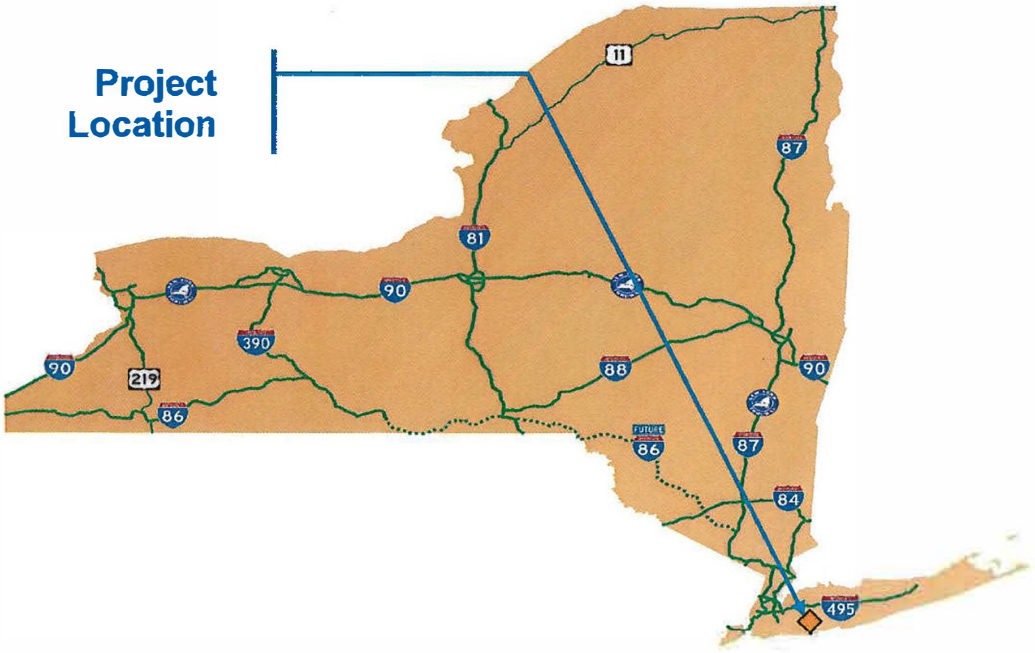
Transportation Project Report

Project Scoping Report / Final Design Report

August 2023

Large Culvert Resiliency Replacement
Project Identification Number (PIN): 0LC1.01
Culvert at NYS Route 27A / Amityville Creek Replacement
Culvert Identification Number (CIN): C050001
Village: Amityville
Town: Babylon
County: Suffolk



NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

Project Approval Sheet

Milestones	Signatures	Dates
A. Recommendation for, Scope and Design Approval:	The project cost and schedule are consistent with the Regional Capital Program. Glenn R. Murrell Glenn Murrell, P.E. Regional Planning and Program Manager	8/10/23 Date
B. Recommendation for Scope, Design, and Nonstandard Feature Approval:	All requirements requisite to these actions and approvals have been met, the required independent quality control reviews separate from the functional group reviews have been accomplished, and the work is consistent with established standards, policies, regulations and procedures, except as otherwise noted and explained. No nonstandard features have been identified, created, or retained. Ken Murphy, P.E. P.P. RON KUDLA, P.E. REGIONAL STRUCTURES ENG. Regional Design Engineer	8/11/2023 Date
C. Public Hearing Certification	A public hearing was held on April 26, 2023. Ron Kudla, P.E. Project Manager	8/07/2023 Date
D. Categorical Exclusion Determination on Behalf of FHWA	This project qualifies as a Categorical Exclusion under the National Environmental Policy Act per the NYSDOT/FHWA Programmatic Agreement Regarding Categorical Exclusions. Richard Causin, P.E. Regional Director	8/14/23 Date
E. Scope, Design, and Nonstandard Feature	The required environmental determinations have been made, and the preferred alternative for this project is ready for final design. No nonstandard features are being retained or created.	
Approval:	Richard Causin, P.E. Regional Director	8/14/23 Date

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List of Preparers

Group Director Responsible for Production of this Design Approval Document:

Craig Jenne, PE, Principal Associate, Project Manager, Hardesty & Hanover

Description of Work Performed: Directed the preparation of the Design Approval Document in accordance with established standards, policies, regulations and procedures, except as otherwise explained in this document.



Note: *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*

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Attachments
A. Maps, Plans, Profiles & Typical Sections
B. Environmental Information
C. Traffic Information
D. Pavement Information
E. Structures Information
F. Stakeholders and Public Input
G. Right-of-Way Information
H. Hydraulics and Preliminary Drainage Report
I. Other

CHAPTER 1 – PROJECT DEVELOPMENT

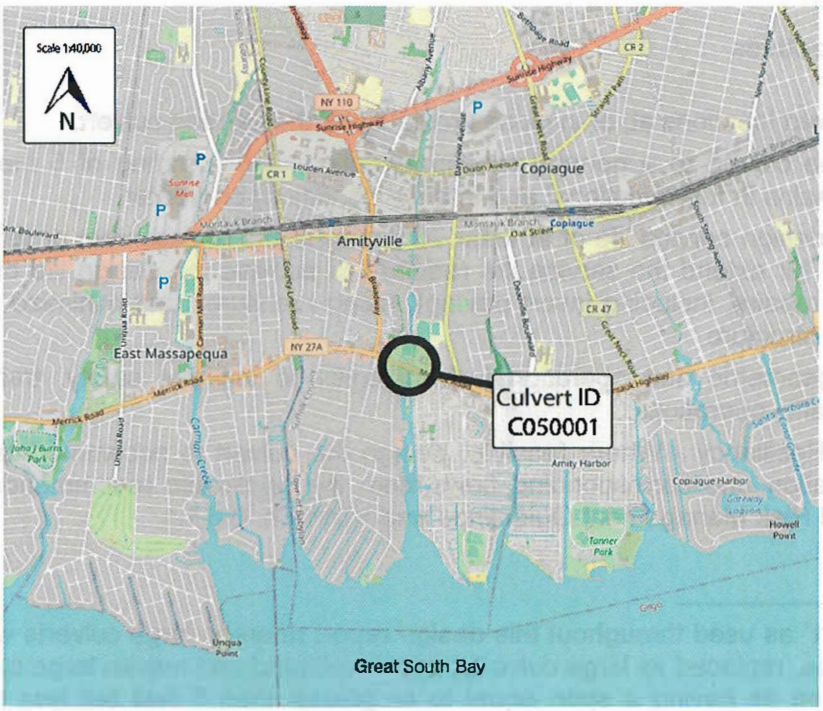
1.1 Introduction

The Culvert Resiliency of State System program (CRoSS) is a statewide program to address the safety and hydraulic resiliency of highway stream crossings. This report was prepared in accordance with the NYSDOT Project Development Manual, 17 NYCRR (New York Codes, Rules and Regulations) Part 15, and 23 CFR (Code of Federal Regulations) 771. Transportation needs have been identified (Section 1.2.1), objectives established (Section 1.2.3) to address the needs, and cost-effective alternatives developed (Section 1.3). This project is federally funded.

Public Friendly Description
This project proposes to replace the aging culvert located at Merrick Road (NYS Route 27A) over Amityville Creek in the Village of Amityville, Town of Babylon, Suffolk County. Merrick Road will be reconstructed between Ocean Avenue and Grand Central Avenue and raised to reduce the potential for flooding during severe weather events. New sidewalks will also be added where none currently exist within the project area.,

1.1.1 Project Location

The proposed project location, Culvert ID C050001 at NYS Route 27A over Amityville Creek, is shown in the following map and table:



Culvert Identification Number (CIN)	Route Number	Feature Crossed	Reference Marker	Town	County
C050001	NY27A (Merrick Road)	Amityville Creek	27A 0705 1005	Babylon	Suffolk

1.2 Purpose, Need and Objectives

1.2.1 Project Need

This project is needed to preserve and prolong the service life of the deteriorating culvert structure listed in section 1.1.1. This culvert was identified by NYSDOT Region 10 and was approved by the Deputy Chief Engineer for Structures (DCES). This structure is more than 90 years old and is showing signs of structural deterioration. Refer to Section 2.8.1 for additional information about site conditions.

1.2.2 Project Purpose

The purpose of the Culvert Resiliency of State System program (CRoSS) is to address culverts[1] at the subject location on the State highway system which currently have poor condition ratings, with a focus on safety, infrastructure, and hydraulic resiliency, in support of the state's economy and environmental stewardship responsibilities.

1.2.3 Project Objectives

1. Retain culvert locations at, or in close proximity to, the existing culvert.
2. Restore the culvert to a general recommendation of 5 (a rating of 5 means that the culvert remains in fully functional and in a fair condition) or greater.
3. Provide a design service life of at least 70 years for the replacement or rehabilitation of the culvert (or extend the service life required to achieve the design life of the existing culvert by repairs, including invert paving), using measures that minimize the life cycle cost of the structure.
4. Address geometric and operational deficiencies to improve safety, traffic flow and facilitate traffic operations.
5. Hydraulic Resiliency - Where feasible, design the culvert to accommodate the vertical flood elevation and corresponding flows from the applicable recommendations in the NYS Flood Risk Management Guidelines and HDM Ch. 8.6.1.1.

[1] The term "culvert" as used throughout this design report refers to large culverts which may be replaced as bridges, replaced as large culverts, or rehabilitated and remain large culverts. Large culverts are defined as having a span equal to or greater than 5 feet but less than 20 feet. Bridges are defined in the Uniform Code of Bridge Inspection as structures with a length of more than twenty feet.

1.3 Project Alternative(s)

- **No Build Alternative:** The No Build alternative will result in continued deterioration of the culvert resulting in increased maintenance and eventually requiring closure of the highway to traffic. It also will not address hydraulic resiliency or environmental stewardship. This alternative does not satisfy the project objectives.
- **Culvert Replacement Alternative**: The replacement alternative satisfies the project objectives and has been identified as the reasonable alternative. See Chapter 2 - Site Specific Information, for additional discussion on the culvert replacement alternatives studied and the preferred alternative selected for this project.
- **Culvert Rehabilitation Alternative**: The rehabilitation alternative does not satisfy the project objectives and has been removed from further consideration. See Chapter 2 – Site Specific Information, for additional discussion and the Rehabilitation vs. Replacement analysis.

For a discussion of the design criteria for the alternative(s) under consideration, see Section 2.9 of this report.

1.4 Project Effects

1.4.1 Environmental Classification

The environmental classification for this project is listed in Exhibit 1-1. Additional information on classification is included in Section 2.13 of this report.

Exhibit 1-1
Environmental Classification Summary

NEPA Classification	Class II CE	BY	NYSDOT
SEQRA Type:	Type II	BY	NYSDOT

1.4.2 Comparison of Considered Alternatives

Refer to Section 2.2 of Chapter 2 for the site alternatives analyses.

1.4.3 Anticipated Permits/Coordination/Certifications

The culvert location included in this project involves work within waterbodies. Refer to Section 2.3 for the anticipated permits/coordination/certification for this site.

1.5 Preferred Alternative

Only one reasonable build alternative, Replacement (Alternative 2), has been identified as the prudent and feasible alternative that meets all the project objectives. This alternative retains the culvert location, restores the culvert to a general recommendation of 5 or greater, provides a 70-year design service life, improves safety and traffic flow by introducing drop off protection at culvert crossing, bike lanes in both directions, new sidewalks where there were missing facilities

and introducing an eastbound left turn lane at the Ocean Avenue intersection, and provides hydraulic resiliency. Alternative 2 – Replacement of the culvert, is selected as the preferred alternative. See Section 2.2 for a comparison of all the considered alternatives.

1.6 Project Schedule and Cost

Exhibit 1-2 – Project Schedule	
Activity	**Date Occurred/Tentative**
Public Information Meeting / EDPL Hearing	April 2023
Scope/Design Approval	August 2023
ROW Acquisition	June 2024
Construction Start	Early 2025
Construction Complete	November 2026

Exhibit 1-3A – Summary of Preferred Alternative Project Costs

PROJECT COSTS		AMOUNT
PAVEMENT		$ 850,000.00
TRAFFIC SIGNALS		$ 256,014.00
EARTHWORK		$ 96,056.00
CURB AND SIDEWALKS		$ 425,000.00
GUIDE RAIL AND MEDIAN BARRIER		$ 1,833.00
LIGHTING		$ 100,000.00
RETAINING WALLS		$ 228,648.00
NOISE WALLS		$ -
UTILITIES		$ 100,000.00
DRAINAGE		$ 300,000.00
LARGE CULVERT		$ 600,000.00
OVERHEAD SIGN STRUCTURES		$ -
SIGNING AND PAVEMENT MARKINGS		$ 118,000.00
LANDSCAPING		$ 177,000.00
ENVIRONMENTAL		$ 118,000.00
SURVEY OPERATIONS		$ 50,000.00
STRUCTURES DEMOLITION		$ 150,000.00
SUBTOTAL IN BASE YEAR DOLLARS		$ 3,570,551.00
CONTINGENCY/RISK	30%	$ 1,071,165.00
WZTC	20%	$ 928,343.00
SUBTOTAL IN BASE YEAR DOLLARS		$ 5,570,059.00
TRAINING REQUIREMENTS		$ 100,000.00
FIELD CHANGE		$ 510,305.00
MOBILIZATION		$ 247,215.00
SUBTOTAL IN BASE YEAR DOLLARS		$ 6,427,579.00
COST DATA YEAR & MIDPOINT OF CONSTRUCTION YEAR	2023	2025
INFLATION/ESCALATION TO MIDPOINT OF CONSTRUCTION	2%	$ 391,440.00
AWARD/CONSTRUCTION COST		$ 6,819,019.00
QC AND ADMINISTRATION OF FINAL DESIGN & CONTRACT	3%	$ 204,571.00
CONSTRUCTION INSPECTION	7%	$ 477,331.00
ROW		$ 499,950.00
TOTAL PROJECT COST		$ 8,000,871.00

Exhibit 1-3B – Project Funding			
Project Phase	**Year of Expenditure Cost**	**Fund Source**	**Obligation Date**
Design I-IV	$25,000	Bridge Initiative PIT	10/21/2021
	$884,123	Bridge Initiative PIT	5/26/2022
Design V-VI	$884,123	Bridge Initiative PIT	5/31/2022
	$45,180	Bridge Initiative PIT	3/15/2023
Right of Way Incidentals	$26,950	SDF	5/12/2023
Right of Way Acquisition	$473,000	SDF	9/1/2023
Construction	$1,915,000	STBG Flex	5/29/2024
	$478,000	Bridge Initiative PIT	5/29/2024
	$3,990,000	Bridge Initiative PIT	5/29/2024
Construction Inspection	$1,277,000	STBG Flex	5/29/2024
	$320,000	SDF	5/29/2024
TOTAL	**$10,318,376**		

1.7 Public Involvement

A public involvement plan and public comments received on this project are included in Attachment F.

For additional information, please contact:

Mailing Address: Lizy Varghese, PE, Project Manager
New York State Department of Transportation
Office of Structures, Region 10
250 Veterans Memorial Highway
Hauppauge, NY 11788

Email Address: lizy.varghese@dot.ny.gov

Telephone: (631) 952-6855

Please include the six-digit Project Identification Number (PIN) 0LC1.01 in any written correspondence.

The remainder of this report is a detailed technical evaluation of existing conditions, anticipated impacts of the one reasonable/preferred alternative and comparison to the null alternative, copies of technical reports and plans and other supporting information.

1.8 Local Plans for the Project Area

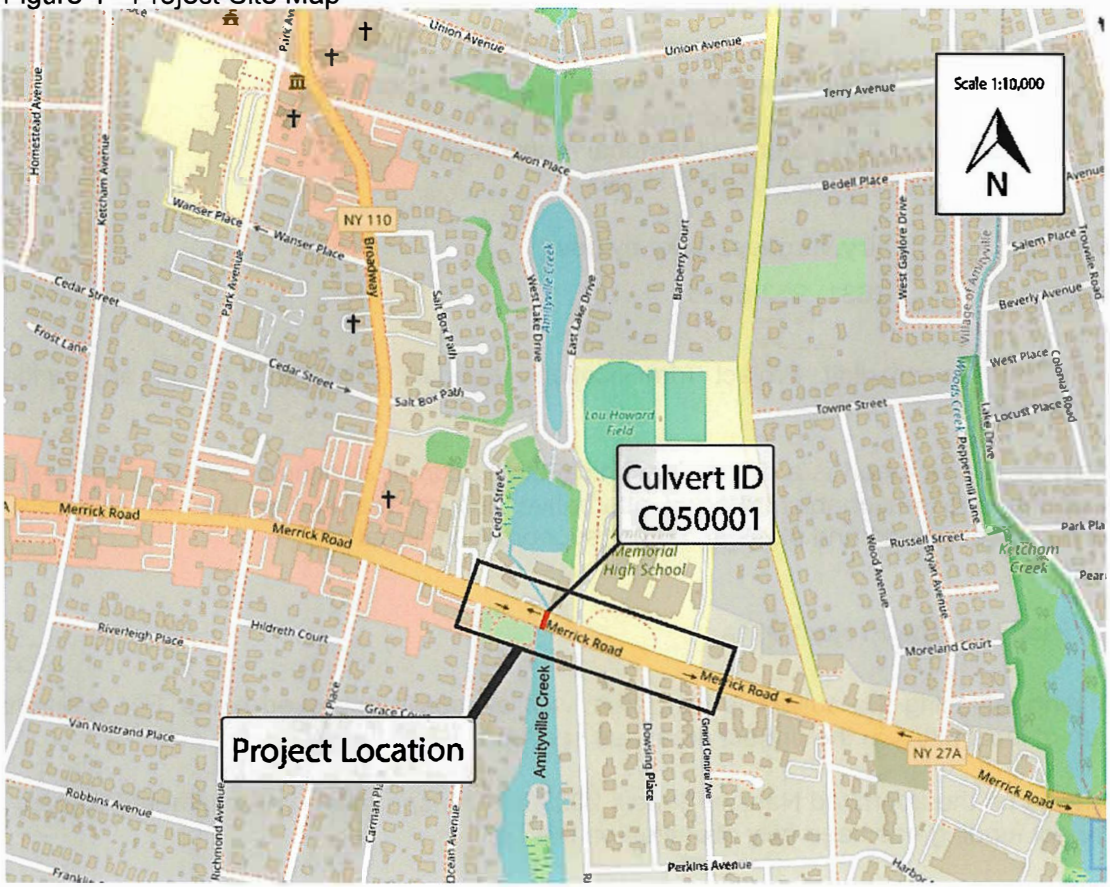
Rehabilitating/replacing the culvert is consistent with all locally approved plans. For additional discussion of local plans in the project area, see section 2.6.2 of the report.

This project is on the approved Nassau/Suffolk 2023-27 Transportation Improvement Program (TIP). Project funding has been fully allocated on the TIP.

CHAPTER 2 – Site Information

2.1 Site Map and Information:

Figure 1 - Project Site Map



A. Route number: NY27A (Reference Marker 27A 0705 1005)
B. Route name: Merrick Road
C. SH (state highway) number and official highway description: 5300
D. CIN (Culvert Identification Number) and feature crossed: C050001, Amityville Creek
E. City/Village/Township: Village of Amityville, Town of Babylon
F. County: Suffolk
G. Clear span of existing culvert: 6 ft Length of existing culvert: 65 ft
H. Any other description information which is pertinent: N/A
I. Federal Aid System: Non-NHS Functional Class: 16 – Urban Minor Arterial
J. Existing AADT: 21,937
K. Trucks: 2%

2.2 Comparison of Considered Alternatives

Alternatives Under Consideration

No Build Alternative: The No Build alternative will result in continued deterioration of the existing culvert resulting in increased maintenance and eventually requiring closure of the roadway to traffic. It also will not address hydraulic resiliency or environmental stewardship. This alternative does not satisfy the project objectives. The No Build Alternative is retained in the report to evaluate impacts resulting from the reasonable alternative.

Alternative 2: Replace Culvert, Raise Roadway to NAVD88 Elevation 6 ft. (Preferred Alternative)
This alternative will replace the existing culvert with a new larger culvert with a design life of 70 years and raise approximately 815' of the NYS Route 27A roadway profile such that the roadway is at least at the FEMA base flood elevation of NAVD88 6 ft. This alternative will satisfy the 50-year storm flow (Q_{50}) allowable headwater/depth ratio (AHW/D) guideline and prevent the roadway from overtopping during a 100-year storm event while maintaining a pavement elevation consistent with the other low points of NYS Route 27A adjacent to the project area. This alternative will also address existing non-standard features.

Alternatives Found to Be Not Reasonable

Alternative 1: Replace Culvert, No Change to Roadway Elevation
This alternative will replace the existing culvert with a new culvert with a design life of 70 years while maintaining the existing roadway elevation. The new culvert will not meet the hydraulic resiliency objectives for this project because it will not be able to pass the 50-year design storm. Additionally, the roadway will not be raised to the FEMA 100-year base flood elevation (Elevation 6 feet NAVD88) and may continue to flood during extreme weather events. Therefore, this alternative is not reasonable and has been removed from further consideration.

Alternative 3: Replace Culvert, Raise Roadway to NAVD88 Elevation 8 ft.
This alternative will replace the existing culvert with a new larger culvert with a design life of 70 years and raise approximately 1000' of the NYS Route 27A roadway profile such that the roadway is at least at elevation NAVD88 8 ft, which is the FEMA base flood elevation of NAVD88 6 ft plus an additional 2 ft of freeboard. This alternative will provide the most hydraulic resiliency by meeting the guidelines for the 50-year and 100-year storm events but will have increased property impacts when compared to Alternative 2. This alternative will also address existing non-standard features but the increased property impacts of this alternative will require more property acquisition and will have a negative effect on the Nautical Park property located west of Amityville Creek along the south side of Merrick Road. This alternative is not reasonable because of the additional property impacts compared to the reasonable alternative

Alternative 4: Rehabilitate Existing Culvert
This alternative would repair and/or reline the existing large culvert to address structural deficiencies. This alternative does not meet the project objectives because it would not provide any additional hydraulic resiliency and the roadway would continue to have flooding issues during storm events. Therefore, the alternative is not reasonable and has been removed from further consideration.

Alternative 2 is the preferred alternative and is the only alternative carried through the rest of this discussion.

Exhibit 2-1
Comparison of Considered Alternatives

Category	Alternatives Evaluated		
	No Build	**Preferred Alternative 2**	Alternative 3
Environmental Impacts			
Aquatic Resources	None	Cofferdam and turbidity Curtain	Cofferdam and turbidity Curtain
Threatened & Endangered Species	None	NLEB to be protected through winter tree cutting	NLEB to be protected through winter tree cutting
Wetlands	None	1,500 sf temp 500 sf permanent	1,500 sf temp 500 sf permanent
Section 106	None	None	None
Section 4(f)	None	Minor – Programmatic 4(f) for Parkland (small strip easement to adjust grade)	Minor – Programmatic 4(f) for Parkland (small strip easement to adjust grade)
Noise	None	Temporary: Adjacent properties during construction Permanent: None	Temporary: Adjacent properties during construction Permanent: None
Storms & Flooding	Does not meet guidelines for peak flow (Q_{50} and Q_{100})	Provides capacity for Q_{50} peak flow and enhances storm resiliency	Provides capacity for Q_{50} peak flow and meets Q_{100} freeboard guideline
Social Impacts			
Property/Relocations	None	Minor property acquisition from 9 parcels, no relocations	Substantial property acquisition, parking relocations
Mobility (Pedestrian, bicycle, transit, etc.)	Limited facilities for pedestrian/bicycle mobility	Enhanced pedestrian and bicycle mobility through addition of sidewalks and shoulders	Enhanced pedestrian and bicycle mobility through addition of sidewalks and shoulders
Environmental Justice	Within Environmental Justice area that is impacted by storm flooding	Mitigates storm flooding impact to Environmental Justice community	Mitigates storm flooding impact to Environmental Justice community
Economic and/or Operational Impacts			
Temporary Detours	N/A	N/A	N/A
Floodplain impacts	Q_{50} & Q_{100} flows overtop roadway	Will pass Q_{100} flows without overtopping roadway	Will pass Q_{100} flows without overtopping roadway and provide recommended freeboard
Utilities	N/A	Gas, water, cable, and electric to be relocated as necessary	Gas, water, cable, and electric to be relocated as necessary
Construction Cost	N/A	$6.8M	$8.7M

2.3 Anticipated Permits/Coordination/Certifications

Exhibit 2-2 Anticipated Permits/Certifications/Coordination
Permits
NYS Department of Environmental Conservation (NYSDEC):
• State Pollutant Discharge Elimination System (SPDES) General Permit
• Article 25 Tidal Wetland Permit
• Water Quality Certification - Blanket
Army Corps of Engineers (USACE):
• Nationwide Permit #3, PCN Required: N
Coordination
NYSDEC (pursuant to the "NYSDEC/NYSDOT Memorandum of Understanding Regarding ECL Articles 15 & 24")
Federal Highway Administration
New York State Historic Preservation Officer (SHPO)
US Fish and Wildlife Service
New York Natural Heritage Program
National Park Service
Municipalities – Village of Amityville, Town of Babylon
Metropolitan Planning Organization – New York Metropolitan Transportation Council
Utilities – Cablevision of Western Suffolk, PSEG, LIL National Grid, Long Island Power Authority, Suffolk County DPW Sewer District, Suffolk County Water Authority, Village of Amityville, Verizon Communications
Certifications
NYS Department of State Coastal Zone Consistency Certification Statement

2.4 Public Involvement Information

Refer to Attachment F for more information about the Public Involvement Plan and summary of public comments received for this project. Key milestone dates are shown below in Exhibit 2-3.

Exhibit 2-3
Public Involvement Plan Schedule of Milestone Dates

Activity	Date Occurred/Tentative
Field Pre-Scoping Meeting (all groups)	July 25, 2022
In-house DOT scoping meeting	August 17, 2022
Stakeholder Notification (Notification letters)	September 8, 2022
Meetings with Town/Village/County Officials	September - December 2022
Public Information Meeting / EDPL Hearing	April 26, 2023
Current Project Letting date	September 2024

2.5 Functional Classification / National Highway System / Truck Access

Exhibit 2-4
Classification Data

Route(s)	NY27A
Functional Classification	Urban – Minor Arterial
National Highway System (NHS)	No
Designated Truck Access Route	No
Qualifying Highway	No
Within 1 mile of a Qualifying Highway	No
Within the 16 ft vertical clearance network	No

2.6 Planning Considerations

2.6.1 Abutting Highway Segments and Future Plans

The abutting highway segments along NYS Route 27A east and west of the project limits typically consists of 11 ft travel lanes with minimal shoulders and left turn lanes in the median.

West of the project area, the highway consists of one lane in each direction with left turn lanes at each intersection and continuous sidewalks on both sides of the road. The travel lanes are typically 11' +/- wide. Right side shoulders in the eastbound direction are provided for on-street parking between County Line Road and NYS Route 110. There are no shoulders provided in the westbound direction.

East of the project area, the highway typically consists of two travel lanes in each direction with no shoulders and a continuous two-way left turn lane in the median. Sidewalks are continuous on both sides of the roadway. Travel lanes are typically 11'+/- wide and there are no shoulders on the right side of the roadway.

The Regional Planning Group has confirmed that there are no plans to reconstruct or widen the roadway within the project limits, or the adjoining segments, within the next 20 years.

The project site is located at a low point on NYS Route 27A of approximately elevation 4 (NAVD88) near the crossing over Amityville Creek. To the east of the project area, there is a low point on NYS Route 27A of approximately elevation 6 (NAVD88) over Ketcham Creek. The preferred Alternative 2 proposes to raise the roadway at Amityville Creek to a similar elevation as NYS Route 27A at adjacent streams in order to reduce roadway flooding and maintain vehicle access along the corridor. Refer to exhibit in Attachment A for localized high and low points along NYS Route 27A near the project site.

2.6.2 Local Plans for the Project Area

Also see discussion in Section 1.8 regarding project level adherence to Local Plans.

A Comprehensive Storm Drainage Improvement Study was prepared by the Village of Amityville in 2018. This study assessed the existing stormwater drainage systems in the Village of Amityville, identified deficiencies, developed strategies and improvements, compared design alternatives, and made recommendations based on priority areas. The study suggested solutions such as bulkhead replacements, check valve installations, updates to existing closed drainage systems, and road raising at certain locations particularly prone to flooding. The subject project location was not included on the list of proposed road raising locations because sites south of NYS Route 27A are at a lower elevation and more prone to flooding, and, therefore, were identified as priority locations for improvements. The proposed project would not conflict with local plans and improvements detailed in the study.

There are no approved developments planned within the project area that will impact the project or traffic operations.

2.6.3 Access Control

Access is unrestricted along NYS Route 27A. Sixteen business and residential driveways exit onto the highway within the project limits between Bennett Place and Grand Central Avenue. Public input on the existing eastbound turning movement into Hidden Lakes Estates at the Ocean Avenue intersection has been evaluated and a short unsignalized eastbound median left-turn lane into Hidden Lakes Estate will be added to the proposed project. No other existing access control is proposed to change.

2.7 Traffic Considerations

2.7.1 Traffic Volumes

Exhibit 2-5
Existing and Forecast Traffic Volumes

	NY27A	
Year	**AADT**	**DHV**
2019	21,937	1,750
ETC (2026)	22,622	1,805
ETC+20 (2046)	24,698	1,970

ETC is the Estimated Time of Completion for the project. A growth factor of 0.44% per year is used to predict future traffic volumes based on NYMTC's Plan 2045 Table 2.6. Traffic Data is sourced from the NYSDOT Traffic Data Viewer. As per NYSDOT Highway Design Manual Chapter 5, Exhibit 5.1b, culvert replacements and rehabilitations do not require a traffic analysis for future design years if the capacity of the roadway is not changing. ETC and ETC+20 traffic volumes are provided for informational purposes. The existing Truck AADT is 541, or approximately 2% of AADT.

2.7.2 Speed Studies

Exhibit 2-6
Speed Data

Route	NY27A
Existing Speed Limit	30 mph
Operating Speed (mph) and Method Used for Measurement	39 mph (85th percentile speed)* Measured by Radar in January 2023

** Source: Speed Study dated January 2023, see Attachment C*

2.7.3 Level of Service Analysis

This project does not propose any capacity improvements and NYSDOT does not anticipate the need for capacity improvements within the next 20+ years. The traffic signal at Riverside Avenue will be replaced in-kind with the same timings and lane arrangements. A traffic impact study is not provided for this project.

2.7.4 Safety and Crash History Analysis

A crash analysis was performed in accordance with NYS Highway Design Manual Chapter 5. The analysis was made on an approximate segment from RM 27A 0705 1004 to RM 27A 0705 1006, a length of approximately ½ mile, and was performed on data from the most recent three-year period from 06/01/2019 to 5/31/2022.

Based on the crash data provided by NYS Department of Motor Vehicles, there were a total of 41 crashes during the 3-year study period. The crash rate for this segment of NY27A is calculated to be 6.96 crashes per million vehicle miles. This is higher than the statewide crash rate for similar facilities, which is 5.31 crashes per million vehicle miles. Therefore, this segment is considered a High Accident Location (HAL).

As shown in Exhibit 2-7 below, the predominant crash types for the segment analyzed are Rear End:

Exhibit 2-7
Collision Summary
NYS Route 27A, Approx from RM 27A 0705 1004 to 27A 0705 1006

Type of Collision	Number	Percentage
Rear End	32	78.0
Fixed Object	2	4.9
Sideswipe (Same Direction)	2	4.9
Bicyclist and Pedestrian	2	4.9
Right Turn (Against Other Car)	1	2.4
Left Turn (Against Other Car)	1	2.4
Right Angle	1	2.4

According to NYSDOT Region 10, there is a Priority Investigation Location (PIL) within the study area. PILs are identified by NYSDOT as more severe crash sites having experienced an established threshold of a set number of crashes in the most recent two-year period and having experienced crash rates exceeding a statistical upper control limit for the particular highway type. The PIL exists between RM 27A 0705 1004 and RM 27A 0705 1007, which overlaps the project location. The narrow shoulders or lack of shoulders may have contributed to the high crash rate. Based on the 85th percentile speed on NY27A, which was found to be 39 mph in the vicinity of the culvert (see Exhibit 2-6 and Speed Study in Attachment C), the required minimum stopping sight distance is 271 ft (Exhibit 2-12). The stopping sight distances available both east and west of the culvert exceed the minimum requirements. Note that rear end crashes and bike/ped crashes make up 83% of the total crashes in the project area. The existing shoulder

width is non-standard and the project proposes to improve the shoulder width to meet standards, which should reduce the crash rate.

Additionally, public input on the safety of the existing eastbound turning movement into Hidden Lakes Estates at the Ocean Avenue intersection was considered. The project will add a short unsignalized eastbound median left-turn lane into Hidden Lakes Estates to provide queuing storage for a few cars that will reduce conflicts within the general travel lanes.

A crash analysis is contained in Attachment C.

2.7.5 Pedestrians, Bicyclists and Transit (Complete Streets)

Pedestrians - There are existing generators of pedestrian traffic within the project area. The adjacent land use is split between commercial, residential and parkland. Amityville Memorial High School is located within project limits. Pedestrian travel primarily consists of students and residents using the sidewalks to travel to school, to adjacent commercial areas, and to Nautical Park (a passive park adjacent to the project area).

The existing sidewalks are in good condition with minor damage to curbs. However, there is a missing sidewalk connection on the south side of NY27A between Riverside Avenue and Grand Central Avenue. The project proposes to provide continuous sidewalks on both sides of the roadway along with striped crosswalks, including constructing the missing section of sidewalk between Riverside Avenue and Grand Central Avenue. All sidewalk and crosswalks will be constructed to meet ADA-compliant standards for pedestrian facilities.

Bicyclists – There is potential for bicycling within the project limits. This route is not a designated bike route and high levels of bicycle traffic have not been identified during site visits. However, higher bicycle levels are anticipated at other times in the project area due to the proximity of Amityville Memorial High School and the suburban context of the roadway. One crash from the historical data provided resulted in an injury to a bicyclist. The existing eastbound shoulder varies between 3.5 and 5 ft and there is no westbound shoulder at the culvert. A continuous 4 ft shoulder is proposed in both directions to accommodate bicyclists and provide them with more room to operate along NY27A in the project area.

Transit - There is one public transit bus line (S20), operated by Suffolk County Transit, that passes through the study area. In addition, Amityville Memorial High School is within the project area, which is assumed to have a substantial amount of school bus traffic during the morning and afternoon peak hours.

Dock - There is an existing dock over the outfall of the culvert on the south side of NYS Route 27A. The dock, which is believed to be originally constructed circa 1920's, is severely deteriorated and is not recommended for use in its current condition. The dock is not owned by NYSDOT and to construct the new culvert the dock must be partially removed. The Department will remove the dock under this project as the new crash barrier proposed at the culvert will eliminate access to the dock from the roadway.

2.8 Culverts

2.8.1 Culvert Data

The existing culvert is more than 90 years old and has steel beams embedded in the top slab for strength. Record plans for the structure are not available and inspection reports indicate deterioration of the structure. The existing culvert is described in the table below. The project proposes to replace the existing culvert with a new structure.

Exhibit 2-10
Structure Data

Data	Existing Structure	Proposed Structure
Culvert Identification Number	C050001	C050001
Feature Carried/Crossed	NY27A / Amityville Creek	NY27A / Amityville Creek
Type of Structure	3-sided steel / concrete culvert	3-sided pre-cast concrete culvert
Number and Length of Spans	1 span, 6 ft span length	1 span, 11 ft span length
Hydraulic Opening	3 ft H x 6 ft W	5 ft H x 11 ft W
Lane Width(s)	14.5 ft WB, 10 ft Turning, 11 ft EB	11 ft WB, 11 ft Turning & 11 ft EB
Curb to curb width	39 ft	41 ft
Shoulder Width(s)	0 ft WB, 3.5 ft EB	4 ft each direction
Sidewalk(s)	5+ feet, both sides	5+ feet, both sides
Utilities Carried	Water, Gas, Overhead Electric, Overhead & Underground Cable, Sanitary Sewer	Water, Gas, Overhead Electric, Overhead & Underground Cable, Sanitary Sewer
Horizontal Clearance(s)	1 ft WB, 15 ft EB	15 ft 3 in WB, 15 ft 4 in EB
Vertical Clearance(s)	15 ft 6 in (traffic signal head)	15 ft 6 in (traffic signal head)
State Condition Rating	3.522 (poor condition)	7.000 (new condition)

History & Deficiencies – The existing pavement elevation in the project area is at elevation 4' (NAVD88 Datum) and prone to flooding during extreme weather events. The village of Amityville states that minor flooding occurs several times each year. There are also structural deficiencies of the culvert with two (2) structural flags identified in the most recent inspection report.

Inspection – The last structural Inspection was performed on October 31, 2022. The General Recommendation Rating of 3 indicates the structure is in poor condition. The primary concerns are the deteriorating top slab and undermining of the culvert footings. Two (2) structural flags identified in the last inspection indicates heavily corroded bottom flanges in the top slab with section loss and footings undermined for 50% of their length. This structure shows signs of advanced structural deteriorations. Based on its structural deficiencies and age, it is recommended to replace the culvert.

Restrictions – None

Waterway – The waterway within the project limits is not navigable. This project is not near any US Coast Guard navigational aids and does not have navigable facilities near the site. Existing boat slips south of the project site will not be impacted by the project. A Coast Guard Checklist is not required.

2.8.2 Hydraulic Considerations

A detailed hydraulic analysis and field investigation for the culvert that carries NY27A over Amityville Creek have been completed and can be found in Attachment I. The findings and recommendations of the hydraulic analysis are summarized below.

The existing structure is a 65 ft long 6 ft wide x 3 ft high 3-sided culvert on 5 degrees skew and was built more than 90 years ago. The hydrologic and hydraulic analysis indicates that the existing structure is not adequate to carry the design discharges from 50-year storm and 100-year storm events (the roadway overtops in both storm events). This structure can be lined to temporarily address the immediate structural deficiencies with a less hydraulically efficient structure. However, this rehabilitation option is not recommended as a permanent solution to the existing structural deficiencies since it will exacerbate the roadway overtopping during design flows.

This culvert is considered Non-Critical for the purposes of the NYS Flood Risk Management Guidelines and the resulting criteria in Exhibit 8-12 of the NYS Highway Design Manual (HDM) Chapter 8. As noted in Exhibit 2-11 below, the hydraulic analysis included modeling the following:

An 11 ft wide x 5 ft high 3-sided structure with a minimum roadway elevation of 6 ft (Alternative 2) was modeled using HY-8 software using the configurations shown in the plans in Attachment A. The hydraulic data is shown in Exhibit 2-11 below. It assumes the same skew as existing and the use of headwalls.

Exhibit 2-11
Flood Risk Management Guidelines

Highway Criticality	Design/ Checked Flood Frequency (Years)	Existing Structure (6' wide x 3' high)			Proposed Replacement (11' wide x 5' high)		
		Water Surface Elevation (WSEL)	Allowable Headwater/Depth Ratio (AHW/D)	Roadway Freeboard	Change in WSEL (ft)	AHW/D	Roadway Freeboard
Non-Critical Highways	projected Q_{50} Design (203 cfs)	5.03 feet (NAVD88)	1.86	-1.41 ft (roadway overtops)	0.39	1.19	0.58 ft
	projected Q_{100} Check (228 cfs)	5.31 feet (NAVD88)	1.95	-1.69 ft (roadway overtops)	0.53	1.28	0.16 ft

Based on the results of the hydraulic assessment/analysis included in the Drainage Report (Attachment I) and Exhibit 2.11 above:

- The proposed hydraulic opening of 11 ft wide x 5 ft tall 3-side culvert meets the guidelines for the 50-year AHW/D ratio (AHW/D≤1.2 for D=5ft).
- The proposed hydraulic opening does not meet guidelines for the 100-year check elevation below the bottom of the subbase due to being outlet controlled by the high

tailwater elevation from the Great South Bay as defined in the FEMA Flood Insurance Study (see Watershed Report in Attachment I). However, this alternative does prevent overtopping of the roadway for the 100-year storm due to raising the roadway to be at least the FEMA base flood elevation of 6ft NAVD88. This non-conforming hydraulic feature is proposed to be retained under the preferred Alternative 2 and is discussed in Section 2.9.4. Although Alternative 3 would satisfy the guideline of the 100-year headwater elevation being at or below the bottom of subbase, it would entail significantly more impacts to adjacent properties and would require flatter longitudinal grades of the roadway and more drainage inlets to achieve gutter spread design guidelines.

- Tailwater elevations are in Watershed Report in Attachment I and are based on FEMA study stillwater elevations (elev. 5.0 for 50-yr and 5.3 for 100-yr).

- The proposed 3-sided culvert will have a natural stream bottom. Stream material removed due to construction will be replaced by suitable material. Scour analysis and erosion protection will be completed in final design.

2.9 Design Standards

2.9.1 Critical Design Elements

Exhibit 2-12 Table of Critical Design Elements					
PIN	0LC1.01	**CIN**		C050001	
Functional Class:	Urban – Minor Arterial	**NHS**		**Non-NHS**	X
Design Class:	Arterial	**Context Class:**		Suburban	
Project Type:	Culvert Replacement	**Terrain:**		Level	
Design Year AADT:	24,698(ETC+20)	**Percentage of Trucks:**		2%	
Truck Access or Qualifying Highway (QH)?	No	**If not a QH, is project within 1 mi of a QH?**		No	
Existing or Proposed Bicycle Route?	No	**Anticipated level of bicycle activity**		High	

	Element	Standard	Existing Condition	Proposed Condition[2]
1	Design Speed	40 mph[1] HDM Section 2.7.2.3 A	30 mph posted	40 mph Design Speed Maintain 30 mph speed limit
2	Lane Width	11 ft min., 12 ft desirable Turning lane <= 2% trucks: 10 ft min., 11 ft desirable HDM Section 2.7.2.3 B, Exhibit 2-4	14.5 ft shared lane westbound (no shoulder) 10 ft turning lane 11 ft eastbound	11 ft 11 ft turn lane
3	Shoulder Width	4 ft min., 5 ft desirable Shoulder will accommodate bicyclists HDM Section 2.7.2.3 C, Exhibits 2-1a and 2-4	0 ft westbound** 3.5 ft eastbound**	4 ft westbound 4 ft eastbound
4	Horizontal Curve Radius	356 ft Min. (at e_{max} = 4%) HDM Section 2.7.2.3 D, Exhibit 2-4	Tangent	Tangent
5	Superelevation	e_{max} = 4% HDM Section 2.7.2.3 E, Exhibit 2-1b	Normal Crown	Normal Crown
6	Stopping Sight Distance (Horizontal and Vertical)	271 ft Min. HDM Section 2.7.2.3 F, Exhibit 2-4	562 ft	562 ft
7	Maximum Grade	7% HDM Section 2.7.2.3 G, Exhibit 2-4	2.5%	1.8%
8	Cross Slope	1.5% Min., 3% Max. HDM Section 2.7.2.3 H	1.5% Min.	2%
9	Vertical Clearance	HDM Section 2.7.2.3 I NYSDOT Standard Sheet 680-07 (Traffic Signal Head)	15 ft 6 in	15 ft 6 in

	Element	Standard	Existing Condition	Proposed Condition[2]
10	Design Loading Structural Capacity	NYSDOT LRFD Specifications: AASHTO HL-93 Live Load with LRFR 1.2 or higher HDM Section 19.5.3	N/A	AASHTO HL-93 Live Load with LRFR 1.2 or higher
11	Americans with Disabilities Act Compliance[3]	HDM Chapter 18	Facilities will be evaluated in final design	Proposed pedestrian facilities will comply with HDM Chapter 18

Notes:

1 The Regional Traffic Engineer has concurred that the proposed Design Speed of 40 mph is consistent with the anticipated off-peak 85th percentile speed and is within the design classification's range of design speeds for terrain and volume.

2 ** Denotes non-standard feature

3 Refer to Section 2.3.5 for detailed pedestrian facility information.

2.9.2 Other Design Parameters

Exhibit 2-13
Other Design Parameters

Element	Parameter	Parameter Measurement based on Existing Conditions	Proposed Condition
Clear Zone	15-feet HDM Sections 10.2 & 10.3	1-ft *	5-ft *
Drainage Design Storm	5-year HDM Section 8.3.2.4, Exhibit 8-3	-	5-year
Culvert Design Storm	50-year HDM Section 8.3.2.4, Exhibit 8-3	-	50-year
Allowable Headwater at Culvert Inlets	Below bottom of subbase for the 100-year design storm HDM Section 8.6.1.1, Exhibit 8-12	-1.69 ft * (roadway overtops)	0.16 ft *
AHW/D for culverts	50-year design storm: < 1.5 for D ≤ 4ft ≤ 1.2 for D = 5ft HDM Section 8.6.1.1 C, Exhibit 8-12	1.86	1.19
Span (internal width across stream)	Flows shall be accommodated by carrying (field measured) average bank-full channel cross-sectional dimensions through a single opening Average measured bankfull width: 8 feet 1.25 x OHW Mark width: 10 ft Width at 2-year design storm: 8 feet *See USACE Nationwide Permits (NWP) 2021 Regional Condition G-B.1.a. NYSDEC Blanket Water Quality Certification for 2017 NWPs Condition 2*	6 ft	11 ft
Slope (N/A for bottomless or 3-sided culverts)	Existing Stream Slope 0.7% *See USACE Nationwide Permits (NWP) 2021 Regional Condition G-B.1.d NYSDEC Blanket Water Quality*	N/A (3-sided culvert)	N/A (3-sided culvert)

Exhibit 2-13
Other Design Parameters

Element	Parameter	Parameter Measurement based on Existing Conditions	Proposed Condition
	Certification for 2021 NWPs Condition 2.		
Stone apron/scour protection	At or below streambed to create uniform streambed grade *See USACE Nationwide Permits (NWP) 2021 Regional Condition G-B.1.e*	Y/N: Y	Y/N: Y
Low flow channel	Low flow channel concentrates and conveys low flows continuously through structure from upstream to downstream on surface of stream bed Low flow channel dimensions Shape : Rectangular Depth: 1' Width:8' *See USACE Nationwide Permits (NWP) 2021 General Condition C.2.*		Low flow channel dimensions within crossing Shape: Rectangular Depth: 1' Width: 8'
Discharge velocity	Matches stream flow velocity of stream reach at the 2-year design storm flowrate (Q2) and at aquatic base flow[2] Existing stream velocity at: Q2: 6.10 ft/s Aquatic base flow: N/A *See USACE Nationwide Permits (NWP) 2021 General Condition C.2.* *USACE NWP General Condition C.9.*	Culvert outlet discharge velocity at: Q2: 6.10 ft/s Aquatic base flow: N/A	Culvert outlet discharge velocity at: Q2: 3.33 ft/s Aquatic base flow: N/A

Notes:

1 * Denotes non-conforming feature

[2] Aquatic base flow is estimated as 0.5-1.0 CFS per square mile of drainage area

Exhibit 2-14 Other Design Parameter: Design Vehicle		
Location	**Design Vehicle**	**Vehicle Accommodated**
NYS Route 27A	SU, S-BUS 40	SU, S-BUS 40

2.9.3 Existing and Proposed Highway/Bridge Plan and Section

The existing section and proposed typical section diagrams are located in Attachment A.

2.9.4 Nonstandard/Nonconforming Features

The following nonconforming features are proposed to be retained.

Clear Zone Width - The required Basic Recovery Width for a 40 mph design speed and an AADT over 6,000 is 15-feet. Currently, there are trees and utility poles (fixed objects) within 1-ft of the edge of travelway in the westbound direction. There is no curb vaulting/fixed object crash history and, per NYSDOT HDM Section 10.2.1 for reconstruction projects, clear zones are minimum goals to be tempered by field conditions, crash history, and other factors; And that, barring significant history of run-off-road crashes, non-freeway 2R and 3R projects may frequently be designed with clear zone widths that do not meet the recommended widths in NYSDOT HDM Exhibit 10-1. Additionally, in heavily developed areas, right-of-way limitations may preclude devoting substantial space to effective clear zones. This project location is in a heavily developed area, has right-of-way limitations, and has no significant history of run-off-road crashes. The project proposes to improve the clear zone width from 1-ft to 5-ft with the introduction of standard shoulder widths.

