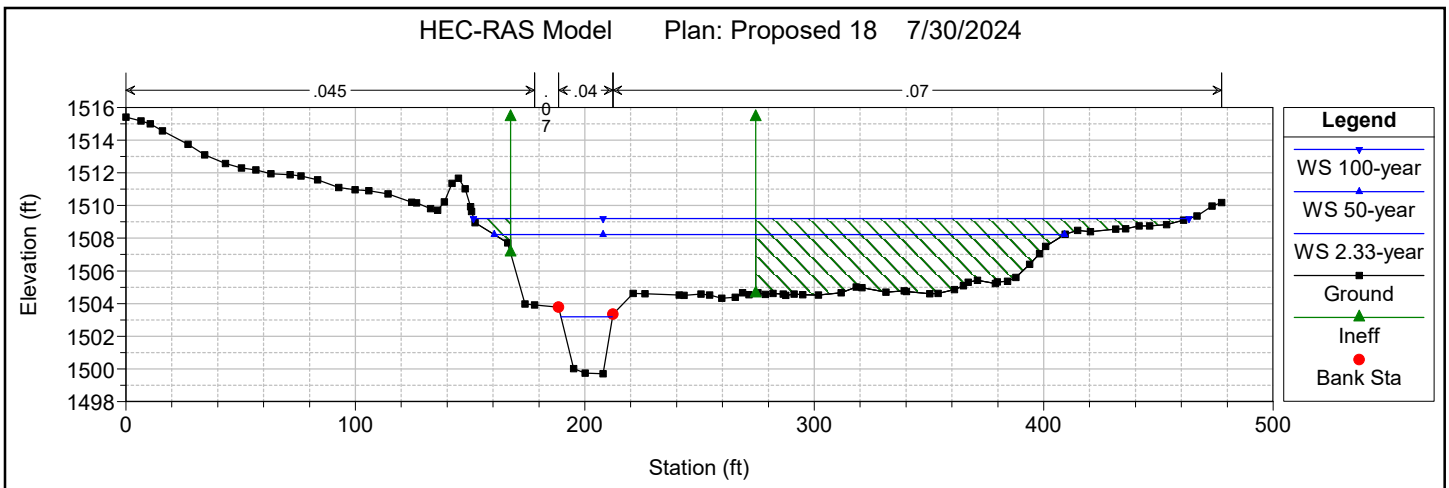


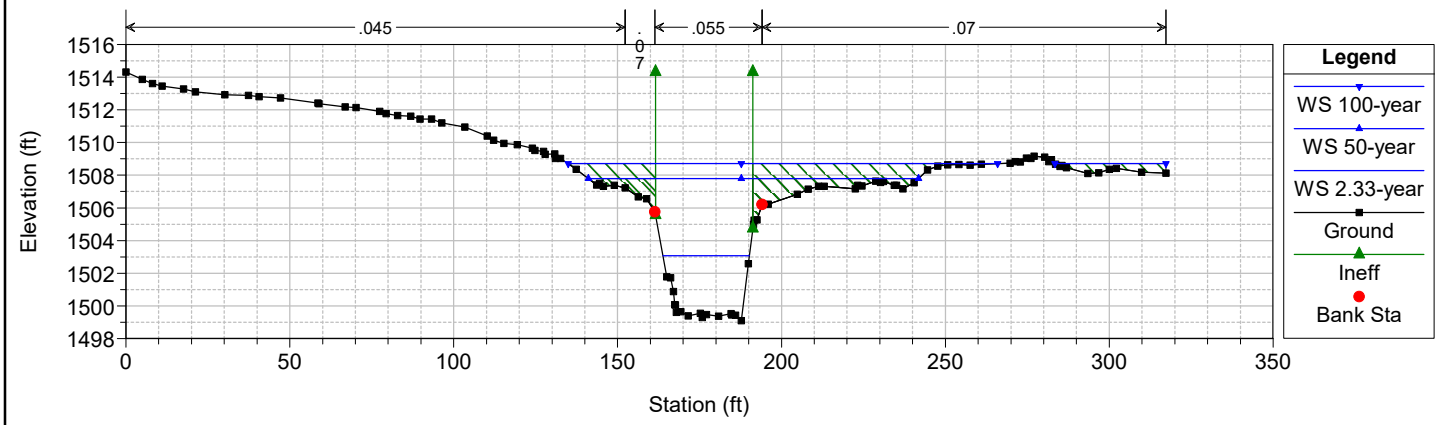
HEC-RAS Model Plan: Proposed 18 7/30/2024