Additionally, there is no existing protection for the drop-off hazard into Amityville Creek on both sides of the highway. Crash rated aesthetic barriers are proposed to provide protection from the drop-off into Amityville Creek for the majority of the point-of-need protection. Impacts and access restrictions from an existing walkway accessing the roadway to the property on the north side of the culvert were limited, resulting in approximately 20 linear feet of redirection coverage not provided on the westbound approach. There is no run-off-road crash history within the project limits and the project will enhance the drop-off protection to Amityville Creek.

100-Year Freeboard - The 100-year design storm freeboard for the preferred alternative is below the roadway surface but does not meet the recommended guideline of being below the bottom of subbase (18" below roadway surface). Therefore, in the preferred alternative, the roadway will not overtop during the 100-year design storm and is an enhancement from the existing condition which overtops during smaller design storms.

The following existing non-standard features will be enhanced. The project does not propose to retain any non-standard features.

Shoulder Width - The existing shoulder in the project area is non-standard. The lack of proper width shoulders does not provide proper accommodations for bicyclists. The lack of shoulders may also be a contributing factor for the high crash rate. Widening the shoulders will likely lower the crash rate for rear end crashes and bicycle/pedestrian crashes. The proposed project will include the minimum standard shoulder in both directions.

ADA Facilities - The compliance of existing pedestrian facilities within the scope of this project (refer to Section 2.3.5) will be evaluated in final design using the applicable standards in the NYSDOT Critical Elements for the Design, Layout and Acceptance of Pedestrian Facilities found on the NYSDOT Highway Design Manual Chapter 18 webpage. If any facilities do not meet the applicable standards, then the procedural requirements identified in ED 15-004 - Design, Construction and Inspection of Pedestrian Facilities in the Public Right of Way will be followed and they will be rehabilitated, replaced, or justified as nonstandard (in final design).

2.10 Other Infrastructure Considerations

2.10.1 Pavement and Shoulder Conditions

The pavement and shoulder in the project area are in good condition, with no large potholes or pavement patches. The pavement shows some minor cracking due to its age, but this does not impact ride quality. The proposed pavement for the project will be new full-depth asphalt in the area of the culvert replacement and an asphalt overlay at the project limits where the new pavement elevations will be similar to existing. Additionally, in order to address standing water issues and re-striping, we are proposing to extend the project resurfacing limits to the west approximately 250 feet west of Ocean Avenue and to the east up to the intersection of Grand Central Avenue.

2.10.2 Right of Way

The NYSDOT Regional Right of Way Group does not consider the property takes de-minimis (small or inconsequential), therefore, an Eminent Domain Procedure Law (EDPL) hearing is required. This hearing was held simultaneously with the public information meeting on April 26, 2023.

The table below identifies potential property acquisitions (FEE) or temporary easements (TE) that will be necessary to construct the new culverts and the associated "raised" roadway to construct and support the system. No acquisitions or easement are anticipated for any other purposes.

Exhibit 2-15 also represents the impacts associated with Alternative 2 (6' roadway elevation). Alternative 3 (8' roadway elevation) would impact properties to the north and south of NYS Route 27A to a greater degree as it will require additional grading to meet existing property grades. The impact to the apartment building complex to the north of NYS Route 27A would be substantial, requiring additional drainage relief for that property.

Exhibit 2-15 Anticipated Right-of-Way Acquisitions (Alternative 2)					
Reputed Owner	**Tax Map No.**	**Type of Acquisition**	**Estimated Acquisition Area (SF)[1]**	**Parcel Size (SF)**	**Percentage of Acquisition**
200 Merrick Road Corp.	0101-008.00-01.00-023.000	FEE	167	110,362	0.15%
		PE	73	110,362	0.07%
		TE	287	110.362	0.26%
Union Free School District 6	0101-008.00-01.00-022.000	FEE	960	600,070	0.16%
County of Suffolk	0101-007.00-08.00-006.000	PE	69	5,379	1.28%
County of Suffolk	0101-007.00-08.00-007.000	FEE	32	6,131	0.52%
		PE	162	6,131	2.64%
Town of Babylon	0101-012.00-02.00-001.000	FEE	489	N/A	N/A
		TE	977	N/A	N/A
2550 Corp	0101-010.00-02.00-067.000	FEE	242	15,284	1.58%
C&3 GS, Inc.	0101-01.00-02.00-020.0001	FEE	416	28,116	1.48%
		PE	1,256	28,116	4.47%
Judith Properties, Inc.	0101-010.00-02.00-021.000	FEE	371	8,933	4.15%
		PE	483	8,933	5.41%
2550 Corp	0101-010.00-02.00-001.0001	FEE	41	1,759	2.33%

[1] – Estimated acquisition areas are approximate.

2.10.3 Geotechnical

There are no special geotechnical concerns with the soils or rock slopes within the project area. The proposed 3-sided culvert will have pile supports for the footings because rock is not near the streambed and spread footings are not permissible with uses conveying water that may have scour vulnerability.

2.10.4 Access Management

This project will not permanently affect access to any properties along NYS Route 27A.

2.10.5 Traffic Control Devices

Under the preferred Alternative 2, It is anticipated that the existing traffic signal at Riverside Avenue and NY27A will need to be replaced as part of the roadway reconstruction work. The intersection profile is proposed to be raised approximately 2.5-ft and the traffic signals will be replaced in-kind to provide the required 15 ft 6 in vertical clearance to signal heads. The project

does not propose any changes to existing signal timing and lane arrangements at this intersection. A SERF form has been completed for FHWA and is included in Attachment C.

2.10.6 Drainage Systems

The existing drainage system outlets into the side of the existing culvert that crosses under NYS Route 27A. This system will be replaced as part of this project. The Village of Amityville has identified stormwater collection deficiencies near the intersections of Ocean Avenue and Grand Central Avenue with NYS Route 27A. Due to the change in elevation of the roadway, changes to stormwater runoff on adjacent properties and driveways will be mitigated so there are no adverse impacts. Stormwater from the new roadway will be collected before reaching private property through the installation of a positive drainage system, where feasible. Leaching basins will be installed where a connection to a closed drainage system is not available and where soil conditions and groundwater elevation permit. Ground disturbances extend outside the highway boundary in various locations throughout the project to support the highway fill with the proposed profile increase resulting in more than one acre of disturbance.

Therefore, the project will require a SPDES Construction General Permit GP-0-20-001. Requirements for stormwater management practices that provide water quality treatment and water quantity controls must be assessed. The results of the SPDES assessment indicate that stormwater quantity controls are not required because the project outlets into a fifth order stream. A Stormwater Pollution Prevention Plan (SWPPP) with the appropriate erosion and sediment control measures and permanent stormwater management practices will be developed prior to commencement of construction activity.

2.10.7 Utilities and Lighting/

Due to the raising of the roadway, various utilities will be impacted. Impacts will be mitigated during final design. Impacts will be identified, and the limit of the impacts will be determined in final design. Based on initial coordination with PSEG Long Island and Verizon, the utility poles on the south side of NYS Route 27A from Ocean Avenue to Grand Central Avenue will be removed and facilities relocated to the utility poles on the north side of NYS Route 27A within the same limits.

Exhibit 2-16
Utilities

Owner	Type	Location/Side	Length	Condition/Conflict
Suffolk County Water Authority	Water	WB Lane / LT	950-ft	8" active main / vertical adjustment at culvert
National Grid	Gas	EB Sidewalk / RT	950-ft	6" steel main / tree root removal and adjustment at culvert
PSEG Long Island	Electric	WB overhead poles / LT Light feeder to pole at EB sidewalk Sta. 15+00	950-ft	active overhead / replace poles with higher poles
Suffolk County DPW Sewer Authority	Sanitary Sewer	Centerline	500-ft	12" CIP centerline & 30" across Riverside Ave / maintain & protect

Exhibit 2-16 Utilities				
Owner	**Type**	**Location/Side**	**Length**	**Condition/Conflict**
Cablevision of Western Suffolk	Comm	WB overhead poles / LT	905-ft	maintain on new poles
Verizon Communications	Comm	EB Sidewalk & overhead poles / RT	950-ft	20 duct bank / vertical adjustment at culvert 2 active overhead lines / relocate to WB overhead poles

2.10.8 Guide Railing, Median/Roadside Barriers and Impact Attenuators

A decorative concrete bridge barrier is proposed to be installed at the new culvert. This will protect vehicles from entering Amityville Creek, should they veer off the road. On the north side of NYS Route 27A, the existing guide rail between the roadway and the sidewalk is proposed to be removed and a new decorative bridge barrier will be installed within the limits of the culvert on both sides. Decorative fencing will remain along the parking lots on the north side.

On the south side of NYS Route 27A, the decorative bridge barrier will extend beyond the structure to prevent vehicles that veer off the road from entering Amityville Creek. Decorative fencing and the decorative light fixtures and pedestals will remain along the Nautical Park property.

Exhibit 2-17 Proposed Location of Guide Railing, Median Barriers and Impact Attenuators		
Type	**Location**	**Approx. Length (ft)**
Retaining Wall with Decorative Fence	North side NY27A beyond culvert	32
Decorative Bridge Barrier	South side NY27A at culvert	107
Decorative Bridge Barrier	North side NY27A at culvert	31
Retaining Wall	South side NY27A beyond culvert	104

2.10.9 Intelligent Transportation Systems (ITS)

The existing traffic signal poles and equipment at the intersection of NYS Route 27A and Riverside Avenue are being replaced in-kind with new traffic signal poles and equipment. A Systems Engineering Review Form (SERF) has been completed and included in Attachment C.

2.10.10 Landscape and Community Enhancement Considerations

Adjacent to NYS Route 27A is Nautical Park, owned by Suffolk County and maintained by the Village of Amityville. The park may be impacted by this project. The level of impact, if any, is anticipated to be minor. The existing gate entrance near the culvert will be relocated approximately 40 feet to the west to accommodate the necessary road raising at the culvert. In addition, NYSDOT will remove existing street trees and replace them with new trees in front of the Nautical Park in consultation with the Village of Amityville and Suffolk County.

2.11 Work Zone Safety and Mobility

2.11.1 Transportation Management Plan

The Region has determined that the subject project is not significant per 23 CFR 630.1010.

A Transportation Management Plan (TMP) will be prepared for the project consistent with 23 CFR 630.1012. The TMP will consist of a Temporary Traffic Control (TTC) plan. Transportation Operations (TO) and Public Information (PI) components of a TMP will be considered during final design.

2.11.2 Proposed Work Zone Traffic Control

Refer to Attachment A of this report for the three-stage work zone traffic control plan. Two-way traffic will be maintained at all times during construction. The center turning lane will be temporary closed during construction. The work zone traffic control plan will accommodate pedestrians via sidewalk detours and bicyclists via shared lanes and/or guidance to dismount and walk on sidewalks. Signs will be provided to guide pedestrians and bicyclists during each stage of construction. No off-site detours are anticipated during construction.

Temporary concrete barriers will be used to separate traffic from the work zones.

The new culvert structure, which is wider than the existing structure, allows for the new culvert sidewalls to be placed outboard of the existing structure while the basic flow of Amityville Creek is maintained within the old structure. Small cofferdam structures will be needed at each end of the culvert to maintain the base flow and allow the new culvert end sections and headwalls to be constructed.

Stage 1 will shift eastbound & westbound travel lanes up against the existing westbound curb, and the south side of the roadway and culvert will be removed and reconstructed. Temporary GRSS walls will likely be used to support the 1-2' higher proposed roadway along the stage line.

Stage 2 will shift the eastbound travel lane up against the newly constructed proposed eastbound curb so that a work zone can be created between the eastbound and westbound lanes. The roadway and culvert in this center section of the roadway will be reconstructed. Again, temporary GRSS walls will be needed to support the 1-2' higher proposed roadway along the stage line.

Stage 3 will shift both the eastbound & westbound travel lanes up against the newly constructed proposed eastbound curb, and the northern-most portion of the roadway and culvert will be reconstructed.

Routes for emergency vehicles as well as access to all side streets and driveways will be maintained during construction. The details for the work zone traffic control plans will be prepared and evaluated during final design.

2.12 Additional Considerations

2.12.1 Constructability Review

The Regional Construction Group has no concerns regarding constructability. Any constructability concerns that do arise will be addressed during final design.

2.12.2 Ownership and Maintenance Jurisdiction

The roadway, culvert and traffic signals at Riverside Avenue are currently owned and maintained by NYSDOT and will continue to be owned and maintained by NYSDOT after construction.

2.12.3 NYS Smart Growth Public Infrastructure Policy Act (SGPIPA)

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act (SGPIPA), as it will enhance existing infrastructure.

To the extent practicable this project has met the relevant criteria as described in ECL § 6-0107. The Smart Growth Screening Tool was used to assess the project's consistency and alignment with relevant Smart Growth criteria. The tool reflects the current project scope. The Smart Growth Screening Tool is included in Attachment J.

2.13 Social, Economic, and Environmental Considerations

Refer to the Social, Economic and Environmental Resources Checklist (SEERC) included in Attachment B for information on all environmental issues for which the project was screened.

2.13.1 National Environmental Policy Act (NEPA)

This project is being progressed as a NEPA Class II action (Categorical Exclusion or CE) because it does not individually or cumulatively have a significant environmental impact. As a CE, it is excluded from the requirement for the preparation of an Environmental Impact Statement (EIS) or Environmental Assessment (EA).

Per the Federal Highway Administration's regulations in 23 CFR 771.117, this project qualifies as a Categorical Exclusion (CE). The project is primarily a culvert replacement (23 CFR 771.117(c)(28)) and does not significantly impact the environment. Per the result of the project wide Federal Environmental Approvals Worksheet (FEAW) provided in Attachment B and in accordance with the NYSDOT/FHWA Programmatic Agreement Regarding Categorical Exclusions, the NYSDOT will make the NEPA environmental determination pending FHWA's concurrence. The Deputy Chief Engineer of Design's signature on the Project Approval Sheet of this document will constitute the CE determination. Refer to the FEAW in Attachment B for the details of this determination.

2.13.2 State Environmental Quality Review Act (SEQRA)

New York State Department of Transportation is the SEQRA lead agency as per 17 NYCRR Part 15 "Procedures for Implementation of State Environmental Quality Review Act", Section 15.5.

SEQRA Type II
In accordance with 17 NYCRR Part 15, the Department has determined that this project meets the requirements of a SEQRA Type II Action. A Type II Action is one that is of a class or type of action which has been determined in 17 NYCRR 15.14 to not have a significant effect on the environment. No further SEQRA processing is required. The project is identified as Type II per 17 NYCRR Section 15.14, Subdivision (e), Item 37, Paragraph iv. The project does not violate any of the criteria contained in subdivision (d) of Section 15.14. The SEQRA Type II Action Analysis is included in Attachment B.

2.13.3 Additional Environmental Information

2.13.3.1: Surface Water and Wetland Resources:

The proposed replacement culvert carries the Amityville Creek under NYS Route 27A. At this location the stream is perennial and is classified by the NYSDEC as a class C and standard C(T) waterbody. Waters with a classification of C with a standard of T indicates that it is a designated trout water and is regulated by NYSDEC. Trout supported streams (standard T) require in-water work date restrictions; in-water work is prohibited between October 1 and April 30.

The following information on Amityville Creek was gathered through field visits and topographic surveys. The creek is in a commercial/residential area with development of pervious area on the southwest quadrant of the culvert and impervious area on the remaining three quadrants. The stream appears to have been altered directly upstream of the culvert from development and is lined with concrete walls on both sides. Downstream of the culvert the stream configuration also appears to have been influenced by the development of marina docks.

Exhibit 2-19
Field-Measured Stream Cross Section Data

	Stream Bed Low Point	Ordinary High Water (OHW) width	OHW x 1.25	Bankfull width
Waterbody Cross Section A 100 ft upstream of culvert	+/- El. 0.10 ft	+10.50 ft ±	13.13 ft	10.5 ft
Waterbody Cross Section B 80 feet upstream of culvert	+/- El. 0.00 ft	+9 ft ±	11.25 ft	9 ft
Waterbody Cross Section C 30 feet downstream of culvert	+/- El. (-) 1.5 ft	+80 ft ±	100 ft	80 ft ±
Waterbody Cross Section D 105 feet downstream of culvert	+/- El. (-) 1.5 ft	+85 ft ±	106 ft	85 ft ±
Average		N/A	N/A	N/A

Preliminary modeling results indicate that a 10'-0" horizontal opening has 100-year headwater WSELs ~3" higher than a 11 ft opening, lending credence to the chosen width of 11 ft. The headwater depth of water through both options is higher than the tailwater depth downstream due to the upstream channel width being confined by vertical concrete walls.

Exhibit 2-20 Stream Impacts		
	Temporary Impacts (including dredge/ fill from likely access and dewatering)	**Permanent Impacts**
Amityville Creek	(Max) 101.5 linear ft/ 1,143.5 ft^2	(Max) 23.5 linear ft/ 300 ft^2

For the proposed work, including likely access areas, up to 101.5 lf of the stream will be temporarily impacted (1,143.5 sf within the ordinary high water). This does not include the expected permanent disturbance, measured to be up to 23.5 linear ft (300 square feet within the ordinary highwater). The limits of the permanent disturbance include the removal of the current pipe extensions and lengthening of the box to accommodate the future addition of standard shoulders. The crossing will be designed to meet the Nationwide Permit General and Regional conditions regarding Aquatic Life Movement and Management of Water Flows as well as the conditions within the blanket water Quality Certification pertaining to culverts. The existing 20 feet (300 square feet) of stream bed will be permanently impacted.

Aquatic Organism and Passage related discussion
Based on field observations of the existing culvert the inlet grade is not dropped and the outlet grade is not perched. A weir located upstream of the culvert represents the boundary between freshwater and saltwater habitat and prevents further Aquatic Organism Passage to the upstream freshwater environs. The canal section (tidal) thru the culvert up to the upstream weir has been identified as potential essential fish habitat (EFH) for several saltwater fish species and passage will not be adversely impacted during and after construction of the replacement culvert.

Information was gathered to identify a North Atlantic Aquatic Connectivity Collaborative (NAACC) score for the existing culvert of 0.79 (minor barrier). NAACC is an assessment of road-stream crossings for passability by terrestrial wildlife. Discussions with NYSDEC staff did not identify any specific species of concern at this location. The projected NAACC score based on the proposed design is 0.88 (insignificant barrier), therefore AOP will be nominally enhanced by the design.

Wetlands:
The project area at this culvert (C050001) is mapped by the National Wetlands Inventory as a Riverine (R2UBH) wetland on the north and south side of the road, and an Estuarine and Marine Deepwater (E1UBL) wetland 15' south of the culvert. NYSDEC's Environmental Resource Mapper shows State Wetland A-4 located approximately 280' north of the culvert.

Based on a review of DEC Environmental Resource Mapper, and as verified by a site visit, there are NYSDEC regulated freshwater wetlands adjacent to the project but the project area is not within the 100-foot jurisdictional adjacent area boundary.

Federal jurisdictional wetlands exist within the project limits, as shown in Attachment B. The proposed project is anticipated to have minor impacts to the riverine wetland that passes below the culvert. There is no alternative to construction in wetlands because avoidance is not practicable. However, all practicable measures to minimize impacts to wetlands will be utilized.

Mitigation for these impacts is not expected. This work will likely be authorized under Nationwide Permits #3. Work will not commence until the permits are granted. Work will adhere to all permit conditions.

A Blanket Section 401 Water Quality Certification applies to this project because the work required will meet the requirements of a Section 404 or Section 10 Nationwide Permit and will comply with the NYSDEC General WQC Conditions.

The project will require a NYSDEC Article 25 Tidal Wetlands Permit for proposed work in the state-regulated tidal wetland and regulated adjacent area (300 ft.). The permit will be obtained from NYSDEC once the detailed location and extent of the impacts are determined.

Exhibit 2-21
Wetland Description and Impacts

Wetland						
ID	Type	NYSDEC ID/ Assumed Waters of the US	Identified Wetland Functions	Total Size est. (acre)	Temporary impacts (sf)	Permanent impacts (sf)
1	Tidal Wetlands/Waters of the US	NYSDEC ID 701, Category LZ	Shoreline Stabilization, Wildlife Habitat, Nutrient Removal	92 acres	1,500 sf	500 sf
Total Impacts					1,500 sf	500 sf

Executive Order 11990
As noted above, the project will permanently impact 0.01 acres of wetland. The identified function of this wetland (shoreline stabilization, wildlife habitat, nutrient removal) will not be impacted by the proposed work. Preliminary plans including the approximate wetland boundaries are included in Attachment B. The project will employ standard erosion control techniques to avoid impacts to the wetlands within the project area. There is no practicable alternative to the proposed construction in the wetlands and the proposed project includes all practicable measures to minimize harm to the involved wetlands that may result from the construction of the transportation project. Therefore, the project qualifies to use the programmatic EO 11990 finding provided by FHWA (1997).

2.13.3.2: General Ecology and Terrestrial Passage

Threatened and Endangered Species:

Following NYSDOT screening protocols, an official species list was created from the US Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) for this crossing and is included in Attachment B. The crossing was also screened using the New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper (ERM) for known occurrences. The IPaC species list, dated 10/13/2022, lists the following species: Northern Long-eared Bat (Myotis septentrionalis) (threatened), Piping Plover

(Charadrius melodus) (threatened), Red Knot (Calidris canutus rufa) (threatened), Roseate Tern (Sterna dougallii dougallii) (endangered), Monarch Butterfly (Danaus plexippus) (candidate), and Seabeach Amaranth (Amaranthus pumilus) (threatened).

NYSDEC's Environmental Resource Mapper indicates that there are no New York State protected plants or animals located in the vicinity of the project.

The project will involve the removal of several trees. Any required tree removal will be performed during the tree cutting dates of October 1 to March 31. A *May Affect, Not Likely to Adversely Affect* determination concurrence from FHWA was received for Northern Long-eared Bat (Myotis septentrionalis) in a letter dated February 28, 2023 which is included in Attachment B. A bridge bat survey has been conducted in November 2022 and again in April 2023 and both surveys indicated that bats are not present. A bridge bat survey will be completed within 2 years from the expected start of construction if necessary.

The project area does not consist of dry sandy beaches, dunes, or tidal flats. A *No Effect/No Suitable Habitat* determination concurrence from FHWA for Piping Plover (Charadrius melodus) is included in Attachment B.

This culvert is lined with concrete walls, inhibiting high wave or current action from creating sandy habitat for Red knots (Calidris canutus rufa). The project area is also approximately 1 mile north of the coast, making habitat not likely in this area. A *No Effect/No Suitable Habitat* determination concurrence for the Red Knot (Calidris canutus rufa) is included in Attachment B.

Based on site inspections, the project area does not consist of rocky offshore islands, barrier beaches, or salt marshes. All four quadrants of the culvert are developed and/or sparsely vegetated, therefore does not provide adequate nesting sites for Roseate Terns. A *No Effect/No Suitable Habitat* determination for Roseate Tern (Sterna dougallii dougallii) is included in Attachment B.

This project area is not within an Atlantic barrier island that is sparsely vegetated. Although over wash is possible within the project area from periods of high water and wind, the surrounding environment would not be suitable for Seabeach Amaranth (Amaranth pumilus). A *No Effect/No Suitable Habitat* determination concurrence for Seabeach Amaranth (Amaranth pumilus) is included in Attachment B.

Monarch butterfly is a candidate species and is not officially protected by the Endangered Species Act. Measures that that would minimize potential harm to the Monarch butterfly during construction will be implemented into the final design plans.

Since the project includes in-water work, the National Marine Fisheries Services online viewers for Section 7 Consultation Species and for Essential Fish Habitat were reviewed and the results are included in Attachment B. The project is within a Section 7 consultation area. The project area is approximately 175' north of a mapped habitat for Atlantic Sturgeon and Sea Turtles.

The work at this culvert is not anticipated to cause a take on any state listed species which is known to occur in the area. This determination is predicated on the timing restrictions for tree cutting identified above.

S1/S2 Mussels
NYS Natural Heritage Program (NHP) data, dated March 2022, and NYSDEC S1/S2 Mussel Waterbody data were used to determine the potential for S1/S2 mussels or other protected mussels to be within the waterbody. The screening revealed no potential for protected mussels. NYSDEC's Environmental Resource Mapper indicates that are no Imperiled Mussels located in the Amityville Creek at this location.

2.13.3.3: Floodplains:

The culvert location was investigated online via the Federal Emergency Management Agency (FEMA) Flood Map Service Center. On the FEMA Flood Insurance Rate Map (FIRM) for Suffolk County (Village of Amityville), NY, Panel 36103C0841H dated 9/25/2009, the waterbody conveyed by the culvert is shown to be within the approximate 1% annual chance floodplain (100-year floodplain) of Amityville Creek and Great South Bay. No floodway has been adopted. Under 6 NYCRR Part 502.3 (a) and 502.4 (a), NYSDOT as the State Agency proposing the project has determined the existing base flood elevations (identified in the Hydraulic/Drainage Report Attachment I) on the basis of all pertinent information available from Federal, State or other sources. Compliance with Executive Order (EO) 11988, 23 CFR 650, Subpart A and 6 NYCRR Part 502 are required.

The project is considered a functionally dependent use of the floodplain, as the purpose of the culvert is to convey waters under the roadway. Therefore, this is keeping with the constraints discussed in 23 CFR 771.117(e) and the NYSDOT/FHWA Programmatic Agreement regarding NEPA Categorical Exclusions.

Based on the preliminary hydraulic analysis discussed in the previous sections and in Attachment I, the project will not raise the base flood elevation. Therefore, the project complies with EO 11988, 23 CFR 650, Subpart A and 6 NYCRR Part 502.

2.13.3.4: Section 106

As the project is a federally funded action, NYSDOT will be following the Section 106 Process of the National Historic Preservation Act. This ensures compliance with the NYSHPA Section 14.09 process.

The culvert (CIN 050001) is more than 70 years old. The proposed scope of work includes replacing the culvert. A permanent fee taking is required at both ends of the culvert to envelope the headwalls within NYSDOT ownership and a minor temporary easement is required for construction access. The culvert is not located within a known historic district. All proposed earthwork will occur within previously disturbed soils. FHWA issued a Section 106 determination of *No Historic Properties Affected*, based on SHPO review and concurrence with the NYSDOT recommended finding, dated June 27, 2023 and included in Attachment B.

2.13.3.5: Section 4(f)

The proposed project involves a small strip use of Nautical Park, a publicly owned park owned by Suffolk County, which qualifies for Section 4(f) protection as a publicly owned park, recreational area, wildlife, or waterfowl refuge. In coordination with the FHWA, it has been determined that the project meets the applicability criteria for the *Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Highway Projects with Minor Involvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges*. The Programmatic

Section 4(f) Evaluation sets forth the basis for Section 4(f) approval that there are no feasible and prudent alternatives to the use of the Section 4(f) property and that the project includes all possible planning to minimize harm from such use. A Section 4(f) programmatic evaluation has been prepared to fully assess "use" of this land. We have received concurrence from FHWA in a letter dated June 26, 2023 and is included in Attachment B.

NYSDOT has coordinated with Suffolk County and incorporated its suggested minimization and mitigation measures into the project plans. We have received concurrence from the jurisdictional agency, Suffolk County, in a letter dated April 20, 2023 that is included in Attachment B. The full programmatic evaluation is included in Attachment B with related correspondence.

Furthermore, NYSDOT has determined, in coordination with the FHWA, that the project meets applicability criteria for Activities that are Undertakings with No Potential to Cause Effects to Historic Properties.

2.13.3.6: Environmental Justice

According to the NYS Department of Environmental Conservation (DEC) online mapping tool for identifying Potential Environmental Justice Areas (PEJAs), portions of PEJAs are located within 1 mile of the project location. The Public Involvement Plan (PIP) for this project includes an Environmental Justice (EJ) Public Engagement Plan (PEP) component that identifies the EJ Community Representatives, the Community Study Area, and the benefits, burdens, and adverse impacts to the EJ populations. Furthermore, Limited English Proficient (LEP) populations were identified within 1 mile of the project location. There are no disproportionate impacts to EJ populations. Coordination with representative EJ population has been performed including providing access to the project fact sheet, which was provided in both English and Spanish, and comment solicitation and attendance at the public information meeting and EDPL hearing.

2.13.3.7: Additional Items

As identified in SEERC, the following additional environmental topics are pertinent to this culvert location and are not covered elsewhere in this document. A summary of these resources and the impacts from this proposed work follow.

Asbestos

An asbestos screening was performed for this project, which determined asbestos containing materials could potentially be present in the culvert. An Asbestos Assessment was performed, during which the sampling/testing of suspect asbestos containing materials was conducted. No Asbestos Containing Material (ACM) was found to be present. Sampling testing of suspect asbestos containing materials observed during the on-site inspection indicated no presence of asbestos containing materials. No confirmed asbestos containing materials and no assumed asbestos containing materials were identified. This is documented in the October 2022 Asbestos Assessment Report which is in Attachment E.

Hazardous Waste/Contaminated Materials

A Hazardous Waste/Contaminated Materials Site Screening (Modified Phase I Environmental Site Assessment) was conducted for the project site in accordance with NYSDOT TEM Chapter 4.4.20, in order to document the likely presence or absence of hazardous/contaminated environmental conditions. A hazardous/contaminated environmental condition is the presence

or likely presence of any hazardous substances or petroleum products (including products currently in compliance with applicable regulations) on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. If hazardous or contaminated materials are found, items will be added to the contract documents for their removal.

The Hazardous Waste/Contaminated Materials Site Screening included a review of NYSDEC and USEPA regulatory data files, review of historic Sanborn Maps, review historic aerial photographs, and a site visit in September 2022.

Potential hazardous waste/contaminated materials site was identified adjacent to the project site at the former Boat/Auto Sales and Service Shop at 217 Merrick Road. Additional details for this Screening Assessment are available in Attachment B.

A review of Sanborn Maps and historic aerial imagery indicated that a boat and auto sales and service shop was located southeast adjacent to the project site at 217 Merrick Road, which is the current location of a commercial office building. This property was depicted as a boat and auto sales and service shop in the 1964 Sanborn Map. In addition, historic aerial imagery depicts this property as a boat and auto sales and service shop as early as 1953. The property is currently a commercial building, but the past use of this property as an auto and boat sales and repair shop may have adversely impacted the project site with hazardous materials.

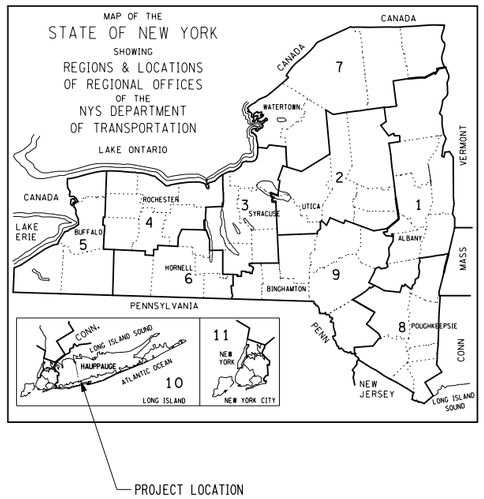
No other hazardous waste/contaminated material sites were identified within or adjacent to the project site during the course of the Hazardous Waste/Contaminated Materials Site Screening.

Based on the findings of the Hazardous Waste/Contaminated Materials Site Screening, there is potential for soil and groundwater at the project site to have been impacted by hazardous waste/contaminated materials. Since the complete replacement of the culvert is proposed, which will require excavation, a Hazardous Waste/Contaminated Materials Detailed Site Assessment (Phase II Investigation) is recommended for the project site.

If contamination is identified during the Phase II Investigation, a Remediation Plan and Construction Health and Safety Plan would be developed to describe requirements for mitigation, material handling and disposal, and worker and community health and safety procedures to be implemented during construction.

ATTACHMENT A

Maps, Plans, Profiles, and Typical Sections



PROJECT LOCATION

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY THE DEPARTMENT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (US CUSTOMARY) REFERENCED IN THE CONTRACT PROJECT "PROPOSAL" EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN THE CONTRACT PROJECT "PROPOSAL."

CONTRACT PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH NYSDOT POLICIES AND GUIDELINES AND THE FINAL DESIGN REPORT APPROVED ON --/--/----

CULVERT REPLACEMENT
CIN 050001
NYS RTE 27A OVER AMITYVILLE CREEK
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
SUFFOLK COUNTY

CONTRACT: DXXXXXX

SUFFOLK COUNTY

CONTRACTOR'S NAME _____

AWARD DATE _____

COMPLETION DATE _____

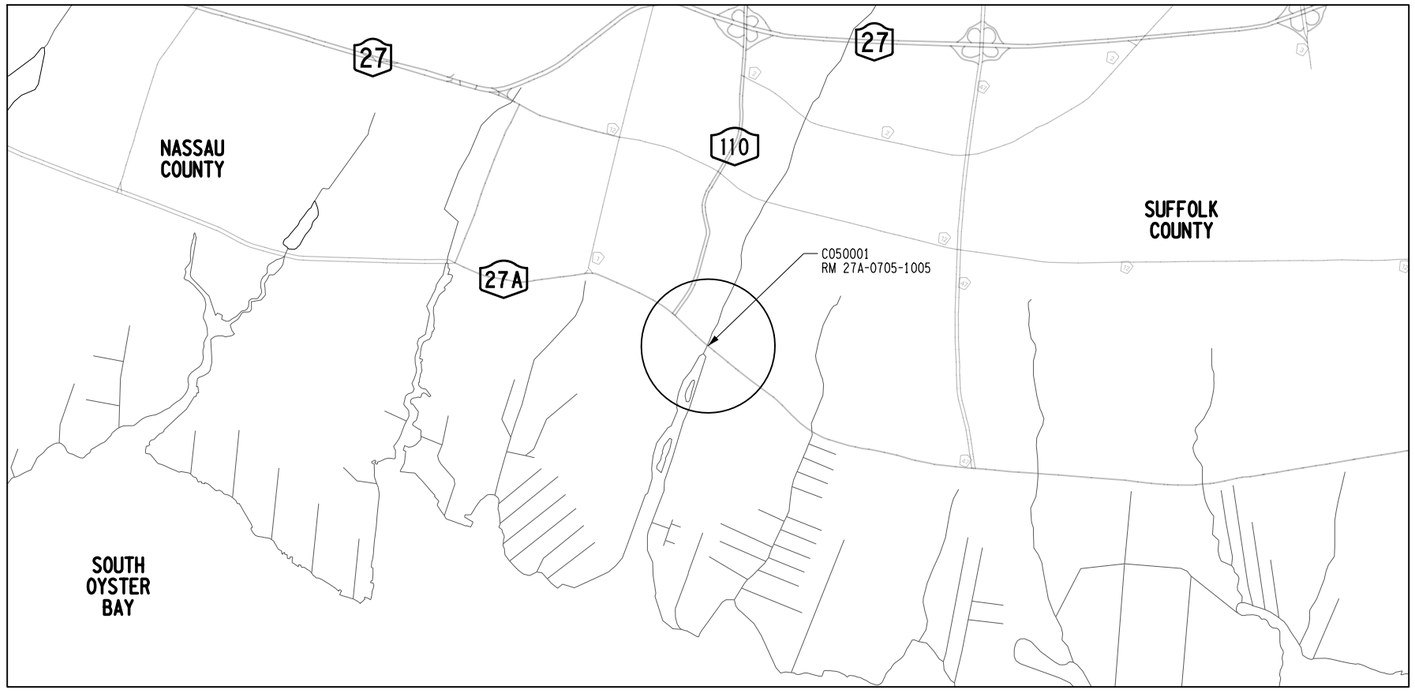
FINAL ACCEPTANCE DATE _____

REGIONAL DIRECTOR _____

ENGINEER IN CHARGE _____

FINAL COST TOTAL _____

FISCAL SHARE COST(S)



PROJECT LOCATION
NOT TO SCALE
THIS PROJECT IS LOCATED ON THE FOLLOWING ROADWAY IN SUFFOLK COUNTY:
NYS RTE 27A
IN THE TOWN OF BABYLON

RECOMMENDED BY	RECOMMENDED BY	RECOMMENDED BY	RECOMMENDED BY	APPROVED BY
REGIONAL DESIGN ENGINEER DATE	REGIONAL CONSTRUCTION ENGINEER DATE	REGIONAL DIRECTOR OF OPERATIONS DATE	REGIONAL TRAFFIC ENGINEER DATE	REGIONAL DIRECTOR DATE
--	--	--	--	--

CULVERT REPLACEMENT		
S.H. 5300		
TOWN OF BABYLON		
NYS RTE 27A OVER AMITYVILLE CREEK		
COUNTY: SUFFOLK		
FED. ROAD REG. NO.	STATE	SHEET NO.
1	N.Y.	1
CAPITAL PROJECT IDENTIFICATION NO. OLC1.01		

INDEX ON SHEET NO. 2

PROJECT MANAGER C. JENNE, PE
CHECK A. MADDEN, PE
DRAFTING E. LEI
CHECK A. MADDEN, PE
DESIGN E. LEI
JOB MANAGER L. VARGHESE, PE
DESIGN SUPERVISOR R. KUDLA, PE

FILE NAME = 0LC101_cph_cvr.dgn
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USER = cjenne

ALIGNMENT	
ABBR.	DESCRIPTION
AH	AHEAD
AZ	AZIMUTH
BK	BACK
℄	BASELINE
BRG	BEARING
℄	CENTERLINE
CS	CURVE TO SPIRAL
e	SUPERELEVATION RATE (CROSS SLOPE)
EQ	EQUALITY
EXT	EXTERNAL
HCL	HORIZONTAL CONTROL LINE
HSD	HEADLIGHT SIGHT DISTANCE
L	LENGTH OF CIRCULAR CURVE
LS	LENGTH OF SPIRAL
LVC	LENGTH OF VERTICAL CURVE
E	CENTER CORRECTION OF VERTICAL CURVE
ℳ	MAIN LINE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
POL	POINT ON LINE
PSD	PASSING SIGHT DISTANCE
PT	POINT OF TANGENT
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
R	RADIUS
SC	SPIRAL TO CURVE
SSD	STOPPING SIGHT DISTANCE
ST	SPIRAL TO TANGENT
STA	STATION
T	TANGENT LENGTH
TGL	THEORETICAL GRADE LINE
TS	TANGENT TO SPIRAL
VC	VERTICAL CURVE

TOPOGRAPHY (DRAINAGE)	
ABBR.	DESCRIPTION
BB	BOTTOM OF BANK (STREAM)
BC	BOTTOM OF CURB
BO	BOTTOM OF OPENING
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CIP	CAST IRON PIPE
℄ STRM	CENTERLINE OF STREAM
CMP	CORRUGATED METAL PIPE
CP	CONCRETE PIPE
CSP	CORRUGATED STEEL PIPE
CULV	CULVERT
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
DS	DRAINAGE STRUCTURE PIPE
D'XING	DITCH CROSSING
EHW	EXTREME HIGH WATER
EL	ELEVATION
ELEV	ELEVATION
ELW	EXTREME LOW WATER
ES	END SECTION
HW	HEADWALL
INV	INVERT
MH	MANHOLE
MHW	MEAN HIGH WATER
OHW	ORDINARY HIGH WATER
OLW	ORDINARY LOW WATER
RCP	REINFORCED CONCRETE PIPE
SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE
TB	TOP OF BANK (STREAM)
TC	TOP OF CURB
TG	TOP OF GRATE
VCP	VITRIFIED CLAY PIPE

TOPOGRAPHY (MISCELLANEOUS)	
ABBR.	DESCRIPTION
ABUT	ABUTMENT
AOBE	AS ORDERED BY ENGINEER
ASPH	ASPHALT
BDY	BOUNDARY
BLDG	BUILDING
BM	BENCH MARK
CC	CENTER TO CENTER
CONC	CONCRETE
CONST	CONSTRUCTION
CR	COUNTY ROAD
D	DEED DISTANCE
DM	DIRECT MEASUREMENT
DWY	DRIVEWAY
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
FEE	FEE ACQUISITION
FEE WO/A	FEE ACQUISITION WITHOUT ACCESS
FP	FENCE POST
FD	FOUNDATION
FL	FENCE LINE
GAR	GARAGE
GR	GRAVEL
HO	HOUSE
HWY	HIGHWAY
IP	IRON PIN OR IRON PIPE
MB	MAILBOX
MON	MONUMENT
N&W	NAIL AND WASHER
OG	ORIGINAL GROUND
O/H	OVERHEAD
P	PARCEL
PAV'T	PAVEMENT
PE	PERMANENT EASEMENT
PED POLE	PEDESTRIAN POLE
ℙ	PROPERTY LINE
POR	PORCH
RR	RAILROAD
RTE	ROUTE
ROW	RIGHT OF WAY
RW	RETAINING WALL
SH	STATE HIGHWAY
SHLDR	SHOULDER
SPK	SPIKE
ST	STREET
STK	STAKE
STY	STORY
SW	SIDEWALK
TE	TEMPORARY EASEMENT
TO	TEMPORARY OCCUPANCY
U/G	UNDERGROUND
WW	WING WALL

UTILITIES	
ABBR.	DESCRIPTION
E	ELECTRIC
EMH	ELECTRIC MANHOLE
G	GAS
GP	GUY POLE
GSB	GAS SERVICE BOX (HOUSE LINE)
GV	GAS VALVE (MAIN LINE)
HYD	HYDRANT
LP	LIGHT POLE
LPG	LOW PRESSURE GAS
PP	POWER POLE
SA	SANITARY SEWER
SMH	SANITARY MANHOLE
ST	STORM SEWER
T	TELEPHONE
TCB	TRAFFIC CONTROL BOX
TELBOX	TELEPHONE BOX
TEL P	TELEPHONE POLE
TMH	TELEPHONE MANHOLE
CTV	CABLE TELEVISION
W	WATER
WSB	WATER SERVICE BOX (HOUSE LINE)
WV	WATER VALVE (MAIN LINE)

SUBSURFACE EXPLORATION	
ABBR.	DESCRIPTION
REPLACE ABBREVIATION "AB" WITH:	
AH	HAND AUGER
CP	CONE PENTROMETER
DA	2¼ INCHES CASED DRILL HOLE
DM	DRILLING MUD
DN	4 INCHES CASED DRILL HOLE
FH	HOLLOW FLIGHT AUGER
PA	POWER AUGER
PH	PROBE
PT	PERCOLATION TEST HOLE
RP	1 INCH SAMPLER (RETRACTABLE PLUG)
	TO BE DEFINED AT THE TIME OF EXPLORATION
SP	SEISMIC POINT
TP	TEST PIT
ABBREVIATION "C" IN CATEGORIES: DA, DM, DN, AND FH WITH:	
B	BRIDGE
C	CUT
D	DAM
F	FILL
K	CULVERT
W	WALL
X	TO BE USED IF ONE OF THE ABOVE CANNOT BE DEFINED AT THE TIME THE EXPLORATION IS MADE

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: ESTIMATE OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: (SPECS/PROPOSAL)
"	-	INCHES
'	LF	LINEAR FEET
mi	MI	MILES
ft^2	SF	SQUARE FEET
YD^2	SY	SQUARE YARD
AC	AC	ACRES
YD^3	CY	CUBIC YARD
GAL	GAL	GALLON
lb	LB	POUND
TON	TON	TON

INDEX

TOTAL NUMBER OF SHEETS: 17

SHEET NUMBER	DESCRIPTION	DRAWING NUMBER
1	TITLE SHEET	COVER
2	INDEX AND ABBREVIATIONS	INDEX
3-4	LEGEND, LINE, AND POINT SYMBOLOGY	LEG-01 TO LEG-02
5-7	TYPICAL SECTIONS	TYP-01 TO TYP-03
8-9	WORK ZONE TRAFFIC CONTROL DETAILS	WZD-01 TO WZD-02
10-12	WORK ZONE TRAFFIC CONTROL PLANS	WZP-01 TO WZP-03
13-16	GENERAL PLANS	GNP-01 TO GNP-04
17-18	PROFILES	PRO-01 TO PRO-02

PROJECT MANAGER C. JENNE, PE
CHECK A. MADDEN, PE
DRAFTING E. LEI
CHECK A. MADDEN, PE
DESIGN SUPERVISOR R. KUDLA, PE
JOB MANAGER L. VARGHESE, PE
DESIGN E. LEI
CHECK A.