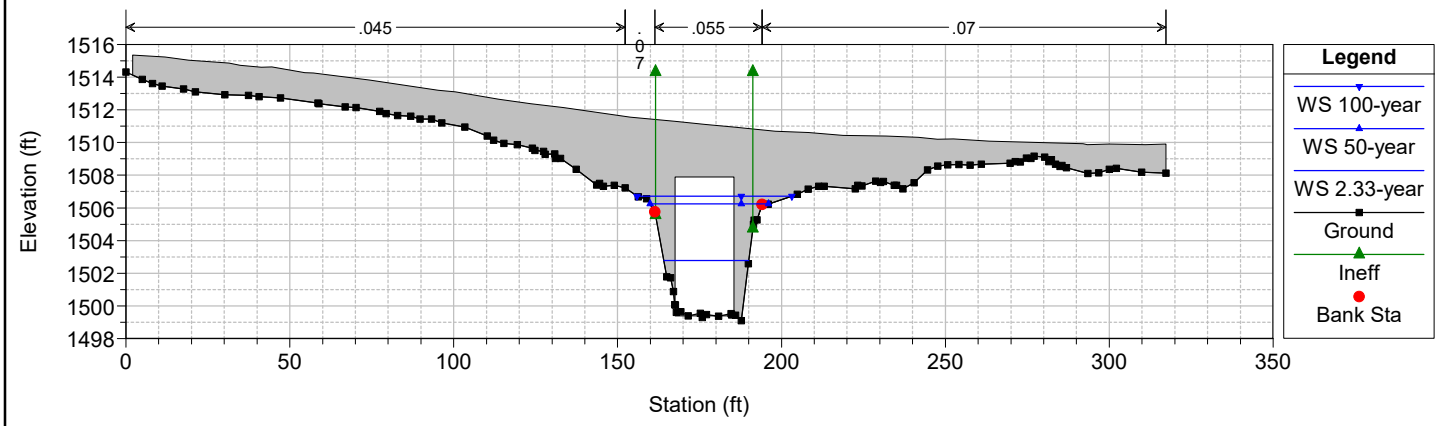


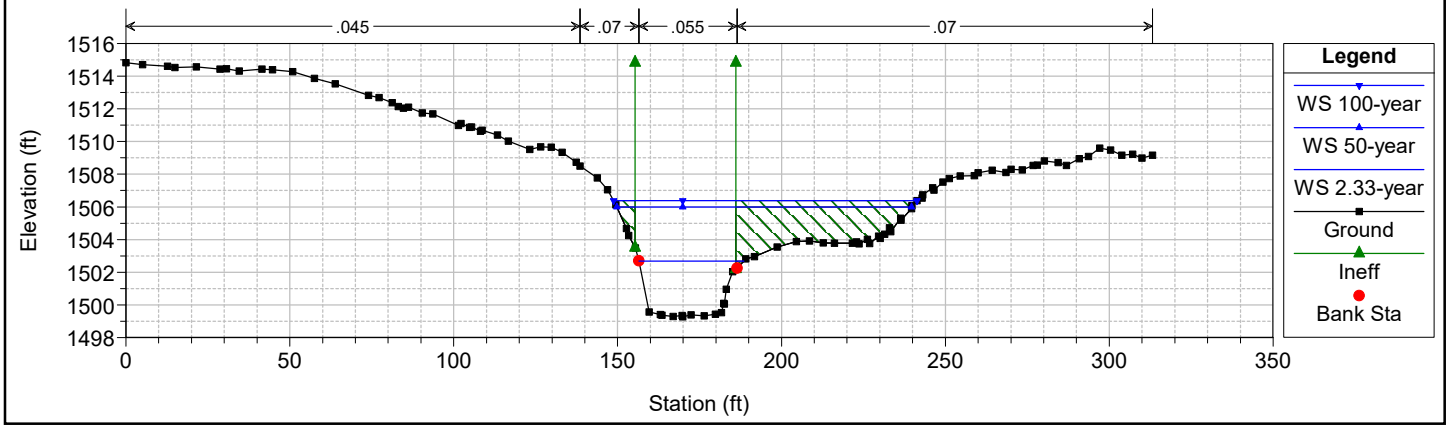
HEC-RAS Model Plan: Proposed 18 7/30/2024