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USER = cjenne

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN 0LC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

INDEX & ABBREVIATIONS

CONTRACT NUMBER
DXXXXXX

DRAWING NO. IND-01
SHEET NO. 2

H&H

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

ALIGNMENT

STYLE	NAME	DESCRIPTION
	AC	CONTROL (CENTERLINE)
	AD_P	DETOUR
	AT_P	TRANSITION CONTROL

BRIDGE

STYLE	NAME	DESCRIPTION
	BR	RAIL
	BSHT	SHEET PILING

CONTROL

STYLE	NAME	DESCRIPTION
	CB	BASELINE
	CBPR	BASELINE, PROJECTION

DRAINAGE

STYLE	NAME	DESCRIPTION
ST	DCP	CULVERT PIPE
ST	DCP_P	CULVERT PIPE (DIR)
	DDG_P	DITCH, GRASS LINED
	DDP_P	DITCH, PAVED INVERT
	DDS_P	DITCH, STONE LINED
	DFL_P	FLOW LINE
	DSSD	SLOTTED DRAIN
UD	DUD_P	UNDERDRAIN

ENVIRONMENTAL

STYLE	NAME	DESCRIPTION
	ECT	CURTAIN, TURBIDITY
	EDMC	DAM, COFFER
	EDMEC_P	DAM, EARTHEN CHECK
	EDMGSC_P	DAM, GRAVEL BAG/SAND BAG CHECK
	EDMPC_P	DAM, PREFABRICATED CHECK
	EDMSC_P	DAM, STONE CHECK
	EFNS	FENCE, SILT
	EFNSV	FENCE, SILT & VEGETATION
	EFNV	FENCE, VEGETATION
FL	ESFL	FILTER, SEDIMENT LOG
AA	EWAA_P	WETLAND, ADJACENT AREA
FW	EWF	WETLAND, FEDERAL
FW SW	EWFS	WETLAND, FEDERAL AND STATE
SW	EWM	WETLAND, MITIGATION AREA
SW	EWS	WETLAND, STATE

LANDSCAPE

STYLE	NAME	DESCRIPTION
	LABL	AREA, BRUSH LINE
	LAHR	AREA, HEDGE ROW
	LAPB	AREA, PLANTING BED
	LAWA	AREA, WOODED AREA OUTLINE
	LAWE	AREA, WATERS EDGE
	LCUT_P	CUT LIMIT
	LFILL_P	FILL LIMIT
	LFNC	FENCE
	LTRC	TREE ROW, CONIFEROUS
	LTRD	TREE ROW, DECIDUOUS
	LWH	WALL, H PILE
	LWR	WALL, RETAINING
	LWS	WALL, STONE

ROW MAPPING

STYLE	NAME	DESCRIPTION
	MDL	DEED LINE
PE	MEE	EASEMENT, EXISTING
PE	MEP_P	EASEMENT, PERMANENT
APE	MEPA_P	EASEMENT, PERMANENT, APPROX.
TE	MET_P	EASEMENT, TEMPORARY
ATE	META_P	EASEMENT. TEMPORARY, APPROX.
FEE	MF_P	FEE ACQUISITION, W/ ACCESS
AFEE	MFA_P	FEE ACQUISITION, APPROXIMATE
	MFS_P	FEE ACQUISITION, SHAPE
FEE W/OA	MFWOA_P	FEE ACQUISITION, W/O ACCESS
	MHA	HISTORICAL, ACQUISITION
HB	MHB	HIGHWAY BOUNDARY
AHB	MHBA	HIGHWAY BOUNDARY, APPROX.
	MHBW	HWY BOUNDARY, FACE OF WALL
HB W/OA	MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS
	MJC	JURISDICTION, CITY
	MJCY	JURISDICTION, COUNTY
	MJHD	JURISDICTION, HISTORIC DISTRICT
	MJLL	JURIS., (GREAT, MILITARY) LOT LINE
	MJN	JURISDICTION, NATION
	MJPB	JURISDICTION, PUBLIC LANDS
	MJS	JURISDICTION, STATE
	MJT	JURISDICTION, TOWN
	MJV	JURISDICTION, VILLAGE
	MPL	PROPERTY LOT LINE
	MPLA	PROPERTY LOT LINE, APPROXIMATE
	MSL	SUB LOT LINE

ROADWAY

STYLE	NAME	DESCRIPTION
CZ	RCZ_P	CLEAR ZONE
	RG	GUIDE RAIL, MISCELLANEOUS
	RGB	GUIDE RAIL, BOX BEAM
	RGBM	GUIDE RAIL, BOX BEAM, MEDIAN
	RGC	GUIDE RAIL, CABLE
	RGCB	GUIDE RAIL, CONCRETE BARRIER
	RGP_P	GUIDE POST
	RGW	GUIDE RAIL, W BEAM
	RGWM	GUIDE RAIL, W BEAM, MEDIAN
	RPB	PARKING BUMPER
	RRC	RAIL ROAD, CATENARY
3R	RRER	RAIL ROAD, 3RD RAIL
	RRPLS_P	RAIL, PHOTO, LARGE SCALE
	RRPSS	RAIL, PHOTO, SMALL SCALE
	RRS	RUMBLE STRIP
	RRSLS_P	RAIL, SURVEY, LARGE SCALE
	RRSSS	RAIL, SURVEY, SMALL SCALE

SIGNS

STYLE	NAME	DESCRIPTION
	SBLB	BILLBOARDS
	SM	MULTIPLE POST
	SSO	STRUCTURE, OVERHEAD
	SSOC	STRUCTURE, OVHD. CANTILEVER

STRIPING

STYLE	NAME	DESCRIPTION
	STB•	BROKEN LINE
	STDB•	DOUBLE BROKEN LINE
	STDL•	DOTTED LINE LONG
	STDS•	DOTTED LINE SHORT
	STFB•	FULL BARRIER LINE
	STH•	HATCH LINE
	STPB•	PARTIAL BARRIER LINE
	STRCT	ROUNDABOUT, CAT TRACKS
	STRYL	ROUNDABOUT, YIELD LINE
	STSB	STOP BAR
	STSE•	SOLID, EDGE
	STXL	X WALK, LADDER LINE
	STXLB	X WALK, LADDER BAR LINE

• = W (WHITE) OR Y (YELLOW)

TRAFFIC CONTROL

STYLE	NAME	DESCRIPTION
	TCSW	SIGNAL, SPAN WIRE

TRAFFIC WORK ZONE

	NAME	DESCRIPTION
	TWZBT_P	BARRIER, TEMPORARY
	TWZBTWL_P	BARRIER, TEMPORARY, W/ WARNING LIGHTS
	TWZCD_P	CHANNELIZING DEVICE
	TWZPMRC_P	PAVEMENT MARKING REMOVAL OR COVERING

UTILITIES

STYLE	NAME	DESCRIPTION
C	UC	CONDUIT, UNDERGROUND
]C[	UCH	CONDUIT, HANGING
OC	UCO	CONDUIT, OVERHEAD
E	UE	ELECTRIC LINE, UNDERGROUND
]E[	UEH	ELECTRIC LINE, HANGING
OE	UEO	ELECTRIC LINE, OVERHEAD
OET	UETO	ELECTRIC TRANSMISSION, OVERHEAD
	UESS	ELECTRIC, SUBSTATIONS
FO	UFO	FIBER OPTIC, UNDERGROUND
]FO[	UFOH	FIBER OPTIC, HANGING
OFO	UFOO	FIBER OPTIC, OVERHEAD
G	UG	GAS, UNDERGROUND
]G[	UGH	GAS, HANGING
OG	UGO	GAS, OVERHEAD
IC	UIC	INFORM CABLE, UNDERGROUND
]IC[	UICH	INFORM CABLE, HANGING
O	UO	OIL LINE, UNDERGROUND
]O[	UOH	OIL LINE, HANGING
	UPBP	POLE, BRACE, PUSH BRACE
	UPGW	POLE, GUY WIRE
SA	USA	SANITARY SEWER, UNDERGROUND
]SA[	USAH	SANITARY SEWER, HANGING
SAF	USAF	SANITARY SEWER, FORCE MAIN, UGND
]SAF[	USAFH	SANITARY SEWER, FORCE MAIN, HANG
T	UT	TELEPHONE, UNDERGROUND
]T[	UTH	TELEPHONE, HANGING
OT	UTO	TELEPHONE, OVERHEAD
CTV	UTV	CABLE TV, UNDERGROUND
]CTV[	UTVH	CABLE TV, HANGING
OCTV	UTVO	CABLE TV, OVERHEAD
UU	UUU	UNKNOWN, UNDERGROUND
]UU[	UUH	UNKNOWN, HANGING
OUU	UUO	UNKNOWN, OVERHEAD
W	UW	WATER LINE, UNDERGROUND
]W[	UWH	WATER LINE, HANGING
OW	UWO	WATER LINE, OVERHEAD

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CULVERT REPLACEMENT	PIN OLC1.01	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER
S.H. 5300	NY-27A		C050001	LEGEND	DXXXXXX
VILLAGE OF AMITYVILLE					DRAWING NO. LEG-01
TOWN OF BABYLON					SHEET NO. 3
COUNTY: SUFFOLK REGION: 10					

H&H

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER C. JENNE, PE
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DRAFTING E. LEI
JOB MANAGER L. VARGHESE, PE
DESIGN E. LEI
CHECK A. MADDEN, PE
DESIGN SUPERVISOR R. KUDLA, PE

FILE NAME = OLC101.cph.leg-01.dgn
DATE/TIME = 21-JUN-2023 13:28
USER = cjenne

ALIGNMENT

CELL	NAME	DESCRIPTION
	ACC	CENTER OF CURVATURE
	ACOGO	COGO
	ACS	CURVE TO SPIRAL
	ADPI_P	DETOUR, POINT OF INTERSECT.
	ADPL_P	DETOUR, POINT ON LINE
	AEQN	EQUATION
A	AEQNAHD	EQUATION AHEAD
B	AEQNBK	EQUATION BACK
	AEVT	EVENT STATION
	APC	POINT OF CURVATURE
	APCC	POINT OF COMPOUND CURVATURE
	API	POINT OF INTERSECTION
	APOB	POINT OF BEGINNING
	APOC	POINT OF CURVATURE
	APOE	POINT OF END
	APOL	POINT ON LINE
	APOS	POINT ON SPIRAL
	APOT	POINT ON TANGENT
	APOVC	POINT ON VERTICAL CURVE
	APOVT	POINT ON VERTICAL TANGENT
	APORC	POINT ON REVERSE CURVE
	APT	POINT OF TANGENCY
	APVC	POINT OF VERTICAL CURVATURE
	APVCC	POINT OF VERT. CMPND CURVE
	APVI	POINT OF VERT. INTERSECTION
	APVRC	POINT OF VERT. REVERSE CURVE
	APVT	POINT OF VERTICAL TANGENCY
	ASC	SPIRAL TO CURVE
	ASPI	SPIRAL POINT OF INTERSECTION
	ASTS	SPIRAL TO SPIRAL
	AST	SPIRAL TO TANGENT
	ATS	TANGENT TO SPIRAL
	AVEVT	VERTICAL EVENT POINT
	AVHIGH	VERTICAL HIGH POINT
	AVLOW	VERTICAL LOW POINT

BRIDGE

	BSC	BRIDGE, SCUPPER

CONTROL

	CBP	BASELINE, POINT
	CBPOL	BASELINE, POINT ON LINE
	CBSP	BASELINE, SPUR POINT
	CBTP	BASELINE, TIE POINT
	CPBM	BENCHMARK
	CPH	POINT, HORIZ. PHOTOGRAMMETRY
	CPSM	POINT, SURVEY MARKER, PERM.
	CPSV	POINT, VERT., PHOTOGRAMMETRY

DRAINAGE

CELL	NAME	DESCRIPTION
	DINV	INVERT
	DS	STRUCTURE, RECTANGULAR
	DSI	STRUCTURE, INVERT
	DSM	STRUCTURE, MANHOLE
	DSMTXX_P	STRUCTURE, MANHOLE, TYPE "XX" "XX" = 48, 60, 72, 96
	DSR	STRUCTURE, ROUND
	DST"X"CB P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R
	DST"X" P	STRUCTURE, RECT., TYPE "X" "X" = I, K, L, M, O, P, U

ENVIRONMENTAL

CULV	EIOP_P	STR., INLET, OUTLET PROT.
GB	EIPGB_P	STR., INLET PROT., GRAVEL BAG
FL	EIPEFL_P	STR., INLET PROT., FILTER LOG
PRFB	EIPP_P	STR., INLET PROT., PREFAB.
SF	EIPSF_P	STR., INLET PROT., SILT FENCE
	ERCB	RISER, CONCRETE BOX
	ETRS_P	TRAP, SEDIMENT
	EWFG	WETLAND FLAG

GEOTECHNICAL

	GDH	DRILL HOLE

LANDSCAPE

	LELS	ELEVATION, SPOT
	LFP	FLAG POLE
	LMB	MAILBOX
	LPB	PAPER BOX
	LPST	POST, SINGLE
	LRB	ROCK, BOULDER
	LSHC	SHRUB, CONIFEROUS
	LSHD	SHRUB, DECIDUOUS
	LTC	TREE, CONIFEROUS
	LTD	TREE, DECIDUOUS
	LTS	TREE, STUMP
	LTW P	TREE, WELL OR WALL
	LUKP	UNKNOWN POINT

ITS

CELL	NAME	DESCRIPTION
	IANT P	ANTENNAS
A	IASCTS	ACCOU. SPEED/COUNT SNSR.S
P	ICABPAD	CABINET & PAD
	ICCTV	CCTV SITE
CDPD	ICDPD	CDPD TRANSCEIVER
	ICELLT	CELL PHONE TOWER
	ICJB	CONDUIT JACK OR BORING
	ICNTLCAB	CONTROLLER CABINET
	ICPB	COMMUNICATION PULL BOX
	ICTD	CONDUIT TURNING DOWN
	ICTU	CONDUIT TURNING UP
	ICVTRT	COMM. VEH. ROAD TRANSCEIVER
	IDEFAULT	DEFAULT
EZ	IEZR	E-ZPASS READER
EZ-T	IEZTR	TRANSMITTAL READER
XC	IFOXCAB	FIBER OPTIC X-CONNECT CABINET
	IFUSSPL	FUSION SPLICE
	IHARADV	HAR ADVISORY SIGN
	IHARST	HAR SITE
LC	ILC	LOAD CENTER
	IMECSPL	MECHANICAL SPLICE
PM	IMSCS	PORT. SPEED & COUNT SENSOR
M	IMSCTS	MICRO SPEED & COUNT SENSOR
M	IMT	MICROWAVE TRANSCEIVER
VMS	IOVHVMS	PERM. OVERHEAD VMS
PA	IPASCS	PORT. ACCOU. SPD & CNT. SENSOR
	IPEDS	PEDESTRIAN SIGNAL HEAD
	IPSS	PAVEMENT SURFACE SENSOR
PVMS	IPVMS	PERM. VMS
RM	IRM	RAMP METER
RWIS	IRWIS	RDWY WEATHER INFO. SENSOR
	ISP	SOLAR PANEL
SS	ISST	SPREAD SPECT. TRANSCEIVER
TC	ITDB	TELEPHONE DEMARCATION BLK
TP	ITP	SUBSURFACE TEMP. PROBE
	IVTRT	VEHICLE TO RDWY TRANSCEIVER
W/M	IWIMD	WEIGHT IN MOTION DETECTOR
WVR	IWVR	WIRELESS VIDEO REPEATER
V	IWVRC	WIRELESS VIDEO RECEIVER
V	IWVTT	WIRELESS VIDEO TRANSMITTER

ROW MAPPING

CELL	NAME	DESCRIPTION
	MDL1P	DEED LINE, TYPE 1
	MDL2P	DEED LINE, TYPE 2
	MDL3P	DEED LINE, TYPE 3
	MDL4P	DEED LINE, TYPE 4
	MDL5P	DEED LINE, TYPE 5
	MEEP	EASEMENT, EXISTING
A	MEPAP_P	EASEMENT, PERM., APPROX.
	MEPP_P	EASEMENT, PERM., BACK LINE
	MEPSP_P	EASEMENT, PERM., SHAPE
A	MFAP_P	FEE ACQUISITION, APPROX.
	MFP_P	FEE ACQUISITION, BACK LINE
	MFSP_P	FEE ACQUISITION, SHAPE
	MHBAP	HIGHWAY BNDRY., APPROX.
	MHBCP	HISTORICAL, BLDG. CORNERS
	MHBP	HIGHWAY BNDRY, PT.
	MJCP	PT., JURIS. CITY
	MPBC	PT., BUILDING CORNER
	MPCC	PT., CROSS CUT
	MPDH	PT., DRILL HOLE
	MPF	PT., FENCE LOCATION
	MPIP	PT., IRON PIPE
	MPIR	PT., IRON ROD
	MPM	PT., MONUMENT
	MPMM	PT., MONUMENT, MISC.
	MPN	PT., NAIL
	MPRS	PT., RAILROAD SPIKE
	MPSP	PT., SPIKE
	MPST	PT., STAKE
	MPTW	PT., TREE W/ WIRE
	MPWL	PT., WALL LOCATION

ROW ACQUISITION

M1 P1 FEE	MFS_P_T	FEE ACQUISITION
M1 P1 PE	MEPS_P_T	EASEMENT, PERMANENT
M1 P1 TE	METS_P_T	EASEMENT, TEMPORARY
M1 P1 TO	METS_P_T	OCCUPANCY, TEMPORARY
M1 P1 FEE WO/A	MFS_P_T	FEE ACQUISITION W/O ACCESS

ROADWAY

	RES P	ELEVATION, SPOT
	RGA	GUIDE RAIL, ANCHOR
	RGP	GUIDE POST, SINGLE

SIGNS

CELL	NAME	DESCRIPTION
	S	SINGLE POST
	S_P	SINGLE POST, PROPOSED
	SB_P	BACK TO BACK, PROPOSED
	SDEL	DELINEATORS
	SPM	PARKING METER
RFM	SRM	REFERENCE MARKERS
	SRSC3	SHLD, CTY, 123 DIG.
	SRSC4	SHLD, CTY, 4 DIG.
	SRSCT2	SHLD, CTY TOUR, 1-2 DIG.
	SRSCT4	SHLD, CTY TOUR, 3-4 DIG.
	SRSI	SHLD, INTERSTATE
	SRSN2	SHLD, NATIONAL, 2 DIG.
	SRSN3	SHLD, NATIONAL, 3 DIG.
	SRSS2	SHLD, STATE, 2 DIG.
	SRSS3	SHLD, STATE, 3 DIG.
	SRSS4	SHLD, STATE, 4 DIG.

TRAFFIC CONTROL

	TCBJ	BOX, JUNCTION
	TCBP	BOX, PULL BOX
	TCBS	BOX, SPLICE
	TCMC	MICROCOMPUTER CABINET
	TCPP	PED POLE
	TCSH	SIGNAL HEADS
	TCSP	SIGNAL POLE

TRAFFIC WORK ZONE

	TWZAP_P	ARROW PANEL
	TWZAPC_P	ARROW PANEL, CAUTION MODE
	TWZAPT_P	ARROW PANEL, TRAILER OR SUPPORT
	TWZBCD_P	BARRICADE (TYPE III)
	TWZCMS_P	CHANGEABLE MESSAGE SIGN (PVMS)
	TWZFLG_P	FLAGGER
	TWZFT_P	FLAG TREE
	TWZIA_P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)
	TWZLUM_P	LUMINAIRE (TEMPORARY)
	TWZSDT_P	SYMBOL, DIRECTION OF TRAFFIC
	TWZSDTD_P	SYMBOL, DIRECTION OF TEMPORARY TRAFFIC DETOUR
	TWZSGN_P	SIGN (TEMPORARY)
	TWZSIG_P	SIGNAL, TRAFFIC OR PEDESTRIAN (TEMPORARY)
	TWZWL_P	WARNING LIGHT
	TWZWV_P	WORK VEHICLE
	TWZWVA_P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR

UTILITIES

CELL	NAME	DESCRIPTION
E	UEB	ELECTRIC, BOX
E	UEM	ELECTRIC, METER
E	UEMH	ELECTRIC, MANHOLE
	UEPT	ELECTRIC, POLE, TRANS.
G	UGM	GAS, METER
G	UGMH	GAS, MANHOLE
	UGLM	GAS, LINE MARKER
FP	UGP	GAS/FUEL PUMP
	UGV	GAS, VALVE
	UGVT	GAS, VENT
	ULP	LIGHTING, POLE
	ULPM	LIGHTING, POLE, MEDIAN
	ULPP	LIGHTING, POLE, PED.
	UMFC	MISC. FILLER CAP
	UOLM	OIL, LINE MARKER
	UP	POLE, WITH UTILITY
	UPD	POLE, DEAD (NO UTILITY)
	UPL	POLE, WITH LIGHT
S	USMH	SANITARY SEWER MANHOLE
P	UTB	TELEPHONE, BOOTH
	UTLM	TELEPHONE, LINE MARKER
T	UTMH	TELEPHONE, MANHOLE
	UTVLM	CABLE TV, LINE MARKER
	UTVPB	CABLE TV, PULL BOX
	UUB	UNKNOWN, BOX
	UUJB	UNKNOWN, JUNCTION BOX
	UUMH	UNKNOWN, MANHOLE
	UUPB	UNKNOWN, PULL BOX
	UUVL	UNKNOWN, VALVE
	UUVT	UNKNOWN, VENT
W	UUW	UNKNOWN, WELL
	UWFH	WATER, FIRE HYDRANT
W	UWM	WATER, METER
W	UWMH	WATER, MANHOLE
	UWV	WATER, VALVE
W	UWW	WATER, WELL

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S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN 0LC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

LEGEND

CONTRACT NUMBER
DXXXXXX

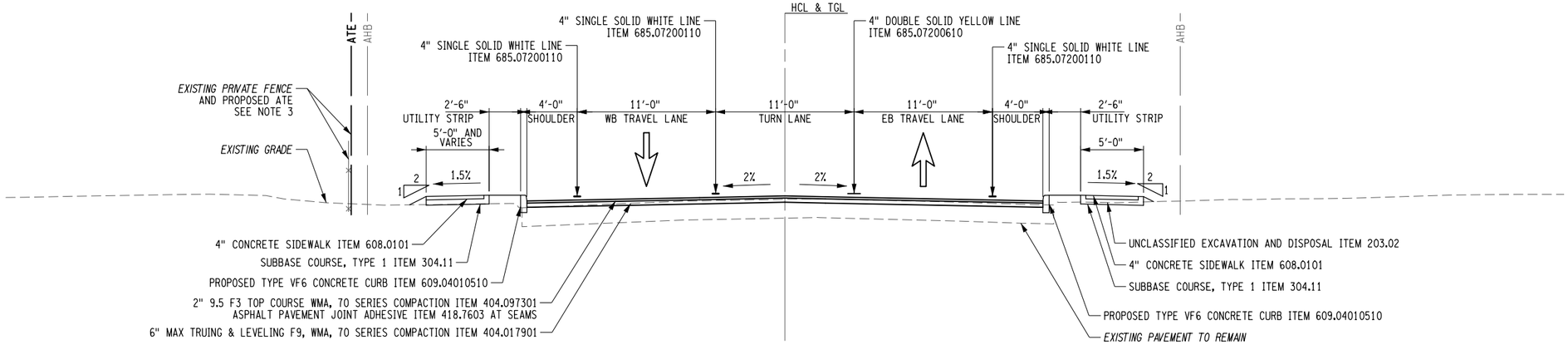
DRAWING NO. LEG-02
SHEET NO. 4

H&H

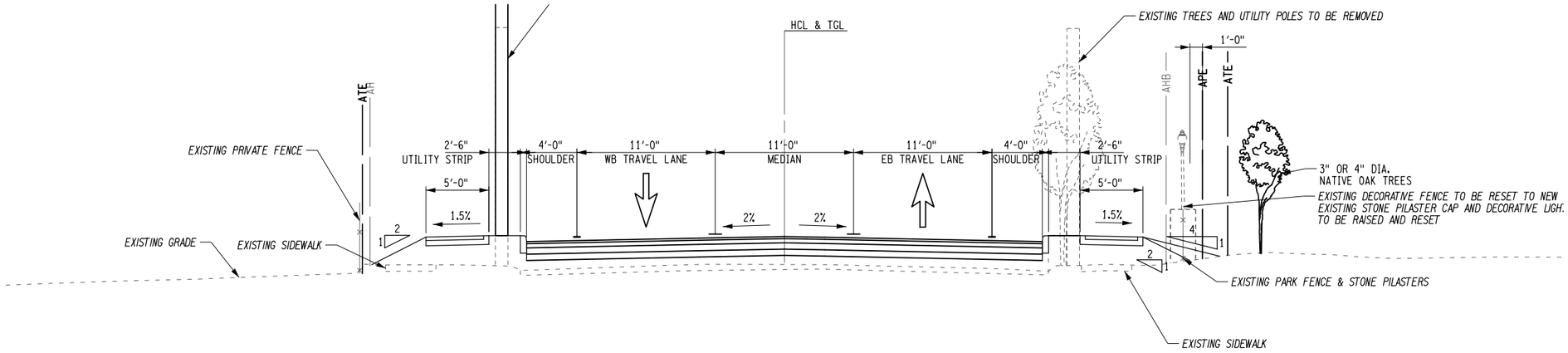
NEW YORK STATE OF OPPORTUNITY. Department of Transportation

PROJECT MANAGER C. JENNE, PE
CHECK A. MADDEN, PE
DRAFTING E. LEI
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DESIGN E. LEI
JOB MANAGER L. VARGHESE, PE
DESIGN SUPERVISOR R. KUDLA, PE

FILE NAME = 0LC101_cph_leg-02.dgn
DATE/TIME = 21-JUN-2023 13:28
USER = cjenne



TYPICAL SECTION 1
NYS RTE 27A (MERRICK RD)
TRUING AND LEVELING
STA. 12+50 TO STA. 13+25
AND STA. 21+40 TO STA. 22+00



TYPICAL SECTION 2
NYS RTE 27A (MERRICK RD)
RELOCATED PARK FENCE
STA. 13+25 TO STA. 15+30

5 0 5 10 15 20'
1" = 10'

NOTES:

1) IF EXISTING FIELD CONDITIONS DO NOT MATCH THE PROPOSED WMA THICKNESSES, THEN THE BINDER THICKNESS MAY BE REVISED TO MATCH EXISTING PAVEMENT THICKNESSES.

2) THE PROPOSED 6" THICK COURSE OF ITEM 404.258901 IS TO BE PLACED IN 2 (3") LIFTS.

3) EXISTING PRIVATE FENCE AND PROPOSED ATE FOR STA. 12+50 TO STA. 13+25 ONLY.

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	404.258901	25 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON
304.10119917	SUBBASE COURSE, TYPE 1011-2	CY	407.0102	DILUTED TACK COAT	GAL
304.11	SUBBASE COURSE, TYPE 1	CY	418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF
404.017901	TRUING & LEVELING F9, WMA, 70 SERIES COMPACTION	TON	490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY
404.018901	TRUING & LEVELING F9, WMA, 80 SERIES COMPACTION	TON	608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY
404.097301	9.5 F3 TOP COURSE WMA, 70 SERIES COMPACTION	TON	609.04010510	CAST-IN-PLACE CONCRETE CURB (GRADING INCLUDED) TYPE VF6	LF
404.098101	9.5 F1 TOP COURSE WMA, 80 SERIES COMPACTION	TON	685.070200110	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF
404.198901	19 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON	685.070200610	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF

AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

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NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

TYPICAL SECTIONS - 01

CONTRACT NUMBER
DXXXXXX

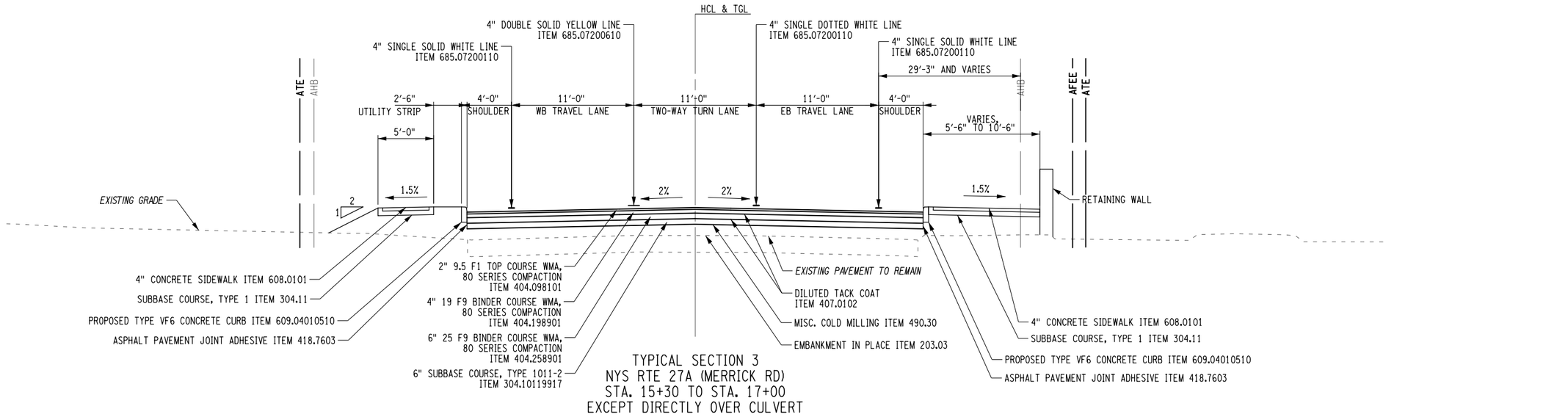
DRAWING NO. TYP-01
SHEET NO. 5

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

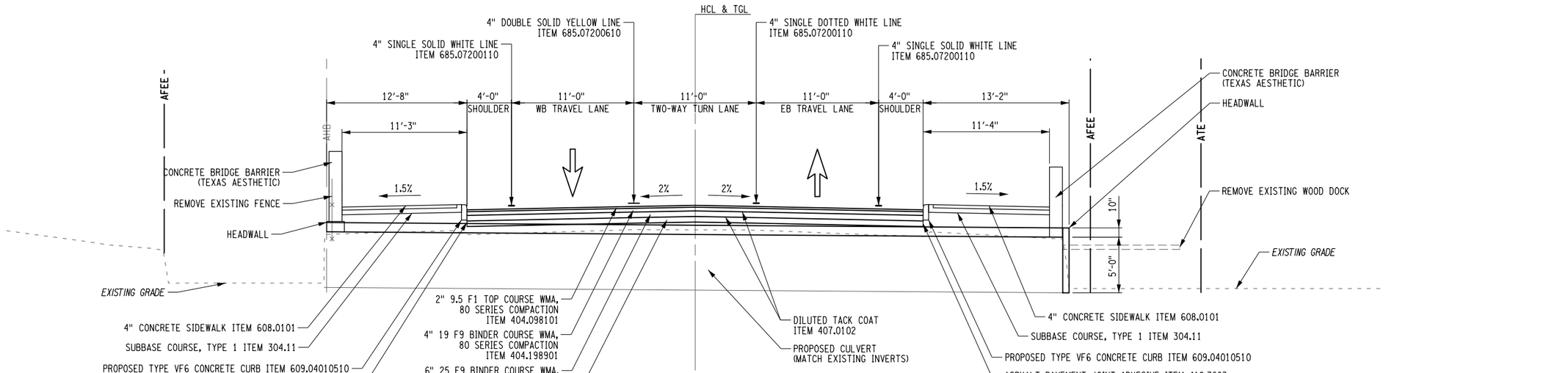
NEW YORK STATE OF OPPORTUNITY. Department of Transportation

DESIGN SUPERVISOR R. KUDLA, PE
JOB MANAGER L. VARGHESE, PE
DESIGN E. LEI
DRAFTING E. LEI
CHECK A. MADDEN, PE
PROJECT MANAGER C. JENNE, PE

FILE NAME = OLC101_cph_typ-01.dgn
DATE/TIME = 21-JUN-2023 13:29
USER = cjenne



TYPICAL SECTION 3
NYS RTE 27A (MERRICK RD)
STA. 15+30 TO STA. 17+00
EXCEPT DIRECTLY OVER CULVERT



TYPICAL SECTION 4
NYS RTE 27A (MERRICK RD)
OVER CULVERT
STA. 15+85 TO STA. 15+95

5 0 5 10 15 20'
1" = 10'

NOTES:

1) IF EXISTING FIELD CONDITIONS DO NOT MATCH THE PROPOSED WMA THICKNESSES, THEN THE BINDER THICKNESS MAY BE REVISED TO MATCH EXISTING PAVEMENT THICKNESSES.

2) THE PROPOSED 6" THICK COURSE OF ITEM 404.258901 IS TO BE PLACED IN 2 (3") LIFTS.

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT
203.03	EMBANKMENT IN PLACE	CY	490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY
304.10119917	SUBBASE COURSE, TYPE 1011-2	CY	606.2701	HPBO (MOD.) CORRUGATED BEAM GUIDE RAILING	LF
304.11	SUBBASE COURSE, TYPE 1	CY	608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY
404.098101	9.5 F1 TOP COURSE WMA, 80 SERIES COMPACTION	TON	608.020102	ASPHALT SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS, AND VEGETATION CONTROL STRIPS	TON
404.198901	19 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON			
404.258901	25 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON	609.04010510	CAST-IN-PLACE CONCRETE CURB (GRADING INCLUDED) TYPE VF6	LF
407.0102	DILUTED TACK COAT	GAL	685.070200110	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF
418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF	685.070200610	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN OLC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

TYPICAL SECTIONS - 02

CONTRACT NUMBER
DXXXXXX

DRAWING NO. TYP-02
SHEET NO. 6

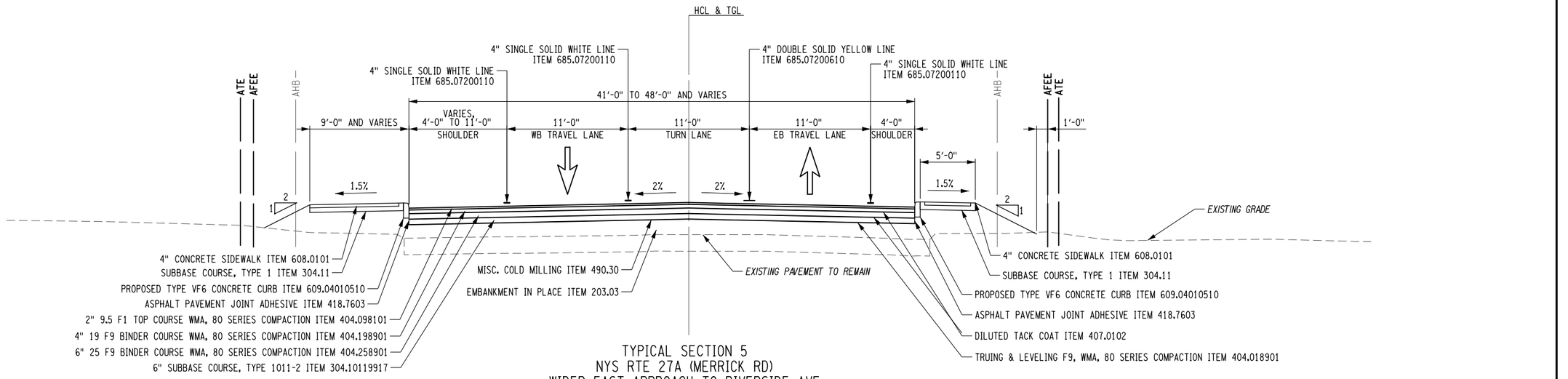
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H&H

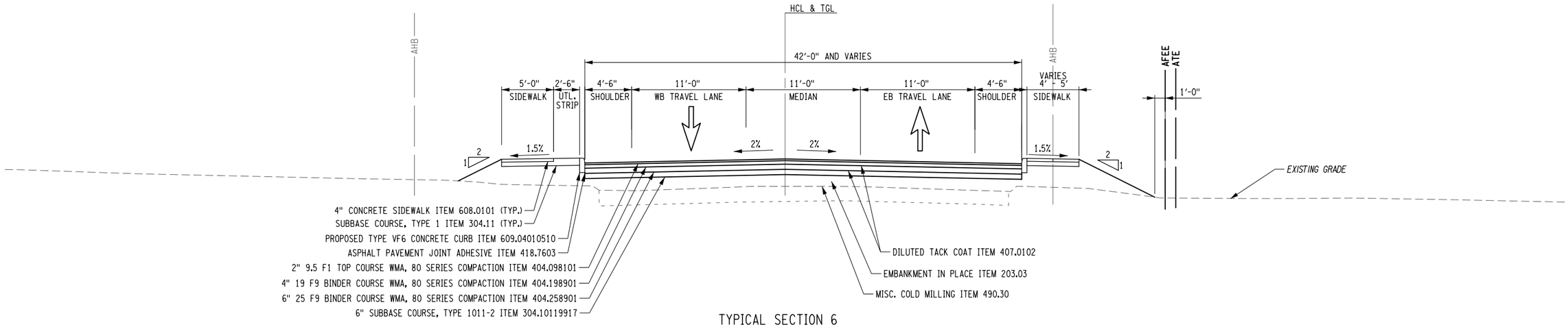
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DRAFTING E. LEI
CHECK A. MADDEN, PE
PROJECT MANAGER C. JENNE, PE
CHECK A. MADDEN, PE

FILE NAME = OLC101_cph_typ-02.dgn
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USER = cjenne



TYPICAL SECTION 5
NYS RTE 27A (MERRICK RD)
WIDER EAST APPROACH TO RIVERSIDE AVE
STA. 18+20 TO STA. 18+90



TYPICAL SECTION 6
NYS RTE 27A (MERRICK RD)
BETWEEN RIVERSIDE AVE AND DOWSING PL
STA. 18+90 TO STA. 19+55

5 0 5 10 15 20'
1" = 10'

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT
203.03	EMBANKMENT IN PLACE	CY	490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY
304.10119917	SUBBASE COURSE, TYPE 1011-2	CY	606.2701	HPBO (MOD.) CORRUGATED BEAM GUIDE RAILING	LF
304.11	SUBBASE COURSE, TYPE 1	CY	608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY
404.098101	9.5 F1 TOP COURSE WMA, 80 SERIES COMPACTION	TON	608.020102	ASPHALT SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS, AND VEGETATION CONTROL STRIPS	TON
404.198901	19 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON			
404.258901	25 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON	609.04010510	CAST-IN-PLACE CONCRETE CURB (GRADING INCLUDED) TYPE VF6	LF
407.0102	DILUTED TACK COAT	GAL	685.070200110	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF
418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF	685.070200610	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF

NOTES:

AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN OLC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

TYPICAL SECTIONS - 03

CONTRACT NUMBER
DXXXXXX

DRAWING NO. TYP-03
SHEET NO. 7

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NEW YORK STATE OF OPPORTUNITY. Department of Transportation

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JOB MANAGER L. VARGHESE, PE
DESIGN E. LEI
DRAFTING E. LEI
CHECK A. MADDEN, PE
PROJECT MANAGER C. JENNE, PE

FILE NAME = OLC101_cph_typ-03.dgn
DATE/TIME = 21-JUN-2023 13:29
USER = cjenne

STAGING NOTES:

STAGE 1:

CLOSE CENTER TURNING LANE THROUGHOUT PROJECT LIMITS AND SHIFT WESTBOUND & EASTBOUND TRAVEL LANES TO NORTH CURB LINE. DETOUR PEDESTRIANS TO NORTH SIDEWALK AT OCEAN AVE AND BAYVIEW AVE. CONSTRUCT EASTBOUND ROADWAY AND CULVERT SEGMENT REPLACEMENT. MAINTAIN FLOW THROUGH CULVERT AT ALL TIMES.

STAGE 2:

SHIFT EASTBOUND TRAVEL LANE TO NEWLY CONSTRUCTED SOUTH CURB LINE. REMOVE PEDESTRIAN DETOURS AND ALLOW PEDESTRIANS ON EXISTING NORTH SIDEWALK AND NEWLY CONSTRUCTED SOUTH SIDEWALK. CONSTRUCT MEDIAN ROADWAY AND CULVERT SEGMENT REPLACEMENT. MAINTAIN FLOW THROUGHOUT CULVERT AT ALL TIMES.

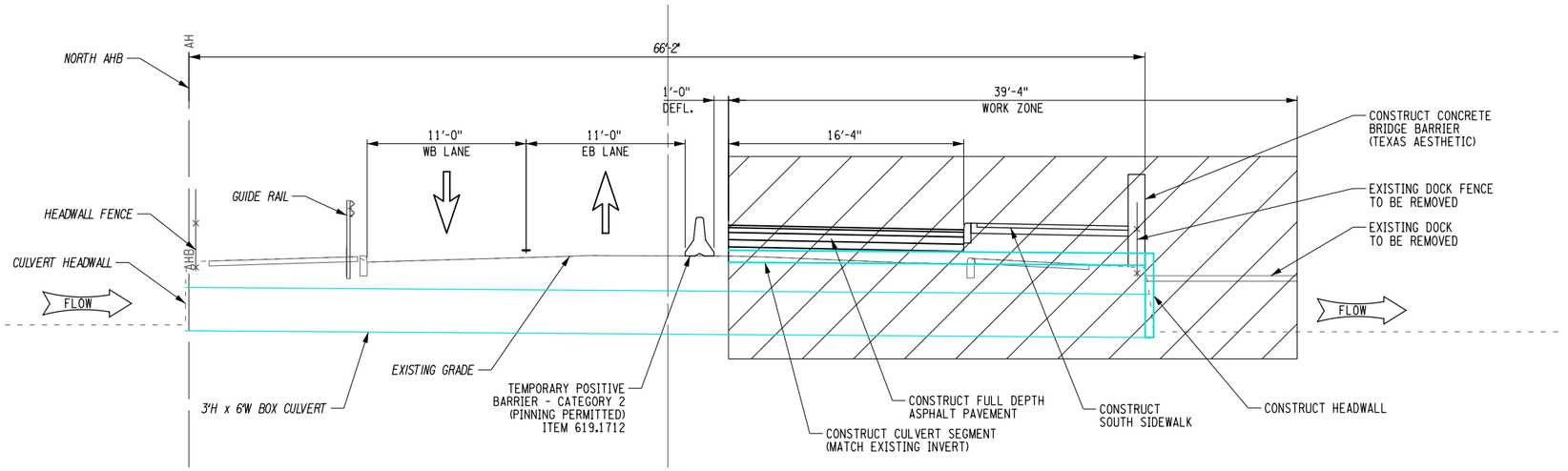
CULVERT STAGING NOTES:

1) DOWNSTREAM EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY WORK.

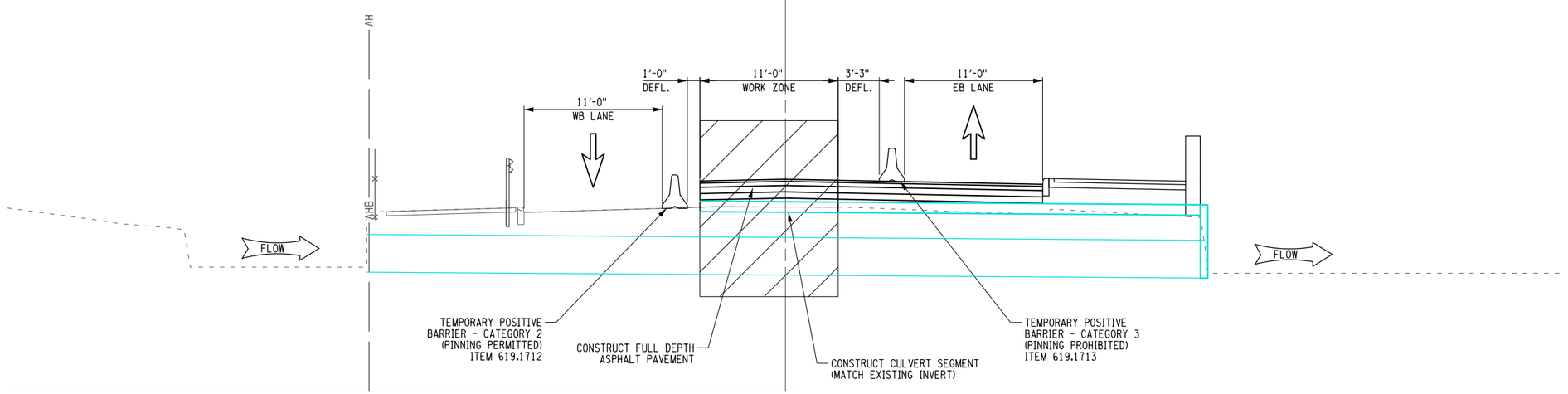
2) AFTER EXCAVATION OF THE EXISTING ROADWAY, THE EXISTING CULVERT ROOF SHALL BE REMOVED.

3) COFFERDAMS SHALL BE UTILIZED ALONG THE INSIDE OF BOTH OF THE EXISTING CULVERT WALLS TO FACILITATE CONSTRUCTION OF THE NEW WIDER THREE-SIDED CULVERT WHILE MAINTAINING FLOW AT ALL TIMES WITHIN THE EXISTING CULVERT.

4) SIX TOTAL COFFERDAMS ARE ANTICIPATED TO FACILITATE THE THREE-STAGE CONSTRUCTION.



STAGE 1



STAGE 2

ITEM	DESCRIPTION	UNIT
619.1711	TEMPORARY POSITIVE BARRIER - CATEGORY 1 (PINNING PROHIBITED)	LF
619.1712	TEMPORARY POSITIVE BARRIER - CATEGORY 2 (PINNING PERMITTED)	LF
619.1713	TEMPORARY POSITIVE BARRIER - CATEGORY 3 (PINNING PROHIBITED)	LF

5 0 5 10 15 20'
1" = 10'

AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN OLC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

WORK ZONE TRAFFIC CONTROL

TYPICAL SECTIONS - 01

CONTRACT NUMBER
DXXXXXX

DRAWING NO. WZD-01

SHEET NO. 8

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DRAFTING E. LEI
CHECK A. MADDEN, PE
PROJECT MANAGER C. JENNE, PE

FILE NAME = OLC101_cph_wzd-01.dgn
DATE/TIME = 21-JUN-2023 13:29
USER = cjenne

STAGING NOTES:

STAGE 3:

SHIFT WESTBOUND TRAVEL LANE SOUTH AND DETOUR PEDESTRIANS TO SOUTH SIDEWALK AT OCEAN AVE AND BAYVIEW AVE. CONSTRUCT WESTBOUND ROADWAY AND FINAL CULVERT SEGMENT REPLACEMENT. MAINTAIN FLOW THROUGH CULVERT AT ALL TIMES.

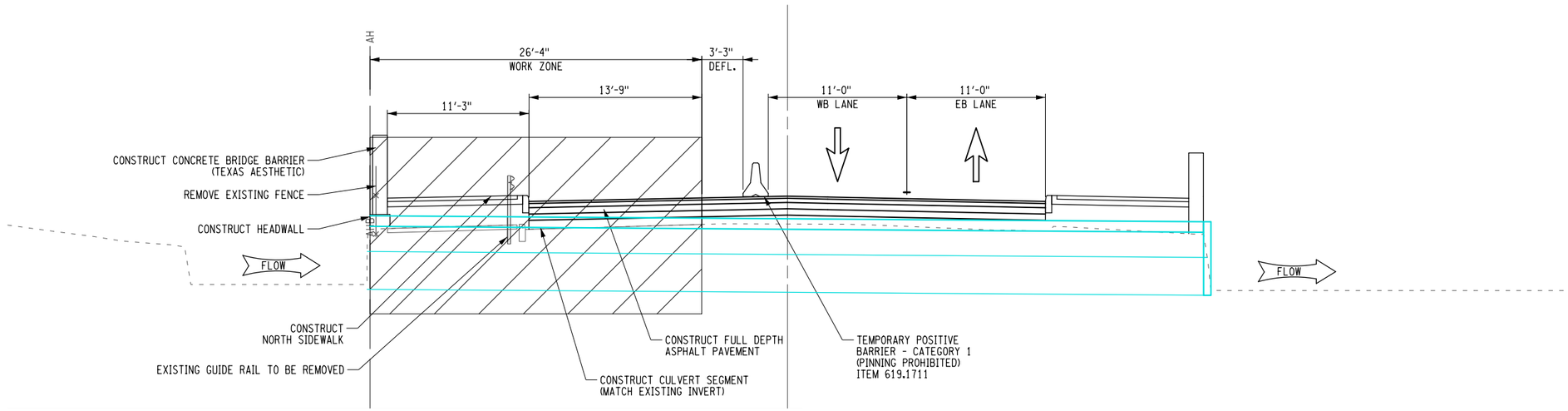
CULVERT STAGING NOTES:

1) DOWNSTREAM EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY WORK.

2) AFTER EXCAVATION OF THE EXISTING ROADWAY, THE EXISTING CULVERT ROOF SHALL BE REMOVED.

3) COFFERDAMS SHALL BE UTILIZED ALONG THE INSIDE OF BOTH OF THE EXISTING CULVERT WALLS TO FACILITATE CONSTRUCTION OF THE NEW WIDER THREE-SIDED CULVERT WHILE MAINTAINING FLOW AT ALL TIMES WITHIN THE EXISTING CULVERT.

4) SIX TOTAL COFFERDAMS ARE ANTICIPATED TO FACILITATE THE THREE-STAGE CONSTRUCTION.