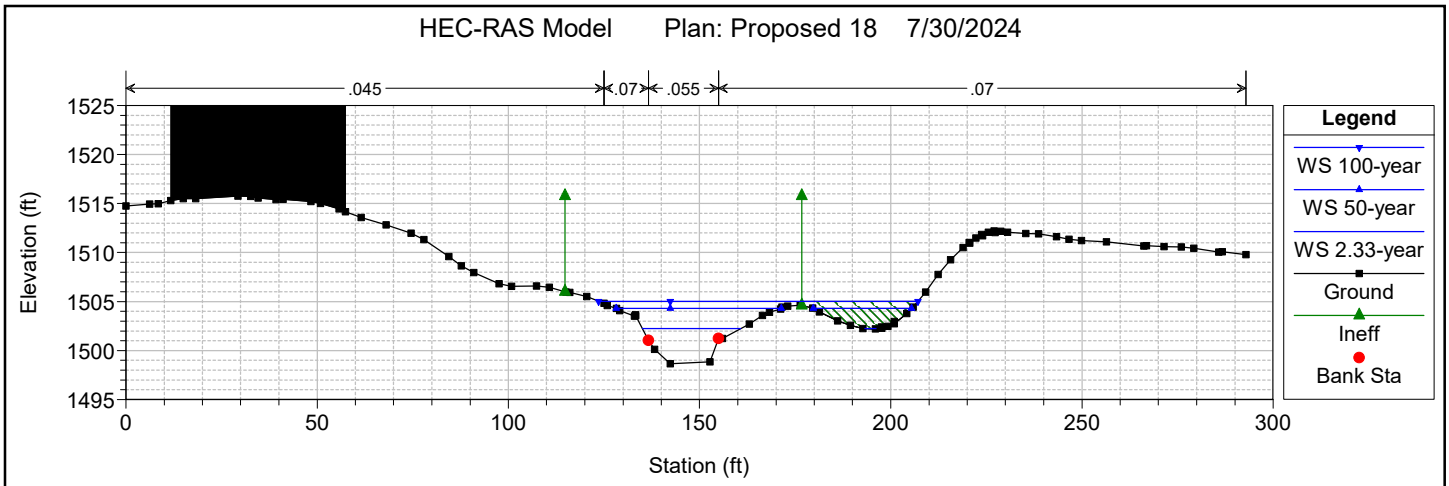


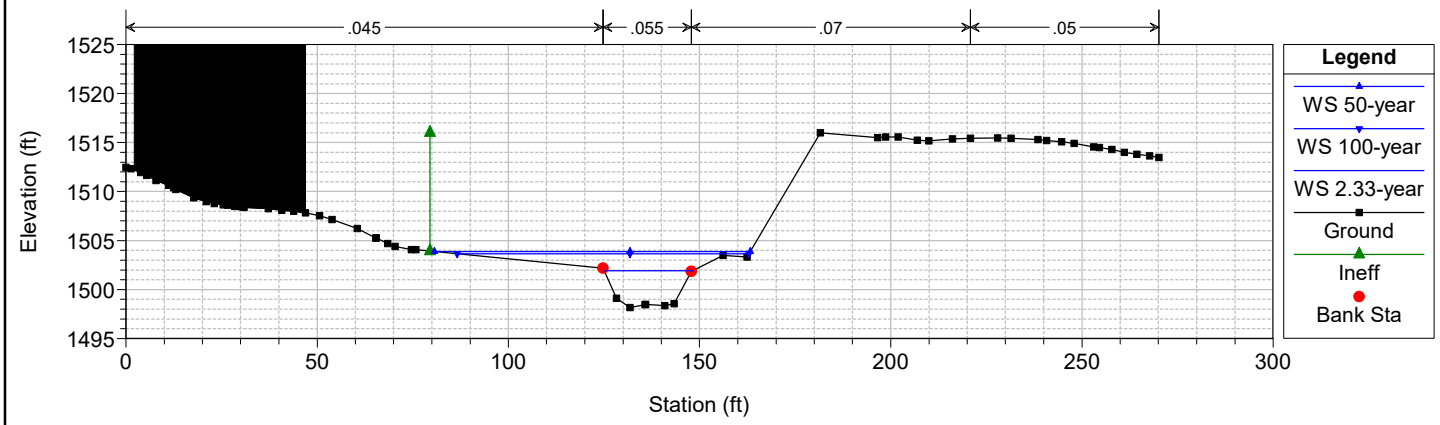

HEC-RAS Model Plan: Proposed 18 7/30/2024
.045
.04
.07
Elevation (ft)
Station (ft)
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Ineff
Bank Sta

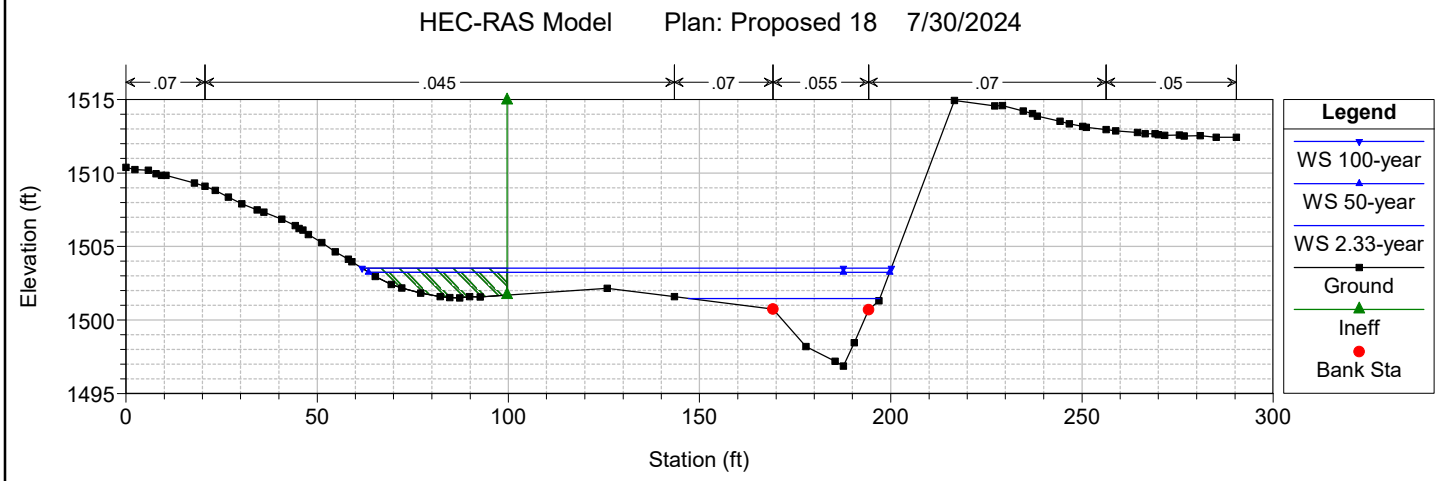

HEC-RAS Model Plan: Proposed 18 7/30/2024
.045
.055
.07
Elevation (ft)
Station (ft)
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Ineff
Bank Sta

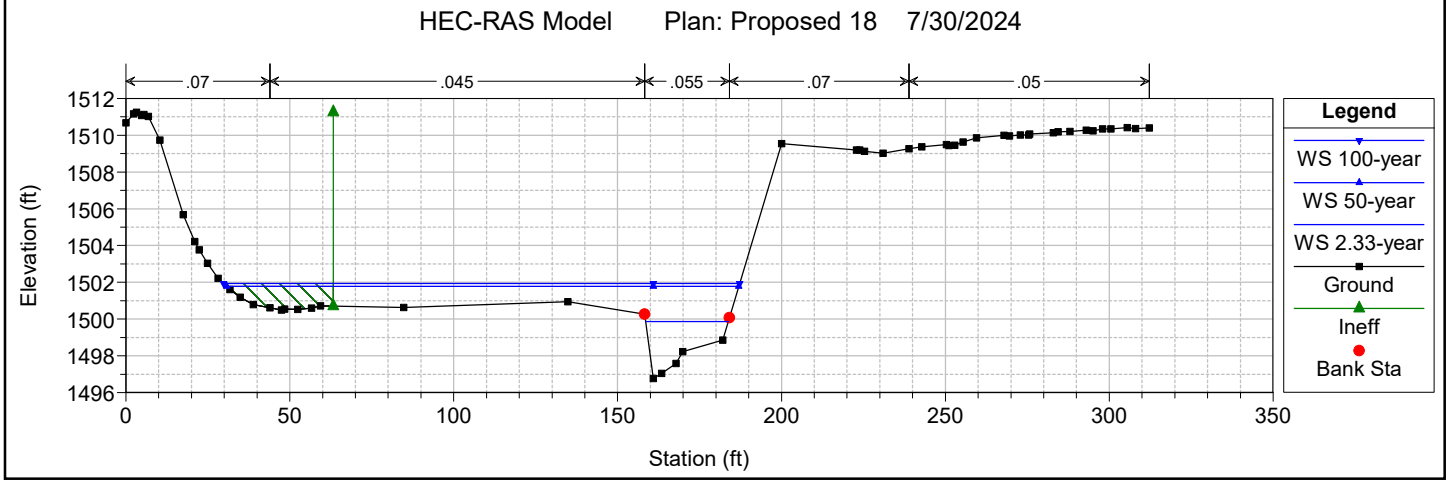

HEC-RAS Model Plan: Proposed 18 7/30/2024
.045
.055
.07
Elevation (ft)
Station (ft)
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Ineff
Bank Sta


HEC-RAS Model Plan: Proposed 18 7/30/2024
.045
.07
.055
.07
Elevation (ft)
Station (ft)
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Ineff
Bank Sta

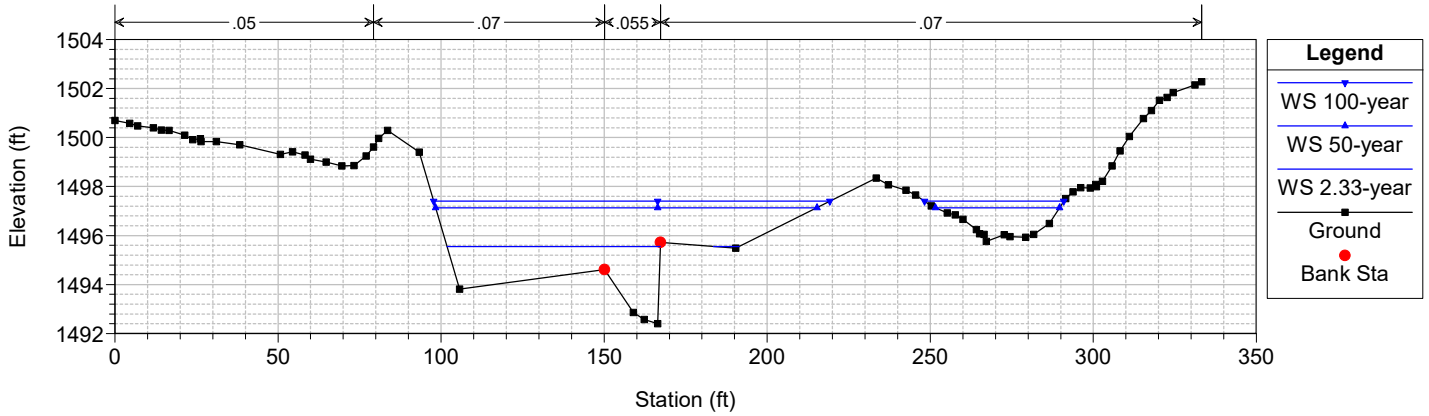

HEC-RAS Model Plan: Proposed 18 7/30/2024
.045
.07
.055
.07
Elevation (ft)
1525
1520
1515
1510
1505
1500
1495
0
50
100
150
200
250
300
Station (ft)
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Ineff
Bank Sta


HEC-RAS Model Plan: Proposed 18 7/30/2024
.045
.055
.07
.05
Elevation (ft)
1525
1520
1515
1510
1505
1500
1495
0
50
100
150
200
250
300
Station (ft)
Legend
WS 50-year
WS 100-year
WS 2.33-year
Ground
Ineff
Bank Sta

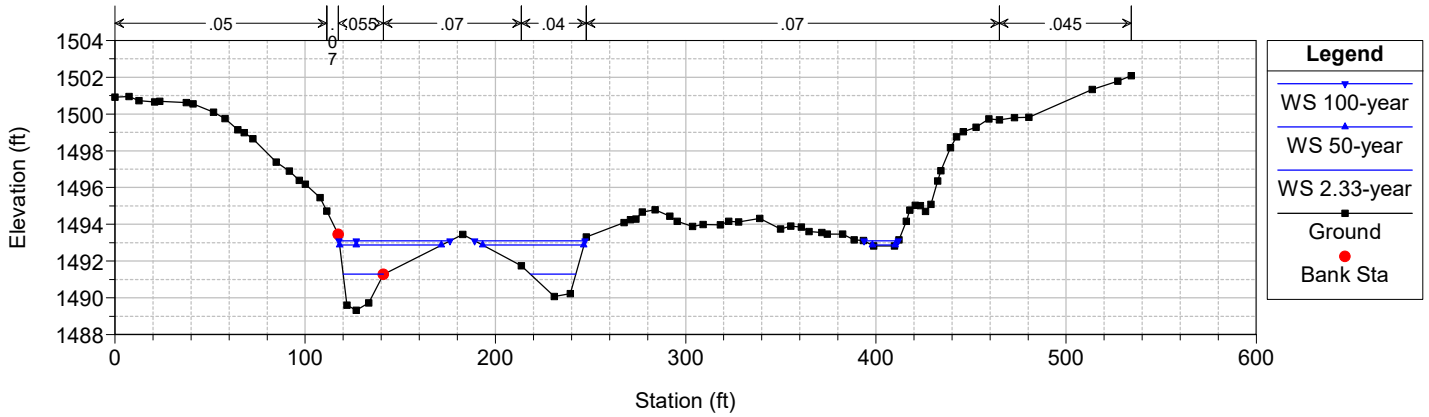

HEC-RAS Model Plan: Proposed 18 7/30/2024
.07
.045
.07
.055
.07
.05
Elevation (ft)
1515
1510
1505
1500
1495
0
50
100
150
200
250
300
Station (ft)
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Ineff
Bank Sta


HEC-RAS Model Plan: Proposed 18 7/30/2024
.07
.045
.055
.07
.05
Elevation (ft)
1512
1510
1508
1506
1504
1502
1500
1498
1496
0
50
100
150
200
250
300
350
Station (ft)
Legend
WS 100-year
WS 50-year
WS 2.33-year
Ground
Ineff
Bank Sta