STAGE 3

ITEM	DESCRIPTION	UNIT
619.1711	TEMPORARY POSITIVE BARRIER - CATEGORY 1 (PINNING PROHIBITED)	LF

5 0 5 10 15 20′

1" = 10′

AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN OLC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

WORK ZONE TRAFFIC CONTROL

TYPICAL SECTIONS - 02

CONTRACT NUMBER
DXXXXXX

DRAWING NO. WZD-02

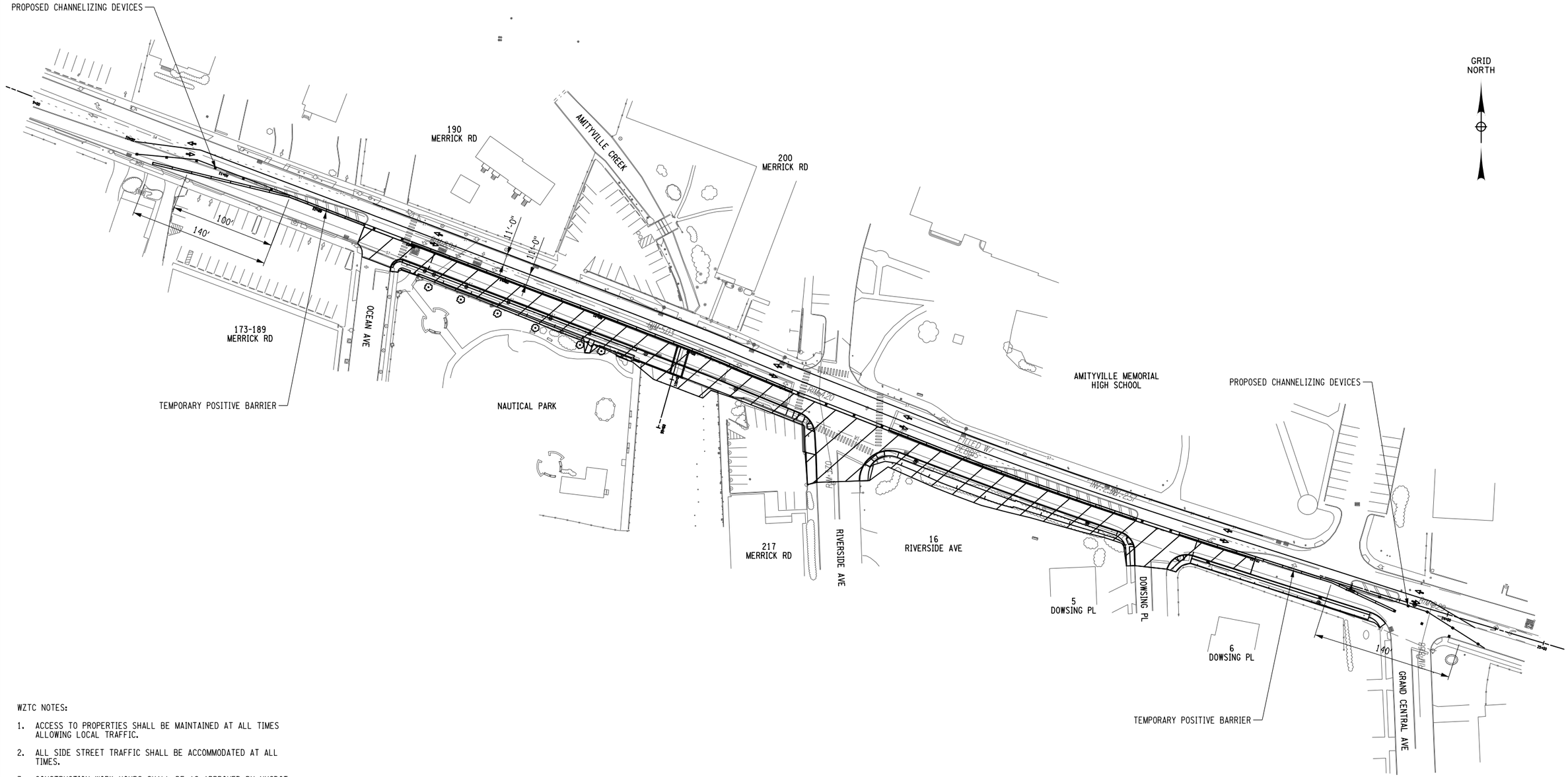
SHEET NO. 9

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PROJECT MANAGER C. JENNE, PE

FILE NAME = OLC101.cph.wzd-02.dgn
DATE/TIME = 21-JUN-2023 13:29
USER = c.jenne



WZTC NOTES:

1. ACCESS TO PROPERTIES SHALL BE MAINTAINED AT ALL TIMES ALLOWING LOCAL TRAFFIC.
2. ALL SIDE STREET TRAFFIC SHALL BE ACCOMMODATED AT ALL TIMES.
3. CONSTRUCTION WORK HOURS SHALL BE AS APPROVED BY NYSDOT AND THE VILLAGE OF AMITYVILLE.

AFFIX SEAL: ON:	ALTERED BY: ON:

WORK ZONE TRAFFIC CONTROL PLAN LEGEND

WORK ZONE

NOTE:

1. SEE STANDARD SHEET 619-422 FOR ADVANCED WARNING SIGN PLACEMENT.

50 0 50 100 150 200'

1" = 100'

H&H

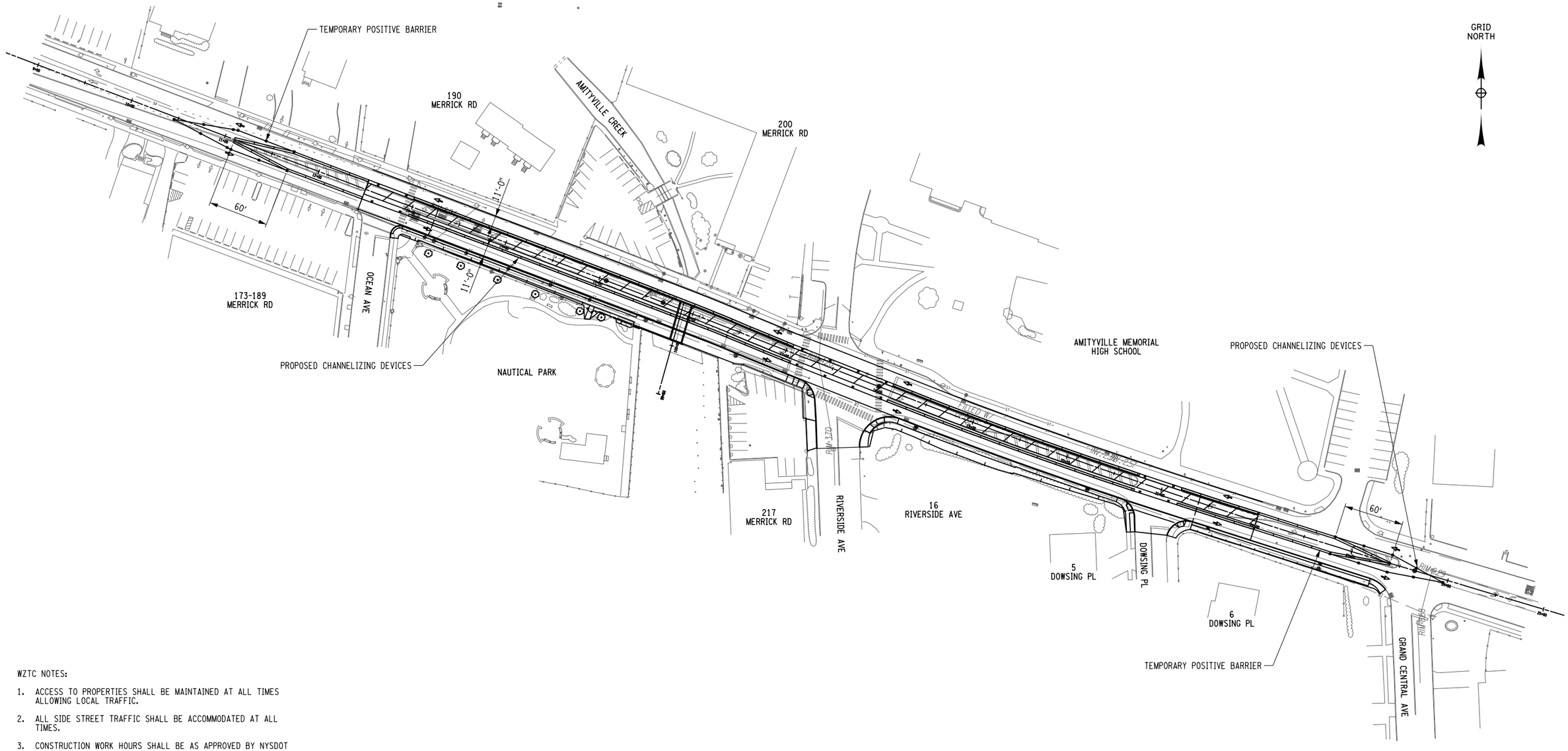
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CULVERT REPLACEMENT	PIN 0LC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER DXXXXXX
	S.H. 5300				WORK ZONE TRAFFIC CONTROL PLAN	
	VILLAGE OF AMITYVILLE				STAGE 1	DRAWING NO. WZP-01
	TOWN OF BABYLON					SHEET NO. 10
	COUNTY: SUFFOLK REGION: 10					

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WZTC NOTES:

1. ACCESS TO PROPERTIES SHALL BE MAINTAINED AT ALL TIMES ALLOWING LOCAL TRAFFIC.
2. ALL SIDE STREET TRAFFIC SHALL BE ACCOMMODATED AT ALL TIMES.
3. CONSTRUCTION WORK HOURS SHALL BE AS APPROVED BY NYSDOT AND THE VILLAGE OF AMITYVILLE.

AFFIX SEAL: ON:	ALTERED BY: ON:

WORK ZONE TRAFFIC CONTROL PLAN LEGEND

WORK ZONE

NOTE:

1. SEE STANDARD SHEET 619-422 FOR ADVANCED WARNING SIGN PLACEMENT.

50 0 50 100 150 200'

1" = 100'

H&H

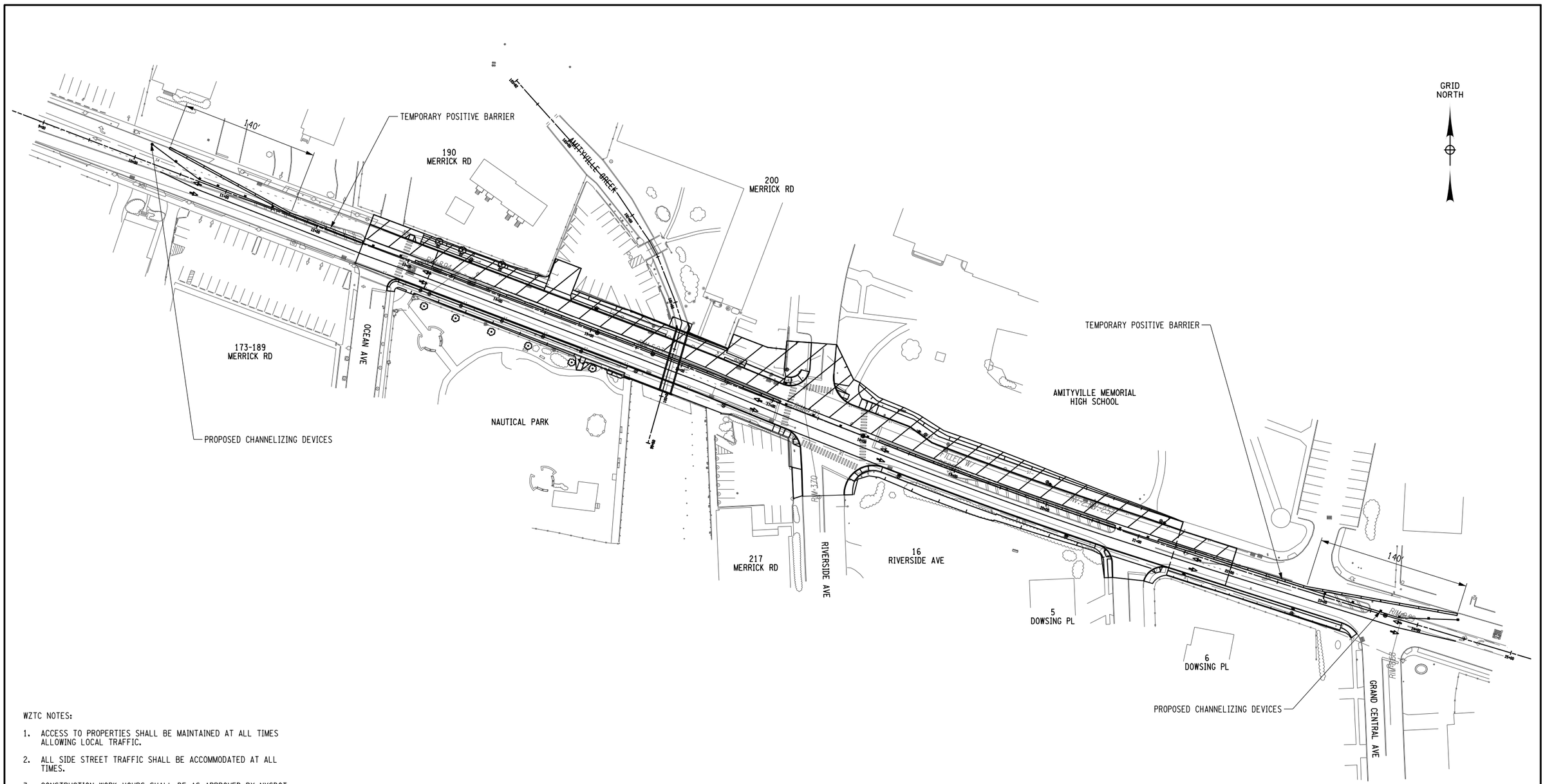
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CULVERT REPLACEMENT S.H. 5300 VILLAGE OF AMITYVILLE TOWN OF BABYLON COUNTY: SUFFOLK REGION: 10	PIN OLC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN STAGE 2	CONTRACT NUMBER DXXXXXX DRAWING NO. WZP-02 SHEET NO. 11

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WZTC NOTES:

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AFFIX SEAL: ON:	ALTERED BY: ON:

WORK ZONE TRAFFIC CONTROL PLAN LEGEND

WORK ZONE

NOTE:

1. SEE STANDARD SHEET 619-422 FOR ADVANCED WARNING SIGN PLACEMENT.

50 0 50 100 150 200'
1" = 100'

H&H

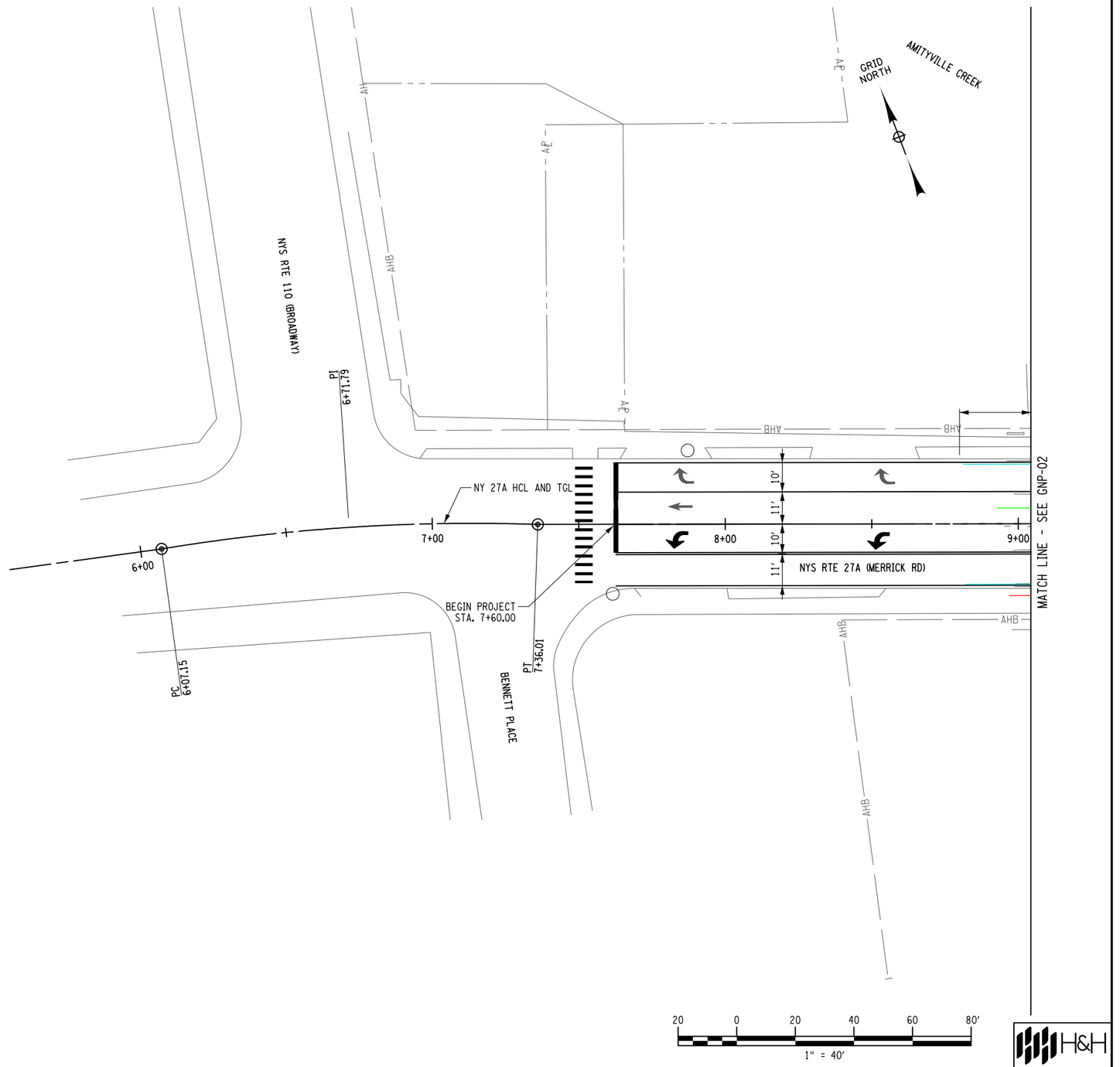
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CULVERT REPLACEMENT S.H. 5300 VILLAGE OF AMITYVILLE TOWN OF BABYLON COUNTY: SUFFOLK REGION: 10	PIN OLC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN STAGE 3	CONTRACT NUMBER DXXXXXX DRAWING NO. WZP-03 SHEET NO. 12

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CULVERT REPLACEMENT S.H. 5300 VILLAGE OF AMITYVILLE TOWN OF BABYLON COUNTY: SUFFOLK REGION: 10	PIN OLC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED NY 27A (MERRICK RD) OVER AMITYVILLE CREEK GENERAL PLAN - 01	CONTRACT NUMBER DXXXXXX DRAWING NO. GNP-01 SHEET NO. XXX

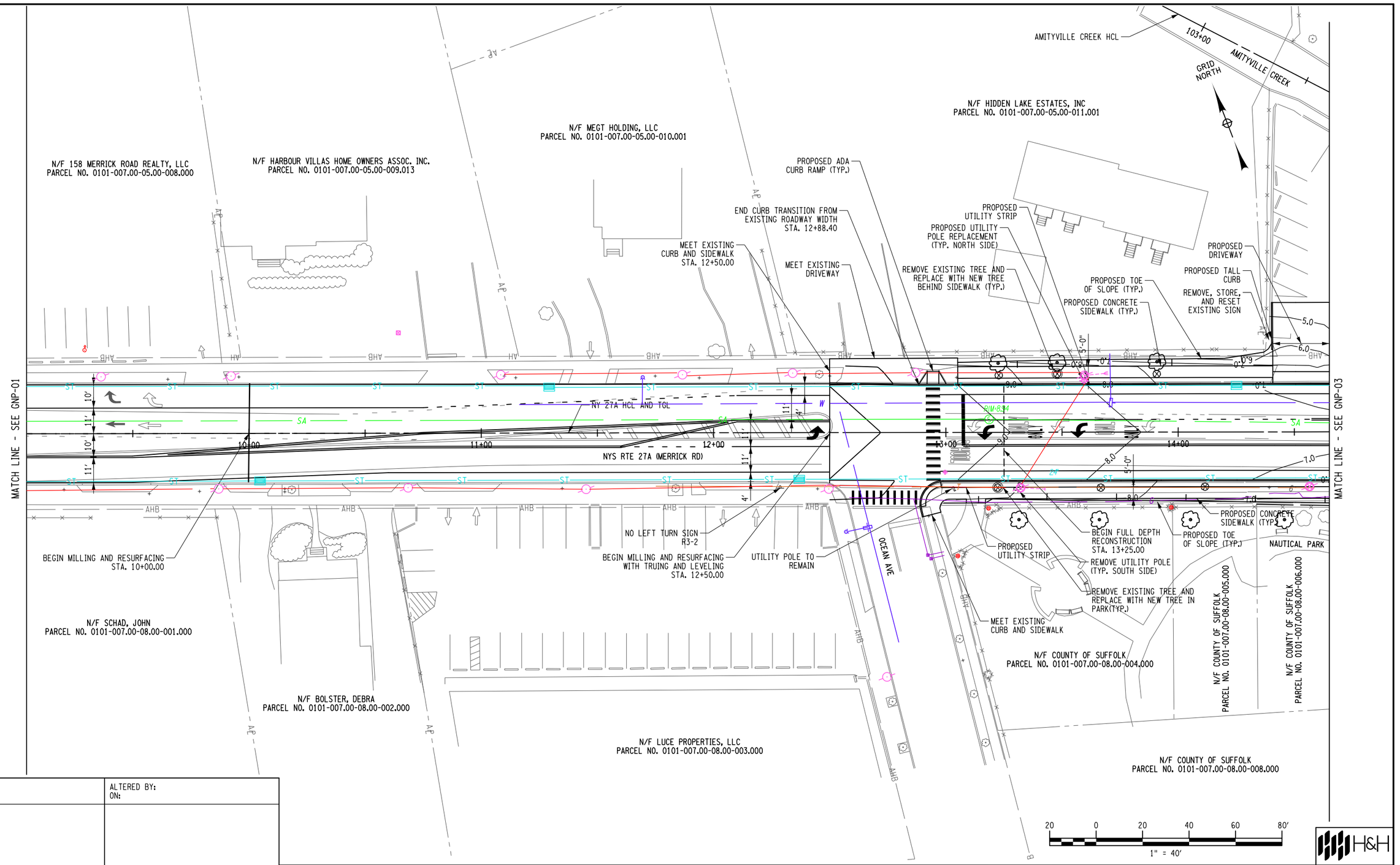
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NEW YORK STATE OF OPPORTUNITY. Department of Transportation

H&H

DESIGN SUPERVISOR R. KUDLA, PE | JOB MANAGER L. VARGHESE, PE | DESIGN E. LEI | CHECK A. MADDEN, PE | DRAFTING E. LEI | CHECK A. MADDEN, PE | PROJECT MANAGER C. JENNE, PE

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DESIGN E. LEI
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DESIGN SUPERVISOR R. KUDLA, PE

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AFFIX SEAL:	ALTERED BY:
ON:	ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN OLC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

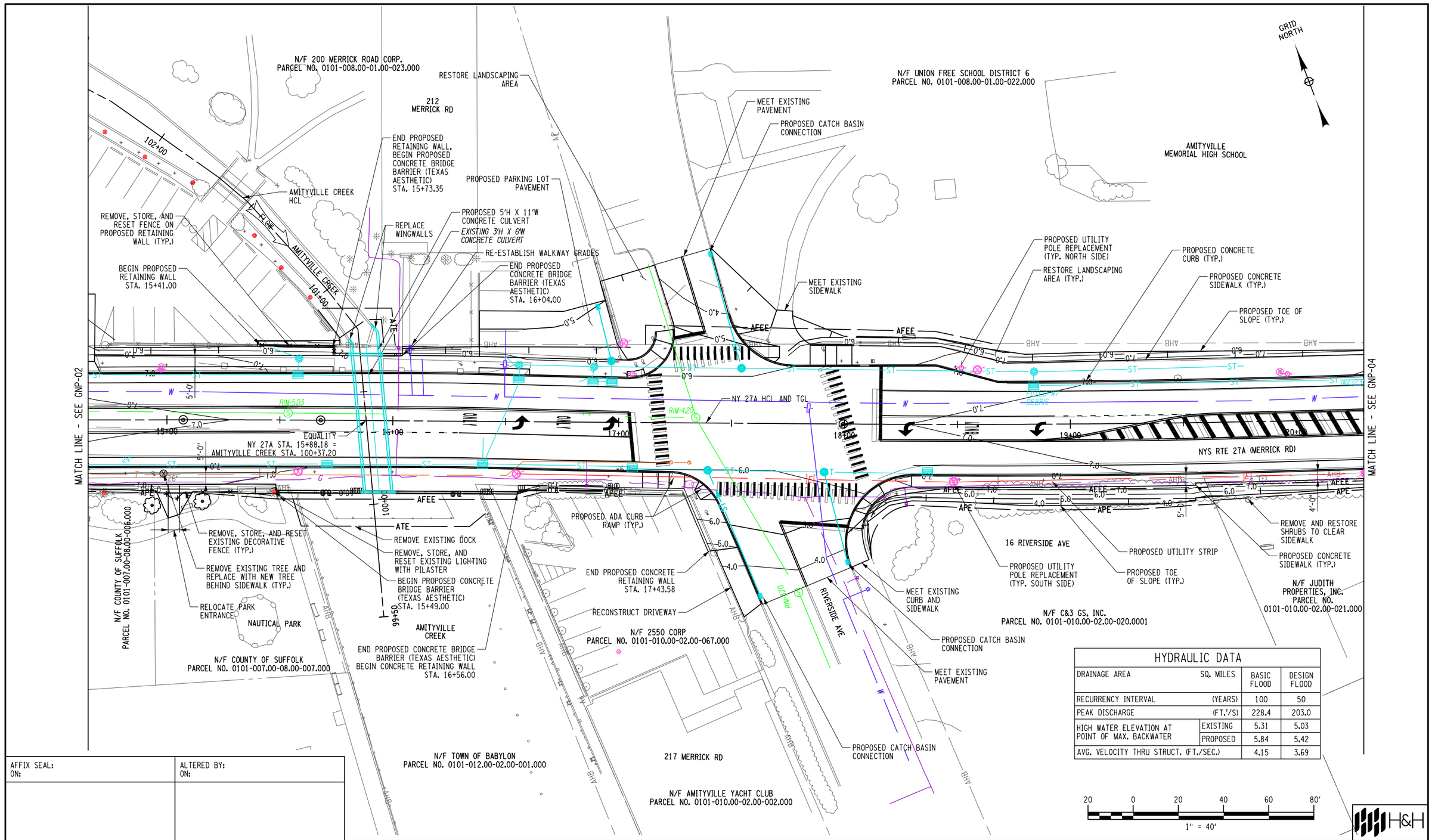
NY 27A (MERRICK RD) OVER AMITYVILLE CREEK
GENERAL PLAN - 02

CONTRACT NUMBER
DXXXXXX

DRAWING NO. GNP-02
SHEET NO. 14

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HYDRAULIC DATA			
DRAINAGE AREA	SQ. MILES	BASIC FLOOD	DESIGN FLOOD
RECURRENCY INTERVAL	(YEARS)	100	50
PEAK DISCHARGE	(FT.³/S)	228.4	203.0
HIGH WATER ELEVATION AT POINT OF MAX. BACKWATER	EXISTING	5.31	5.03
	PROPOSED	5.84	5.42
AVG. VELOCITY THRU STRUCT. (FT./SEC.)		4.15	3.69

20 0 20 40 60 80′
1" = 40′

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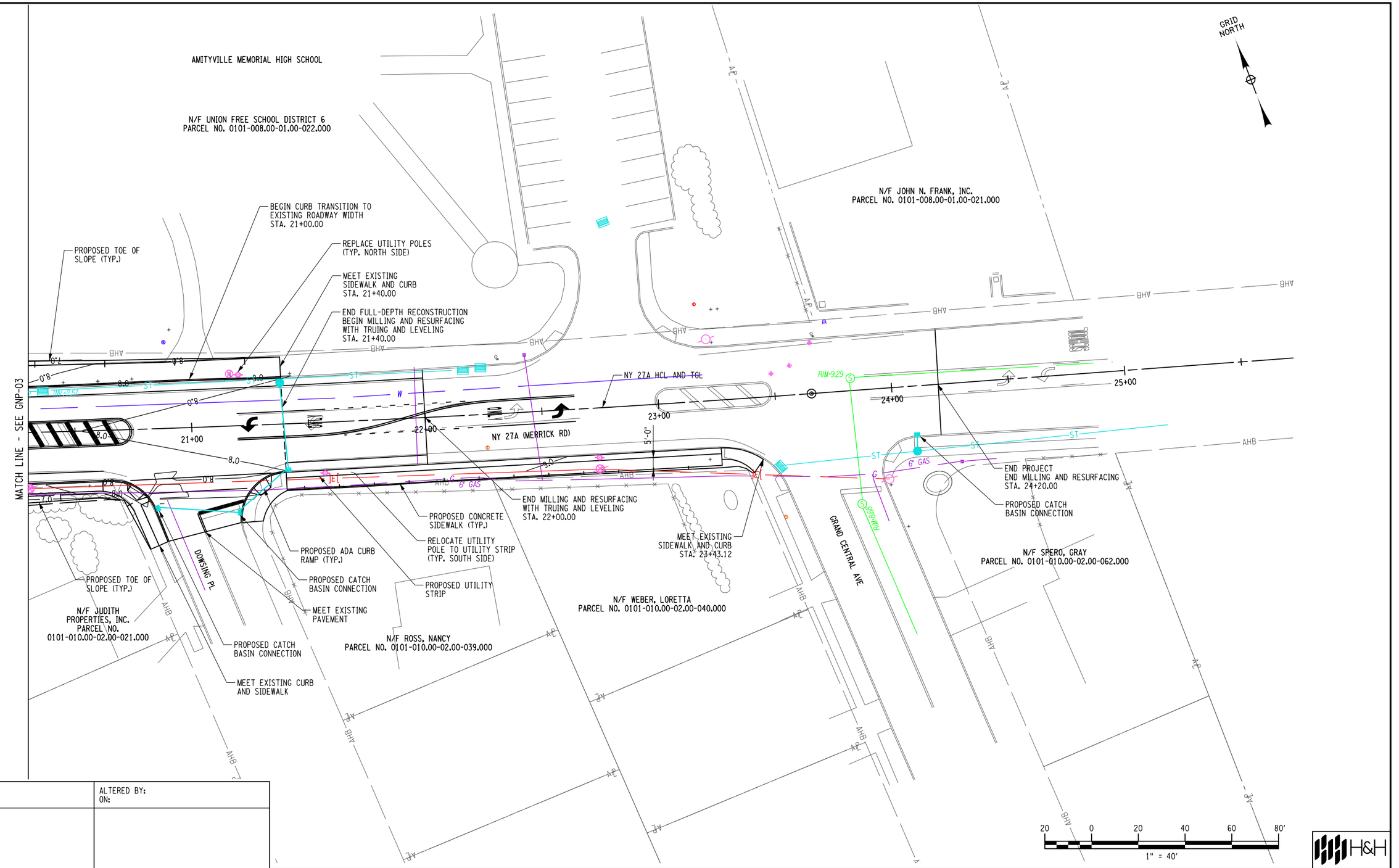
CULVERT REPLACEMENT	PIN OLC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER DXXXXXX
S.H. 5300				NY 27A (MERRICK RD) OVER AMITYVILLE CREEK	DRAWING NO. GNP-03
VILLAGE OF AMITYVILLE				GENERAL PLAN - 03	SHEET NO. 15
TOWN OF BABYLON					
COUNTY: SUFFOLK REGION: 10					

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DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT	PIN 0LC1.01	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER DXXXXXX
S.H. 5300	NY-27A			NY 27A (MERRICK RD) OVER AMITYVILLE CREEK	DRAWING NO. GNP-04
VILLAGE OF AMITYVILLE				GENERAL PLAN - 04	SHEET NO. 16
TOWN OF BABYLON					
COUNTY: SUFFOLK REGION: 10					

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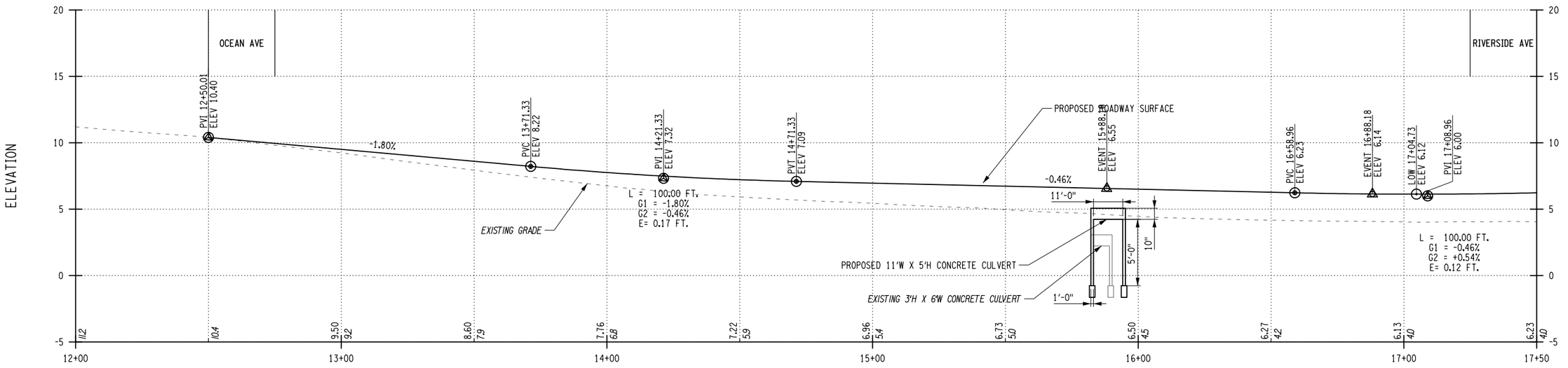
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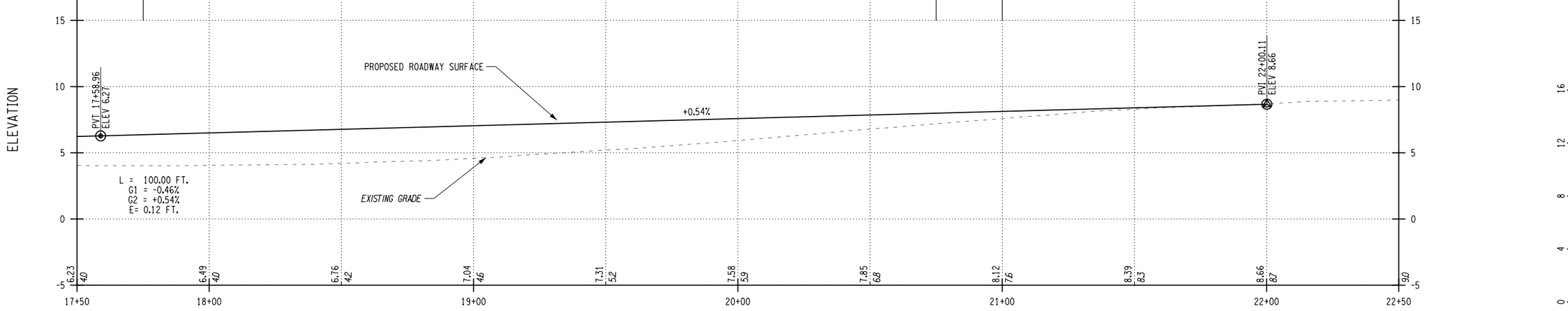
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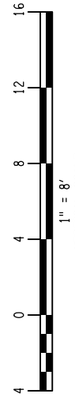


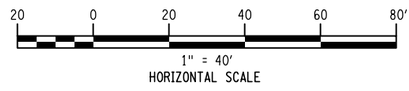
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AS-BUILT REVISIONS
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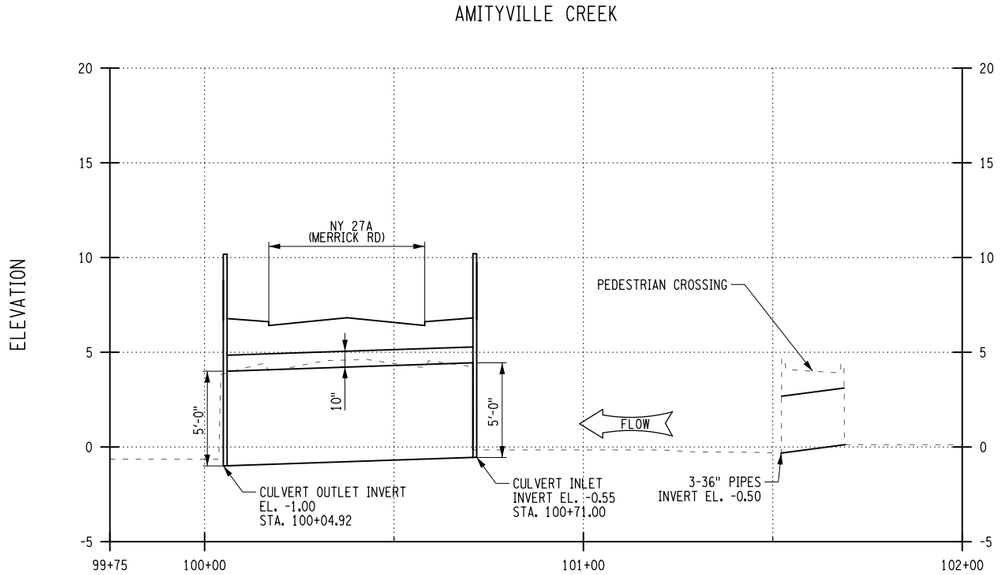
CULVERT REPLACEMENT S.H. 5300 VILLAGE OF AMITYVILLE TOWN OF BABYLON COUNTY: SUFFOLK REGION: 10	PIN OLC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED ROADWAY PROFILE - 01	CONTRACT NUMBER DXXXXXX DRAWING NO. PRO-01 SHEET NO. XXX	H&H

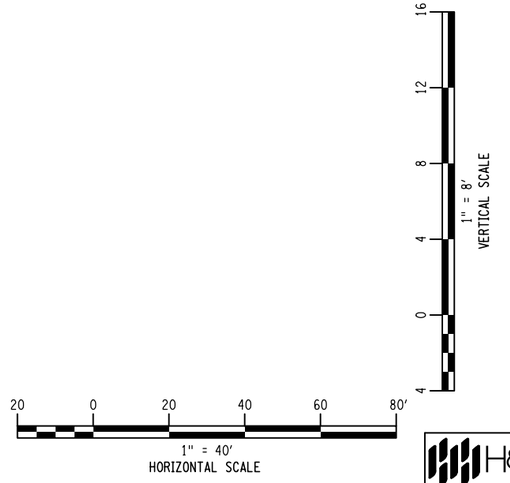
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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CULVERT REPLACEMENT S.H. 5300 VILLAGE OF AMITYVILLE TOWN OF BABYLON COUNTY: SUFFOLK REGION: 10	PIN OLC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED STREAMBED PROFILE	CONTRACT NUMBER DXXXXXX DRAWING NO. PRO-02 SHEET NO. 18

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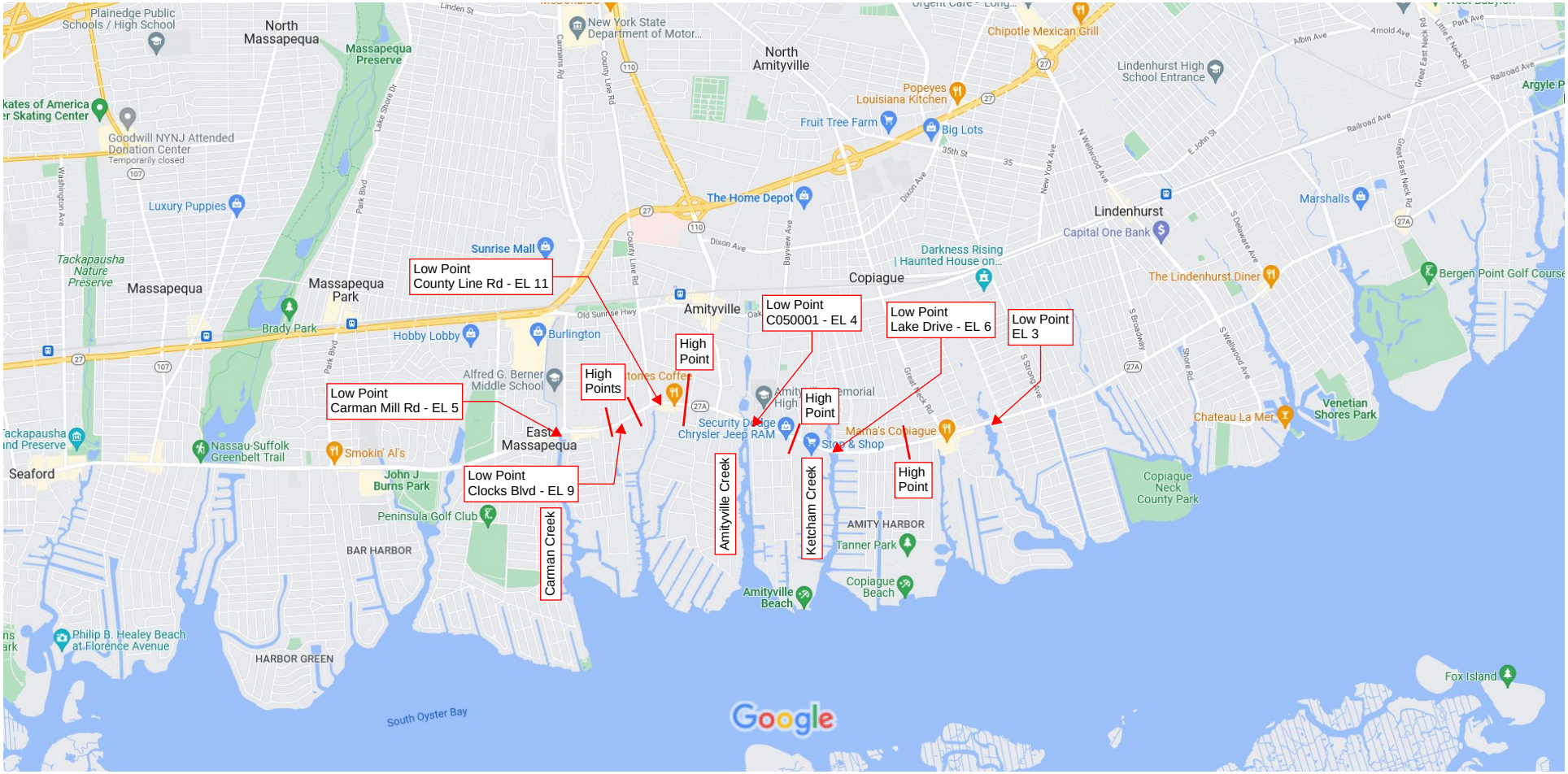
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USER = c.jenne

Google Maps



Map data ©2022 Google 2000 ft

ATTACHMENT B

Environmental Information

Social, Economic and Environmental Resources Checklist

PIN:0LC1.01	FUNDING TYPE: Federal
DESCRIPTION: Culvert Replacement at NYS Route 27A over Amityville Creek (Culvert ID Number C050001)	DATE:12/06/2022
	REVISION DATE: 04/14/2023
MUNICIPALITY: Village of Amityville	NEPA CLASS: II
COUNTY: Suffolk	SEQRA TYPE: II
SCOPE: Culvert Replacement and Raise Highway	

SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS	IF YES, GO TO IMPACT OR ISSUE; IF NO CHECK BOX BELOW	IMPACT[1] OR ISSUE?	
	NO	YES	NO
Social			
A. Land Use			
1. Is there potential to affect current land use/zoning?	☒	☐	☐
2. Is there a lack of consistency with community's comprehensive plan and/or other local or regional planning goals?	☒	☐	☐
3. Will the project affect any planned or future development?	☒	☐	☐
B. Neighborhoods and Community Cohesion			
1. Are relocations of homes or businesses proposed or acquisition of community resources anticipated?	☒	☐	☐
2. Is there potential for changes to neighborhood character?	☒	☐	☐
3. Is there a potential to impact transportation options (e.g., transit, walking, bicycling)?	☒	☐	☐
4. Are there potential changes to travel patterns that could affect neighborhood quality of life?	☒	☐	☐
5. Will the project divide or isolate portions of the community or generate new development that could affect the current community structure?	☒	☐	☐
C. General Social Groups			
1. Are there potential effects to the ability of transit dependent, elderly, or disabled populations to access destinations (particularly local businesses and health care facilities)?	☒	☐	☐
2. Does the project have the potential to disproportionately impact low income or minority populations (Environmental Justice)?	☒	☐	☐
3. Are there alterations to pedestrian facilities that would affect the elderly or disabled such as lengthening pedestrian crossings or providing median refuge?	☒	☐	☐
D. Community Services			
1. Is there potential to affect access to or use of Schools, Recreation Areas or Places of Worship (e.g., detours, sidewalk removal, addition of curb ramps, crosswalks, pedestrian signals, etc.)?	☒	☐	☐

SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS	IF YES, GO TO IMPACT OR ISSUE; IF NO CHECK BOX BELOW	IMPACT[1] OR ISSUE?	
	NO	YES	NO
2. Is there potential to affect emergency service response?	☒	☐	☐
Economic			
A. Regional and Local Economies			
1. Is there potential to affect local economic viability (e.g., development potential, tax revenues, employment opportunities, retail sales or public expenditures)?	☒	☐	☐
2. Is there a potential to divert traffic away from businesses?	☒	☐	☐
B. Business Districts			
1. Are there potential effects on the viability or character of Business Districts?	☒	☐	☐
2. Will the project affect transportation options available for patrons getting into or out of the District?	☒	☐	☐
3. Will sidewalks, bicycling opportunities or transit opportunities to or within the district be affected?	☐	☒	☐
4. Will parking within the district be affected?	☒	☐	☐
C. Specific Business Impacts			
1. Are effects to specific businesses anticipated? (e.g., sidewalks, bicycling opportunities, or handicapped access to and from businesses)?	☒	☐	☐
2. Will the project affect available transportation options for patrons to businesses?	☒	☐	☐
3. Will the project affect the ability of businesses to receive deliveries?	☒	☐	☐
4. Will parking for businesses be affected?	☒	☐	☐
Environmental			
1. Are there wetlands within or immediately adjacent to the project limits? *See Environmental Procedures Manual (EPM) 4.A.R, Executive Order (EO) 11990 may apply.*	☒	☐	☐
2. Are there Surface Waters (other than wetlands) within or immediately adjacent to the project limits? *lakes, ponds streams or wetlands of any jurisdiction*	☐	☐	☒
3. Is there a designated Wild or Scenic River within or immediately adjacent to the project limits? *(See The Environmental Manual (TEM) 4.4.3)*	☒	☐	☐
4. Will the project require a U.S. Coast Guard Bridge Permit? *Project area includes a bridge over navigable waters of U.S.*	☒	☐	☐
5. Does the project area contain waters regulated as Navigable by U. S. Army Corps of Engineers? *Section 404/10 Individual Permit or NWP 23 may be required*	☒	☐	☐
6. Is the project in a mapped Flood Zone? *TEM section 4.?, EO 11988*	☐	☐	☒
7. Is the project in or could it affect a designated coastal area? *FAN and/or Consistency determination may be required. See TEM 4.6*	☐	☐	☒
8. Is the project area above a Sole Source Aquifer? *See TEM 4.4 Coordination with FHWA and/or EPA may be required.*	☒	☐	☐

SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS	IF YES, GO TO IMPACT OR ISSUE; IF NO CHECK BOX BELOW	IMPACT[1] OR ISSUE?	
	NO	YES	NO
9. Will the project involve one (1) acre of ground disturbance (or 5,000 sf in the East of Hudson watershed)?	☐	☒	☐
10. Are federally/state listed endangered species or designated critical habitat indicated for the project county? *Coordination with DEC and/or a FHWA determination may be required. See TEM 4.4.9.3*	☐	☐	☒
11. Is the project in a designated Critical Environmental Area? *TEM 4.4.11(SEQR issue)*	☒	☐	☐
12. Are there any resources protected by Section 106 (or Section 1409) within the project limits or immediate area? *See TEM 4.4.12 Appendix G*	☒	☐	☐
13. Is Native American coordination required outside of Section 106 consultation? *The project on or affecting Native American Lands or other areas of interest*	☒	☐	☐
14. Is there a use, constructive use or temporary occupancy of a 4(f) resource? *See SECTION 4(f) POLICY PAPER and contact Area Engineer.*	☐	☒	☐
15. Will the project involve conversion of a 6(f) resource? *listed as having Land and Water Conservation funds spent on the resource*	☒	☐	☐
16. Is there any potential to affect the character of important and possibly significant the visual resources of the project area and its environs? *(See PDM Chapter 3.2.2.2)*	☒	☐	☐
17. Will the project convert land protected by the Federal Farmland Protection Act? *See TEM 4.4.15*	☒	☐	☐
18. Will the project acquire active farmland from an Agricultural District? *(SEQR issue)*	☒	☐	☐
19. Is the project in a non-attainment area and exceed the CO screening criteria? *see EPM Chapter 1 1.1-19 an Air Quality Analysis required*	☒	☐	☐
20. Is the project in a non-attainment area and exceed the PM screening criteria? *see EPM Chapter 1 1.1-19? A hot spot analysis is required*	☒	☐	☐
21. Is the project a Type I Noise project as per 23 CFR 772? *See TEM 4.4.18*	☒	☐	☐
22. Will the project require the removal of Asbestos Containing Materials? *See TEM 4.4.19*	☒	☐	☐
23. Does the project area contain Contaminated and Hazardous Materials? *EPA National Priority List*	☐	☒	☐
24. Will the project increase the height of towers, construct new towers or other obstructions in a known migratory bird flyway?	☒	☐	☐

NOTES:

[1] The term "impacts" means both positive and negative effects. Both types of effects should be discussed in the body of the report as appropriate.