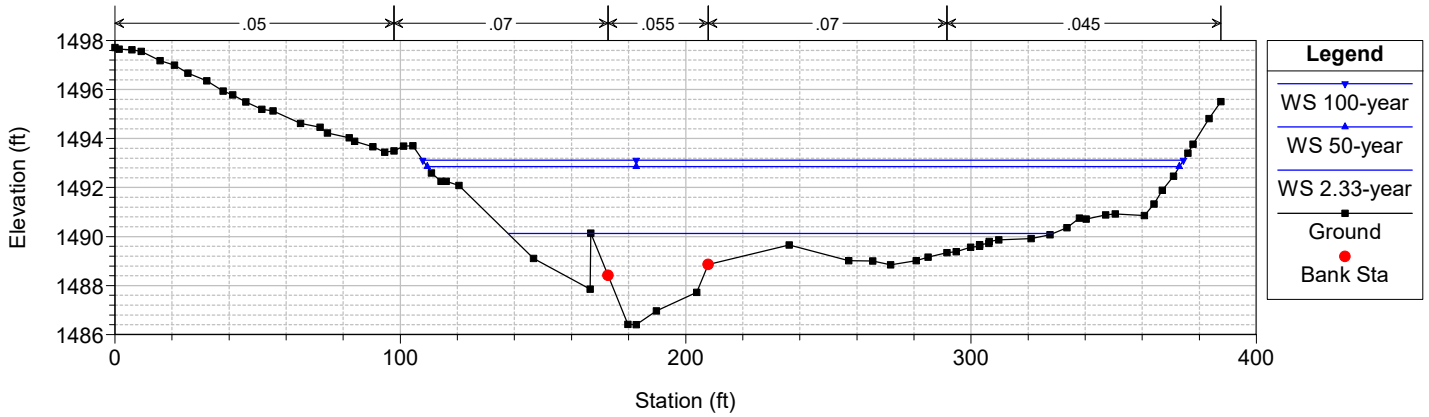
HEC-RAS Model Plan: Proposed 18 7/30/2024



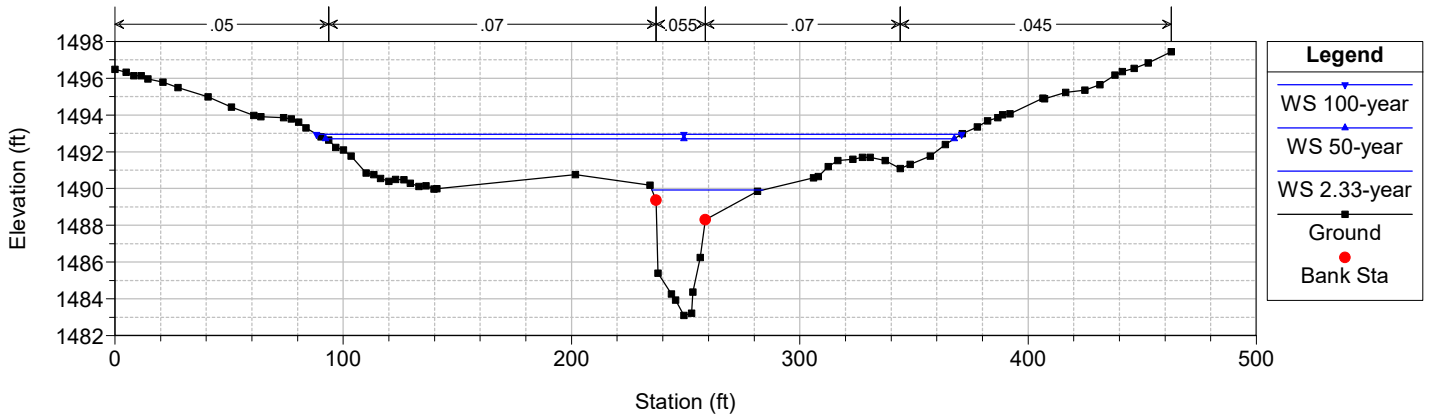
HEC-RAS Model Plan: Proposed 18 7/30/2024



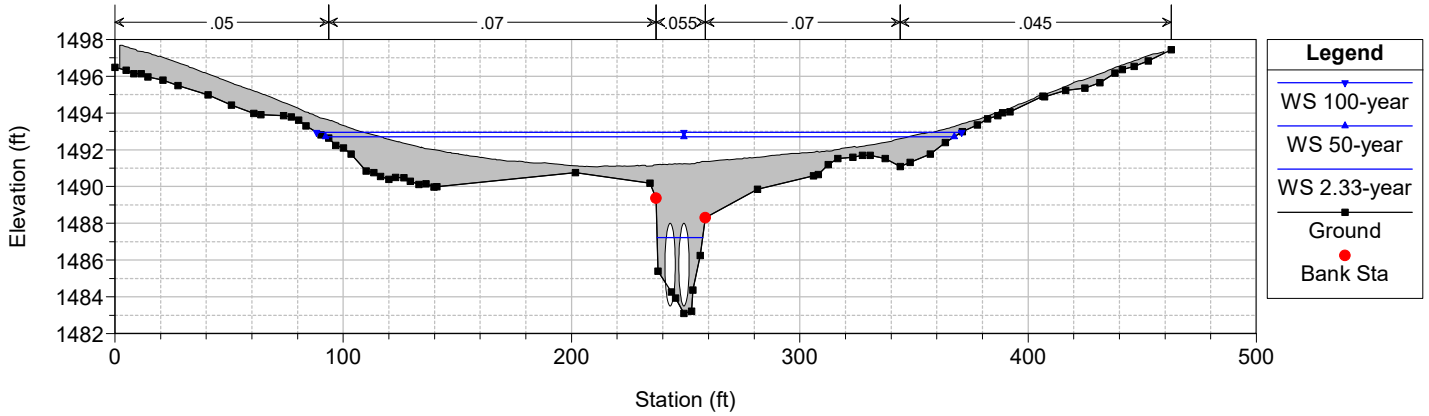
HEC-RAS Model Plan: Proposed 18 7/30/2024