PREPARED BY (Print Name and Title):

CERTIFICATION:

I certify that the information provided above is true and accurate.

Regional/Main Office Environmental Unit Supervisor S. Fathi Date 6/28/2023

Print Name and Title: SHEREF FATHI ES-3

State Environmental Quality Review Act (SEQRA)

Type 2 Action Analysis

In accordance with 17 NYCRR Part 15, the Department has determined that this project meets the requirements of a SEQRA Type II Action. A Type II Action is one that is of a class or type of action which has been determined in 17 NYCRR 15.14 to not have a significant effect on the environment. No further SEQRA processing is required. The project is identified as Type II per 17 NYCRR Section 15.14, Subdivision (e), Item 37, Paragraph iv *"replacement reconstruction or rehabilitation, at present sites or immediately adjacent thereto, of existing bridges, culverts or other transportation structures, including railroad crossing structures, not involving substantial expansion of the structure"*. The project does not violate any of the criteria contained in subdivision (d) of Section 15.14. See below for a review of the 17 NYCRR Section 15.14, subdivision (d) criteria and how it pertains to the project.

Review of subdivision (d) criteria within the State Environmental Quality Review Act (17 NYCRR Section 15.14 SEQRA)

(1) no acquisition of any occupied dwelling units or principal structures of businesses;

Part 17 of the New York Code of Rules and Regulations Section 15.14 subdivision (e), Item 37, Paragraph iv states that a highway project is considered a SEQRA type II action if it involves "*replacement, reconstruction or rehabilitation, at present sites or immediately adjacent thereto, of existing bridges, culverts or other transportation structures, including railroad crossing structures, not involving substantial expansion of the structure*". The Project does not require acquisition of dwellings and businesses; however, the proposed strip property takings are considered minor as no parcel acquisition exceeds more than 7.4% at any of the respective properties, nor is there any acquisition of any structures and/or buildings themselves (See exhibit 2-5 in Design Report).

(2) no significant changes in passenger or vehicle traffic volume, vehicle mix, local travel patterns or access (other than changes that would occur without the action);

The project objectives include addressing geometric and operational deficiencies to improve safety, traffic flow and facilitate traffic operations. The capacity of the roadway will not be changing due to the Project and therefore will not have any long-term impact to traffic capacity. A traffic signal at Riverside Avenue and NY27A will need to be replaced as part of the roadway reconstruction work and will only have temporary traffic disruptions during construction. A transportation management plan will be prepared for the project consistent with 23 CFR 630.1012 which will consist of a temporary traffic control plan. Refer to Attachment A of this report for the three-stage work zone traffic

control plan. Within the traffic control plan, two-way traffic will be maintained at all times during and after construction. There are no other local plans within the project area that will impact the project or traffic operations. Routes for emergency vehicles as well as access to all side streets and driveways will be maintained during construction. The details for the work zone traffic control plans will be prepared and evaluated during final design. Therefore, no significant temporary or permanent changes in traffic volume, vehicle mix, local travel patterns or access are anticipated from the project.

(3) no more than minor social, economic or environmental effects upon occupied dwelling units, businesses, abutting properties or other established human activities;

No social or economic effects are anticipated from the project as there will be no changes in traffic patterns, nor will there be any impediments to any local businesses, public buildings, or local dwellings that are permanent. Temporary effects to traffic patterns during construction are anticipated as well as a temporary easement of several parking lot spaces from the 200 Merrick Road Corp. (tax map number 0101-008.00-01.00-023.000). All acquisitions required for this project, whether temporary or permanent, will not have any more than minor social or economic impacts to occupied dwelling units, businesses, abutting properties or other established human activities. The environmental impacts, including those impacts to Nautical Park, are anticipated to be minor and mitigation measures are in place. Refer to Attachment A of this report for the three-stage work zone traffic control plan. Refer to Exhibit 2-15 for more information about property acquisitions.

(4) no significant inconsistency with current plans or goals that have been adopted by local government bodies;

There are no approved developments planned within the project area that will impact the project or traffic operations. Rehabilitating/replacing the culvert is consistent with all locally approved plans. For additional discussion of local plans in the project area, see Section 2.6.2 of this report.

(5) no physical alteration of more than 2.5 acres of publicly owned or operated parkland, recreation area or designated open space;

The proposed acquisition of a small strip of Nautical Park required for the raising of NY27A to above the 100--year storm level to ensure storm resiliency would result in a take of 775 square feet (0.02 acre). The 100-year design storm freeboard for the preferred alternative is below the roadway surface but does not meet the recommended guideline of being below the bottom of subbase (18” below roadway surface). Hence, in the preferred alternative, the roadway will not overtop even during the 100-year design storm and is an enhancement from the existing condition which overtops during much smaller design storms. Therefore, this project remains below the SEQRA threshold as there will be no physical alteration of more than 2.5 acres of publicly owned or operated parkland, recreation area, or designated open space due to this project.

(6) no effect on any district, site, building, structure or object that is listed, or may be eligible for listing, on the National Register of Historic Places, or any historic building, structure, site or prehistoric site that has been proposed by the Committee on the Registers for consideration by the New York State Board of Historic Preservation for a recommendation to the State Historic Preservation Officer for nomination for inclusion in said National Register;

The NYSDOT is following the Section 106 Process of the National Historic Preservation Act. In conformance with this process, FHWA has issued a Section 106 determination of *No Historic Properties Affected*, based on SHPO review and concurrence with the NYSDOT recommended finding (still to be issued). See Section 2.13.3.4 of this report for further section 106 review details.

(7) no more than minor alteration of, or adverse effect upon, any property, protected area, or natural or man-made resource of national, State or local significance, including but not limited to:

(i) freshwater or tidal wetlands and associated areas;

The proposed work will be within a mapped National Wetlands Inventory "riverine" area as well as a NYSDEC-mapped tidal wetlands area. The work is considered minor as no significant impacts are anticipated for either wetland types. Wetland and water quality protection and best management practices such as coffer dams and sediment control measures will be implemented during the in-water portion of the work for the culvert rehabilitation. Culvert rehabilitation/replacement is considered a SEQRA Type II action and does not have major environmental impacts. This activity is considered "*generally compatible*" with tidal wetland values and functions under NYS ECL Article 25 Tidal Wetlands Act regulations in 6 NYCRR Part 661. See Section 2.13.3.1 of this report for a detailed review of anticipated wetland impacts and needed permits.

(ii) floodplain areas;

The project is considered a functionally dependent use of the floodplain, as the purpose of the culvert is to convey the flow of the waterway under the roadway. Based on the preliminary hydraulic analysis discussed further in this report and in Attachment I as well as Appendix 4 in the environmental database report, the project will not raise the base flood elevation. Therefore, the project will not have a significant impact on the floodplain area.

(iii) prime or unique agricultural land;

There are no prime or unique agricultural land parcels near or within the project area limits.

(iv) agricultural districts so designated pursuant to article 25, section 203, when more than one acre of such district may be affected;

There are no agricultural districts within the project limits.

(v) water resources, including lakes, reservoirs, rivers, streams;

The Project is within a perennial NYSDEC regulated stream designated as Class C and standard C(T) waterbody. Therefore, the project may be subject to in-water work date restrictions, prohibiting in-water work between October 1 and April 30. No significant impacts to water resources are anticipated to occur from the project. See Section 2.13.3.1 for further water resource details as well as Attachment B of this report.

(vi) water supply sources;

The project is approximately 10 feet to 15 feet from both the surficial and lower aquifers. A very low downward gradient from the surficial to the lower aquifer has been identified, along with a very low upward gradient from the lower aquifer to the surficial aquifer. No water supply wells, springs, or intakes are within the project limits and therefore, no water supply sources are to be impacted. Information based on site-specific subsurface investigations is documented in the Attachments section of this report within the CERCLIS investigation report(s). No significant impacts to water supply sources are anticipated to occur from the project.

(vii) designated wild, scenic and recreational rivers;

There are no NYSDEC designated wild, scenic, or recreational rivers nor any rivers on the nationwide inventory list within the project.

(viii) unique ecological, natural wooded or scenic areas;

There are no unique ecological, natural wooded, or scenic areas within the project.

(ix) rare, endangered or threatened species formally designated as such pursuant to Federal law; and

The Northern Long Eared Bat (*Myotis septentrionalis*) has been designated as federally endangered on November 30, 2022. Summer bat habitat has been identified within the project action area and tree removal is scheduled for this project. With concurrence from the USFWS, it has been determined that this project is not likely to adversely affect (NLAA) the Northern Long-eared Bat. Any trees that are required to be removed in order to raise the road above the 50-year storm level shall be cut during the winter cutting season (between October 1st and March 31st) to ensure no impacts to the Northern Long-eared Bat. See Attachment B of this report for the USFW IPaC Consistency Letter.

(x) any area officially designated as a critical environmental area pursuant to 6 NYCRR Part 617; and

The project is not within a designated critical environmental area.

(8) no requirement for an indirect source air quality permit, pursuant to 6 NYCRR Part 203.

This project is located within an area subject to transportation air quality conformity. The project does not exceed the carbon dioxide screening criteria and has been determined not to affect air quality due to changes of traffic patterns or construction activities. Refer to Attachment B of this report for further air quality details.

MEMORANDUM

TO: **K. Murphy, Regional Design Engineer**

FROM: **R. Kudla, Project Manager**

SUBJECT: ***Recommended NEPA CE Determination***
PIN 0LC1.01
Culvert Replacement at Amityville Creek under NY27A
Village of Amityville, Suffolk County

DATE: **7/14/2023**

The Federal Environmental Approval Worksheet (FEAW) has been completed using the FEAW Thresholds document (Version 4.0) and includes the conclusions that:

- No unusual circumstances exist per 23 CFR 771.117(b)
- The project meets the description of 23 CFR 771.117 c(28) "Bridge rehabilitation, reconstruction, or replacement; or the construction of grade separation to replace existing at-grade railroad crossings.".

The project will not cause any significant environmental impacts.

This action is considered a Federal Aid Highway Project (FAHP) and is subject to the Programmatic Agreement between the Federal Highway Administration (FHWA) New York Division and the New York State Department of Transportation (NYSDOT) regarding the processing of actions classified as categorical exclusions (CE) for federal-aid highway projects (PARCE 2022) and meets the conditions for FAHP under which the NYSDOT may make the CE Determination.

The completed, signed FEAW is attached to this memo and both documents will be retained in the Design Approval Document (DAD). The DAD will also address and document the applicable environmental requirements identified in the FEAW. Based on the recommendation in the FEAW, the Regional Director's signature on the CE Determination line of the Project Approval Sheet of the DAD will indicate the NYSDOT's determination that the project qualifies as a CE (Class II) under the National Environmental Policy Act (NEPA).

The CE determination is not considered made until that signature is present. If those procedures are followed, no separate review of the CE determination by the FHWA is required under the PARCE 2022.

For questions or additional information, please contact Lizy Varghese at (631) 952-6855, or by email at Lizy.Varghese@dot.ny.gov.

Attachments

ecc: MOPL with FEAW only

Federal Environmental Approval Worksheet

PIN: 0LC1.01	Completed by: Ron Kudla	Date Completed: 7/14/23	FUNDING TYPE: Federal
TITLE/PUBLIC DESCRIPTION: Culvert Replacement Project at Amityville Creek under NYS Route 27A			NEPA CLASS: Class II: CE SEQR TYPE: Type II

LOCALITY (Village, Town, City): Village of Amityville	COUNTY: Suffolk	Action Type: Federal Aid Highway Project	Is this a Reevaluation? **No**

Purpose of this Worksheet:

- Implement the *Programmatic Agreement Between the Federal Highway Administration, New York Division (FHWA), and the New York State Department of Transportation (NYSDOT) Regarding the Processing of Actions Classified as Categorical Exclusions (CEs) for Federal-Aid Highway Projects* (PARCE), executed September 2022.
- Communicate the project National Environmental Policy Act (NEPA) classification and identify whether the FHWA or the NYSDOT (titles identified per Project Development Manual (PDM) Chapter 4, Exhibit 4-2) is making the CE determination.
- Identify any FHWA independent determinations, approvals and/or concurrences required before the CE determination can be made.
- To be included within the Design Approval Document (DAD[1]) in accordance with the documentation requirements in the PARCE.

Categorical Exclusion (CE) - a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency (40 CFR 1508.4). Actions that do not individually or cumulatively have a significant environmental effect are excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS) (23 CFR 771.115(b)).

Instructions:

Initial review of the Federal Environmental Approval Worksheet (FEAW) should occur in scoping or early in Design Phase I to identify potential risks. Complete new review of the FEAW periodically, particularly if project parameters or site condition changes result in potential resource impacts. Completion of the FEAW with signature in Step 4 is required prior to Design Approval. See PDM Chapter 4 for additional details.

Step 1A: Unusual Circumstances Threshold Determination –

Do any, or the potential for any, unusual circumstances exist:

- Significant environmental impacts (23 CFR 771.117(b)) **YES**☐ **NO**☒
- Substantial controversy on environmental grounds (23 CFR 771.117(b)) **YES**☐ **NO**☒
- Significant impact on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act (23 CFR 771.117(b)) **YES**☐ **NO**☒
- Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the project (23 CFR 771.117(b)) **YES**☐ **NO**☒
- Residential or non-residential displacements (FHWA-NY Division identified circumstance[2]) **YES**☐ **NO**☒
- Conversion of a road segment from non-tolling to tolling, or the construction of a new highway or bridge with tolling proposed (FHWA-NY Division identified circumstance) **YES**☐ **NO**☒

If yes to any of the above, contact the Main Office Project Liaison (MOPL) (see PDM Exhibit 4-1). Any project which would normally be classified as a CE but could involve unusual circumstances (or even uncertainty) will require consultation with the Office of Environment (OOE) and subsequently with the FHWA to determine if CE classification is still warranted. If, after consultation with the FHWA, it is determined that the project cannot be progressed as a CE, **skip to step 4** and see PDM Chapter 4 for NEPA Class I (EIS) or Class III (EA) processing. If, after consultation with the FHWA, it is determined that the project can be progressed as a CE, **proceed to step 1B.**

If no to all the above, then this project qualifies as a CE; **proceed to step 1B**.

Step 1B: Identification of CE action

Is the project an action listed in 23 CFR 771.117 (c) - (d) (or as identified in FHWA's additional flexibilities memo)?
YES☒ **NO**☐

If Yes, proceed to step 2.

If No, contact the MOPL (see PDM Exhibit 4-1). If, after consultation with the OOE and the FHWA, it is determined that the project cannot be progressed as a CE, **skip to step 4** and see PDM Chapter 4 for NEPA Class I (EIS) or Class III (EA) processing. If, after consultation with the FHWA, it is determined that the project can continue as a CE, **proceed to step 2.**

[1] For FHWA actions not associated with a project (no DAD), include the FEAW in the appropriate documentation for that action.
[2] See additional discussion on FHWA-NY unusual circumstances in the FEAW Instructions document.

Federal Environmental Approval Worksheet

Project ID Number: 0LC1.01

Step 2: FHWA environmental actions required prior to CE determination[3]

The Step 2 table identifies certain issues that require: the FHWA to make the CE determination (Column A and 2.4); independent FHWA determinations (2.1); FHWA approvals, compliance, or concurrence (2.2); or notification to the FHWA (2.3). Review ***the FEAW Thresholds document*** to determine how to fill out each column of Step 2.

2.1	Required FHWA Independent environmental determinations	PARCE threshold exceeded[4]	FHWA independent determination/ concurrence required	Date Federal determination/ concurrence issued	Resource not present, or present but threshold not exceeded
		A	B	B1	C
Executive Order (EO) 11990 Protection of Wetlands Individual Finding			☐	Date Issued	☒
ESA Section 7 Threatened and Endangered Species		☐	☒	6/30/2023	☐
Section 106 of National Historic Preservation Act		☐	☒	6/27/2023	☐
Section 4(f) (Park, Wildlife Refuge, Historic Sites, and National Wild and Scenic Rivers)		☐	☒	6/26/2023	☐
2.2	**Other FHWA environmental approvals, compliance and/or concurrence required**	**PARCE threshold exceeded[4]**	**Threshold exceeded; FHWA approval, compliance or concurrence required**		**Resource not present, or present but threshold not exceeded**
EO 11988 Floodplains		☐	☐		☒
EO 12898 Environmental Justice		☐	☐		☒
US Army Corps of Engineers Permitting		☐	☐		☒
Section 6(f) Land and Water Conservation Funds		☐	☐		☒
Safe Drinking Water Act Section 1424(e)			☐		☒
Migratory Bird Treaty Act			☐		☒
23 CFR 772 Type I Noise abatement			☐		☒
2.3	**Other Environmental Issues requiring FHWA notification**	**PARCE threshold exceeded[4]**	**FHWA notification threshold exceeded**		**Resource not present, or present but threshold not exceeded**
National Wild and Scenic Rivers		☐	☐		☒
US Coast Guard Bridge Permit		☐	☐		☒
Known hazardous waste site (only EPA National Priority list)			☐		☒
Project on or affecting Native American Lands			☐		☒
2.4	**Other Issues Triggering FHWA Approval of Categorical Exclusion**	**PARCE threshold exceeded[4]**			**Resource not present, or present but threshold not exceeded**
Property Acquisition		☐			☒
Major Traffic Disruptions		☐			☒
Changes in Access Control		☐			☒

[3] **This table does not represent all environmental issues and actions to which a project is subject to.** Classification as a CE does not exempt the project from further environmental review. Refer to the PDM Appendix A and The Transportation Environmental Manual (TEM) to determine review requirements.

[4] When PARCE threshold is exceeded, the NYSDOT recommends that the project qualifies as a CE and requests the FHWA make the CE determination. Information on PARCE specific thresholds is contained within ***the FEAW Thresholds document.***

Federal Environmental Approval Worksheet

Project ID Number: 0LC1.01

Step 3: Who makes the NEPA CE Determination?

To identify which party, either the FHWA or the NYSDOT, makes the CE determination in accordance with the PARCE, follow the instructions found in the table below, beginning in Step 3A. This step also identifies which correspondence shell to use to distribute the FEAW and other environmental notifications or approvals.

3	**Determine whether the FHWA or the NYSDOT makes the CE determination and whether additional notifications or approvals are required.**
3A	**Is the project an action listed in 23 CFR 771.117 (c) - (d)** (Answered yes in Step 1B)**?** **YES** ☒ If Yes, **proceed to 3B.** **NO** ☐ If No, the FHWA makes the CE determination. • For **Locally Administered Federal Aid Projects only**, the DAD, the NYSDOT recommendation and request (that the FHWA determines the project qualifies as a CE) are sent from the Regional Planning and Program Manager (RPPM) to the FHWA directly using **FAHP Shell 4.** • For all other actions, the DAD[5] and the NYSDOT recommendation and request (that the FHWA determines the project qualifies as a CE) are sent to the MOPL for review using **FAHP Shell 3, ID/IQ Shell 3** or using appropriate **ROW transmittal**. **Proceed to Step 4.**
3B	**Are any of the CE Thresholds from the PARCE exceeded** (Are there any checks in Column A of Step 2)**?** **YES** ☐ If Yes, the FHWA makes the CE determination. • For **Locally Administered Federal Aid Projects only**, the DAD and the NYSDOT recommendation and request (that the FHWA determines the project qualifies as a CE) are sent from the RPPM to the FHWA directly using FAHP **Shell 4.** • For all other actions, the DAD and the NYSDOT recommendation and request (that the FHWA determines the project qualifies as a CE) are sent to the MOPL for review using **FAHP Shell 3, ID/IQ Shell 3** or using appropriate **ROW transmittal**. **Proceed to Step 4.** **NO** ☒ If No, **proceed to 3C.**
3C	**Are there outstanding independent environmental approvals or concurrences?** (Are there checks in column B of Step 2.1 without dates in column B1)**?** **YES** ☐ If Yes, then the FHWA makes the CE determination. • For **Locally Administered Federal Aid Projects only**, the DAD and the NYSDOT recommendation and request (that the FHWA determines the project qualifies as a CE) are sent from the RPPM to the FHWA directly using FAHP **Shell 4.** • For all other actions, the DAD and the NYSDOT recommendation and request (that the FHWA determines the project qualifies as a CE) are sent to the MOPL for review using **FAHP Shell 3, ID/IQ Shell 3** or using appropriate **ROW transmittal**. **Proceed to Step 4.** **NO** ☒ If No, the NYSDOT makes the NEPA CE determination. **Proceed to 3D.**

[5] For non-FAHP actions that do not have a DAD, a detailed description of the action and environmental documentation is sent in lieu of a DAD.

Federal Environmental Approval Worksheet

Project ID Number: OLC1.01

3D	**Are there** ☐ any circumstances requiring demonstration of applicable EO compliance (any checks in column B of Table 2.2); or ☐ any issues requiring the FHWA environmental notification (any checks in column B of Table 2.3)? ☐ If **either** box is checked, **once all required approvals and concurrences have been secured,** the NYSDOT makes the CE determination, but the information must be forwarded to FHWA for notification or action prior to Design Approval for FAHP (prior to physical construction for ID/IQ, or prior to RD approval for ROW actions) using **FAHP Shell 1** (can also be used for ROW actions), **For ID/IQ, Shell 1 is sent to notify FHWA (and request concurrence if needed). ID/IQ Shell 2 is also used to request RD signature once FHWA response is received).** **Proceed to step 4.** ☒ If **neither** box is checked, **once all required approvals and concurrences have been secured,** the NYSDOT makes the CE determination without notification to the FHWA. The project will use **FAHP Shell 2, ID/IQ Shell 2** or appropriate **ROW transmittal**. **Proceed to step 4.**

Step 4: Summary and Recommendation

- The project location(s) **is** located within an area subject to transportation air quality conformity.
  - **If the project is within such areas, the NEPA process may not be completed until all transportation conformity requirements are met[6].**
  - Transportation conformity requirements **have been met at time of signature.**
- This project does qualify to be progressed as a Categorical Exclusion.
- The NEPA Determination will be made by NYSDOT
- The Action meets the conditions of the listed CE at 23 CFR 771.117: c(28) "Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in paragraph (e)..." [7]
- All outstanding FHWA environmental approvals will be obtained and are listed here:
- All the conditions of the PARCE are addressed herein (or within the DAD or attachments).

I certify that the information provided above is true and accurate and recommend the project be processed as described above.

Project Manager/Designer (or Responsible Local Official)[8] X _____ Date 7/14/2023

Print Name and Title: Ron Kudla - Regional Structures Engineer

Regional Environmental Unit Supervisor X _____ Date 7/14/2023

Print Name and Title: Sheref Fathi - Environmental Specialist III

Regional Local Project Liaison (Locally Administered Projects Only) X _____ Date_____

Print Name and Title: _____

Changes that may have occurred since the preparation of the FEAW which would create the need to review the FEAW again include but are not limited to triggers for reevaluations described in PDM Appendix 11 or any expansion in location or scope of the action for non-FAHP actions. Based on the review of the previously certified FEAW, if the current scope of the

[6] See additional information on conformity *in FEAW_Instructions.doc*
[7] See additional information on identifying (c)26, (c)27 & (c)28 versus d (13) *in FEAW_Instructions.doc*
[8] Or appropriate Permitting/ROW staff for use and occupancy permit or disposal of surplus property

action would change any of the answers to the FEAW and more specifically if any of the determinations within step 2.1 require a new federal determination or concurrence then a new FEAW should be produced and certified.

Species Conclusions Table

Project Name: PIN 0LC1.01, C050001 Merrick Road over Amityville Creek, Suffolk
County Date: November 2022

Species Name	Potential Habitat Present?	Species Present?	Piping Plover Critical Habitat Present?	ESA / Eagle Act Determination	Notes / Documentation Summary (include full rationale in your report)
Northern Long Eared Bat	Yes	No	No	No Effect	IPAC has records of the species potentially occurring near the project site. The Northern Long Eared bat is generally found in wooded areas where they usually roost under loose tree bark on dead or dying trees. Their summer roosting habitat is rarely human structures such as sheds or barns. During winter they prefer high humidity environments such as caves and mines. Although the IPAC determination was may affect, a field investigation of the project area indicates that there may be suitable habitat within the project area, resulting in an IPAC determination of may affect, not likely to adversely affect. Trees will only be cleared during the October 1st to March 31st time frame.
Piping plover	No	No	No	No Effect, No Suitable Habitat	The piping plover's preferred habitat is spacious sandy beaches. Since there are no spacious sandy beaches in the project area, a ***no effect, no suitable habitat*** determination is recommended for the project regarding piping plover.
Roseate tern	No	No	No	No Effect, No Suitable Habitat	The roseate tern's breeding distribution is highly localized throughout its range. Breeding in New York State is confined to Great Gull Island on Long Island (where 95% of them breed) and a few scattered locations on Long Island; it occurs inland only accidentally. Roseate terns overwinter in the Americas, primarily along the Brazilian coast. Since the project will not impact any roseate tern habitat, a ***no effect, no suitable habitat*** determination is recommended for the project regarding roseate tern.

Red Knot	No	No	No	No Effect, No Suitable Habitat	The Red Knot's habitat is typically coastal marine areas and estuarine areas with exposed intertidal sediments. It can also occur in high energy bay containing tidal flat. The project area does not contain such habitat therefor a determination of no effect no suitable habitat is recommended for the project regarding the Red Knot.
Seabeach Amaranth	No	No	No	No Effect, No Suitable Habitat	The Seabeach amaranth is generally found on barrier beaches with overwash flats that accumulate sand. The project area does not contain such habitat therefor a determination of no effect no suitable habitat is recommended for the project regarding the Seabeach Amaranth.

Last modified: 11-7-22

PIN: 0LC1.01 **PROJECT NAME:** Amityville Creek Culvert Replacement at NY27A **Date:** 12/16/2022

Section 7 ESA Process for USFWS Species: ESA Transmittal Sheet

Step 3: Documentation. Please complete the appropriate boxes below and complete the documentation as described.

	ESA Does Not Apply	No Effect, Activity-Based	No Effect	No Effect, No Suitable Habitat	Bat PA IPaC Submittal- Winter Tree Removal (MA, NLAA)	NLEB PA IPaC Submittal- April/Aug/Sept Tree Removal	Individual Submission to USFWS	MA, LAA- Formal Consultation
Northern Long-eared Bat					✓			
Indiana Bat	✓					NA		
Bog Turtle	✓				NA	NA		
Mollusks (Dwarf Wedge Mussel, Rayed Bean, Clubshell, Chittenango Ovate Amber Snail)	✓				NA	NA		
Karner Blue Butterfly	✓				NA	NA		
P. plover, R. knot, R. tern S. gerardia, S. amaranth, M. butterfly				✓	NA	NA		
Documentation Required	The IPaC Official Species List is included in the DAD.	Record the corresponding number of the activity in the box. This sheet and the IPaC Official Species List are included in the DAD.	NYSDOT submits "No Effect" determination to FHWA. FHWA will concur or not concur.	NYSDOT submits "No Effect, No Suitable Habitat" determination to FHWA. Concurrence has been obtained if 7 days pass without correspondence from FHWA.	NYSDOT submits through IPaC w/ Area Engineer included. Concurrence is obtained if 14 days pass without correspondence from USFWS.	NYSDOT submits through IPaC w/ Area Engineer included. Concurrence is obtained if 30 days pass without correspondence from USFWS.	NYSDOT submits either BE or BA to FHWA, who submits to USFWS for concurrence.	NYSDOT submits BA to FHWA for Initiation of Formal Consultation with USFWS.
Submission to FHWA Required?	No	No	Yes	Yes	cc: only	cc: only	Yes	Yes
Submission to USFWS by DOT through IPAC Required?	No	No	No	No	Yes	Yes	No	No
Submission to USFWS by FHWA Required?	No	No	No	No	No	No	Yes	Yes

Instructions: This Summary Sheet is to be included all submissions to FHWA. A submittal package includes all documentation for all species requiring concurrence with a cover letter requesting concurrence, so that FHWA can make one ESA determination. SEE EACH SPECIES-SPECIFIC PACKAGE FOR SPECIFIC DOCUMENTATION REQUIREMENTS FOR SUBMITTALS. Also, FHWA requires documentation of compliance with ESA in the DAD.

PIN: 0LC1.01 **PROJECT NAME:** Amityville Creek Culvert Replacement **Date:** 2/15/2023

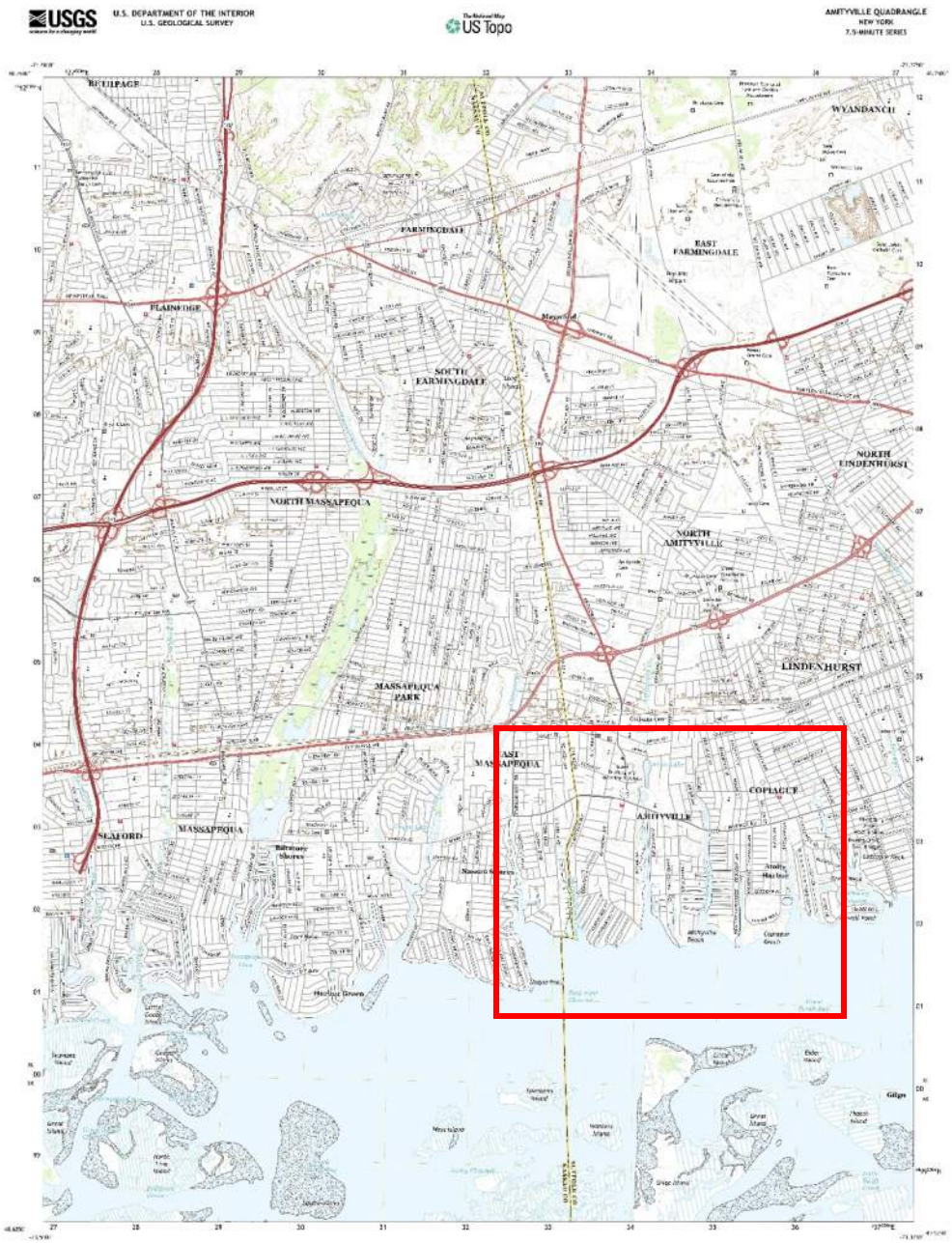
Section 7 ESA Process for NMFS Species: ESA/EFH Transmittal Sheet

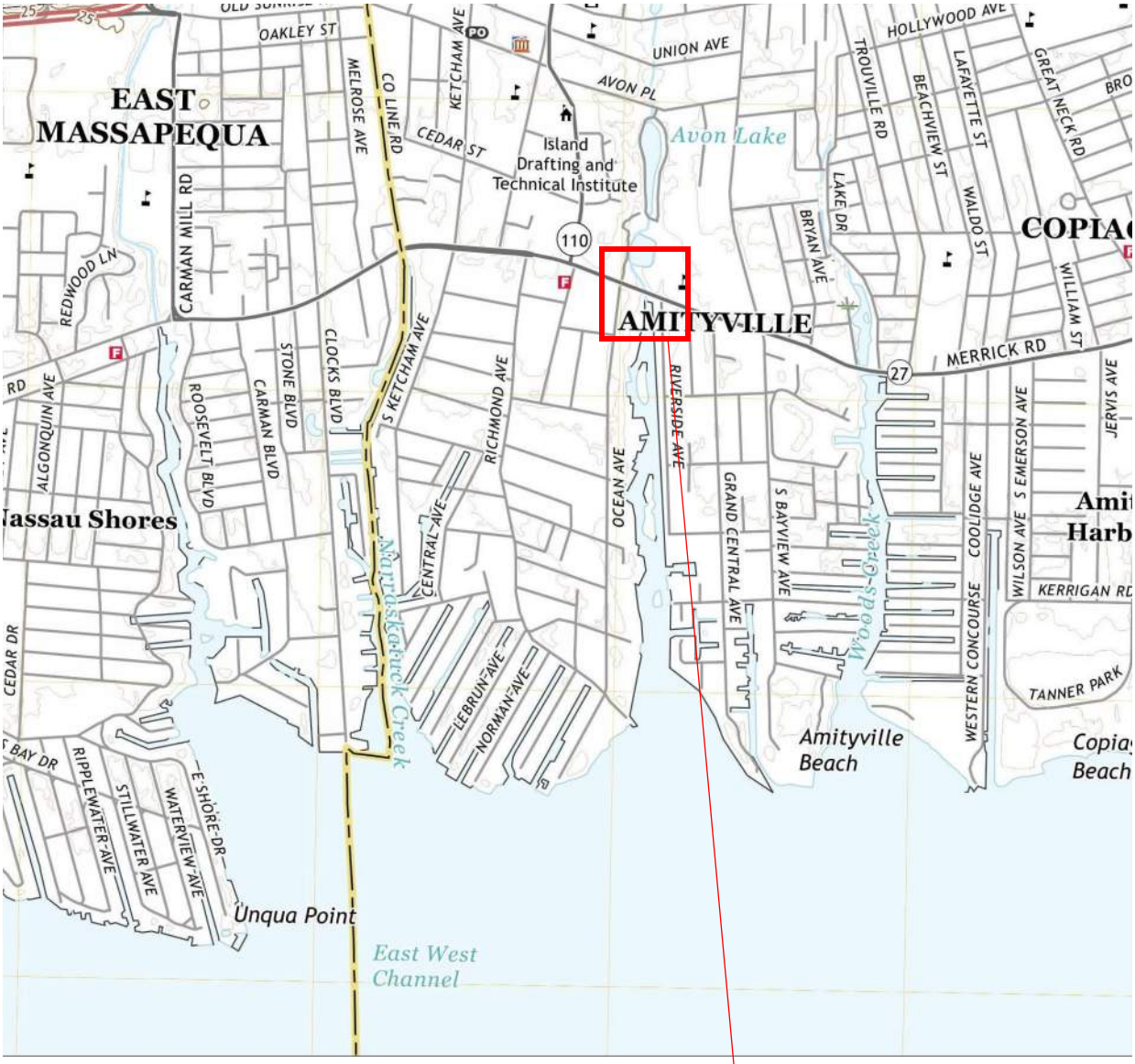
Step 3: Documentation. Please complete the appropriate boxes below and complete the documentation as described.

	ESA/EFH Does Not Apply	No Effect, Activity-Based	No Effect	ESA Programmatic Agreement Applies	EFH Programmatic Agreement Applies	Informal Consultation/ Individual Submission to NMFS	MA, LAA Formal Consultation and/or Individual EFH Consultation is Required
Sturgeon (Shortnose, Atlantic)			✓		NA		
Sea Turtles			✓		NA		
Atlantic Large Whales	✓				NA		
EFH Resources			✓	NA			
Documentation Required	Both the NMFS ESA and EFH Maps printouts are included in the DAD.	Record the corresponding number of the activity in the boxes above. This sheet and both the NMFS ESA and EFH Maps printouts are included in the DAD.	NYSDOT submits "No Effect" determination for NMFS ESA, EFH, or both to FHWA. FHWA will concur or not concur.	NYSDOT submits the ESA Verification Form to NMFS with a cc: to the FHWA Area Engineer	NYSDOT submits the EFH Verification Form to NMFS with a cc: to the FHWA Area Engineer	NYSDOT submits either BE or BA for ESA, and/or an EFH Assessment Report to FHWA, who submits to NMFS for concurrence.	NYSDOT submits BA for ESA and/or an EFH Assessment to FHWA for Initiation of Formal Consultation with NMFS.
Submission to FHWA Required?	No	No	Yes	Yes	Yes	Yes	Yes
Submission to NMFS by FHWA Required?	No	No	No	No	No	Yes	Yes

Note: NMFS ESA Submittals for Programmatic Agreement Verification, Informal, and Formal Consultation is sent to the NOAA/NMFS Protected Resources Division of the Gloucester, MA office. NMFS EFH Submittals for Programmatic Agreement Verification, Informal, and Formal Consultation is sent to the NOAA/NMFS Habitat Conservation Division in Sandy Hook, NJ. Email addresses are located in the respective forms.

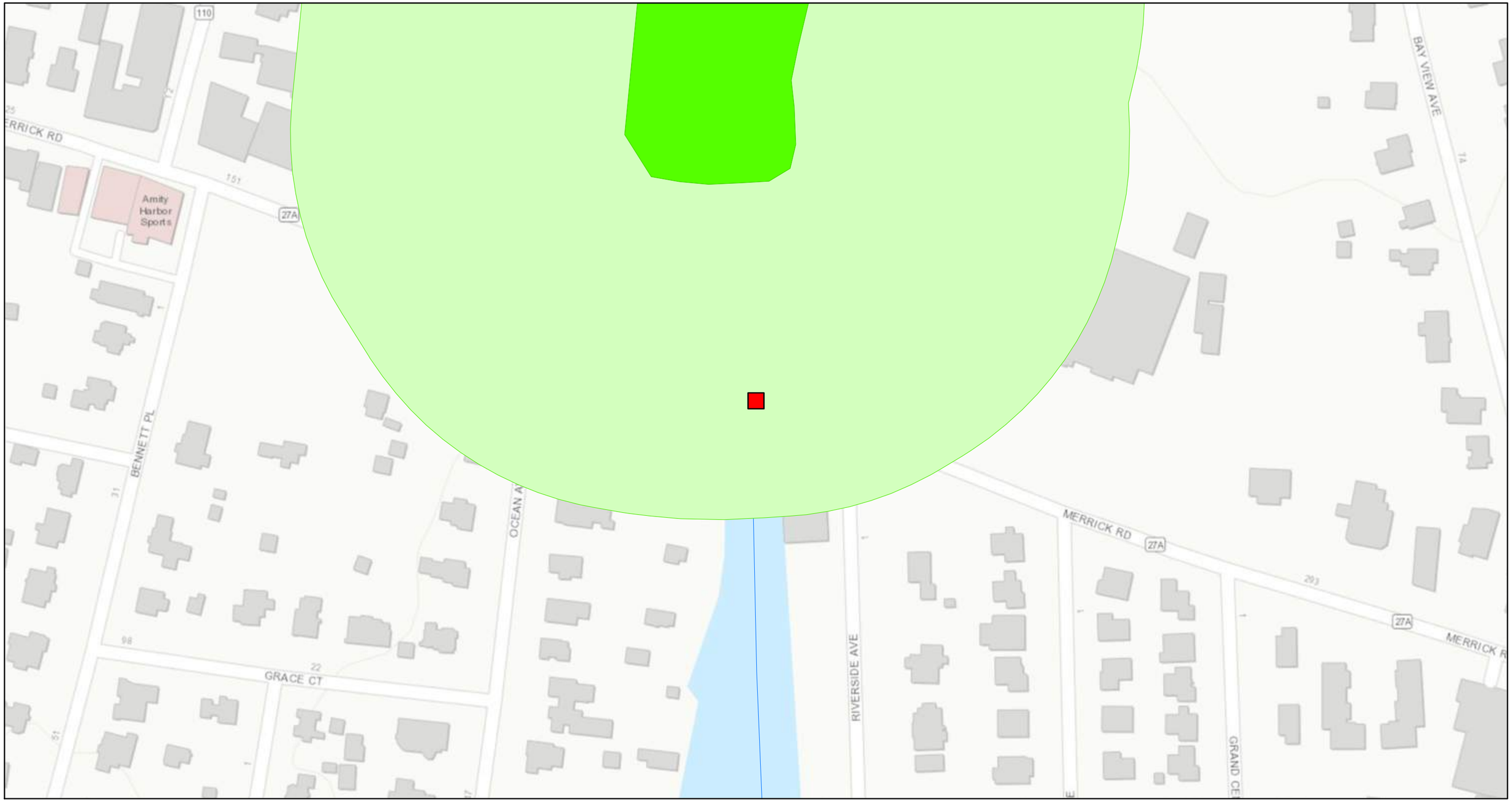
Instructions: This Summary Sheet is to be included all submissions to FHWA. A submittal package includes all documentation for all species requiring concurrence with a cover letter requesting concurrence, so that FHWA can make one ESA determination. SEE EACH SPECIES-SPECIFIC PACKAGE FOR SPECIFIC DOCUMENTATION REQUIREMENTS FOR SUBMITTALS. Also, FHWA requires documentation of compliance with ESA in the DAD.


USGS
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
US Topo
AMITYVILLE QUADRANGLE
NEW YORK
7.5-MINUTE SERIES
BELLPAGE
WYANDANCH
FARMINGDALE
EAST FARMINGDALE
PLAINEDGE
SOUTH FARMINGDALE
NORTH LINDENHURST
NORTH MASSAPEQUA
NORTH AMITYVILLE
LINDENHURST
MASSAPEQUA PARK
EAST MASSAPEQUA
COPIAGUE
AMITYVILLE
SEAFORD
MASSAPEQUA
Gilgo
SCALE 1:24 000
Produced by the United States Geological Survey
AMITYVILLE, NY
2019



Project location

Environmental Resource Mapper



November 29, 2022

Layers and Legend

- Unique Geological Features
- Waterbody Classifications for Rivers/Streams
- Waterbody Classifications for Lakes
- State Regulated Freshwater Wetlands (Outside of the Adirondack Park)
- State Regulated Wetland Checkzone
- Imperiled Mussels

1:2,257

0 0.02 0.04 0.08 mi

0 0.03 0.07 0.13 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

NYS Department of Environmental Conservation
Not a legal document

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands



November 29, 2022

Wetlands

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

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Area : 2,009.02 acres

Jan 6 2023 15:28:08 Eastern Standard Time



Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	2	154.94	N/A
Shortnose Sturgeon	0	0	N/A
Atlantic Salmon	0	0	N/A
Sea Turtles	4	309.87	N/A
Atlantic Large Whales	0	0	N/A
In or Near Critical Habitat	0	0	N/A

Atlantic Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	ANS_C50_ADU_MAF	Atlantic sturgeon	Adult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	77.47
2	ANS_C50_SUB_MAF	Atlantic sturgeon	Subadult	Migrating & Foraging	N/A	01/01	12/31	N/A	N/A	77.47

Sea Turtles

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	GRN_STS_AJV_MAF	Green sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	77.47
2	KMP_STS_AJV_MAF	Kemp's ridley sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	77.47
3	LTR_STS_AJV_MAF	Leatherback sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	77.47
4	LOG_STS_AJV_MAF	Loggerhead sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	77.47

DISCLAIMER: Use of this App does NOT replace the Endangered Species Act (ESA) Section 7 consultation process; it is a first step in determining if a proposed Federal action overlaps with listed species or critical habitat presence. Because the data provided through this App are updated regularly, reporting results must include the date they were generated. The report outputs (map/tables) depend on the options picked by the user, including the shape and size of the action area drawn, the layers marked as visible or selectable, and the buffer distance specified when using the "Draw your Action Area" function. Area calculations represent the size of overlap between the user-drawn Area of Interest (with buffer) and the specified S7 Consultation Area. Summary table areas represent the sum of these overlapping areas for each species group.

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

Greater Atlantic Regional Office
Atlantic Highly Migratory Species Management Division

Query Results

Degrees, Minutes, Seconds: Latitude = 40º 40' 13" N, Longitude = 74º 35' 11" W
Decimal Degrees: Latitude = 40.670, Longitude = -73.414

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

***** W A R N I N G *****

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

EFH

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Winter Flounder	Eggs Juvenile Larvae/Adult	New England	Amendment 14 to the Northeast Multispecies FMP
		Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
		Atlantic Herring	Juvenile Adult	New England	Amendment 3 to the Atlantic Herring FMP
		Pollock	Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Winter Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Longfin Inshore Squid	Juvenile Eggs	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Atlantic Mackerel	Eggs Larvae Juvenile Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
		Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish
		Summer Flounder	Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass

Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.
****For links to all EFH text descriptions see the complete data inventory: open data inventory -->**

All spatial data is currently available for the Mid-Atlantic and New England councils,
Secretarial EFH,
Bigeye Sand Tiger Shark,
Bigeye Sixgill Shark,
Caribbean Sharpnose Shark,
Galapagos Shark,
Narrowtooth Shark,
Sevengill Shark,
Sixgill Shark,
Smooth Hammerhead Shark,
Smalltail Shark

IPaC Consistency Letter

11-29-2022

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To: December 16, 2022
Project code: 2023-0019950
Project Name: 0LC1.01 Amityville Creek Culvert Replacement

Subject: Concurrence verification letter for the '0CL1.01 Amityville Creek Culvert Replacement' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated December 16, 2022 to verify that the **0LC1.01 Amityville Creek Culvert Replacement** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

NOTE: The Service reclassified the NLEB as an endangered species on November 30, 2022. This ruling becomes effective on January 30, 2023. This NLAA determination does not require reinitiation. For projects requiring consultation after the effective date of January 30, 2023, please use the 2022 FHWA, FRA, FTA PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate
- Piping Plover *Charadrius melodus* Threatened
- Red Knot *Calidris canutus rufa* Threatened
- Roseate Tern *Sterna dougallii dougallii* Endangered
- Seabeach Amaranth *Amaranthus pumilus* Threatened

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

0LC1.01 Amityville Creek Culvert Replacement

Description

This project seeks to raise the level of the road surface to mitigate potential future effects of sea level rise and flooding.

Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   No

2. Is the project within the range of the Northern long-eared bat[1]?

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat.

   Yes

9. Will the project remove *any* suitable summer habitat[1] and/or remove/trim any existing trees **within** suitable summer habitat?

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

    No

11. Have presence/probable absence (P/A) summer surveys[1][2] been conducted[3][4] **within** the suitable habitat located within your project action area?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

12. Does the project include activities **within documented NLEB habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

    Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

    B) During the inactive season

15. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

    Yes

16. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

    No

17. Are *all* trees that are being removed clearly demarcated?

    Yes

18. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

    No

19. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

    Yes

20. Does the project include slash pile burning?

    No

21. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    No

22. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    Yes

23. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the structure? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    Yes

24. Has a structure assessment[1] been conducted **within** the last 24 months[2] to determine if bats are using the structure(s)?

    [1] Structure assessment for occupied buildings means a cursory inspection for bat use. For abandoned buildings a more thorough evaluation is required (See User Guide Appendix D for bridge/abandoned structure assessment guidance).

    [2] Assessments must be completed no more than 2 years prior to conducting any work on the structures, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that structure in subsequent years.

    No

25. Is the structure **within** a known maternity colony's home range[1]?

    [1] A structure assessment is required for structure projects that are within the home range of a known maternity colony. Contact your local FWS office for more information if you are uncertain about where the nearest known maternity colony is located.