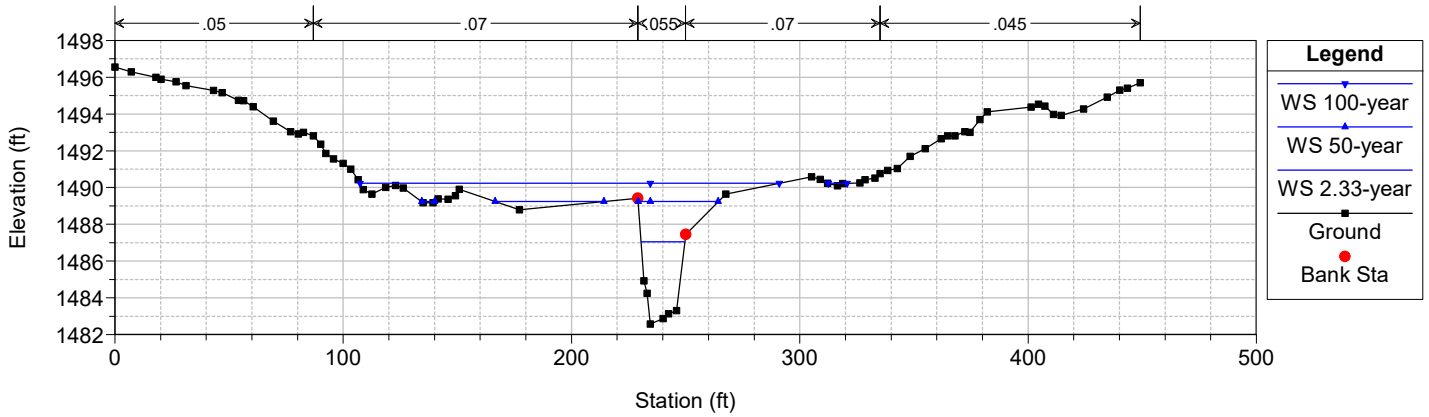
HEC-RAS Model Plan: Proposed 18 7/30/2024



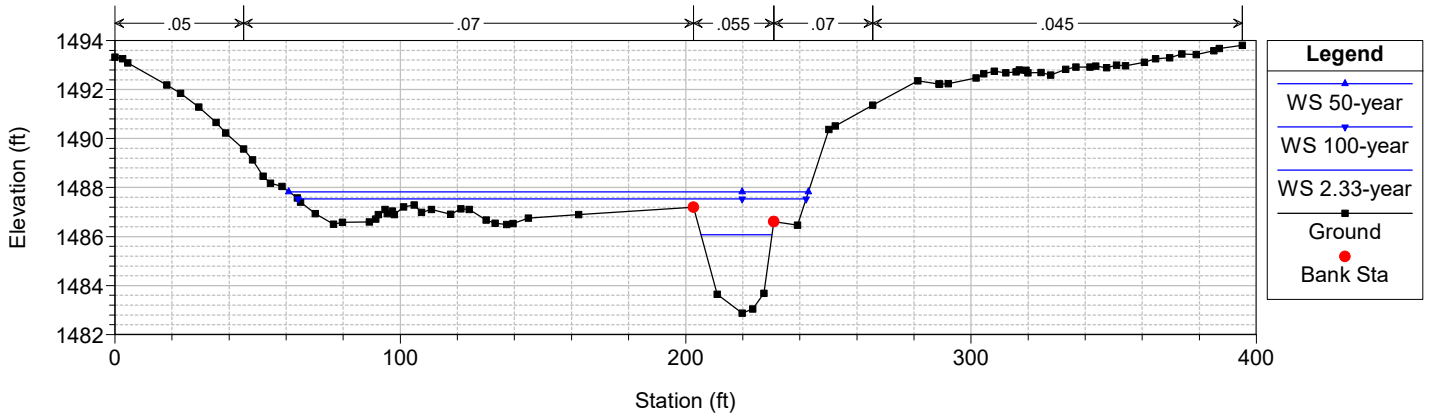
HEC-RAS Model Plan: Proposed 18 7/30/2024



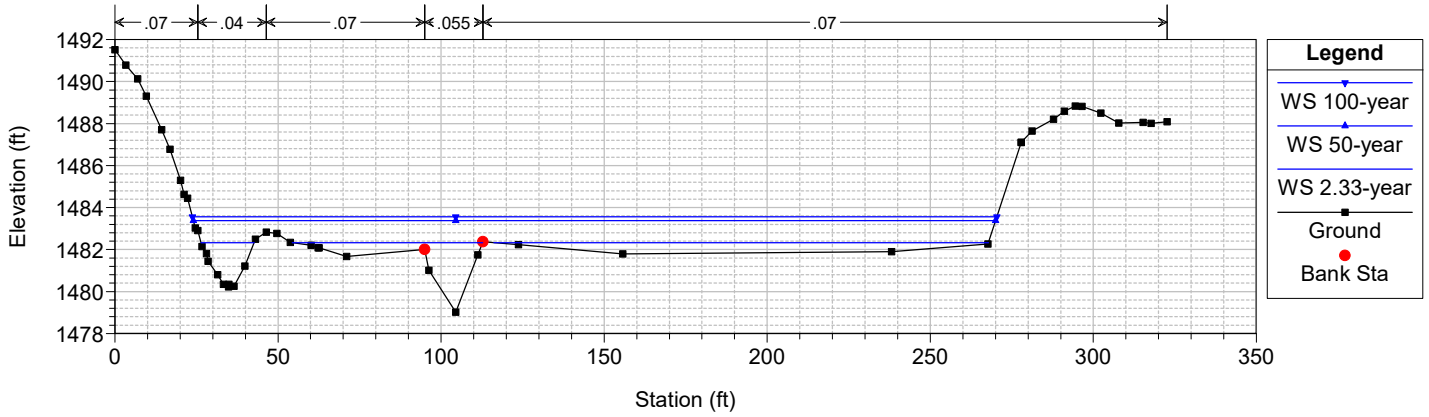
HEC-RAS Model Plan: Proposed 18 7/30/2024



HEC-RAS Model Plan: Proposed 18 7/30/2024



HEC-RAS Model Plan: Proposed 18 7/30/2024



Plan: Proposed 18 Little Mill Crk Carney Hollow RS: 2975 Culv Group: Culvert #1 Profile: 2.33-year

Q Culv Group (cfs)	273.00	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	4.48
Q Barrel (cfs)	273.00	Culv Vel DS (ft/s)	4.49
E.G. US. (ft)	1503.25	Culv Inv El Up (ft)	1499.40
W.S. US. (ft)	1503.08	Culv Inv El Dn (ft)	1499.30
E.G. DS (ft)	1502.84	Culv Frctn Ls (ft)	0.11
W.S. DS (ft)	1502.68	Culv Exit Loss (ft)	0.15
Delta EG (ft)	0.41	Culv Entr Loss (ft)	0.16
Delta WS (ft)	0.40	Q Weir (cfs)	
E.G. IC (ft)	1502.41	Weir Sta Lft (ft)	
E.G. OC (ft)	1503.25	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	1502.78	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1502.68	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	3.44	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	1.93	Min El Weir Flow (ft)	1510.85

Plan: Proposed 18 Little Mill Crk Carney Hollow RS: 2975 Culv Group: Culvert #1 Profile: 50-year

Q Culv Group (cfs)	1133.00	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	9.20
Q Barrel (cfs)	1133.00	Culv Vel DS (ft/s)	9.42
E.G. US. (ft)	1508.21	Culv Inv El Up (ft)	1499.40
W.S. US. (ft)	1507.80	Culv Inv El Dn (ft)	1499.30
E.G. DS (ft)	1506.57	Culv Frctn Ls (ft)	0.19
W.S. DS (ft)	1505.98	Culv Exit Loss (ft)	0.79
Delta EG (ft)	1.64	Culv Entr Loss (ft)	0.66
Delta WS (ft)	1.82	Q Weir (cfs)	
E.G. IC (ft)	1507.41	Weir Sta Lft (ft)	
E.G. OC (ft)	1508.21	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	1506.24	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1505.98	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	8.34	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	4.98	Min El Weir Flow (ft)	1510.85

Plan: Proposed 18 Little Mill Crk Carney Hollow RS: 2975 Culv Group: Culvert #1 Profile: 100-year

Q Culv Group (cfs)	1353.00	Culv Full Len (ft)	
# Barrels	1	Culv Vel US (ft/s)	10.27
Q Barrel (cfs)	1353.00	Culv Vel DS (ft/s)	10.62
E.G. US. (ft)	1509.18	Culv Inv El Up (ft)	1499.40
W.S. US. (ft)	1508.71	Culv Inv El Dn (ft)	1499.30
E.G. DS (ft)	1507.12	Culv Frctn Ls (ft)	0.23
W.S. DS (ft)	1506.38	Culv Exit Loss (ft)	1.01
Delta EG (ft)	2.06	Culv Entr Loss (ft)	0.82
Delta WS (ft)	2.33	Q Weir (cfs)	
E.G. IC (ft)	1508.46	Weir Sta Lft (ft)	
E.G. OC (ft)	1509.18	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	1506.72	Weir Max Depth (ft)	
Culv WS Outlet (ft)	1506.38	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	8.50	Weir Flow Area (sq ft)	
Culv Crt Depth (ft)	5.60	Min El Weir Flow (ft)	1510.85