    No

26. Have presence/probable absence (P/A) summer surveys[1][2] been conducted for this project with *at least one* survey point **within** suitable habitat and within 0.25 miles of the structure(s)[3][4]?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if seasonal restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

27. Will the structure removal, replacement, and/or maintenance activities disturb the maternity colony (or assumed maternity colony) of bats using the structure(s)?

    Note: if a Structure Assessment was not conducted, P/A surveys were not accepted by the local FWS office to show absence, and/or the structure(s) is within a known maternity colony's home range, then in addition to assuming bats are using the structure, it is also assumed a maternity colony of bats are using the structure)

    No

28. Will *any* structure removal, replacement, and/or maintenance activities be done *outside* of the Indiana bat and/or NLEB active season? (i.e. will maintenance activities be done *during* the winter hibernation period[1])

    [1] Coordinate with the local Service Field Office for appropriate dates.

    Yes

29. Will *any* structure removal, replacement, and/or maintenance activities be done *during* the Indiana bat and/or NLEB active season? (i.e. will maintenance activities be done during the spring, summer, and/or fall[1])

    [1] Coordinate with the local Service Field Office for appropriate dates.

    No

30. Will your structure related activities disturb or harass roosting bats in any way? (example activities that ***would not*** be expected to disturb bats include activities away from roosts inside common rooms and structures, and normal cleaning and routine maintenance)

    No

31. Will the structure removal, replacement, and/or maintenance activities maintain suitable bat roosting habitat? (note: suitable roosting sites may be incorporated into the design of a replacement structure)

    Yes

32. Will the structure removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

    No

33. Will the project involve the use of **temporary** lighting *during* the active season?

    No

34. Will the project install new or replace existing **permanent** lighting?

    No

35. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

36. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

37. Will the project raise the road profile **above the tree canopy**?

    No

38. Are the wetland or stream protection activities associated with compensatory wetland/ stream mitigation portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because your activities associated with compensatory wetland/stream mitigation activities do not clear suitable summer habitat and are not within 0.5 miles of Indiana bat or NLEB hibernaculum.

39. Are the project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

    Automatically answered
    Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

40. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

41. Is the structure removal, replacement, or maintenance activities portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the activities are outside the active season, are not expected to disturb or harass roosting bats in any way, and suitable roosting sites will be maintained

42. **General AMM 1**
    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

43. **Tree Removal AMM 1**
Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal[1] in excess of what is required to implement the project safely?

    Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

    [1] The word "trees" as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS' current summer survey guidance for our latest definitions of suitable habitat.

    Yes

44. **Tree Removal AMM 3**
Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

    Yes

45. **Tree Removal AMM 4**
Can the project avoid cutting down/removal of *all* (1) **documented**[1] Indiana bat or NLEB roosts[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

    [1] The word documented means habitat where bats have actually been captured and/or tracked.

    [2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    Yes

46. **Structure AMM 1**
If the goal of the project is to exclude bats from the structure, will you coordinate with your local Service Field Office and follow the Acceptable Management Practices for Bat Control Activities in Structures guidance document (White-nose Syndrome Conservation and Recovery Working Group 2015)?

    Yes

47. **Structure AMM 2**
For structure maintenance, repair, and/or alteration activities conducted outside the active season, will you determine if there are hibernating bats in the area of the structure(s) where work will occur?

    Yes

48. **Structure AMM 2**
    If hibernating bats (or signs of frequent bat activity) are observed in the area of the structure(s) where work will occur, will all maintenance activity or similar structure alteration be conducted in a manner that will not disturb the hibernating bats?

    Yes

49. **Structure AMM 4**
    Will you avoid removing the structure(s) if roosting bats, hibernating bats, or signs of frequent bat activity are observed in/on the structure(s)?

    Note: If there are concerns about human health/safety/property coordinate with a nuisance wildlife control officer and the local USFWS Field Office.

    Yes

Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   Yes

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   No

3. How many acres[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

   [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0.45

4. Please describe the proposed structure work:

   Replace the deteriorating culvert which is currently underwater and raise the roadway such that the height of the edge of the shoulder is at least at the FEMA 100-year Floodplain elevation (6 feet NAVD88). This alternative meets all of the project objectives by replacing the deteriorating culvert and raising the roadway elevation to increase hydraulic resiliency.

5. Please state the timing of all proposed structure work:

   January 2025 to November 2026

Avoidance And Minimization Measures (AMMs)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

STRUCTURE AMM 4

If bat activity (or signs of frequent bat activity) is observed, Transportation Agencies and State DOTs will not remove the structure.

Note: If there are concerns about human health/safety/property, coordinate with a nuisance wildlife control officer and the local USFWS Field Office.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

STRUCTURE AMM 1

If the goal of the project is to exclude bats, coordinate with your local USFWS Field Office and follow Acceptable Management Practices for Bat Control Activities in Structures guidance document (White-nose Syndrome Conservation and Recovery Working Group 2015).

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

STRUCTURE AMM 2

If structure maintenance, repair, and/or alteration will be performed during the winter hibernation period, determine if work will occur in an area with hibernating bats. If hibernating bats or signs of frequent bat activity are observed, Transportation Agencies and State DOTs will conduct maintenance activity or similar structure alteration in a manner that will not disturb bats using the structure.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on December 01, 2022. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPaC User Contact Information

Agency: New York State Department of Transportation
Name: Anthony Becker
Address: 250 Veteran's Memorial Highway
City: Hauppauge
State: NY
Zip: 11788
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Lead Agency Contact Information

Lead Agency: Federal Highway Administration
Name: John Nickelson
Email: john.nickelson@dot.gov

Species List from
IPaC

04-11-2023

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To: April 11, 2023
Project Code: 2023-0019950
Project Name: 0LC1.01 Amityville Creek Culvert Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

PROJECT SUMMARY

Project Code: 2023-0019950
Project Name: 0LC1.01 Amityville Creek Culvert Replacement
Project Type: Road/Hwy - Maintenance/Modification
Project Description: This project seeks to raise the level of the road surface to mitigate potential future effects of sea level rise and flooding.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.6702055,-73.41382480635124,14z



Counties: Suffolk County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. 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.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern *Sterna dougallii dougallii* Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

FLOWERING PLANTS

NAME	STATUS
Seabeach Amaranth *Amaranthus pumilus*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/8549

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPAC USER CONTACT INFORMATION

Agency: New York State Department of Transportation
Name: Anthony Becker
Address: 250 Veteran's Memorial Highway
City: Hauppauge
State: NY
Zip: 11788
Email anthony.becker@dot.ny.gov
Phone: 6319526489

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration
Name: John Nickelson
Email: john.nickelson@dot.gov

Bridge/Bat Survey

4-12-2023

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
1230pm 04/12/23	D 038157	Rt 27a	Suffolk
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
C050001	40.67012, -73.41348	2'	24'

Structure Type (check one)

Bridge Construction Style

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ⊙ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☒ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

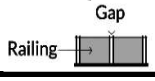
☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☒ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☒ Commercial	☐ Ranching
☒ Residential-urban	☐ Riparian/wetland
☐ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Concrete surfaces (open roosting on concrete)	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Spaces between concrete end walls and the bridge deck	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ All guiderails	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Emma Chilton

Signature:

Bridge/Bat Survey

11-30-2022

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
1200pm 11/30/22	D 038157	Rt 27a	Suffolk
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
C050001	40.67012, -73.41348	2'	24'

Structure Type (check one)

Bridge Construction Style

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss (Side View)
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ⊙ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☒ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☒ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☒ Commercial	☐ Ranching
☒ Residential-urban	☐ Riparian/wetland
☐ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Concrete surfaces (open roosting on concrete)	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Spaces between concrete end walls and the bridge deck	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck (Gap / Railing)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ All guiderails	☐ Not present: N/A	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Emma Chilton

Signature: Emma Chilton

Photo Key Map: C050001 (Amityville, NY)

Project Location



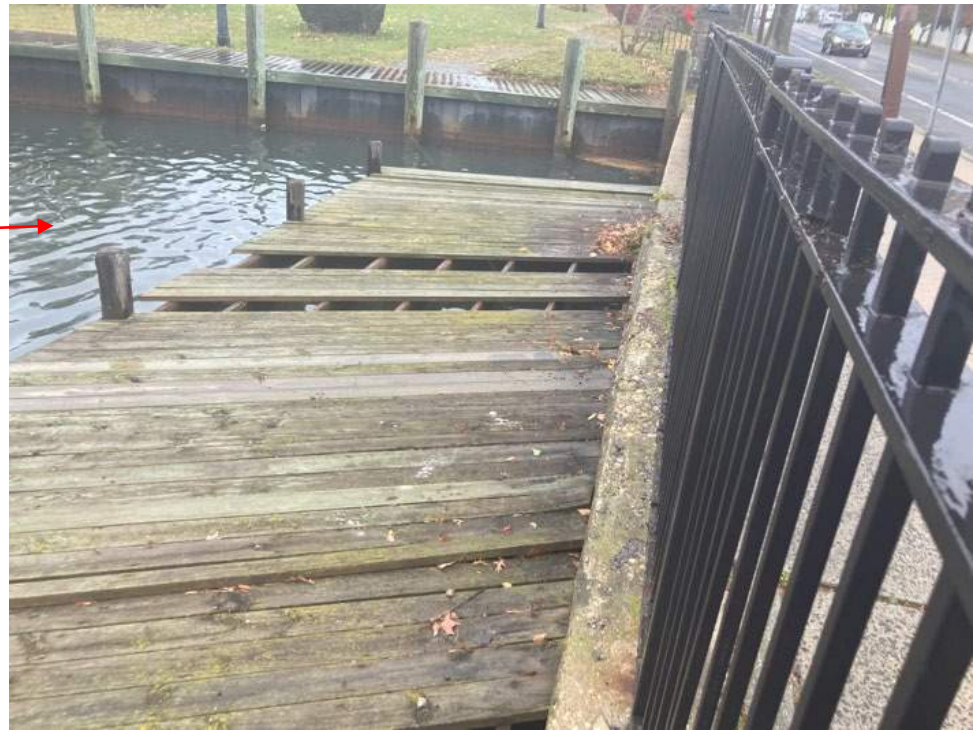

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U.S. Department of Transportation
Federal Highway Administration

New York Division

Leo W. O'Brien Federal Building
11A Clinton Avenue, Suite 719
Albany, NY 12207
518-431-4127
518-431-4121
NewYork.FHWA@dot.gov

February, 28 2023

In Reply Refer To:
HML-NY

Mr. Anthony Becker
Environmental Specialist
NYSDOT - Region 10
250 Veterans' Memorial Highway
Hauppauge, NY 11788

Subject: PIN 0LC1.01
Culvert at NY27A/Amityville Creek Replacement
Village of Amityville in the Town of Babylon, Suffolk County
ESA Section 7 Concurrence Request for USFWS-listed and NMFS-listed Species
Essential Fish Habitat (EFH) evaluation, Magnuson-Stevens Act

Dear Mr. Becker:

The Federal Highway Administration (FHWA) has reviewed the ESA documentation submitted for the subject project with your February 15 letter and follow-up email dated February 17. We concur with NYSDOT's determination that the project will have ***No Effect*** on the Piping Plover (*Charadrius Melodus*), the Red Knot (*Calidris Canutus Rufa*), the Roseate tern (*Sterna Dougallii Dougallii*), Seabeach amaranth (*Amaranthus Pumilus*), and the Monarch Butterfly. We concur with the finding of ***May Affect, Not Likely to Adversely Affect*** (MANLAA) for the Northern Long-eared Bats (NLEB) (*Myotis septentrionalis*).

Per the U.S. Fish and Wildlife Service's (Service) correspondence dated December 16, 2022, the Piping Plover, Red Knot, Roseate tern, Northern Long-eared Bat (NLEB), Seabeach amaranth, and Monarch butterfly may occur within the vicinity of the project site – the project area does not include critical habitat for any of these species. The NYSDOT has found that this project will have ***No Effect*** on the Piping Plover, Red Knot, Roseate tern, or Seabeach amaranth, or Monarch butterfly because the species do not reside or have suitable habitat in the work area. In accordance with the Programmatic Biological Opinion (PBO) between the Service and FHWA, the Service was advised on December 16, 2022, of NYSDOT's determination "that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (***MANLAA***) the threatened Northern long-eared bat (*Myotis septentrionalis*)." The Service did not respond to notice within 14 days and is assumed to concur with the ***MANLAA*** finding for NLEB.

This project proposes to replace the culvert located at Merrick Road (NYS Route 27A) over Amityville Creek, raise the road above flooding elevations and provide bicycle connectivity through the project limits in the Village of Amityville, Town of Babylon, Suffolk County. The

project area is a very shallow, mostly freshwater habitat section of Amityville Creek along hardened shoreline with no vegetation in the project work area. The Atlantic sturgeon and sea turtles were the only species mapped anywhere near the work area (GARFO Mapper), but these species were not directly within the work area. In consideration of the 50-plus boat marina just south of the culvert it is unlikely that sturgeon or sea turtles are expected to occur in this shallow canal (approximately 6 feet deep at the culvert). In view of the hardened shoreline and lacking any biologically beneficial benthic material that could be considered quality juvenile or adult habitat for the fish species mapped; and, being a highly trafficked boating and docking area, this area is not conducive to marine life and does not count as essential fish habitat. It is determined that adverse effects to EFH will not be substantial, FHWA concurs with NYSDOT's finding of ***No Effect*** for EFH.

If, at any time during construction, the presence of any of the Federally-listed species or their habitat are discovered or suspected, construction activities must be stopped and cannot resume until FHWA and the Service are consulted.

If you have any questions or concerns, please contact me at 401-528-4551.

Sincerely,

JOHN D NICKELSON

Digitally signed by JOHN D NICKELSON
Date: 2023.03.01 08:55:27 -05'00'

John D. Nickelson, PE
Area Engineer

cc: Gregg Williams, NYSDOT
Lindsay Pacelli, NYSDOT
Liana Alongi, NYSDOT
Chris Gatchell, FHWA
Megan Pulver, FHWA

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

KATHY HOCHUL
Governor

MARIE THERESE DOMINGUEZ
Commissioner

RICHARD B. CAUSIN, P.E.
Regional Director

6/27/2023

John Nickelson, Area Engineer
Federal Highway Administration – New York Division
Leo W. O'Brien Federal Building, Suite 719
11A Clinton Avenue
Albany, NY 12207

RE: ***Section 106 Effect Finding***
CRoSS Program – Culvert Resiliency of State System Culvert at NYS Route 27A/ Amityville Creek Replacement
Village of Amityville, Town of Babylon in Suffolk County
Culvert Identification Number (CIN): C050001
PIN 0LC1.01

Dear Mr. Nickelson,

The New York State Department of Transportation (NYSDOT), in coordination with the Federal Highway Administration (FHWA) proposes the above-referenced federally funded transportation project subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulation, 36 CFR Part 800 – *Protection of Historic Properties*. The CRoSS Program – Culvert Resiliency of State System Culvert at NYS Route 27A/ Amityville Creek Replacement Project is located in the village of Amityville and Town of Babylon in Suffolk County.

This project is part of the CRoSS (Culvert Resiliency of State System) program. The purpose of the program is to replace and rehabilitate large culverts on the state system with a focus on safety, infrastructure, and hydraulic resiliency. The proposed scope of work for the project involves replacing a large culvert located at NY Route 27A over Amityville Creek in kind with what was originally there. The roadway at this location will be raised to increase resiliency as well. All work will be in the ROW and on disturbed soils.

Following the current Section 106 procedures for federal-aid projects, the Regional Cultural Resource Coordinator (CRC) reviewed the project information to determine whether the project meets the applicability criteria for *Activities that are Undertakings with No Potential to Cause Effects on Historic Properties.* Based on this review, 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 A: No known or potential historic district. Based on this review, the CRC recommends that the project activities have *No Potential to Cause Effects to Historic Properties* Pursuant to 36 CFR 800.3(A)(1) as developed by FHWA, NYSDOT and NYSHPO.

This scope of work and recommendation has been discussed with the Regional Environmental Unit Supervisor and the Project Manager and will be entered in the tracking spreadsheet for Section 106 findings of *No Potential to Cause Effects on Historic Properties* with the date of FHWA's countersign.

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 and will contact FHWA to confirm the determination.

Based on the information provided, the NYSDOT is requesting that FHWA make the determination of *No Potential to Cause Effects to Historic Properties* and confirming that there are no further obligations under Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulation, 36 CFR Part 800 – *Protection of Historic Properties* by countersigning below.

Sincerely,

Crystal Peritz, Region 10 Cultural Resource Coordinator

Based on the information provided FHWA has determined the above-described action has *No Potential to Cause Effects on Historic Properties* under 36 CFR 800.

JOHN D NICKELSON Digitally signed by JOHN D NICKELSON
Date: 2023.06.27 14:02:09 -04'00'

FHWA Date

CC: Kaylie Kramer, FHWA, Environmental Specialist
Sheref Fathi, NYSDOT Regional Environmental Unit Supervisor, Region 10
Ron Kudla, NYSDOT, Project Manager
Lizy Varghese, NYSDOT, Squad Leader
Lori Blair, NYSDOT, Cultural Resource Specialist

U.S. Department of Transportation
Federal Highway Administration

New York Division

Leo W. O'Brien Federal Building
11A Clinton Avenue, Suite 719
Albany, NY 12207
401-528-4551

June 26, 2023

In Reply Refer To:
HML-NY

Mr. Gregg Williams
Environmental Specialist 2
NYSDOT – Region 10
250 Veterans Memorial Highway,
Hauppauge, NY 11788

Subject: PIN 0LC1.01 – NY 27A over Amityville Creek Culvert Replacement
Programmatic Section 4(f) Evaluation for Minor Involvements with Public Parks
Village of Amityville, Town of Babylon, Suffolk County, New York

Dear Mr. Williams:

We have reviewed the material submitted with your email dated June 7 requesting our concurrence that the requirements of 23 CFR Part 774 have been met for the subject project. The New York State Department of Transportation (NYSDOT) has provided documentation for a *Nationwide Programmatic Section 4(f) Evaluation and Approval for Federally-Aided Highway Projects with Minor Involvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges*.

The project proposes to replace a substantially deteriorated culvert carrying Merrick Road (NYS Route 27A) over Amityville Creek, raise the road above coastal flooding elevations and provide bicycle connectivity through the project limits and uses a minor amount of publicly owned public park land that is adjacent to the existing highway. The project requires the use of a small strip of the adjacent public park, "Nautical Park" owned by Suffolk County Department of Parks. This park is a Section 4(f) resource that provides passive use for relaxation, exercise, and views of the abutting Amityville Creek. The proposed use involves adding embankment earth fill to support the raised highway pavement. The County of Suffolk reviewed the proposed project and its expected impacts to Nautical Park and has provided concurrence that the proposed project will have overall minor impacts to the park's recreational features and will not impair the use of such lands for park purposes.

The FHWA reviewed the documentation submitted and:

1. Determined the project meets the applicability criteria of the Minor Involvements with Public Parks programmatic agreement;
2. Determined all the alternatives to the Section 4(f) use have been fully evaluated;
3. Determined the findings (which conclude that there are no feasible and prudent alternatives to the use of the publicly owned public park) are clearly applicable to the project;
4. Determined the project complies with the Measures to Minimize Harm section of the programmatic agreement;

5. Determined that the coordination called for in this programmatic evaluation has been successfully completed;
6. Assured the measures to minimize harm will be incorporated in the project; and
7. Documented the project file clearly identifies the basis for the above determinations and assurances.

FHWA has determined that the application of the *Programmatic Nationwide Section 4(f) Evaluation and Approval for Federally-Aided Highway Projects with Minor Involvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges* is appropriate for this project. The requirements of 23 CFR Part 774 have been satisfied for this project.

If you have any questions, please feel free to contact me at (401) 528-4551.

Sincerely,

JOHN D NICKELSON

Digitally signed by JOHN D NICKELSON
Date: 2023.06.26 08:44:34 -04'00'

John D. Nickelson, P.E.
Area Engineer

cc: Lindsay Pacelli, NYSDOT, Region 10
Sheref Fathi, NYSDOT, Region 10
Lindsey Varghese, NYSDOT Region 10
Ron Kudla, NYSDOT Region 10

May 10th, 2023

NYSDOT PIN 0LC1.01
NY 27A (Montauk Highway) over Amityville Creek
Culvert Replacement Project
Village of Amityville, Town of Babylon
Suffolk County, New York

Nationwide Section 4(f) Evaluation and Approval for Federally-Aided Highway Projects with Minor Involvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges

This programmatic Section 4(f) evaluation has been prepared for this project (NYSDOT PIN 0LC1.01) which improves the existing highway (NY 27A) and uses a minor amount of publicly owned public park land that is adjacent to the existing highway. This programmatic Section 4(f) evaluation satisfies the requirements of Section 4(f) and meets the applicability criteria listed below.

The FHWA Division Administrator is responsible for reviewing each individual project to determine that it meets the criteria and procedures of this programmatic Section 4(f) evaluation. This written analysis and determination by FHWA will be placed in the project record and will be made available to the public upon request.

Project Description and Section 4(f) Protected Lands

This project proposes to replace a substantially deteriorated culvert carrying Merrick Road (NYS Route 27A) over Amityville Creek, raise the road above coastal flooding elevations and provide bicycle connectivity through the project limits in the Village of Amityville, Town of Babylon, Suffolk County, New York -- see **Location Map (Attachment 1).**

The project has a very tight existing right-of-way and there is a need to improve resiliency to the highway in recognition of climate change and sea level rise issues on the south shore of Long Island. Presently this section of the highway is two feet below the 100-year base flood elevation of 6 feet. It is prudent to address this problem as the replacement culvert will have a service life of at least 70 years and NY 27A presently serves as a major conduit for coastal evacuation during severe storm events.
In order to raise the elevation of the roadway low point (the culvert) to above the NFIP 100-year base flood elevation -- see **Floodplain Map (Attachment 2)** the project requires the use of a small strip of an adjacent public park, “Nautical Park” owned by Suffolk County Department of Parks. This park provides passive use for relaxation, exercise, and views of the abutting Amityville Creek. A small walkway exists within the park as well as two buildings. The proposed use involves adding embankment earth fill to support the raised highway pavement – see **Preliminary Plans (Attachment 3).** Impacts to the park, and minimization and mitigation measures are further discussed in the sections below.

Applicability

This programmatic Section 4(f) evaluation is applicable to the proposed project as the project meets the following criteria:

1. The proposed project (culvert replacement) is designed to improve the operational characteristics, safety, and/or physical condition of existing highway facilities on essentially the same alignment. This includes "4R" work (resurfacing, restoration, rehabilitation, and reconstruction), safety improvements, such as shoulder widening and the correction of substandard curves and intersections; traffic operation improvements, such as signalization, channelization, and turning or climbing lanes; bicycle and pedestrian facilities; bridge replacements on essentially the same alignment; and the construction of additional lanes.
2. The Section 4(f) lands ("Nautical Park") are publicly owned public parkland, located adjacent to the existing highway.
3. The amount and location of the land to be used shall not impair the use of the remaining Section 4(f) land, in whole or in part, for its intended purpose. This determination is to be made by the FHWA in concurrence with the officials having jurisdiction over the Section 4(f) lands, and is documented in relation to the size, use, and/or other characteristics deemed relevant.

   The total amount of land to be used from any Section 4(f) site shall not exceed the values in the following Table:

Total Size of Section 4(f) Site	Maximum to Be Acquired
< 10 acres	**10 percent of site**
10 acres - 100 acres	1 acre
> 100 acres	1 percent of site

   This project proposes to acquire (by permanent/temporary easement and temporarily occupy a total of approximately **1.79% (0.02 acre)** of the subject 1.12 acre parkland (Nautical Park– see **Abstract Request Map and Property Acquisition Table (Attachment 4).** Therefore, the project meets this criterion (<10%).
4. The proximity impacts of the project on the remaining Section 4(f) land will not impair the use of such land for its intended purpose. This determination is made by the FHWA in concurrence with the officials having jurisdiction over the Section 4(f) lands, and is documented with regard to noise, air and water pollution, wildlife and habitat effects, aesthetic values, and/or other relevant impacts. The project proposes to acquire/use an approximately 775 square foot (0.02 acre) strip of the park land to adjust the grade on the adjacent parkland to match the required elevation of the proposed improvements. The disturbed area will be

restored to its original condition and any affected elements of the park (e.g., fence, light posts, bench, walkways) will be restored to match the existing features – see **Photos of Existing Conditions (Attachments 5A & 5B).**

5. The officials having jurisdiction over the Section 4(f) lands (Suffolk County Parks Department) agree with the assessment of the impacts of the proposed project on, and the proposed mitigation for the Section 4(f) lands – see **Concurrence Letter (Attachment 6).**

6. This project does not use land from a site purchased or improved with funds under the Land and Water Conservation Fund Act, the Federal Aid in Fish Restoration Act (Dingell-Johnson Act), the Federal Aid in Wildlife Act (Pittman-Robertson Act), or similar laws, or the lands are otherwise encumbered with a Federal interest (e.g., former Federal surplus property). Therefore, no coordination with the appropriate Federal agency is required to ascertain the agency's position on land conversion or transfer.

7. This project does not anticipate the need to prepare an environmental impact statement (EIS). The project (replacement of an existing culvert) qualifies as a Categorical Exclusion (Class 2) action under NEPA. Accordingly, an Individual Section 4(f) process is not required, and a Programmatic 4(f) process may be used.

Alternatives

The following alternatives avoid any use of the public park land, recreational area, or wildlife and waterfowl refuge:

1. **Do nothing.** Not prudent since the culvert is in serious state of disrepair and the culvert is at a flood-prone low point (lower than the 100-year base flood elevation) requiring elevation of the roadway and the associated minor impacts to the adjacent parkland. It is not prudent to replace the existing culvert with a structure that will provide 70 years of service life and not raise this section of roadway to the minimum elevation above the 100-year flood level. Specifically, FHWA Order 5520, regarding Climate Change and Resiliency and Executive Order 1365 requires agencies to consider climate change and extreme weather event preparedness and resilience in all FHWA programs, policies, and activities within the framework of existing laws, regulations, and guidance.
2. **Improve the highway without using the adjacent public park, recreational land, or wildlife and waterfowl refuge**. Not prudent since the culvert is in serious state of disrepair and the culvert is at a flood-prone low point (lower than the 100-year base flood elevation) requiring elevation of the roadway and the associated minor impacts to the adjacent parkland. It is not prudent to replace the existing culvert with a structure that will provide 70 years of service life and not raise this section of roadway to the minimum elevation above the 100-year flood level.

3. **Build an improved facility on new location without using the public park, recreation land, or wildlife or waterfowl refuge.** Not prudent because this would require a horizontal shift in the roadway centerline for a short segment of highway. The resulting impacts would result in the loss of parking spaces to the northside apartment complex and would introduce a curve in the horizontal alignment for a short distance which would create a safety hazard. These impacts are substantially more significant than the slight easement use of a small portion of the public park for slope adjustment grading.

Findings

This programmatic Section 4(f) evaluation can be applied to a project, as each of the following findings are supported by the circumstances, studies, and consultations on the project:

1. **Do Nothing Alternative**. The Do Nothing Alternative is not feasible and prudent because it would not correct existing deteriorated conditions and maintenance problems and not providing such correction would constitute a cost or community impact of extraordinary magnitude, or would result in truly unusual or unique problems, when compared with the proposed use of the Section 4(f) lands.

2. **Improvement without Using the Adjacent Section 4(f) Lands**. It is not feasible and prudent to avoid Section 4(f) lands by roadway design or transportation system management techniques (including, but not limited to, minor alignment shifts, changes in geometric design standards, use of retaining walls and/or other structures, and traffic diversions or other traffic management measures) because implementing such measures would result in: (a) substantial adverse community impacts to adjacent homes, businesses or other improved properties and the impacts, costs, or problems would be truly unusual or unique, or of extraordinary magnitude when compared with the proposed use of Section 4(f) lands.

3. **Alternatives on New Location**. It is not feasible and prudent to avoid Section 4(f) lands by constructing on new alignment because the new location would (a) result in substantial adverse social, economic, or environmental impacts; (b) the new location would substantially increase costs or engineering difficulties (such as an inability to achieve minimum design standards, or to meet the requirements of various permitting agencies such as those involved with navigation, pollution, and the environment); and (c) such problems, impacts, costs, or difficulties would be truly unusual or unique, or of extraordinary magnitude when compared with the proposed use of Section 4(f) lands.

In summary there is no feasible and prudent alternative to the project's proposed minor use of the Section 4(f) parkland (Nautical Park).

Measures to Minimize Harm

This programmatic Section 4(f) evaluation and approval may be used after the FHWA Division Administrator, in accordance with this evaluation, ensures that the proposed action includes all possible planning to minimize harm. The officials having jurisdiction over the Section 4(f) property (Suffolk County Department of Parks) have agreed, in writing, with the assessment of impacts resulting from the use of the Section 4(f) property and with the mitigation measures to be provided. Mitigation measures for this project shall include one or more of the following:

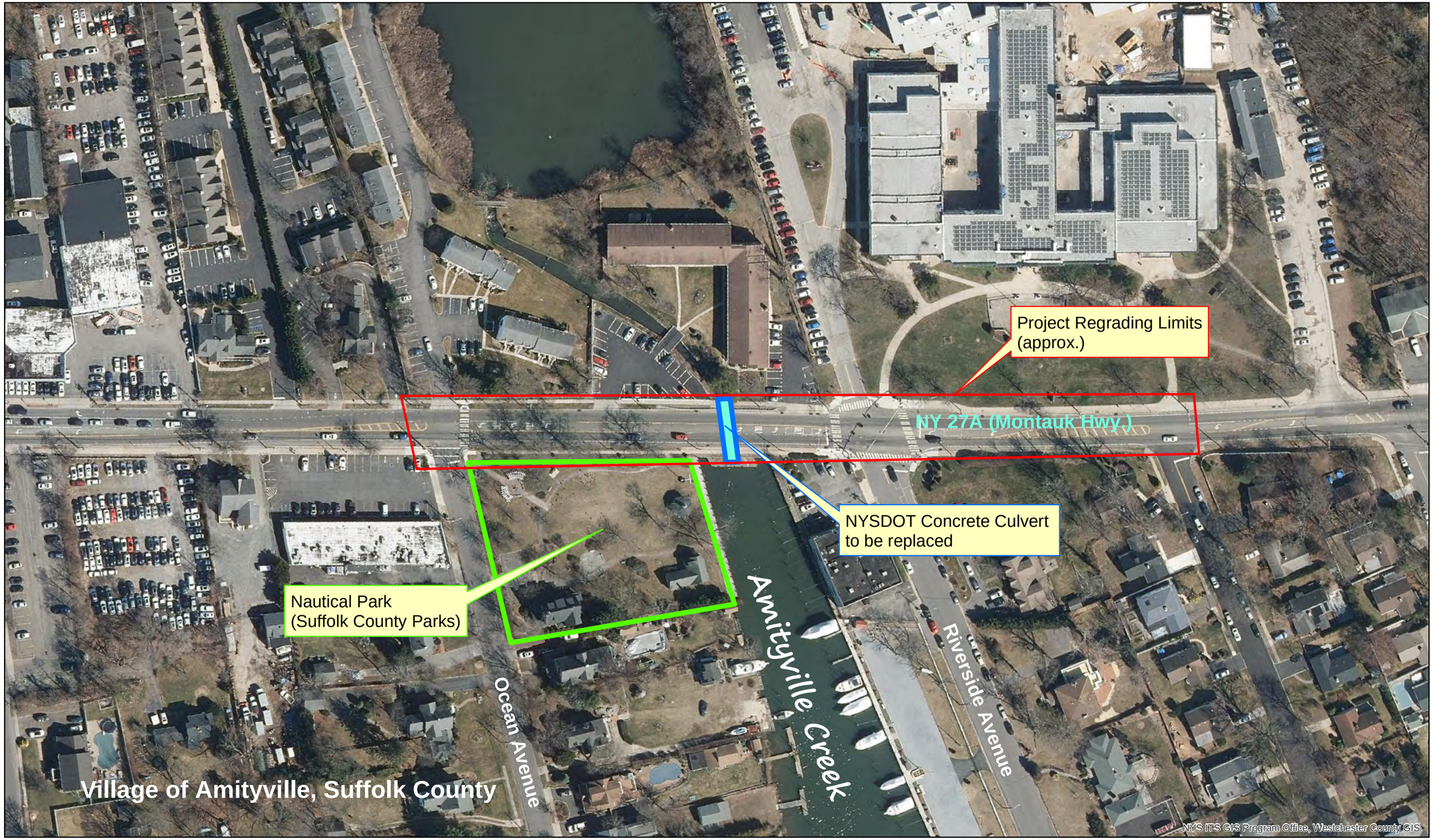
1. Replacement of facilities impacted by the project including sidewalks, paths, lights, trees, and other facilities as identified in the project plans.
2. Restoration and landscaping of disturbed areas.
3. Incorporation of design features (i.e., reduction in right-of-way width, modifications to the roadway section, and minor alignment shifts); where necessary to reduce or minimize impacts to the Section 4(f) property. Also, the existing utility poles in front of the park along the highway segment will be relocated to the north side of NY 27A by the utility company at no cost to the State, thereby improving the viewshed/aesthetics of the park. Such features shall be designed in a manner that will not adversely affect the safety of the highway facility. Flexibility in the application of AASHTO geometric standards should be exercised, as permitted in 23 CFR 625, during such design.
4. Such additional or alternative mitigation measures as may be determined necessary based on consultation with, the officials having jurisdiction over the parkland, recreation area, or wildlife or waterfowl refuge.

Coordination

This project included coordination in the early stages of project development with the local agency officials (Suffolk County Department of Parks) having jurisdiction over the Section 4(f) lands. Suffolk County Parks Department did not identify any Federal encumbrances associated with the subject parkland.

Copies of this final written analysis and determinations required under this programmatic Section 4(f) evaluation will be provided to the officials having jurisdiction over the involved Section 4(f) lands and to other parties upon request.

Prepared by : Gregg Williams, ES-2
NYSDOT, Region 10

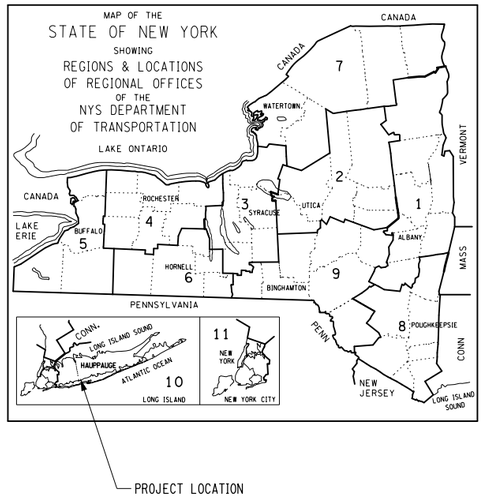


NYSDOT PIN 0LC1.01
NY 27A at Amityville Creek
Culvert Replacement Project

1 inch = 100 feet

Attachment 1 -- Location Map


CEDAR STREET
LAKE DRIVE
TOWNE ST
ZONE X
BROADWAY
MERRICK ROAD
BAYVIEW AVENUE
0LC1.01 --
Project Limits
PLACE
BENNETT PLACE
DOWSING PLACE
ZONE X
ZONE X
PERKINS AVENUE
S IRELAND PLACE
OCEAN AVENUE
RIVERSIDE AVENUE
ZONE A
(EL 6)
ZONE X
ZONE X
ZONE X
MOLE PLACE
ZONE AE
(EL 6)
Attachment 2 --
100-year Flood
Plain Map



PROJECT LOCATION

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY THE DEPARTMENT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (US CUSTOMARY) REFERENCED IN THE CONTRACT PROJECT "PROPOSAL" EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN THE CONTRACT PROJECT "PROPOSAL."

CONTRACT PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH NYSDOT POLICIES AND GUIDELINES AND THE FINAL DESIGN REPORT APPROVED ON --/--/----

CULVERT REPLACEMENT
CIN 050001
NYS RTE 27A OVER AMITYVILLE CREEK
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
SUFFOLK COUNTY

CONTRACT: DXXXXXX

SUFFOLK COUNTY

CONTRACTOR'S NAME _____

AWARD DATE _____

COMPLETION DATE _____

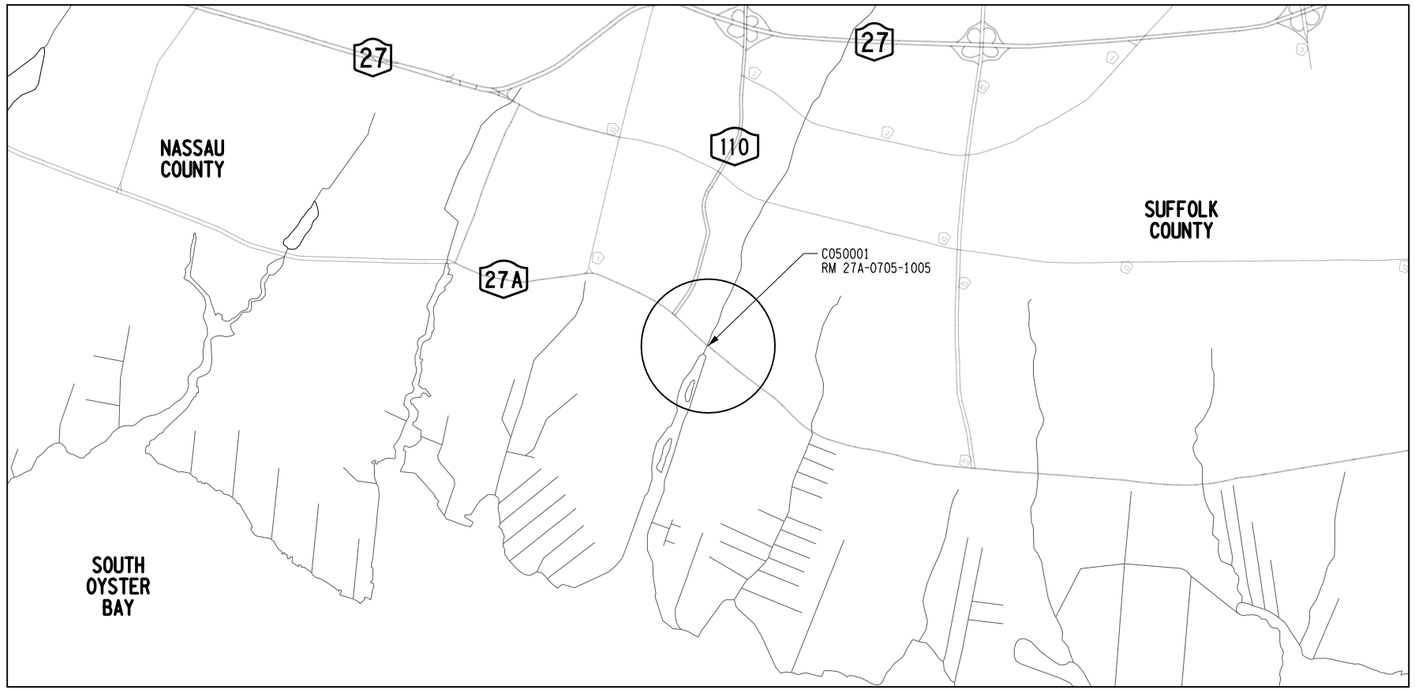
FINAL ACCEPTANCE DATE _____

REGIONAL DIRECTOR _____

ENGINEER IN CHARGE _____

FINAL COST TOTAL _____

FISCAL SHARE COST(S)



PROJECT LOCATION
NOT TO SCALE
THIS PROJECT IS LOCATED ON THE FOLLOWING ROADWAY IN SUFFOLK COUNTY:
NYS RTE 27A
IN THE TOWN OF BABYLON

RECOMMENDED BY	RECOMMENDED BY	RECOMMENDED BY	RECOMMENDED BY	APPROVED BY
REGIONAL DESIGN ENGINEER DATE	REGIONAL CONSTRUCTION ENGINEER DATE	REGIONAL DIRECTOR OF OPERATIONS DATE	REGIONAL TRAFFIC ENGINEER DATE	REGIONAL DIRECTOR DATE
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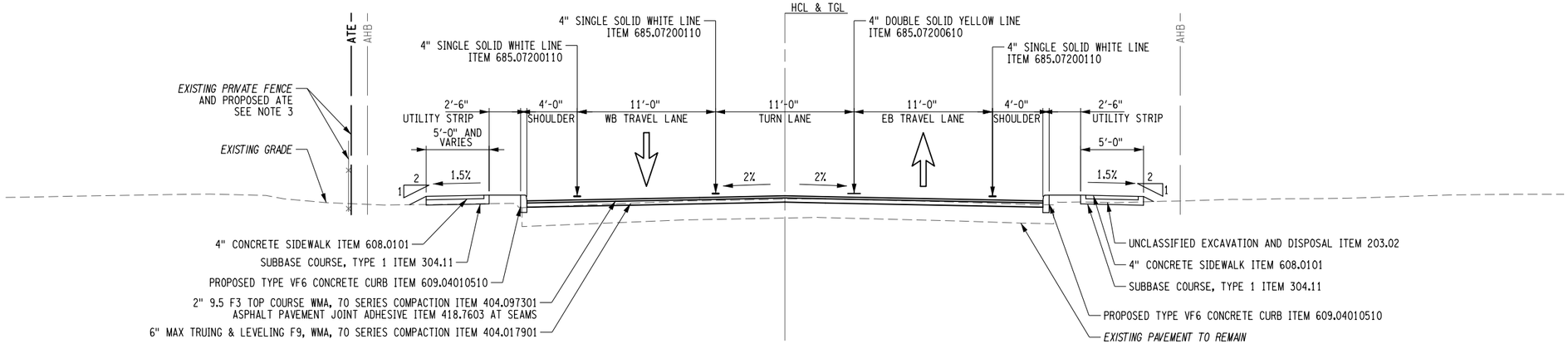
ATTACHMENT 3

CULVERT REPLACEMENT		
S.H. 5300		
TOWN OF BABYLON		
NYS RTE 27A OVER AMITYVILLE CREEK		
COUNTY: SUFFOLK		
FED. ROAD REG. NO.	STATE	SHEET NO.
1	N.Y.	1
CAPITAL PROJECT IDENTIFICATION NO. OLC1.01		

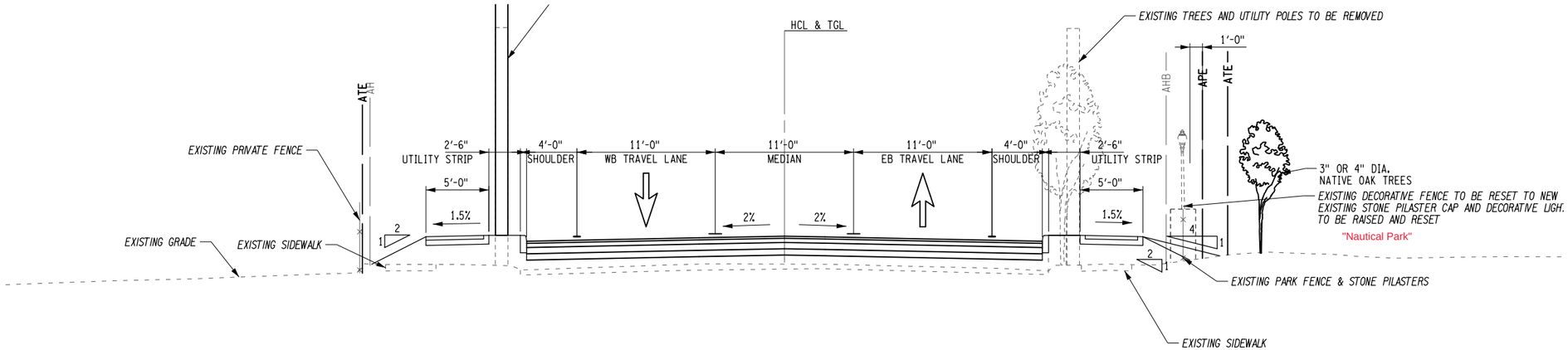
INDEX ON SHEET NO. 2

PROJECT MANAGER C. JENNE, PE
CHECK A. MADDEN, PE
DRAFTING E. LEI
CHECK A. MADDEN, PE
DESIGN E. LEI
JOB MANAGER L. VARGHESE, PE
DESIGN SUPERVISOR R. KUDLA, PE

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USER = cjenne



TYPICAL SECTION 1
NYS RTE 27A (MERRICK RD)
TRUING AND LEVELING
STA. 12+50 TO STA. 13+25
AND STA. 21+40 TO STA. 22+00



TYPICAL SECTION 2
NYS RTE 27A (MERRICK RD)
RELOCATED PARK FENCE
STA. 13+25 TO STA. 15+30

5 0 5 10 15 20'
1" = 10'

NOTES:

1) IF EXISTING FIELD CONDITIONS DO NOT MATCH THE PROPOSED WMA THICKNESSES, THEN THE BINDER THICKNESS MAY BE REVISED TO MATCH EXISTING PAVEMENT THICKNESSES.

2) THE PROPOSED 6" THICK COURSE OF ITEM 404.258901 IS TO BE PLACED IN 2 (3") LIFTS.

3) EXISTING PRIVATE FENCE AND PROPOSED ATE FOR STA. 12+50 TO STA. 13+25 ONLY.

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	404.258901	25 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON
304.10119917	SUBBASE COURSE, TYPE 1011-2	CY	407.0102	DILUTED TACK COAT	GAL
304.11	SUBBASE COURSE, TYPE 1	CY	418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF
404.017901	TRUING & LEVELING F9, WMA, 70 SERIES COMPACTION	TON	490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY
404.018901	TRUING & LEVELING F9, WMA, 80 SERIES COMPACTION	TON	608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY
404.097301	9.5 F3 TOP COURSE WMA, 70 SERIES COMPACTION	TON	609.04010510	CAST-IN-PLACE CONCRETE CURB (GRADING INCLUDED) TYPE VF6	LF
404.098101	9.5 F1 TOP COURSE WMA, 80 SERIES COMPACTION	TON	685.070200110	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF
404.198901	19 F9 BINDER COURSE WMA, 80 SERIES COMPACTION	TON	685.070200610	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF

AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT
S.H. 5300
VILLAGE OF AMITYVILLE
TOWN OF BABYLON
COUNTY: SUFFOLK REGION: 10

PIN OLC1.01
NY-27A

BRIDGES

CULVERTS
C050001

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

TYPICAL SECTIONS - 01

CONTRACT NUMBER
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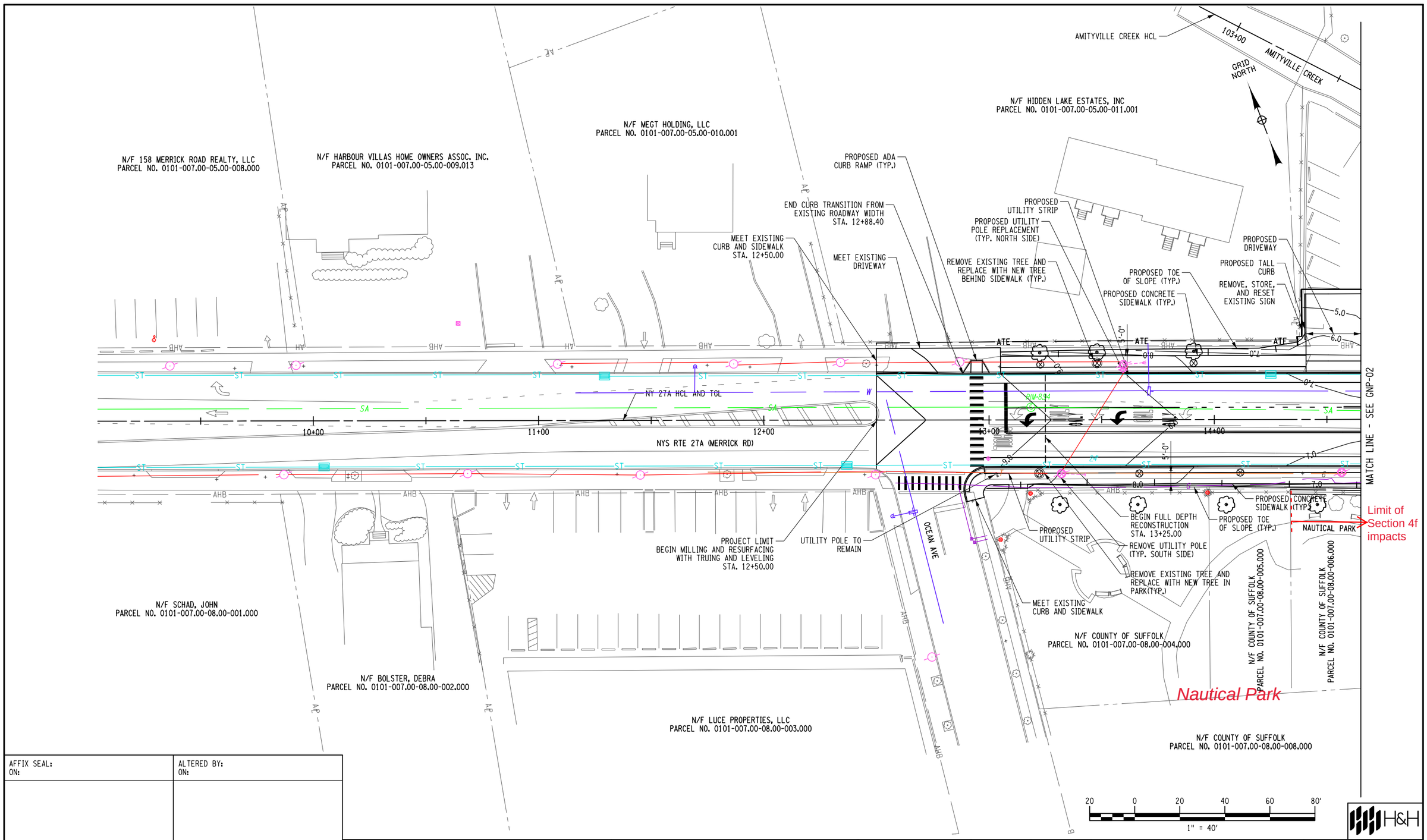
DRAWING NO. TYP-01
SHEET NO. 5

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

DESIGN SUPERVISOR R. KUDLA, PE
JOB MANAGER L. VARGHESE, PE
DESIGN E. LEI
DRAFTING E. LEI
CHECK A. MADDEN, PE
PROJECT MANAGER C. JENNE, PE

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AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT	PIN 0LC1.01	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED
S.H. 5300	NY-27A			NY 27A (MERRICK RD) OVER AMITYVILLE CREEK
VILLAGE OF AMITYVILLE				GENERAL PLAN - 01
TOWN OF BABYLON				
COUNTY: SUFFOLK REGION: 10				

CONTRACT NUMBER DXXXXXX

DRAWING NO. GNP-01

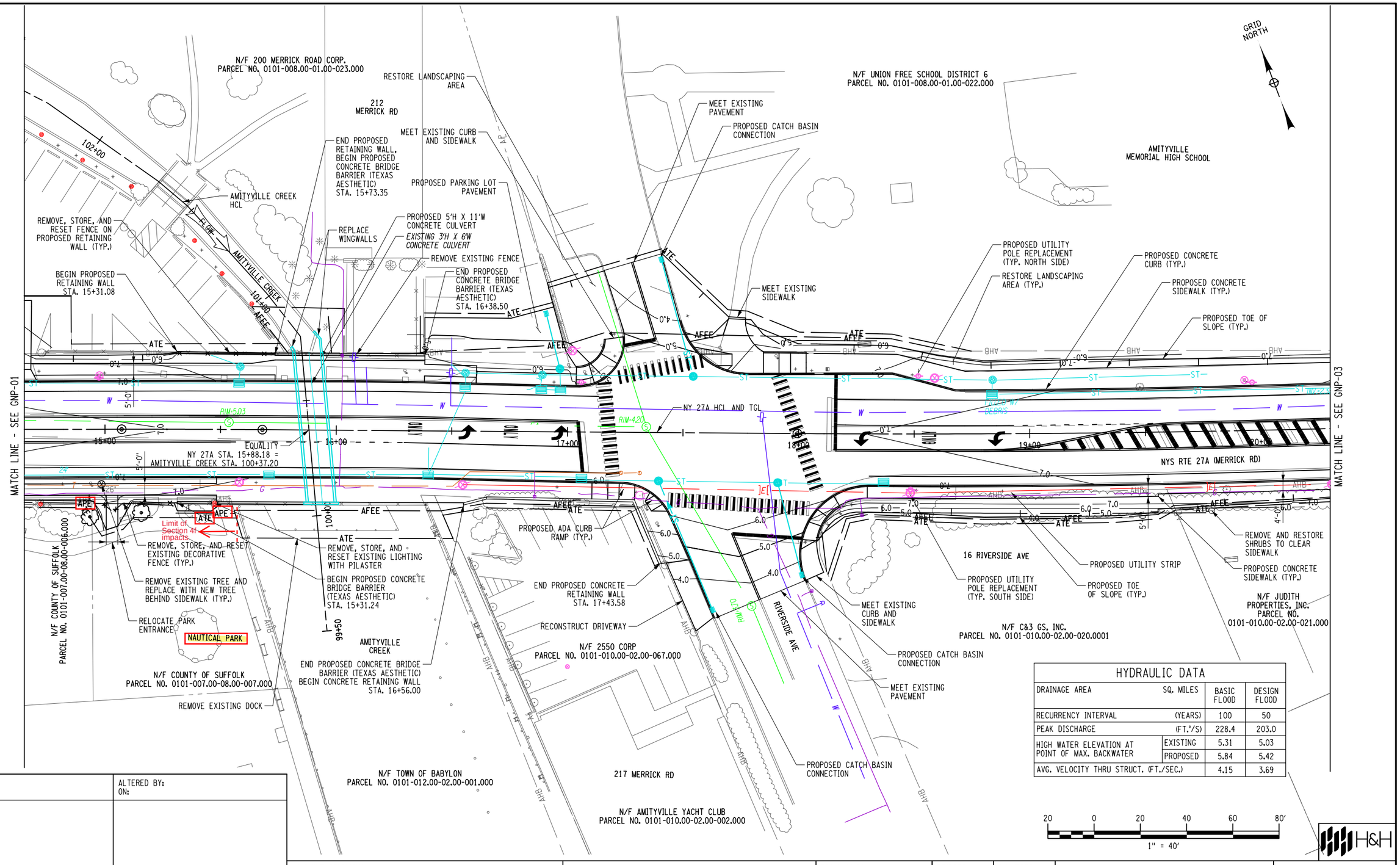
SHEET NO. 13

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NEW YORK STATE OF OPPORTUNITY. Department of Transportation

DESIGN SUPERVISOR R. KUDLA, PE | JOB MANAGER L. VARGHESE, PE | DESIGN E. LEI | DRAFTING E. LEI | CHECK A. MADDEN, PE | PROJECT MANAGER C. JENNE, PE

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USER = c.jenne



HYDRAULIC DATA			
DRAINAGE AREA	SQ. MILES	BASIC FLOOD	DESIGN FLOOD
RECURRENCY INTERVAL	(YEARS)	100	50
PEAK DISCHARGE	(FT.³/S)	228.4	203.0
HIGH WATER ELEVATION AT POINT OF MAX. BACKWATER	EXISTING	5.31	5.03
	PROPOSED	5.84	5.42
AVG. VELOCITY THRU STRUCT. (FT./SEC.)		4.15	3.69

20 0 20 40 60 80′
1" = 40′

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CULVERT REPLACEMENT	PIN OLC1.01 NY-27A	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER DXXXXXX
S.H. 5300				NY 27A (MERRICK RD) OVER AMITYVILLE CREEK	DRAWING NO. GNP-02
VILLAGE OF AMITYVILLE				GENERAL PLAN - 02	SHEET NO. 14
TOWN OF BABYLON					
COUNTY: SUFFOLK REGION: 10					

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NEW YORK STATE OF OPPORTUNITY. Department of Transportation

H&H

DESIGN SUPERVISOR R. KUDLA, PE
JOB MANAGER L. VARGHESE, PE
DRAFTING E. LEI
DESIGN E. LEI
PROJECT MANAGER C. JENNE, PE
CHECK A. MADDEN, PE

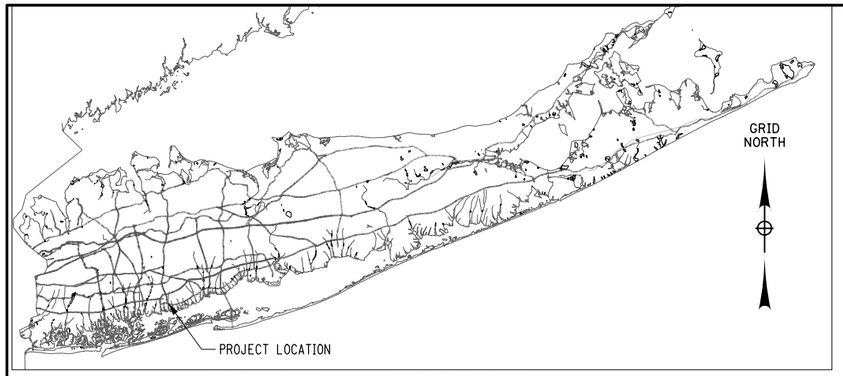
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NEW YORK STATE
DEPARTMENT OF TRANSPORTATION

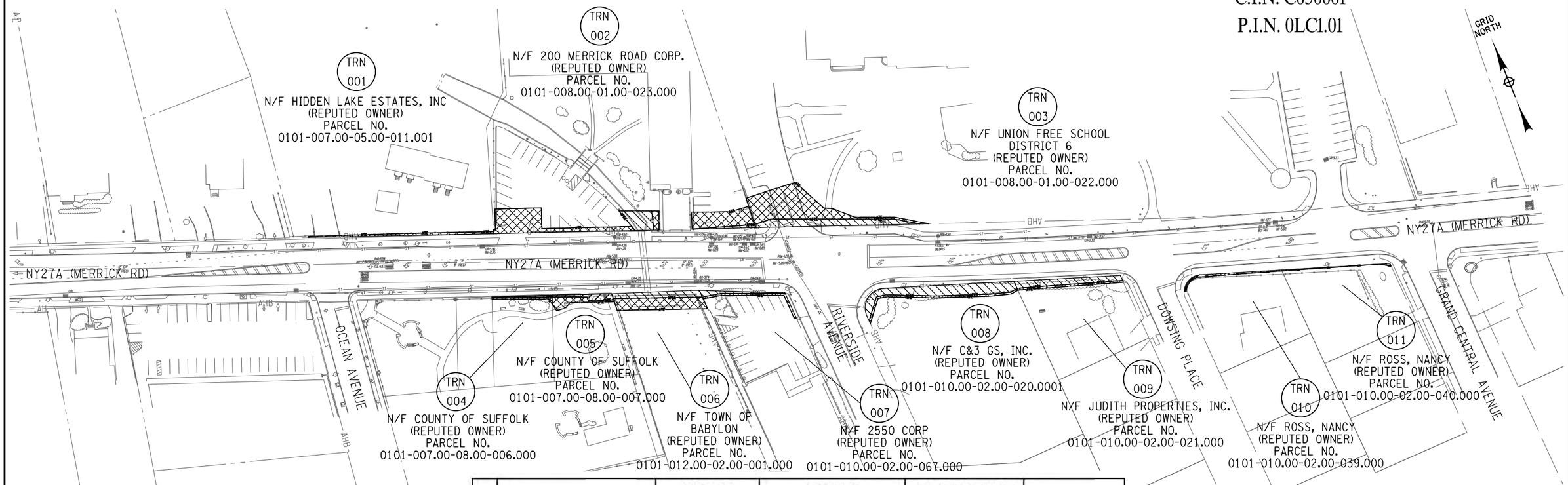
ABSTRACT REQUEST MAP

ROUTE 27A OVER AMITYVILLECREEK
VILLAGE OF AMITYVILLE
SUFFOLK COUNTY

C.I.N. C050001
P.I.N. 0LC1.01



LOCATION MAP NOT TO SCALE



TRN	REPUTED OWNER	TAX MAP INFO SECTION	BLOCK	LOT	DEED REFERENCE LIBER	PAGE	CARTRIDGE	FRAME	AREA OF ACQUISITIONS (S.F.) FEE	P.E	T.E	REMARKS
	S.H. NO. 5300 MERRICK RD											
1	HIDDEN LAKE ESTATES, INC	007	05	11.001							323	
2	200 MERRICK ROAD CORP.	008	01	23					607		2639	
3	UNION FREE SCHOOL DISTRICT 6	008	01	22					1018		2479	
4	COUNTY OF SUFFOLK	007	08	6						62	131	
5	COUNTY OF SUFFOLK	007	08	7						231	351	
6	TOWN OF BABYLON	012	02	1					530		1084	
7	2550 CORP	010	02	67					186		218	
8	C&3 GS, INC.	010	02	20.0001					1574		336	
9	JUDITH PROPERTIES, INC.	010	02	21					660		212	
10	ROSS, NANCY	010	02	39					21		151	
11	WEBER, LORETTA	010	02	40							63	

NOTE: AREA IS ONLY APPROXIMATE AND TO BE USED BY THE OFFICE OF RIGHT OF WAY FOR THE SOLE PURPOSE OF DETERMINING TYPE OF TITLE DATA REQUIRED.

ATTACHMENT 4

AHB — APPROXIMATE HIGHWAY BOUNDARY
℄ — APPROXIMATE PROPERTY LINE
ATE — APPROXIMATE PROPOSED TEMPORARY EASEMENT
APE — APPROXIMATE PROPOSED PERMANENT EASEMENT
AFEE — APPROXIMATE PROPOSED FEE
TRN 000 — TEMPORARY REFERENCE NUMBER

LEGEND
T.E.
P.E.
FEE

100 0 100 200′
1" = 100′

P.I.N. 0LC1.01 DATE: DEC. 9, 2022
MERRICK RD S.H. NO. 5300
VILLAGE OF AMITYVILLE
COUNTY OF SUFFOLK
FILE NAME: C50001_ARM_ROW.DGN

THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, THE DRAWING CONTENTS ARE NOT AN APPROVED FINAL CONSTRUCTION CONTRACT DOCUMENT.

ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED

ABSTRACT REQUEST MAP
ROUTE 27A OVER AMITYVILLE CREEK
VILLAGE OF AMITYVILLE
SUFFOLK COUNTY

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

SHEET 1 OF 1

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 10

CHECKED BY
DRAFTED BY
ESTIMATED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

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DATE/TIME = 05-MAY-2023 13:22
USER = cjenne



ATTACHMENT 5A -- Looking Northwest


Limit of Parkland Disturbance (temporary; re-grading; re-locating gate/entrance; re-setting fence, lighting and bench
ATTACHMENT 5B -- Looking West

ATTACHMENT 6

COUNTY OF SUFFOLK

STEVEN BELLONE
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF
PARKS, RECREATION AND CONSERVATION

JASON SMAGIN
COMMISSIONER

April 20, 2023

Lizy Varghese at
Lizy.Varghese@dot.ny.gov

Re: Culvert Replacement at Amityville Creek/Nautical Park

Dear Lizy Varghese:

The County of Suffolk ("The County") has reviewed the proposed project and its expected impacts to Nautical Park owned by Suffolk County. The County agrees that the proposed project will have overall minor impacts to the park's recreational features and will not impair the use of such lands for park purposes. The project will mitigate all impacts by replacing the existing fence and light posts in-kind and in-place following the minor grading work by the State to meet the proposed highway pavement elevation. Additional mitigation will include planting large trees within the park property to offset the loss of trees along the highway. The park's east entrance gate will be fully replaced and matched to the existing park walkway.

Sincerely,

Jason Smagin
Commissioner
S.C. Dept. of Parks, Recreation and Conservation

cc: Nick Gibbons, Chief Environmental Analyst
Department of Parks, Recreation and Conservation

COUNTY OF SUFFOLK

STEVEN BELLONE
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF
PARKS, RECREATION AND CONSERVATION

JASON SMAGIN
COMMISSIONER

April 20, 2023

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Sincerely,

Jason Smagin
Commissioner
S.C. Dept. of Parks, Recreation and Conservation

cc: Nick Gibbons, Chief Environmental Analyst
Department of Parks, Recreation and Conservation

ATTACHMENT C

Traffic Information

Chapter 18, Appendix A - CAPITAL PROJECTS **COMPLETE STREETS CHECKLIST** **(**18A-2)

PIN:	0CL1.01	**Project Location:**	NY 27A/Amityville Creek, Village of Amityville Suffolk
Context:	☐ Urban/Village ☑ Suburban, or ☐ Rural		
Project Title:	CRoSS Program – Culvert Resiliency of State System		

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.* 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** ☐ **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: Yacob Shenkute Date: 03/31/2023

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**	Existing sidelwalk and pedestiran crossing facility.
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**	Amityville Memorial High School is located within project limits. So is Nautical Park (a passive park adjacent to the project area).
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**	No sidewalk on south side from Riverside Ave to Grand Central Ave.

STEP 2 prepared by: Yacob Shenkute Date: 03/31/2023

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**	
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: Lizy Varghese Date: 3/31/2023

Preparer's Supporting Documentation, Comments and Clarifications:

Last Revised 06/22/2015

Introduction

The intent of this checklist is to assist in the identification of needs for Complete Streets design features on Capital projects, including locally-administered projects.

This checklist is one tool that NYSDOT employs in its integrated approach to Complete Streets considerations. It provides a focused project-level evaluation which aids in identifying access and mobility issues and opportunities within a defined project area. For broader geographic considerations (e.g., bicycle route planning, corridor continuity), NYSDOT and other state and local agencies use a system-wide approach to identifying complete streets opportunities.

Use of this checklist is initiated during the earliest phase of a project, when information about existing conditions and needs may be limited; it is therefore likely that the Preparer will only be able to complete Steps 1 and 2 at this time. As the project progresses, and more detailed information becomes available, the Preparer will be able to complete Step 3 and continue to refine earlier answers, to give an increasingly accurate indication of needs and opportunities for Complete Streets features.

Guidance for Steps 1, 2 and 3

Based on the guidance below, the Regions will assign the appropriate staff to complete each step in the Checklist. The Preparer should have expertise in the subject matter and be able to effectively work with and coordinate comments/responses with involved Regional Groups.

- Steps 1 & 2: Preparer is from Planning; review occurs as part of the normal IPP process.
- Step 3: Preparer is Project Designer; review occurs as part of Design Approval Document review/approval process.
- For Local Projects - Local Project Sponsors will be responsible for completing all steps.

a. A check of "yes" indicates a need to further evaluate the project for Complete Streets features. Please identify in the comment box, or append at the end of the checklist, any supporting information or documentation.

b. Answers to the questions should be checked with the local municipality, transit provider, MPO, etc., as appropriate, to ensure accuracy and evaluate needed items versus desirable items (i.e., prioritize needs).

c. Answers to the questions should be coordinated with NYSDOT Regional program areas as appropriate (e.g., Traffic and Safety, Landscape Architecture, Maintenance, etc.)

d. This checklist should be reviewed during the development of the IPP, Scoping Document, and Design Approval

Document; and revisited due to a project delay or if site conditions or local planning changes during the project development process. Continued coordination with the Regional Bicycle and Pedestrian Coordinator is necessary throughout project scoping and design.

e. It will be assumed that the Project Description and Limits will be as described in the IPP for Step I, the Scoping Document for Step 2 and the Design Approval Document for Step 3. Preparers should describe any deviations from this assumption under "Preparer's Supporting Documentation".

f. For the purposes of this checklist, the "project area" is within 0.5 mi (800 m) for pedestrian facilities and 1.0 mi (1600 m) for bicycle facilities. In some circumstances, bicyclists may travel up to 7 miles for a unique generator, attraction or event. These special circumstances may be considered and described as appropriate.

g. For background on Complete Streets features and terminology, please visit the following websites:

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/design_nonmotor/highway/index.cfm
http://www.fhwa.dot.gov/publications/publicroads/10julaug/03.cfm
http://www.smartgrowthamerica.org/complete-streets/

h. Refer to *Highway Design Manual* Chapter 18, Section 18.5.1 for further information and guidance on the use of this checklist.

i. For projects with multiple sites, Preparers may choose to prepare multiple checklists for each site.

Definitions

- CAMCI (Comprehensive Asset Management/Capital Investment) Viewer - A web-based GIS application used for planning purposes and located at http://gisweb/camci/.
- Generator - A generator, in this document, refers to both origins and destinations for bicycle and/or pedestrian trips (e.g., schools, libraries, shopping areas, bus stops, transit stations, depots/terminals).
- HDM - New York State Department of Transportation's *Highway Design Manual*.
- Maintenance project - For the purposes of this checklist, maintenance projects are listed as the following project types: Rigid pavement repairs, pavement grooving, drainage system restoration, recharge basin reconditioning, SPDES facilities maintenance, underdrain installation, guide rail and/or median barrier upgrading, impact attenuator repair, and/or replacement, reference marker replacement, traffic management systems maintenance, repair and replace loop detectors, highway lighting upgrades, noise wall rehab/replacement, retaining wall rehab/replacement, graffiti removal/prevention, vegetation management, permanent traffic count detectors, weigh-in-motion detectors, slope stabilization, ditch cleaning, bridge washing/cleaning, bridge joint repair, bridge painting and crack sealing.
- MPO (Metropolitan Planning Organization) - A federally mandated and federally funded transportation policy-making organization made up of representatives from local government and governmental transportation authorities.
- Raised Pedestrian Refuge Medians and Corner Islands - Raised elements within the street at an intersection or midblock crossing that provide a clear or safety zone to separate pedestrians, bicyclists, and other non-motorized modes, from motor vehicles . See FHWA's *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations* at http://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf.
- Road diet - A transportation planning technique used to achieve systemic improvements to safety or provide space for alternate modes of travel. For example, a two-way, four lane road might be reduced to one travel lane in each direction, with more space allocated to pedestrian and cyclist facilities. Also known as a lane reduction or road re-channelization.
- Transit facilities - Includes facilities such as transit shelters, bus turnouts and standing pads.
- 1R project - A road resurfacing project that includes the placement or replacement of the top and/or binder pavement course(s) to extend or renew the existing pavement design life and to improve serviceability while not degrading safety.
- 2R project - A multicourse structural pavement and resurfacing project that may include: milling, super elevation, traffic signals, turn lanes, driveway modifications, roadside work, minor safety work, lane and shoulder widening, shoulder reconstruction, drainage work, sidewalk curb ramps, etc.

TRAFFIC VOLUME AND SPEED DATA

OBJECTID	6562645
Route	**27A**
Signing	3
Qualifier	1
Ramp	
DOT ID	100227
County Order	2
Factor Group	30
Station Start	RT 110 AMITYVILLE
Station End	CR 47/GREAT NECK RD
HPMS Sample ID	2217887
Bridge ID	
Railroad Crossing	
NHS	
Roadway Name	MERRICK RD
Roadway Number	
Speed	40
Oneway	
Region County Station	
Station ID	**70257**
Route ID	100227021
From Measure	0.35
To Measure	1.66
COUNT_STATS_ID	45288245
County FIPS	103
Station Number	257
Continuous Count Site ID	
Functional Class	16

Federal Direction	Combined Total
Full Count	Y
Oneway Flag	
Calculation Year	2019
AE_Flag	A
AADT	21937
DHV	1750
DDHV	1018
Single Unit AADT	489
Combination Unit AADT	52
Most Recent Count Year	2019
Most Recent AADT	21937
K-Factor	8
D-Factor	58
2nd Most Recent Count Year	2017
2nd Most Recent AADT	22829
3rd Most Recent Count Year	2006
3rd Most Recent AADT	23142
4th Most Recent Count Year	2002
4th Most Recent AADT	23274
Class Count Year	2019
Class F3 - F13 %	16
Truck or Heavy Vehicle %	2
Single Unit Truck or Bus %	2
Combination Truck %	0
Motorcycle %	0
Passenger Vehicle %	84
Light Duty Truck %	14
Bus %	0
Single Unit Truck %	2
Axle Factor	1
Single Unit Peak %	0
CU_Peak	0
Class Group Year	2019
Speed Count Year	2019
Speed Limit	30
Average Speed	33
50th Percentile Speed	36
85th Percentile Speed	43
Vehicles Exceeding 55 mph	1
Vehicles Exceeding 65 mph	0
Average K-Factor	13.07251072
Average D-Factor	59.18663025
NYS Direction Code	0
Truck AADT	541
Symbolized Truck Percentage AADT	2
Truck AADT Type (Actual vs. Estimated)	Actual
Truck Percent Source Field Name	
Region Name	
Region Number	
County Number	
Morning Highest Value	1628
Afternoon Highest Value	1590
Evening Highest Value	2249

COUNT_ID	**070257_07092019**
REGION	10
REGION_CODE	0
COUNTY_CODE	7
STATION	257
RCSTA	**70257**
FUNCTIONAL_CLASS	16
FACTOR_GROUP	30
LATITUDE	40.667901
LONGITUDE	-73.399396
SPECIFIC_RECORDER_PLACEMENT	135 Ft W of S Emerson Ave
CHANNEL_NOTES	
DATA_TYPE	Speed Statistics
SPEED_LIMIT	30
YEAR_	2019
MONTH_	7
DAY_OF_FIRST_DATA	9
FEDERAL_DIRECTION	Combined Total
FULL_COUNT	Y
AVG_WKDAY_BIN_1	627
AVG_WKDAY_BIN_2	1215
AVG_WKDAY_BIN_3	2897
AVG_WKDAY_BIN_4	6109
AVG_WKDAY_BIN_5	7061
AVG_WKDAY_BIN_6	3955
AVG_WKDAY_BIN_7	1503
AVG_WKDAY_BIN_8	462
AVG_WKDAY_BIN_9	120
AVG_WKDAY_BIN_10	27
AVG_WKDAY_BIN_11	8
AVG_WKDAY_BIN_12	1
AVG_WKDAY_BIN_13	0
AVG_WKDAY_BIN_14	0
AVG_WKDAY_BIN_15	1
AVG_WKDAY_UNCLASSIFIED	
AVG_WKDAY_TOTALS	23986
AVG_SPEED	33
FIFTYTH_PERCENTILE_SPEED	36
EIGHTYFIVETH_PERCENTILE_SPEED	43
PERCENTILE_EXCEEDING_55	1
PERCENTILE_EXCEEDING_65	0
FLAG_FIELD	
BATCH_ID	345038

Attachment C.3

SYSTEMS ENGINEERING REVIEW FORM (SERF)

Part 1. General Project Information

The SERF is normally submitted to the FHWA Division Office ITS Engineer/Specialist prior to obligation of initial funding for any project with ITS elements. Any project for which the SERF is not completed in full at this time will be considered as "High Risk", or requiring full oversight by FHWA, unless approved by FHWA as "Exempt". A full discussion of risk categories is available in the most recent Federal-aid Highway Program Partnership Agreement between FHWA and NYSDOT.

Please provide the following background information. In most cases, 1-3 sentences will be sufficient for each item, but you may include as much as you feel needed.

A. Project Contact – Name, position, phone, email.

Lizy Varghese, Project Manager
Telephone: 631-952-6855
Email: Lizy.Varghese@dot.ny.gov

B. Project Objectives – What is the purpose of the project? What needs (deficiencies) are being addressed?

The purpose of this project is to address poor condition ratings with a focus on safety, infrastructure, and hydraulic resiliency on the culvert on NYS Route 27A (Merrick Road) in Amityville, NY. They project objectives are to retain the culvert location or in close proximity, restore it to a condition rating of 5, provide a design service life of at least 70 years, address geometric and operational deficiencies on Merrick Road, and where feasible design the culvert to accommodate the vertical flood elevation.

C. Project Summary – What solutions will address the needs? What major elements will be installed? What major function(s) will be performed?

The project will raise Merrick Road so the crown of the roadway is above the FEMA 100 year flood elevation and replace the culvert with a new culvert with a larger opening to meet many of the resiliency guidelines. Part of this solution involves replacing existing ornamental fencing with aesthetic concrete crash barriers to improve an existing safety condition. The anticipated construction staging will close a turning lane in the median and maintain the existing one travel lane in each direction throughout phased construction.

D. Work to Date – Any preliminary planning, investigation of options, associated internal or external systems examined, etc.?

The project has an Initial Project Proposal (IPP) and is currently at the Final Design Report (FDR) stage of the design. There are existing cameras, aerial communication fibers and loop ITS elements. The existing poles and equipment are proposed to be replaced in-kind with new traffic signal poles and equipment.

E. Is this project considered "Exempt"? Yes__X__ No_____ If this project is determined to be Exempt, as defined in the Partnership Agreement, you may stop completing the SERF at this point. With FHWA concurrence, a Systems Engineering Analysis will not be required.

Arthur T. O'Connor 08/10/2023

F. Risk Assessment Guidance – Although this assessment is not a regulatory requirement, the answers to these questions will help in understanding the extent of risk involved in this project.

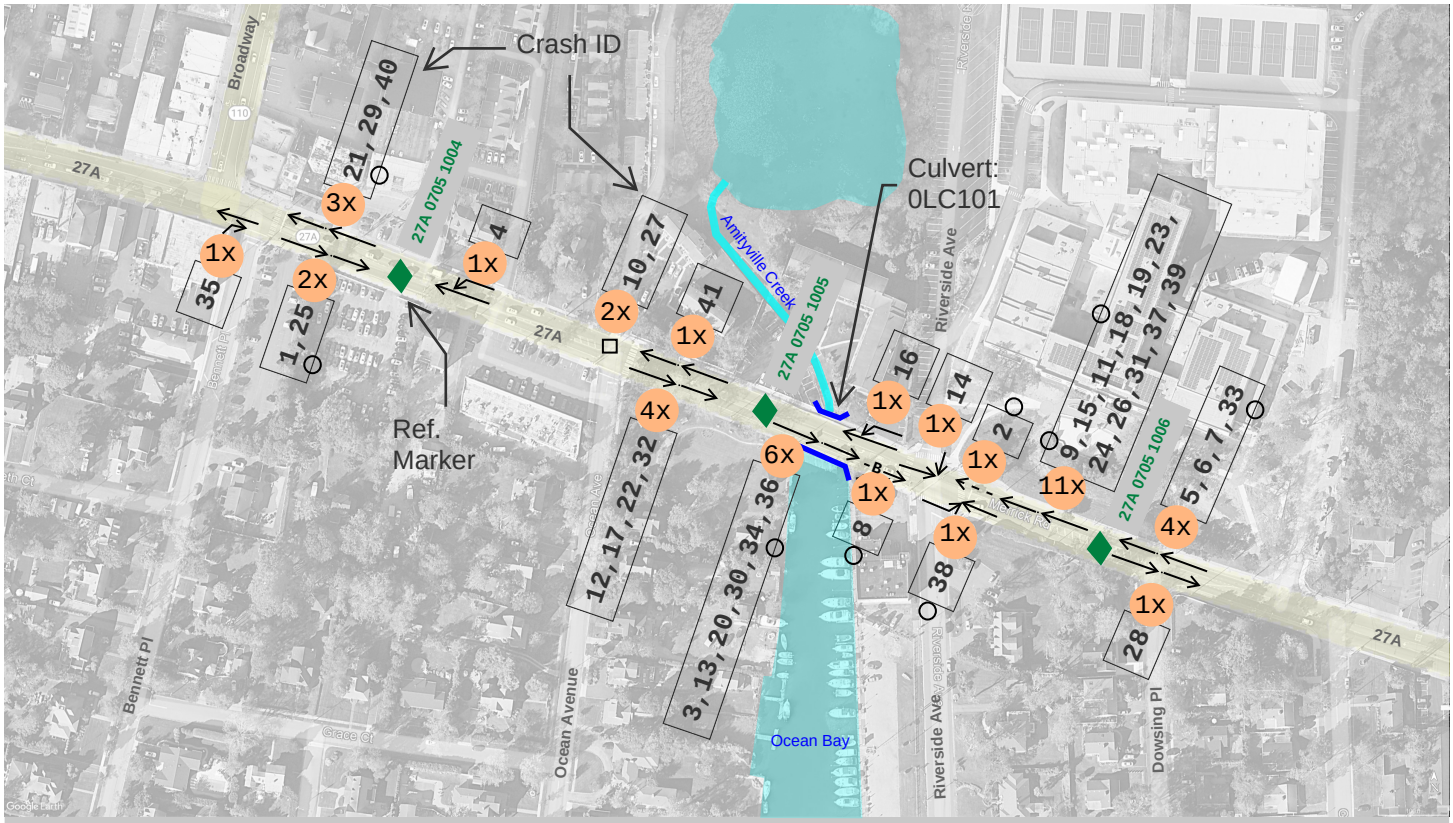
For each question, check Yes or No or Not Sure.

Question:	Yes	No	Not Sure
1. Will the project depend on *only <u>your</u> agency* to implement and operate?	X		
2. Will the project use only software proven elsewhere, with <u>*no*</u> new software writing?	X		
3. Will the project use only hardware and communications *proven* elsewhere?	X		
4. Will the project use only *existing interfaces* (no new interfaces to other systems)?	X		
5. Will the project use only *existing system requirements* that are defined in writing?	X		
6. Will the project use only *existing operating procedures* that are defined in writing?	X		
7. Will the project use only technologies with service life *longer* than 2-4 years?	X		

If all of the above are Yes, that is a <u>preliminary</u> indication that your project is **Low-Risk**.

DEPARTMENT OF TRANSPORTATION
COLLISION DIAGRAM

MUNICIPALITY	AMITYVILLE	COUNTY	SUFFOLK	FILE	TE 56_0LC101.pdf
SEGMENT	NY-27A BETWEEN BROADWAY AND DOWSING PLACE (INCL. CULVERT 0LC101)				
PERIOD	3 YR 0 MO	FROM	4 / 1 / 2018	TO	3 / 31 / 2021
BY	H&H	DATE	8 / 31 / 2022		



SYMBOLS

MOVING VEHICLE		PEDESTRIAN	
MOTORCYCLE	M	BICYCLE	B
BACKING VEHICLE		FIXED OBJECT	
STOPPED VEHICLE		PERSONAL INJURY	
PARKED VEHICLE		FATAL INJURY	

MANNER OF COLLISION

REAR-END		HEAD-ON	
SIDE-SWIPE (SAME D.)		LEFT-TURN (A. CAR)	
OUT OF CONTROL		RIGHT-ANGLE	
SKIDDING		RIGHT-TURN (A. CAR)	
OVERTURNED		LEFT-TURN (W. CAR)	

TE 213 (9/79)

DIAGRAM SHEET

STUDY NO. P.I.N.. 0LC101 INVENTORY NO.	ROUTE NO. 27A BETWEEN BROADWAY (NY-110) AND DOWSING PLACE	COUNTY: SUFFOLK MUNICIPALITY: AMITYVILLE VILLAGE BY: HARDESTY & HANOVER, LLC. DATE: 8/17/2022

NO. OF MONTHS 36 Begin Date: 6/01/2019 End Date: 5/31/2022	LIGHT CONDITIONS (LC) 1. Daylight 2. Dawn 3. Dusk 4. Dark Road Lighted 5. Dark Road Unlighted	ROADWAY CHARACTER (RC) 1. Straight & Level 2. Straight & Grade 3. Straight at Hillcrest 4. Curve & Level 5. Curve & Grade 6. Curve at Hillcrest	ROADWAY SURFACE CONDITION (RSC) 1. Dry 2. Wet 3. Muddy 4. Snow/Ice 5. Slush 10. Other	WEATHER (WEA) 1. Clear 2. Cloudy 3. Rain 4. Snow 5. Sleet/Hail/Freezing Rain 6. Fog/Smog/Smoke 10. Other

NO	CASE	DATE	TIME	# OF VEH	SEV	LC	RC	RSC	WEA	CONTRIB FACTORS	REF MKR	ACC TYPE	DESCRIPTION
1	37911940	6/3/2019	20:00	2	INJURY	3	1	1	1	2, 9	27A 0705 1004	REAR END	V1 AND V2 HEADING EB APPROACHING SIGNALIZED INTERSECTION AT BROADWAY. V1 STRUCKS V2 IN THE REAR AS V2 WAS SLOWING DOWN. V1 OPERATOR ARRESTED FOR DWI.
2	37913503	6/5/2019	13:57	1	INJURY	1	1	1	2	17	27A 0705 1006	PEDESTRIAN	V1 TRAVELLING EB THROUGH GREEN PHASE AT SIGNALIZED INTERSECTION AT RIVERSIDE AVE STRUCKS PEDESTRIAN CROSSING THE ROAD HEADING SOUTH.
3	37939460	6/21/2019	18:10	2	NR	1	1	1	1	4	27A 0705 1006	REAR END	V1 AND V2 TRAVELLING EB APPROACHING SIGNALIZED INTERSECTION AT RIVERSIDE AVE. V2 STOPPED AT THE LIGHT WHEN V1 OPERATOR GETS DISTRACTED AND STRUCKS V2 IN THE REAR.
4	37989022	7/18/2019	17:36	2	PDO	1	1	1	2	7, 20	27A 0705 1004	SIDESWIPE (SAME DIRECTION)	V1 TRAVELLING WB, IN THE WBR BAY AT THE SIGNALIZED INTERSECTION WITH BROADWAY. V2 TRAVELING WB ATTEMPTS TO ACCESS A DRIVEWAY JUST BEFORE THE INTERSECTION FAILS TO YIELD RIGHT OF WAY AND STRUCKS V1 ON THE DRIVER SIDE.
5	38002859	7/29/2019	19:09	2	PDO	1	1	1	1	9, 42	27A 0705 1006	REAR END	V1 AND V2 TRAVELING WB AT DOWSING PL APPROACHING SIGNALIZED INTERSECTION WITH RIVERSIDE AVE. V2 FOLLOWING TOO CLOSELY STRUCKS V1 IN THE REAR.
6	38025049	8/14/2019	18:27	2	PDO	1	1	2	2	4, 9	27A 0705 1006	REAR END	V1 AND V2 TRAVELING WB AT DOWSING PL APPROACHING SIGNALIZED INTERSECTION WITH RIVERSIDE AVE. V2 OPERATOR BEING DISTRACTED AND FOLLOWING TOO CLOSELY STRUCKS V1 IN THE REAR.
7	38025048	8/15/2019	8:07	3	PDO	1	1	1	1	4	27A 0705 1006	REAR END	V1, V2 AND V3 TRAVELING WB AT DOWSING PL APPROACHING SIGNALIZED INTERSECTION WITH RIVERSIDE AVE. V1 OPERATOR BEING DISTRACTED STRUCKS V2 IN THE REAR WHICH CAUSES V2 TO STRIKE V3 IN THE REAR.
8	38092266	9/23/2019	22:28	1	INJURY	4	1	1	1	4, 14, 29	27A 0705 1006	BICYCLIST	BICYCLIST TRAVELLING WB ON THE EB SIDE OF THE ROAD AT THE SIGNALIZED INTERSECTION WITH RIVERSIDE AVE WAS STRUCK BY VEHICLE V1 THAT WAS TRAVELING EB. ALTHOUGH V1 DIDN'T STOP AT THE SCENE, V1 OPERATOR TURNED HERSELF IN ACCOMPANIED BY PERSONAL ATTORNEY.
9	38155651	11/5/2019	09:10	2	INJURY	1	1	1	2	9	27A 0705 1006	REAR END	NOT AVAILABLE.

TE 213 (9/79)

DIAGRAM SHEET

STUDY NO. P.I.N.. 0LC101 INVENTORY NO.	ROUTE NO. 27A BETWEEN BROADWAY (NY-110) AND DOWSING PLACE	COUNTY: SUFFOLK MUNICIPALITY: AMITYVILLE VILLAGE BY: HARDESTY & HANOVER, LLC. DATE: 8/17/2022

NO. OF MONTHS 36 Begin Date: 6/01/2019 End Date: 5/31/2022	LIGHT CONDITIONS (LC) 1. Daylight 2. Dawn 3. Dusk 4. Dark Road Lighted 5. Dark Road Unlighted	ROADWAY CHARACTER (RC) 1. Straight & Level 2. Straight & Grade 3. Straight at Hillcrest 4. Curve & Level 5. Curve & Grade 6. Curve at Hillcrest	ROADWAY SURFACE CONDITION (RSC) 1. Dry 2. Wet 3. Muddy 4. Snow/Ice 5. Slush 10. Other	WEATHER (WEA) 1. Clear 2. Cloudy 3. Rain 4. Snow 5. Sleet/Hail/Freezing Rain 6. Fog/Smog/Smoke 10. Other

NO	CASE	DATE	TIME	# OF VEH	SEV	LC	RC	RSC	WEA	CONTRIB FACTORS	REF MKR	ACC TYPE	DESCRIPTION
10	38230566	11/25/2019	14:25	1	NR	1	1	1	1	4, 5	27A 0705 1004	FIXED OBJECT	V1 TRAVELLING WB IN THE VECINITY OF TWO-WAY STOP CONTOLLED INTERSECTION WITH OCEAN AVE, IT'S OPERATOR GETS DISTRACTED AND STRIKES A UTILITY POLE.
11	38196271	11/26/2019	19:51	2	NR	4	1	1	1	9, 19	27A 0705 1006	REAR END	V1 STOPPED AT RED LIGHT ON THE WB APPROACH TO RIVERSIDE AVE GETS REAR ENDED BY V2 WHICH WAS FOLLOSING TOO CLOSELY. V2 OPERATOR FLED THE SCENE BUT LATER APPEARED AT THE POLICE STATION.
12	38219357	12/9/2019	16:35	3	PDO	3	1	2	3	9, 66	27A 0705 1005	REAR END	V3 TRAVELLING EB AND FOLLOWING TOO CLOSELY V1 AND V2 TOWARDS SIGNALIZED INTERSECTION WITH RIVERSIDE AVE, REAR-ENDS V2 WHICH REAR-ENDS V1.
13	38253774	12/31/2019	14:51	3	PDO	1	1	1	1	4, 9	27A 0705 1006	REAR END	V3 OPERATED BY A DISTRACTED DRIVER TRAVELLING EB AND FOLLOWING TOO CLOSELY BEHIND V1 AND V2 TOWARDS SIGNALIZED INTERSECTION AT RIVERSIDE AVE, REAR-ENDS V2 WHICH REAR-ENDS V1.
14	38279408	1/8/2020	07:00	2	PDO	1	1	2	1	18	27A 0705 1006	RIGHT ANGLE	V1 TURNS SB FROM SIGNALIZED INTERSCETION WITH RIVERSIDE AVE AND STRIKES V2 IN A RIGHT ANGLE MANNER. V2 WAS MAKING AN ILLEGAL U-TURN.
15	38291201	1/23/2020	07:59	2	NR	1	1	1	2	4, 9	27A 0705 1006	REAR END	V1 AND V2 TRAVVELING WB AND APPROACHING SIGNALIZED INTERSECTION WITH RIVERSIDE AVE. V1 GETS REAR-ENDED BY V2 WHICH WAS FOLLOWING TOO CLOSELY AND OPERATED BY A DISTRACTED DRIVER.
16	38395899	2/27/2020	10:45	2	PDO	1	1	1	1	4, 18	27A 0705 1006	SIDESWIPE (SAME DIRECTION)	V1 TRAVELLING WB AND OPERATED BY AN DISTRACTED DRIVER TURNS SB AT SIGNALIZED INTERSECTION WITH RIVERSIDE AVE AND STRIKES PARKED AND UNNOCUPIED VEHICLE V2.
17	38399574	4/25/2020	15:49	2	NR	1	1	1	1	4, 9	27A 0705 1005	REAR END	V1 TRAVELLING EB IN THE VECINITY OF TWO-WAY STOP CONTROLLED INTERSECTION OF OCEAN AVETOWARDS IS OPERATED BY A DISTRACTER DRIVER AND FOLLOWING TOO CLOSELY BEHIND V2. V1 STRIKES V2 IN THE REAR BUMPER.

TE 213 (9/79)

DIAGRAM SHEET

STUDY NO. P.I.N.. 0LC101 INVENTORY NO.	ROUTE NO. 27A BETWEEN BROADWAY (NY-110) AND DOWSING PLACE	COUNTY: SUFFOLK MUNICIPALITY: AMITYVILLE VILLAGE BY: HARDESTY & HANOVER, LLC. DATE: 8/17/2022

NO. OF MONTHS 36 Begin Date: 6/01/2019 End Date: 5/31/2022	LIGHT CONDITIONS (LC) 1. Daylight 2. Dawn 3. Dusk 4. Dark Road Lighted 5. Dark Road Unlighted	ROADWAY CHARACTER (RC) 1. Straight & Level 2. Straight & Grade 3. Straight at Hillcrest 4. Curve & Level 5. Curve & Grade 6. Curve at Hillcrest	ROADWAY SURFACE CONDITION (RSC) 1. Dry 2. Wet 3. Muddy 4. Snow/Ice 5. Slush 10. Other	WEATHER (WEA) 1. Clear 2. Cloudy 3. Rain 4. Snow 5. Sleet/Hail/Freezing Rain 6. Fog/Smog/Smoke 10. Other

NO	CASE	DATE	TIME	# OF VEH	SEV	LC	RC	RSC	WEA	CONTRIB FACTORS	REF MKR	ACC TYPE	DESCRIPTION
18	38403757	5/2/2020	11:14	3	INJURY	1	1	1	1	9, 42	27A 0705 1006	REAR END	V1 TRAVELING WB AND FOLLOWING TOO CLOSELY BEHIND V2 AND V3 ATTEMPTS TO STOP AT SIGNALIZED INTERSECTION WITH RIVERSIDE AVE BUT STRIKES V2 IN THE REAR WHICH CAUSES V2 TO STRIKE V3 IN THE REAR. DRIVER OF V1 CLAIMS DEFECTIVE BRAKES AS THE CAUSE.
19	38446133	6/18/2020	09:12	2	NR	1	1	1	2	4, 9	27A 0705 1006	REAR END	V1 TRAVELLING WB NEAR THE SIGNALIZED INTERSECTION WITH RIVERSIDE AVE IS STOPPED IN TRAFFIC AND STRUCK IN THE REAR BY V2 WHICH WAS FOLLOWING TOO CLOSELY AND OPERATED BY A DISTRACTED DRIVER.
20	38453667	6/24/2020	13:11	2	PDO	1	1	1	1	9, 42	27A 0705 1005	REAR END	V1 TRAVELLING EB AND STOPPED IN TRAFFIC ON THE APROACH TO SIGNALIZED INTERSECTION OF RIVERSIDE AVE IS STRUCK FROM BEHIND BY V2 WHO WAS FOLLOWING TOO CLOSELY AND CLAIM DEFECTIVE BRAKES.
21	38479671	7/18/2020	17:50	2	INJURY	1	1	1	2	9	27A 0705 1004	REAR END	V1 TRAVELLING WB AND SLOWING DOWN ON THE APROACH TO SIGNALIZED INTERSECTION WITH BROADWAY IS STRUCK IN THE REAR BY V2 WHICH WAS FOLLOWING TOO CLOSELY.
22	38508392	7/20/2020	22:30	2	PDO	4	1	1	1	4, 9	27A 0705 1005	REAR END	V1 TRAVELLING EB TURNING RIGHT AT TWO-WAY STOP CONTROLLED INTERSECTION WITH OCEAN AVE GETS REAR ENDED BY V2 WHICH WAS FOLLOWING TOO CLOSELY AND OPERATED BY A DISTRACTED DRIVER.
23	38508391	8/10/2020	17:27	3	NR	1	1	1	1	4, 9	27A 0705 1006	REAR END	V3 OPERATED BY A DISTRACTED DRIVER TRAVELLING WB AND FOLLOWING TOO CLOSELY BEHIND V1 AND V2 TOWARDS SIGNALIZED INTERSECTION AT RIVERSIDE AVE, REAR-ENDS V2 WHICH REAR-ENDS V1.
24	38544477	9/8/2020	07:46	2	NR	1	1	1	1	9	27A 0705 1005	REAR END	V2 TRAVELLING WB AND FOLLOWING TOO CLOSELY BEHIND V1 TOWARDS SIGNALIZED INTERSECTION WITH RIVERSIDE AVE, REAR-ENDS V1.
25	38576977	10/2/2020	19:50	2	PDO	4	1	1	1	3, 4	27A 0705 1004	REAR END	V1 AND V2 ARE BOTH BACKING UNSAFELY IN A NORTHERLY AND EASTERLY DIRECTION, RESPECTIVELY, WITHIN THE PARKING LOT OF THE COMMERCIAL PLAZA AT 173 MERRICK RD, CAUSING A COLLISON.
26	38782195	12/21/2020	12:50	2	PDO	1	1	1	1	XX	27A 0705 1006	REAR END	NOT AVAILABLE.