HEC-RAS Plan: Proposed 18 River: Little Mill Crk Reach: Carney Hollow

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Carney Hollow	3857	2.33-year	273.00	1502.00	1507.19	1505.74	1507.24	0.001316	2.42	240.87	269.50	0.26
Carney Hollow	3857	50-year	1133.00	1502.00	1508.98	1507.47	1509.01	0.000669	2.29	978.20	448.95	0.20
Carney Hollow	3857	100-year	1353.00	1502.00	1509.65	1507.56	1509.68	0.000409	1.96	1285.87	464.23	0.16
Carney Hollow	3542	2.33-year	273.00	1502.17	1506.38		1506.59	0.003700	3.80	96.44	99.34	0.44
Carney Hollow	3542	50-year	1133.00	1502.17	1508.53		1508.67	0.002174	4.00	616.77	441.32	0.36
Carney Hollow	3542	100-year	1353.00	1502.17	1509.45		1509.50	0.000830	2.86	1041.47	484.36	0.23
Carney Hollow	3358	2.33-year	273.00	1501.72	1505.04		1505.50	0.011103	5.42	50.38	29.58	0.73
Carney Hollow	3358	50-year	1133.00	1501.72	1508.46		1508.50	0.000590	2.58	1029.59	491.30	0.20
Carney Hollow	3358	100-year	1353.00	1501.72	1509.41		1509.43	0.000299	2.06	1530.64	555.89	0.15
Carney Hollow	3173	2.33-year	273.00	1499.66	1503.80	1502.69	1504.13	0.005019	4.64	59.29	27.35	0.52
Carney Hollow	3173	50-year	1133.00	1499.66	1508.38	1505.99	1508.44	0.000470	2.83	829.53	550.76	0.19
Carney Hollow	3173	100-year	1353.00	1499.66	1509.35	1506.23	1509.39	0.000328	2.58	1058.24	582.84	0.16
Carney Hollow	3047	2.33-year	273.00	1499.70	1503.20	1502.02	1503.52	0.004603	4.56	59.89	22.47	0.49
Carney Hollow	3047	50-year	1133.00	1499.70	1508.22	1505.32	1508.36	0.000763	3.71	493.77	248.59	0.24
Carney Hollow	3047	100-year	1353.00	1499.70	1509.21	1505.66	1509.34	0.000616	3.61	599.09	311.86	0.22
Carney Hollow	3000	2.33-year	273.00	1499.10	1503.08	1501.21	1503.25	0.003837	3.28	83.35	26.41	0.32
Carney Hollow	3000	50-year	1133.00	1499.10	1507.80	1503.83	1508.21	0.003231	5.16	219.73	100.73	0.33
Carney Hollow	3000	100-year	1353.00	1499.10	1508.71	1504.33	1509.18	0.003133	5.48	246.68	164.92	0.34
Carney Hollow	2975		Culvert									
Carney Hollow	2944	2.33-year	273.00	1499.27	1502.68	1501.02	1502.84	0.003953	3.24	84.14	32.02	0.34
Carney Hollow	2944	50-year	1133.00	1499.27	1505.98	1503.42	1506.57	0.005132	6.18	185.14	89.93	0.44
Carney Hollow	2944	100-year	1353.00	1499.27	1506.38	1503.88	1507.12	0.005939	6.93	197.25	92.54	0.48
Carney Hollow	2909	2.33-year	273.00	1498.65	1502.24	1501.12	1502.59	0.008159	4.84	59.60	28.57	0.49
Carney Hollow	2909	50-year	1133.00	1498.65	1504.31	1504.30	1505.94	0.020316	10.81	127.35	68.86	0.84
Carney Hollow	2909	100-year	1353.00	1498.65	1505.04	1505.04	1506.56	0.016585	10.67	163.27	83.49	0.78
Carney Hollow	2861	2.33-year	273.00	1498.18	1501.93	1500.56	1502.21	0.006874	4.22	64.78	23.29	0.44
Carney Hollow	2861	50-year	1133.00	1498.18	1503.87	1503.87	1504.93	0.015213	8.82	160.12	82.58	0.71
Carney Hollow	2861	100-year	1353.00	1498.18	1503.64	1504.25	1505.51	0.027831	11.54	141.86	76.29	0.96
Carney Hollow	2768	2.33-year	273.00	1496.87	1501.47	1499.92	1501.67	0.004606	3.62	82.86	50.15	0.37
Carney Hollow	2768	50-year	1133.00	1496.87	1503.25	1502.70	1503.72	0.007491	6.33	239.37	136.31	0.51
Carney Hollow	2768	100-year	1353.00	1496.87	1503.53	1502.95	1504.04	0.007841	6.72	266.80	138.35	0.53
Carney Hollow	2646	2.33-year	273.00	1496.77	1499.87	1499.68	1500.48	0.029009	6.28	43.45	25.27	0.84
Carney Hollow	2646	50-year	1133.00	1496.77	1501.77	1501.77	1502.42	0.015797	7.52	195.27	156.29	0.70
Carney Hollow	2646	100-year	1353.00	1496.77	1501.94	1501.94	1502.67	0.016940	8.02	215.67	157.51	0.73
Carney Hollow	2264	2.33-year	273.00	1492.41	1495.55	1494.93	1495.69	0.007021	3.59	102.28	73.25	0.42
Carney Hollow	2264	50-year	1133.00	1492.41	1497.14	1496.35	1497.45	0.009306	5.83	295.20	155.02	0.52
Carney Hollow	2264	100-year	1353.00	1492.41	1497.40	1496.57	1497.74	0.009480	6.15	337.58	164.17	0.53
Carney Hollow	1950	2.33-year	273.00	1489.33	1491.29	1491.29	1491.81	0.033578	5.85	46.97	45.18	0.89
Carney Hollow	1950	50-year	1133.00	1489.33	1492.87	1492.87	1493.61	0.021572	7.48	165.63	118.67	0.80
Carney Hollow	1950	100-year	1353.00	1489.33	1493.10	1493.10	1493.87	0.021533	7.82	195.43	134.52	0.80
Carney Hollow	1706	2.33-year	273.00	1486.40	1490.12	1488.48	1490.16	0.001097	1.79	234.97	190.84	0.19
Carney Hollow	1706	50-year	1133.00	1486.40	1492.85	1490.13	1492.88	0.000501	1.89	872.34	263.52	0.14
Carney Hollow	1706	100-year	1353.00	1486.40	1493.12	1490.30	1493.15	0.000563	2.06	943.16	266.54	0.15
Carney Hollow	1572	2.33-year	273.00	1483.10	1489.92	1486.12	1490.00	0.001082	2.31	133.14	48.69	0.18
Carney Hollow	1572	50-year	1133.00	1483.10	1492.70	1489.36	1492.78	0.001058	3.03	697.00	275.41	0.19
Carney Hollow	1572	100-year	1353.00	1483.10	1492.96	1489.85	1493.04	0.001167	3.25	768.25	282.57	0.20
Carney Hollow	1551		Culvert									
Carney Hollow	1527	2.33-year	273.00	1482.58	1487.05		1487.34	0.006375	4.28	63.80	19.15	0.41
Carney Hollow	1527	50-year	1133.00	1482.58	1489.24	1488.67	1490.75	0.020669	10.04	131.80	88.43	0.78
Carney Hollow	1527	100-year	1353.00	1482.58	1490.23	1490.23	1491.07	0.011094	8.23	272.23	191.93	0.59
Carney Hollow	1420	2.33-year	273.00	1482.88	1486.07		1486.43	0.011206	4.78	57.05	24.90	0.56
Carney Hollow	1420	50-year	1133.00	1482.88	1487.83	1487.83	1488.47	0.014673	7.53	246.29	182.08	0.69
Carney Hollow	1420	100-year	1353.00	1482.88	1487.53	1488.00	1489.06	0.035276	11.04	192.86	177.99	1.05
Carney Hollow	1000	2.33-year	273.00	1479.02	1482.33	1482.11	1482.45	0.007978	3.54	128.53	226.33	0.45
Carney Hollow	1000	50-year	1133.00	1479.02	1483.38	1482.85	1483.55	0.007975	4.73	380.22	246.00	0.49

HEC-RAS Plan: Proposed 18 River: Little Mill Crk Reach: Carney Hollow (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Carney Hollow	1000	100-year	1353.00	1479.02	1483.56	1482.98	1483.75	0.007981	4.93	426.53	246.70	0.49