TE 213 (9/79)

DIAGRAM SHEET

STUDY NO.

P.I.N.. 0LC101

INVENTORY NO.

ROUTE NO. 27A

BETWEEN BROADWAY (NY-110) AND DOWSING PLACE

COUNTY: SUFFOLK
MUNICIPALITY: AMITYVILLE VILLAGE
BY: HARDESTY & HANOVER, LLC.
DATE: 8/17/2022

NO. OF MONTHS
36

Begin Date: 6/01/2019

End Date: 5/31/2022

LIGHT CONDITIONS (LC)

1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

ROADWAY CHARACTER (RC)

1. Straight & Level
2. Straight & Grade
3. Straight at Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve at Hillcrest

ROADWAY SURFACE CONDITION (RSC)

1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

WEATHER (WEA)

1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

NO	CASE	DATE	TIME	# OF VEH	SEV	LC	RC	RSC	WEA	CONTRIB FACTORS	REF MKR	ACC TYPE	DESCRIPTION
27	38693460	1/9/2021	19:43	1	PDO	4	1	1	1	4, 7	27A 0705 1005	FIXED OBJECT	V1 TRAVELLING NB ON OCEAN AVE AT THE TWO-WAY STOP CONTROLLED INTERSECTION WITH MERRICK RD, IS OPERATED BY A DISTRACTED DRIVER. V1 STRIKES A TREE.
28	38693456	1/9/2021	9:47	2	PDO	1	1	1	1	9	27A 0705 1006	REAR END	V1 TRAVELLING EB APROACHING UNSIGNALIZED INTERSECTION WITH DOWSING PL AND PREPARING TO TURN RIGHT GETS STRUCK BY V2 WHICH ATTEMPTED TO PASS V1 ON THE LEFT.
29	38763667	2/18/2021	11:30	2	PDO	1	1	1	2	9	27A 0705 1004	REAR END	V1 TRAVELLING WB APROACHING THE SIGNALIZED INTERSECTION OF BROADWAY AND BENNET PL, IS STRUCK IN THE REAR BY V2 WHICH WAS FOLLWOING TOO CLOSELY.
30	38815857	4/12/2021	14:45	2	PDO	1	1	1	2	9, 26	27A 0705 1006	REAR END	V1 TRAVELLING EB APPROACHING SIGNALIZED INTERSECTION WITH RIVERSIDE AVE, IS SLOWING DOWN AND STRUCK IN THE REAR BY V2 WHICH WAS FOLLOWING TOO CLOSELY.
31	38819339	4/16/2021	14:30	2	PDO	1	1	1	2	9	27A 0705 1006	REAR END	V2 TRAVELLING WB AND FOLLOWING TOO CLOSELY BEHIND V1 AT SIGNALIZED INTERSCETION WITH RIVERSIDE AVE. V2 STRIKES V1 IN THE REAR.
32	38870299	5/28/2021	16:34	2	PDO	1	1	2	3	9	27A 0705 1005	REAR END	V1 TRAVELLING EB AT TWO-WAY STOP CONTROLLED INTERSECTION WITH OCEAN AVE, STOPS IN TRAFFIC DUE TO RED LIGHT AT FOLLOWING INTERSECTION AND IT'S STRUCK IN THE REAR BY V2 WHICH WAS FOLLOWING TOO CLOSELY.
33	38905239	6/23/2021	13:25	3	INJURY	1	1	1	1	9, 62	27A 0705 1006	REAR END	V1 TRAVELLING WB NEAR DOWSING PL STOPS IN TRAFFIC DUE TO RED LIGHT AT RIVERSIDE AVE AND GETS REAR-ENDED BY V2 WHICH WAS FOLLOWING TOO CLOSELY. V2 OPERATOR BLAMES GLARE.
34	38948450	7/21/2021	16:40	2	INJURY	1	1	1	1	9	27A 0705 1005	REAR END	V2 TRAVELLING EB NEAR TWO-WAY STOP CONTROLLED INTERSECTION WITH OCEAN AVE IS FOLLOWING TOO CLOSELY BEHIND V1. V2 STRIKES V1 IN THE REAR.
35	39021646	9/17/2021	15:22	2	PDO	1	1	1	2	9	27A 0705 1004	RIGHT TURN (AGAINST OTHER CAR)	V1 TRAVELLING EB NEAR SIGNALIZED INTERSECTION WITH BROADWAY/BENNET PL AND MAKING A RIGHT TURN INTO PARKING LOT GETS STRUCK BY V2 IN THE REAR BUMPER. V2 WAS FOLLOWING TOO CLOSELY AND OPERATED CLAIMS V1 FAILED TO SIGNAL THE TURN.

TE 213 (9/79)

DIAGRAM SHEET

STUDY NO.

P.I.N.. 0LC101

INVENTORY NO.

ROUTE NO. 27A

BETWEEN BROADWAY (NY-110) AND DOWSING PLACE

COUNTY: SUFFOLK
MUNICIPALITY: AMITYVILLE VILLAGE
BY: HARDESTY & HANOVER, LLC.
DATE: 8/17/2022

NO. OF MONTHS
36

Begin Date: 6/01/2019

End Date: 5/31/2022

LIGHT CONDITIONS (LC)

1. Daylight
2. Dawn
3. Dusk
4. Dark Road Lighted
5. Dark Road Unlighted

ROADWAY CHARACTER (RC)

1. Straight & Level
2. Straight & Grade
3. Straight at Hillcrest
4. Curve & Level
5. Curve & Grade
6. Curve at Hillcrest

ROADWAY SURFACE CONDITION (RSC)

1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush
10. Other

WEATHER (WEA)

1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
10. Other

NO	CASE	DATE	TIME	# OF VEH	SEV	LC	RC	RSC	WEA	CONTRIB FACTORS	REF MKR	ACC TYPE	DESCRIPTION
36	39021597	9/17/2021	13:20	2	PDO	1	1	1	2	4	27A 0705 1005	REAR END	V1 TRAVELLING EB NEAR SIGNALIZED INTERSCETION WITH RIVERSIDE AVE STOPS AT RED LIGHT AND GETS STRUCK IN THE REAR BY V2 WHICH WAS OPERATED BY DISTRACTED DRIVER.
37	39039123	10/1/2021	16:32	2	PDO	1	1	1	1	4	27A 0705 1005	REAR END	V2 TRAVELING WB AND OPERATED BY DISTRACTED DRIVER NEAR SIGNALIZED INTERSECTION WITH RIVERSIDE AVE REAR-ENDS V1 WHICH WAS STOPPED IN TRAFFIC.
38	39101425	11/13/2021	16:11	2	INJURY	1	1	2	2	4, 17	27A 0705 1005	LEFT TURN (AGAINST OTHER CAR)	V1 MAKING A NBL TURN ONTO MERRICK RD AT SIGNALIZED INTERSECTION WITH RIVERSIDE AVE IS STRUCKL BY V2 WHICH DISREGARDED THE RED LIGHT ON IT'S EB APPROACH.
39	39146763	12/12/2021	16:57	2	PDO	4	1	1	1	9	27A 0705 1005	REAR END	V2 TRAVELING WB AND FOLLOWING TOO CLOSELY BEHIND V1 NEAR SIGNALIZED INTERSECTION WITH RIVERSIDE AVE REAR-ENDS V1 WHICH WAS STOPPED IN TRAFFIC.
40	39148587	12/13/2021	7:55	2	PDO	1	1	1	1	9	27A 0705 1004	REAR END	V2 TRAVELING WB AND FOLLOWING TOO CLOSELY BEHIND V1 NEAR SIGNALIZED INTERSECTION WITH BENNET PL REAR-ENDS V1 WHICH WAS STOPPED IN TRAFFIC.
41	39363980	5/26/2022	17:00	3	PDO	1	1	1	1	9	27A 0705 1005	REAR END	V1 TRAVELLING WB AND FOLLOWING TOO CLOSELY TO V2 NEAR TWO WAY-STOP CONTROLLED INTERSECTION WITH OCEAN AVE REAR-ENDS V2 WHICH WAS STOPPED IN TRAFFIC CASUING V2 TO REAR-END V3.

NYSDOT Safety Information Management System

Summary Report By Accident Category

Intersection & Non-Intersection Accidents

Complete Accident Data From NYSDMV Is Only Available thru 31-MAR-2021

ROUTE: 27A HIGHWAY LOCATION 27A 0705 1004 - 27A 0705 1006
DATES: APR-01-2018 - MAR-31-2021

REPORTABLE ACCIDENTS BY YEAR AND SEVERITY

TIME PERIOD	FATAL	INJURY	P-D-O	NON-REPORTABLE	TOTALS
APR-01-2018 - DEC-31-2018	0	1	3	4	8
JAN-01-2019 - DEC-31-2019	0	7	6	7	20
JAN-01-2020 - DEC-31-2020	0	3	5	5	13
JAN-01-2021 - MAR-31-2021	0	1	2	2	5
TOTALS	0	12	16	18	46

NYSDOT Safety Information Management System
Summary Report By Accident Category
Intersection & Non-Intersection Accidents
Complete Accident Data From NYSDMV Is Only Available thru 31-MAR-2021

ROUTE: 27A HIGHWAY LOCATION 27A 0705 1004 - 27A 0705 1006
DATES: APR-01-2018 - MAR-31-2021

REPORTABLE ACCIDENTS BY SEVERITY AND MANNER OF COLLISION

MANNER OF COLLISION	FATAL	INJURY	P-D-O/NR**	TOTALS
REAR END	0	4	20	24
OVERTAKING	0	0	3	3
LEFT TURN (AGAINST OTHER CAR)	0	1	2	3
LEFT TURN (WITH OTHER CAR)	0	0	0	0
RIGHT ANGLE	0	1	1	2
RIGHT TURN (WITH OTHER CAR)	0	0	0	0
RIGHT TURN (AGAINST OTHER CAR)	0	0	0	0
HEAD ON	0	0	1	1
SIDESWIPE	0	0	0	0
UNKNOWN	0	6	7	13
T O T A L S	0	12	34	46

REPORTABLE ACCIDENTS BY SEVERITY AND ROAD SURFACE CONDITION

ROAD SURFACE CONDITION	FATAL	INJURY	P-D-O/NR**	TOTALS
DRY	0	10	28	38
WET	0	1	6	7
MUDDY	0	0	0	0
SNOW/ICE	0	1	0	1
SLUSH	0	0	0	0
FLOODED WATER	0	0	0	0
OTHER/UNKNOWN	0	0	0	0
T O T A L S	0	12	34	46

**NOTE: P-D-O/NR may include non-reportable accidents if they are fully-coded.

ROUTE: 27A HIGHWAY LOCATION 27A 0705 1004 - 27A 0705 1006
DATES: APR-01-2018 - MAR-31-2021

REPORTABLE ACCIDENTS BY SEVERITY AND WEATHER CONDITION

WEATHER CONDITION	FATAL	INJURY	P-D-O/NR**	TOTALS
CLEAR	0	6	23	29
CLOUDY	0	4	6	10
RAIN	0	1	5	6
SNOW	0	1	0	1
SLEET/HAIL/FREEZING RAIN	0	0	0	0
FOG/SMOG/SMOKE	0	0	0	0
OTHER/UNKNOWN	0	0	0	0
T O T A L S	0	12	34	46

REPORTABLE ACCIDENTS BY SEVERITY AND LIGHT CONDITION

LIGHT CONDITION	FATAL	INJURY	P-D-O/NR**	TOTALS
DAYLIGHT	0	10	26	36
DAWN	0	0	0	0
DUSK	0	1	1	2
DARK-ROAD LIGHTED	0	1	6	7
DARK-ROAD UNLIGHTED	0	0	1	1
OTHER/UNKNOWN	0	0	0	0
T O T A L S	0	12	34	46

**NOTE: P-D-O/NR may include non-reportable accidents if they are fully-coded.

ROUTE: 27A HIGHWAY LOCATION 27A 0705 1004 - 27A 0705 1006
DATES: APR-01-2018 - MAR-31-2021

CONTRIBUTING FACTORS BY NUMBER OF OCCURRENCES

CONTRIBUTING FACTOR	NUMBER OF OCCURRENCES	CONTRIBUTING FACTOR	NUMBER OF OCCURRENCES
DRIVER FACTORS:			
NONE	0	ALCOHOL INVOLVEMENT	3
BACKING UNSAFELY	3	DRIVER INATTENTION	22
DRIVER INEXPERIENCE	1	DRUGS (ILLEGAL)	0
FAILURE TO YIELD RIGHT OF WAY	6	FELL ASLEEP	0
FOLLOWING TOO CLOSELY	31	FATIGUED/DROWSY	0
LOST CONSCIOUSNESS	0	ILLNESS	0
PASSING OR LANE USAGE IMPROPERLY	1	PASSENGER DISTRACTION	0
PHYSICAL DISABILITY	0	PEDESTRIAN'S ERROR/CONFUSION	1
TRAFFIC CONTROL DEVICES DISREGARDED	3	PRESCRIPTION MEDICATION	0
UNSAFE SPEED	2	TURNING IMPROPER	2
UNSAFE LANE CHANGE	1	CELL PHONE (HAND HELD)	0
CELL PHONE (HANDS FREE)	0	OTHER ELECTRONIC DEVICE	0
OUTSIDE CAR DISTRACTION	0	REACTION TO OTHER UNINVOLVED VEHICL	1
FAILURE TO KEEP RIGHT	0	AGGRESSIVE DRIVING/ROAD RAGE	0
OTHER (HUMAN)	0		
VEHICLE FACTORS:			
ACCELERATOR DEFECTIVE	0	BRAKES DEFECTIVE	3
HEADLIGHTS DEFECTIVE	0	OTHER LIGHTING DEFECTS	0
OVERSIZED VEHICLE	0	STEERING FAILURE	0
TIRE FAILURE/INADEQUATE	0	TOW HITCH DEFECTIVE	0
WINDSHIELD INADEQUATE	0	DRIVERLESS/RUNAWAY VEHICLE	0
OTHER (VEHICLE)	0		
ENVIRONMENTAL FACTORS:			
ANIMAL'S ACTION	0	GLARE	0
LANE MARKING IMPROPER/INADEQUATE	0	OBSTRUCTION/DEBRIS	0
PAVEMENT DEFECTIVE	0	PAVEMENT SLIPPERY	1
SHOULDERS DEFECTIVE/IMPROPER	0	TRAF CNTRL DEV IMPROPER/NON-WRKING	0
VIEW OBSTRUCTED/LIMITED	0	OTHER (ENVIRONMENTAL)	0
UNKNOWN/NOT RECORDED	112		

NYSDOT Safety Information Management System

Summary Report By Accident Category

Intersection & Non-Intersection Accidents

Complete Accident Data From NYSDMV Is Only Available thru 31-MAR-2021

ROUTE: 27A HIGHWAY LOCATION 27A 0705 1004 - 27A 0705 1006
DATES: APR-01-2018 - MAR-31-2021

REPORTABLE ACCIDENTS BY SEVERITY AND TYPE OF ACCIDENT

TYPE OF ACCIDENT	FIRST EVENT NUMBER OF FATAL	FIRST EVENT NUMBER OF INJURY	FIRST EVENT NUMBER OF P-D-O/NR**	FIRST EVENT OCCURRENCES TOTALS	SECOND EVENT NUMBER OF OCCURRENCES
COLLISION WITH MOTOR VEHICLE	0	8	32	40	5
COLLISION WITH PEDESTRIAN	0	1	0	1	0
COLL. W/BICYCLIST/IN-LINE SKATER	0	2	0	2	0
COLL. W/ANIMAL INCLUDES DEER	0	0	0	0	0
COLLISION WITH RAILROAD TRAIN	0	0	0	0	0
COLLISION WITH OTHER	0	0	0	0	0
COLL. W/LIGHT SUPPORT/UTILITY POLE	0	1	1	2	0
COLLISION WITH GUIDE RAIL	0	0	0	0	0
COLLISION WITH GUIDERAIL - END	0	0	0	0	0
COLLISION WITH CRASH CUSHION	0	0	0	0	0
COLLISION WITH SIGN POST	0	0	0	0	0
COLLISION WITH TREE	0	0	1	1	0
COLLISION WITH BUILDING/WALL	0	0	0	0	0
COLLISION WITH CURBING	0	0	0	0	0
COLLISION WITH FENCE	0	0	0	0	0
COLLISION WITH BRIDGE STRUCTURE	0	0	0	0	0
COLLISION WITH CULVERT/HEADWALL	0	0	0	0	0
COLLISION WITH MEDIAN/BARRIER	0	0	0	0	0
COLLISION WITH MEDIAN/BARRIER - END	0	0	0	0	0
COLLISION WITH OTHER BARRIER	0	0	0	0	0
COLLISION WITH SNOW EMBANKMENT	0	0	0	0	0
COLL. W/EARTH ELE./ROCK CUT/DITCH	0	0	0	0	0
COLLISION WITH FIRE HYDRANT	0	0	0	0	0
COLLISION WITH OTHER FIXED OBJECT	0	0	0	0	0
OVERTURNED	0	0	0	0	0
FIRE/EXPLOSION	0	0	0	0	0
SUBMERSION	0	0	0	0	0
RAN OFF ROAD ONLY	0	0	0	0	0
OTHER NON-COLLISION	0	0	0	0	0
ACC TYPE UNKNOWN	0	0	0	0	92
TOTALS	0	12	34	46	97

**NOTE: P-D-O/NR may include non-reportable accidents if they are fully-coded.

NYSDOT Safety Information Management System
Summary Report By Segment And/Or Intersection
Intersection & Non-Intersection Accidents
Complete Accident Data From NYSDMV Is Only Available thru 31-MAR-2021

ROUTE: 27A HIGHWAY LOCATION: 27A07051004 - 27A07051006 DATES: 01-APR-2018 - 31-MAR-2021

REFERENCE	INT.	DESCRIPTION	NUMBER OF ACCIDENTS											
			TOTAL	FTL	INJ	PDO	N/R	WET ROAD **	FIXED OBJ **	PED& BIKE **	TRUCK *** **	LIGHT CONDITION DWN/DSK **	DAY **	NIGHT **
27A 0705 1004			11	0	3	2	6	1	1	0	0	1	9	1
27A 0705 1004	03	OCEAN AVE	11	0	2	7	2	1	1	1	1	1	7	3
27A 0705 1005			6	0	1	3	2	4	1	0	0	0	4	2
27A 0705 1005	89	RIVERSIDE AVE- E AV	10	0	3	3	4	0	0	1	0	0	9	1
27A 0705 1006			4	0	3	0	1	0	0	1	1	0	3	1
27A 0705 1006	06	DOWSING PL	4	0	0	1	3	1	0	0	0	0	4	0
		ROUTE TOTAL EXCLUDES 999 RMS	46	0	12	16	18	7	3	3	2	2	36	8

** EXCLUDES PARTIALLY CODED NON-REPORTABLES *** EXCLUDES PICKUPS & VANS

TRAFFIC INVESTIGATION DATA

SPEED STUDY
Merrick Road (NY 27A) between Amityville Memorial High School Access and Grand Central Avenue
Amityville, Suffolk County, New York

Submitted to:
New York State Department of Transportation
Traffic Engineering and Safety Group
Region 10
Hauppauge, New York

Contract D038232, PIN DE22.10.HPI

Prepared by:
Michael Baker International, Inc.
225 West 34th Street, Suite 1304
New York, New York 10122

Michael Baker
INTERNATIONAL

January 2023

SPEED STUDY

Merrick Road (NY 27A) between Amityville Memorial High School Access and Grand Central Avenue

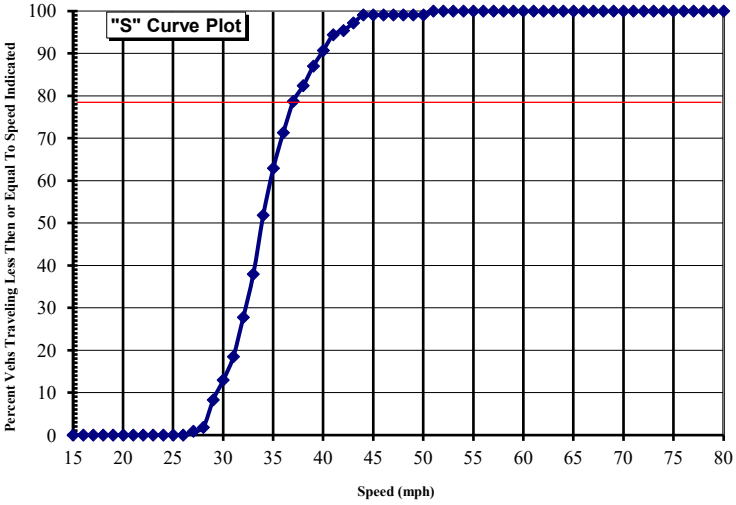
Date:	**1/20/2023**	**Hwy:**	**Merrick Road (NY 27A)**		**Direction:**	**EB**	**SUMMARY OF VEHICLES BY TYPE:**
Time:	**11:00 AM - 3:00 PM**	**Location:**	**between Amityville H.S.**		**Posted Speed:**	**20 mph**	
Observer(s):	**Jason Reed**		**Access and Grand**		**Weather:**	**Cloudy, 47°F**	Passenger = 88.0%
			Central Avenue		**Pav't Condition:**	**Fair**	Trucks = 8.3%
		County:	**Suffolk County**				Buses = 3.7%

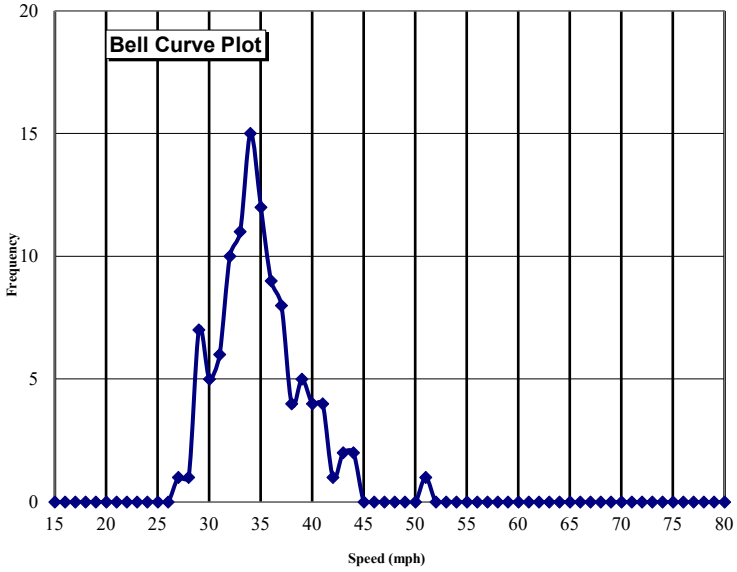
SPEED RANGE	No. VEHICLES (f)	Speed * #	CUMM No. VEHICLES	CUMM %
15	0	0	0	0.0
16	0	0	0	0.0
17	0	0	0	0.0
18	0	0	0	0.0
19	0	0	0	0.0
20	0	0	0	0.0
21	0	0	0	0.0
22	0	0	0	0.0
23	0	0	0	0.0
24	0	0	0	0.0
25	0	0	0	0.0
26	0	0	0	0.0
27	1	27	1	0.9
28	1	28	2	1.9
29	7	203	9	8.3
30	5	150	14	13.0
31	6	186	20	18.5
32	10	320	30	27.8
33	11	363	41	38.0
34	15	510	56	51.9
35	12	420	68	63.0
36	9	324	77	71.3
37	8	296	85	78.7
38	4	152	89	82.4
39	5	195	94	87.0
40	4	160	98	90.7
41	4	164	102	94.4
42	1	42	103	95.4
43	2	86	105	97.2
44	2	88	107	99.1
45	0	0	107	99.1
46	0	0	107	99.1
47	0	0	107	99.1
48	0	0	107	99.1
49	0	0	107	99.1
50	0	0	107	99.1
51	1	51	108	100.0
52	0	0	108	100.0
53	0	0	108	100.0
54	0	0	108	100.0
55	0	0	108	100.0
56	0	0	108	100.0
57	0	0	108	100.0
58	0	0	108	100.0
59	0	0	108	100.0
60	0	0	108	100.0
61	0	0	108	100.0
62	0	0	108	100.0
63	0	0	108	100.0
64	0	0	108	100.0
65	0	0	108	100.0
66	0	0	108	100.0
67	0	0	108	100.0
68	0	0	108	100.0
69	0	0	108	100.0
70	0	0	108	100.0
71	0	0	108	100.0
72	0	0	108	100.0
73	0	0	108	100.0
74	0	0	108	100.0
75	0	0	108	100.0
76	0	0	108	100.0
77	0	0	108	100.0
78	0	0	108	100.0
79	0	0	108	100.0
80	0	0	108	100.0
	108			

STUDY RESULTS

AVERAGE SPEED	50th PERCENTILE	85th PERCENTILE	PACE SPEED RANGE
34.9	**33.9**	**38.6**	**29.0 to 38.0**

% In Pace = 80.6%
% Over Pace = 17.6%
% Under Pace = 1.9%





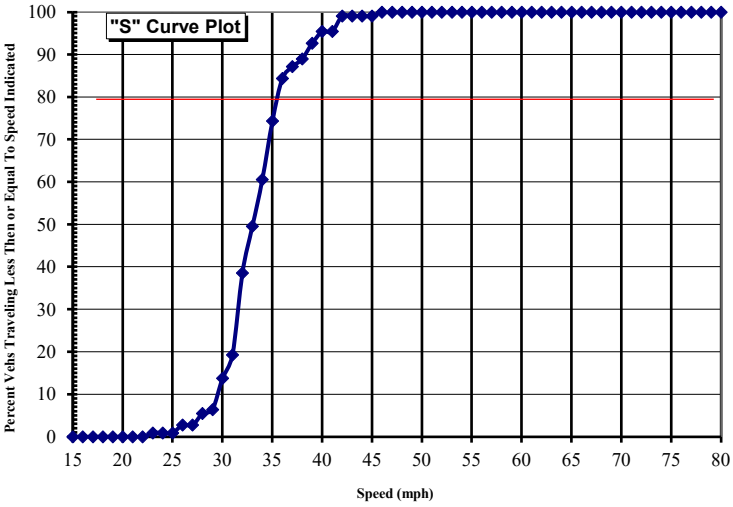
Date:	**1/20/2023**	**Hwy:**	**Merrick Road (NY 27A)**		**Direction:**	**WB**	**SUMMARY OF VEHICLES BY TYPE:**
Time:	**11:00 AM - 3:00 PM**	**Location:**	**between Amityville H.S.**		**Posted Speed:**	**20 mph**	
Observer(s):	**Jason Reed**		**Access and Grand**		**Weather:**	**Cloudy, 47°F**	Passenger = 91.7%
			Central Avenue		**Pav't Condition:**	**Fair**	Trucks = 6.4%
		County:	**Suffolk County**				Buses = 1.8%

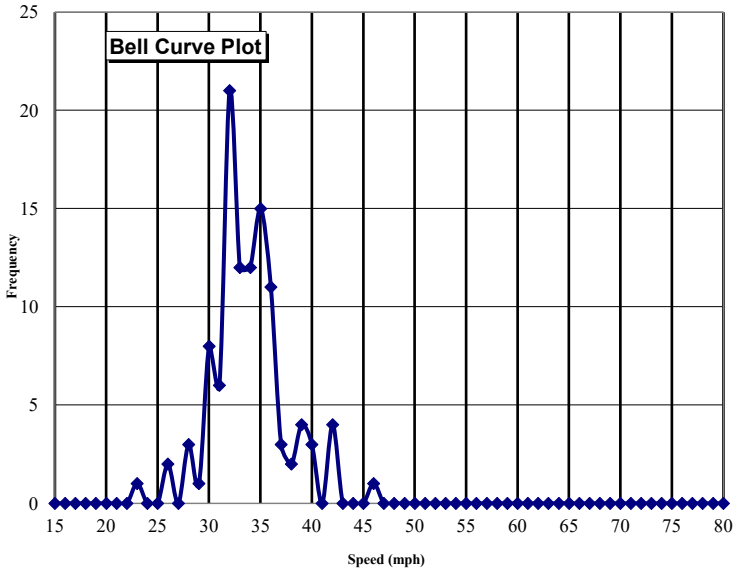
SPEED RANGE	No. VEHICLES (f)	Speed * #	CUMM No. VEHICLES	CUMM %
15	0	0	0	0.0
16	0	0	0	0.0
17	0	0	0	0.0
18	0	0	0	0.0
19	0	0	0	0.0
20	0	0	0	0.0
21	0	0	0	0.0
22	0	0	0	0.0
23	1	23	1	0.9
24	0	0	1	0.9
25	0	0	1	0.9
26	2	52	3	2.8
27	0	0	3	2.8
28	3	84	6	5.5
29	1	29	7	6.4
30	8	240	15	13.8
31	6	186	21	19.3
32	21	672	42	38.5
33	12	396	54	49.5
34	12	408	66	60.6
35	15	525	81	74.3
36	11	396	92	84.4
37	3	111	95	87.2
38	2	76	97	89.0
39	4	156	101	92.7
40	3	120	104	95.4
41	0	0	104	95.4
42	4	168	108	99.1
43	0	0	108	99.1
44	0	0	108	99.1
45	0	0	108	99.1
46	1	46	109	100.0
47	0	0	109	100.0
48	0	0	109	100.0
49	0	0	109	100.0
50	0	0	109	100.0
51	0	0	109	100.0
52	0	0	109	100.0
53	0	0	109	100.0
54	0	0	109	100.0
55	0	0	109	100.0
56	0	0	109	100.0
57	0	0	109	100.0
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60	0	0	109	100.0
61	0	0	109	100.0
62	0	0	109	100.0
63	0	0	109	100.0
64	0	0	109	100.0
65	0	0	109	100.0
66	0	0	109	100.0
67	0	0	109	100.0
68	0	0	109	100.0
69	0	0	109	100.0
70	0	0	109	100.0
71	0	0	109	100.0
72	0	0	109	100.0
73	0	0	109	100.0
74	0	0	109	100.0
75	0	0	109	100.0
76	0	0	109	100.0
77	0	0	109	100.0
78	0	0	109	100.0
79	0	0	109	100.0
80	0	0	109	100.0
	109			

STUDY RESULTS

AVERAGE SPEED	50th PERCENTILE	85th PERCENTILE	PACE SPEED RANGE
33.8	**33.0**	**36.2**	**30.0 to 39.0**

% In Pace = 86.2%
% Over Pace = 7.3%
% Under Pace = 6.4%





ATTACHMENT D

Pavement Information

N/A

ATTACHMENT E

Structures Information

New York State Department of Transportation
General Large Culvert Inspection Report

Inspection Date: October 31, 2022

Structure Information

CIN: **C050001**
Feature Carried: 27A 27A 07051005
Feature Crossed: AMITYVILLE CREEK
Orientation: 3 - EAST

Region: 10 - LONG ISLAND
County: SUFFOLK
Political Unit: Village of AMITYVILLE
Approximate Year Built: 1951

Primary Owner: New York State Department of Transportation
Primary Maintenance Responsibility: New York State Department of Transportation
General Type Main Span: 1 - Concrete, 19 - Culvert
This Bridge is not a Ramp
Number of Spans: 1

Postings

Posted Load Matches Inventory: Yes
Posted Load in field: Not Posted

Posted Vertical Clearances Match Inventory: N/A
Inventory On: Not Posted
Inventory Under: Not Posted

Number of Flags Issued

Red PIA: 0
Red: 0
Yellow: 2
Safety PIA: 0

New York State Inspection Overview

General Recommendation: 3

Action Items

Non-Structural Condition Observations noted: NO
Vulnerability Reviews Recommended: NO
Diving Inspection Requested: NO
Further Investigation Requested: NO

Inspector & Reviewer Signature Information

Inspection Signature: Fiacre Lee — *Date:* November 02, 2022
Review Signature: Nicholas Demos, P.E. 068529-1 — *Date:* December 23, 2022
Processed by : Sonjoy Sikder, P.E. 088574-1 — *Date:* February 07, 2023

Report Printed: February 07, 2023 12:09:54 PM

Additional Information

Overloads Observed

No overload vehicles observed during this inspection.

Notes to Next Inspector

Structure Type: 3-sided frame with slab top with wingwalls founded on footings at left side
Structure located below Route 27A eastbound and westbound, Ref. Marker 27A07051005 located above end abutment at right side
Barrel length = 65'
Span length = 6'
Height of opening = 3'
Depth of cover = 2'
Skew angle = 5°
CIN Plate located on Ref. Marker 27A07051005 sign post

The culvert should be inspected during low tide as the culvert empties into a harbor at the right side, and access through the right side of the culvert is impeded by a wooden deck.

Improvements Observed

2022 - None

Pedestrian Fence Height

4'

Snow Fence

None

Bin Plate Condition

OK

Field Notes

Staff Present During Inspection		
Name	**Title**	**Organization**
Charles Carway	ACI	JUNMA

General Equipment Required for Inspection*
Access Type
13 - Walking
14 - Step Ladder

*** For span specific equipment requirements refer to the Active Inventory's "Access Needs" tab in BDIS.**

Detailed Time & Weather Conditions				
Field Date	**Arrival**	**Departure**	**Temp (F)**	**Weather Conditions**
10/14/2022	08:00 AM	09:00 AM	68	Cloudy, drizzling
10/31/2022	10:00 AM	01:00 PM	73	Sunny

Inspection Times (hours)	
Time required for travel, inspection and report preparation	7.5
Lane closure usage	
Railroad flagging time	

Element Quantities

Element Assessment Summary Table							
Element	**Total Quantity**	**Unit**	**CS-1**	**CS-2**	**CS-3**	**CS-4**	**CS-5**
38 - Reinforced Concrete Slab	390	ft^2		333	22	35	0
215 - Reinforced Concrete Abutment	130	ft			106	24	0
220 - Reinforced Concrete Pile Cap/Footing	36	ft		16	20		0
800 - Erosion or Scour	146	ft		48	74	24	0
801 - Stream Hydraulics	1	each			1		0
853 - Wingwall	16	ft		16			0
860 - Headwall	12	ft		12			0

Element Assessment by Span							
Element**	**Total Quantity**	**Unit**	**CS-1**	**CS-2**	**CS-3**	**CS-4**	**CS-5**
Span Number : 1							
BA215 - Reinforced Concrete Abutment	65	ft			53	12	0
BA220 - Reinforced Concrete Pile Cap/Footing	10	ft			10		0
BA800 - Erosion or Scour	65	ft		20	33	12	0
BW220 - Reinforced Concrete Pile Cap/Footing	8	ft		8			0
BW800 - Erosion or Scour	8	ft		8			0
BW853 - Wingwall	8	ft		8			0
EA215 - Reinforced Concrete Abutment	65	ft			53	12	0
EA220 - Reinforced Concrete Pile Cap/Footing	10	ft			10		0
EA800 - Erosion or Scour	65	ft		20	33	12	0
EW220 - Reinforced Concrete Pile Cap/Footing	8	ft		8			0
EW800 - Erosion or Scour	8	ft			8		0
EW853 - Wingwall	8	ft		8			0
38 - Reinforced Concrete Slab	390	ft^2		333	22	35	0
801 - Stream Hydraulics	1	each			1		0
860 - Headwall	12	ft		12			0

** Elements with a prefix designate the locations of BA-Begin Abutment, BW-Begin Wingwall, EA-End Abutment, EW-End Wingwall, CO-Culvert Outlet, and PR-Pier. No prefix generally indicates the element is part of the superstructure.

Inspection Notes

General Notes

None

Element Condition Notes

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: 38 - Reinforced Concrete Slab	390	0	333	22	35	0

Condition State 3 Note

Referenced Photo(s): 1

Referenced Sketch(es): None

At 30ft from the left, the top slab exhibits a full span x 1/16in wide longitudinal crack with edge spalling that extends the full height of the abutment.
The remainder of the top slab exhibits intermittent moderate to heavy honeycombing throughout with aggregate popouts.

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: 38 - Reinforced Concrete Slab	390	0	333	22	35	0

Condition State 4 Note

Referenced Photo(s): 2

Referenced Sketch(es): None

The original 55ft portion of the top slab has multiple bottom flanges of encased steel beams exposed with corrosion and section loss. See YF 0C224SW046.

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: BA215 - Reinforced Concrete Abutment	65	0	0	53	12	0
Span 1: EA215 - Reinforced Concrete Abutment	65	0	0	53	12	0

Condition State 3 Note

Referenced Photo(s): 3, 4, 5, 6, 7, 8, 9, 10

Referenced Sketch(es): None

At the left extension, the begin abutment exhibits honeycombing with popout spalling from mid-height to the top for the full 10ft length. At 9ft from the left, there is a full height x 1/16in wide vertical crack with a 1ft wide x 1in deep spall. The end abutment is heavily eroded at the base for 1.3ft high x 3.5in deep for the full 10ft length. (Photos 3 and 4)

At 12ft from the left, the drainage pipe openings at the begin and end abutment are heavily abraded with exposed and missing aggregate. There is some infiltration around the begin abutment pipe. The abutments surrounding the pipe openings exhibit moderate to heavy honeycombing with loose aggregate. (Photo 5)

At 23ft from the left, the begin and end abutment exhibits a full height x up to 1/4in wide vertical crack with a 2ft high x up to 5in deep spall and 2ft high x 15in deep spall, respectively, at the waterline. (Photo 6)

At 30ft from the left, the begin and end abutments exhibit a full height x up to 1/8in wide vertical crack with up to 1ft wide x 4in high x 3in deep spalling at the waterline. (Photo 7) The cracks extend into the top slab.

At 37ft from the left, the begin and end abutments exhibits an up to full height x up to 1/4in wide vertical crack with edge spalling. (Photo 8)

At 45ft from the left, the begin and end abutments exhibits a full height x up to 1/4in wide vertical crack with edge spalling (Photo 9)

At 6ft from the right, the begin abutment exhibits a full height vertical crack with up to 3in wide edge spalling. The rightmost 8ft of the end abutment exhibits scattered spalling up to 1ft deep.

The remainder of the begin and end abutments are heavily eroded up to 2ft high x up to 3in deep below the waterline and exhibit scattered spalling up to 6in deep. (Photo 10)

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: BA215 - Reinforced Concrete Abutment	65	0	0	53	12	0
Span 1: EA215 - Reinforced Concrete Abutment	65	0	0	53	12	0

Condition State 4 Note

Referenced Photo(s): 11, 12

Referenced Sketch(es): None

It is unknown if a separate reinforced concrete footing exists on the original 55ft culvert. The begin and end abutment stems are intermittently undermined throughout and continuously from 12ft to 24ft from the right outlet. At this location the end abutment stem shows distress from scour. (Photo 11 and 12) See YF 0C224SW047.

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: BA220 - Reinforced Concrete Pile Cap/Footing	10	0	0	10	0	0
Span 1: EA220 - Reinforced Concrete Pile Cap/Footing	10	0	0	10	0	0

Condition State 3 Note

Referenced Photo(s): 3, 4, 13

Referenced Sketch(es): None

It is unknown if a separate reinforced concrete footing exists on the original 55ft culvert. This rating is for the footing at the left extension.

The begin abutment footing is heavily abraded for the full 10ft length x 8in high x 2in deep. (Photos 3 and 13)
The end abutment footing is heavily abraded for the full 10ft length x 7in high x 3in deep. (Photos 4 and 13)

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: BA800 - Erosion or Scour	65	0	20	33	12	0
Span 1: EA800 - Erosion or Scour	65	0	20	33	12	0

Condition State 3 Note

Referenced Photo(s): 10

Referenced Sketch(es): None

The begin and end abutments are heavily eroded up to 2ft high x up to 3in deep below the waterline.

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: BA800 - Erosion or Scour	65	0	20	33	12	0
Span 1: EA800 - Erosion or Scour	65	0	20	33	12	0

Condition State 4 Note

Referenced Photo(s): 11, 12

Referenced Sketch(es): None

See NBE Item 215 note and YF 0C224SW047.

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: EW800 - Erosion or Scour	8	0	0	8	0	0

Condition State 3 Note

Referenced Photo(s): 14, 15

Referenced Sketch(es): None

At the interface between the concrete channel footing and end left wingwall, there is erosion for the full length x 5in high x up to 1.3ft deep. (Photos 14 and 15)

	TQ	CS-1	CS-2	CS-3	CS-4	CS-5
Span 1: 801 - Stream Hydraulics	1	0	0	1	0	0

Condition State 3 Note

Referenced Photo(s): 13, 16

Referenced Sketch(es): None

The streambed at 10ft from the left inlet is approximately 1.5ft deeper and at 65ft from the left inlet approximately 3ft deeper. (Photos 13 and 16)

Inspection Photographs

Attachment Description: Underside of slab, 30ft from left inlet, looking end.	Photo Number: **1** Photo Filename: **22_FL_PA310323.JPG** 

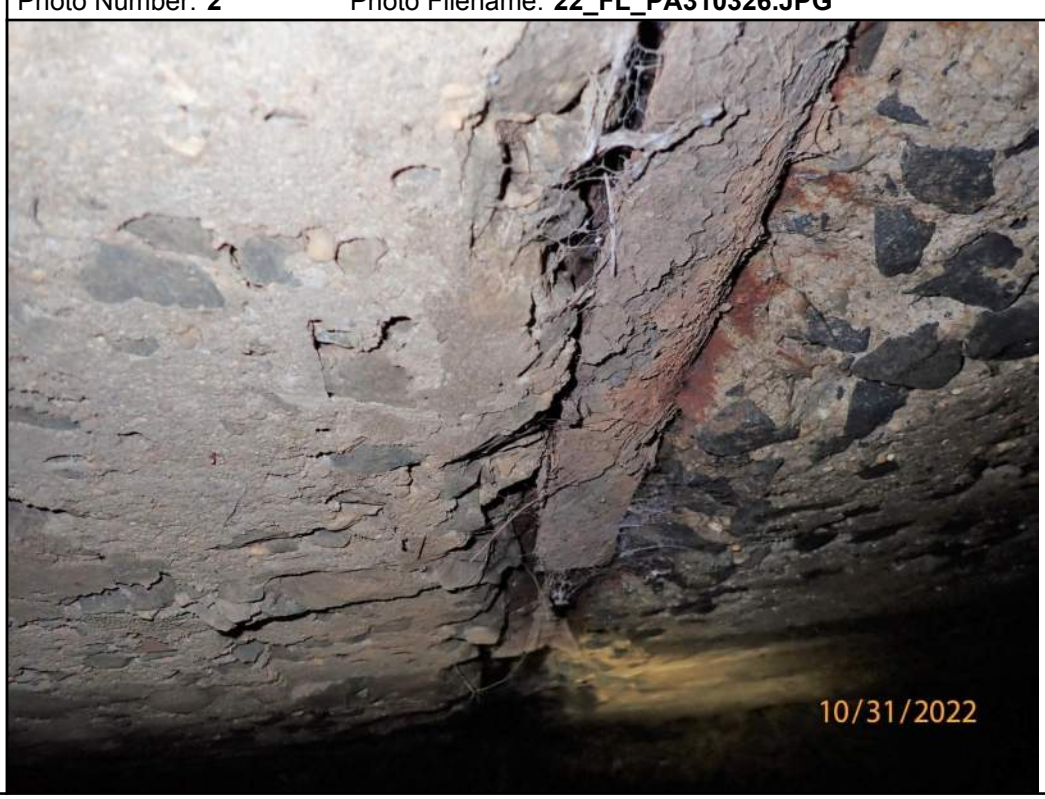
Attachment Description: Underside of slab, 35ft from left inlet, looking end.	Photo Number: **2** Photo Filename: **22_FL_PA310326.JPG** 

Photo Number: **3** Photo Filename: **22_FL_PA140006.JPG**



Attachment Description:
Begin abutment stem from left inlet, looking begin right.

Photo Number: **4** Photo Filename: **22_FL_PA140005.JPG**



Attachment Description:
End abutment stem from left inlet, looking end right.

Attachment Description:
Begin abutment stem, 12ft from left inlet, looking begin right.

Photo Number: **5** Photo Filename: **22_FL_PA140011.JPG**



Attachment Description:
End abutment stem, 23ft from left inlet, looking end.

Photo Number: **6** Photo Filename: **22_FL_PA310317.JPG**



Attachment Description:
Begin abutment stem, 30ft from left inlet, looking begin.

Photo Number: **7** Photo Filename: **22_FL_PA310325.JPG**



Attachment Description:
Begin abutment stem, 37ft from left inlet, looking begin.

Photo Number: **8** Photo Filename: **22_FL_PA310328.JPG**



Photo Number: **9** Photo Filename: **22_FL_PA310330.JPG**



Attachment Description:
End abutment stem, 45ft from left inlet, looking end.

Photo Number: **10** Photo Filename: **22_FL_PA310321.JPG**



Attachment Description:
Begin abutment stem, 24ft from left inlet, looking begin right.

Photo Number: **11** Photo Filename: **22_FL_PA310335.JPG**



Attachment Description:
End abutment stem, 12ft from right outlet, looking end left.

Photo Number: **12** Photo Filename: **22_FL_PA310334.JPG**



Attachment Description:
End abutment stem along top slab, 12ft from right outlet, looking end left.

Photo Number: **13** Photo Filename: **22_FL_PA310308.JPG**



Attachment Description:
Framing/waterway opening from left inlet, looking right.

Photo Number: **14** Photo Filename: **22_FL_PA310309.JPG**



Attachment Description:
End left wingwall, looking end.

Attachment Description: End left wingwall at interface with abutment stem, looking end.	Photo Number: **15** Photo Filename: **22_FL_PA310311.JPG** 

Attachment Description: Left elevation, looking right.	Photo Number: **16** Photo Filename: **22_FL_PA310307.JPG** 

Inspection Sketches

Sketch Number: **1** Sketch Filename: **BD186_C050001.jpg**

BD186_1Sp (4/16)

NYS DEPT. OF TRANSPORTATION

CIN: **10/7 C050001** DATE: **10/31/2022**

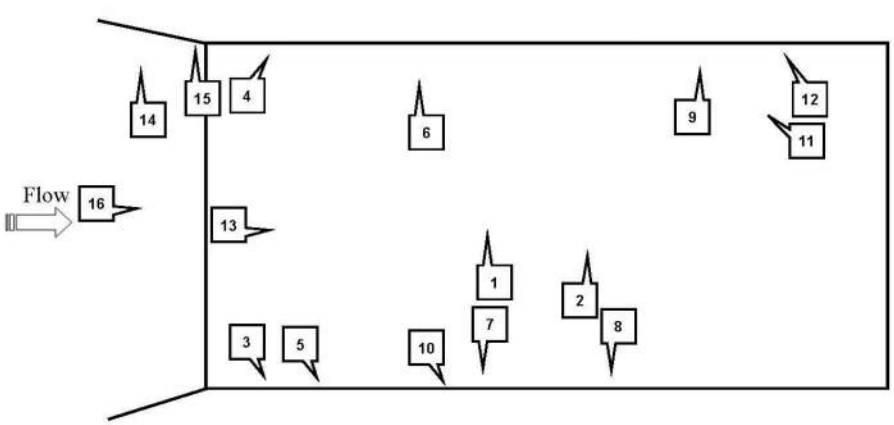
FEATURE CARRIED: **27A 27A 07051005**

FEATURE CROSSED: **AMITYVILLE CREEK**

PHOTO ABOVE DECK XX XX PHOTO BELOW DECK

NORTH

END



BEGIN

Sketch Description: C050001 Photo Location Plan 2022

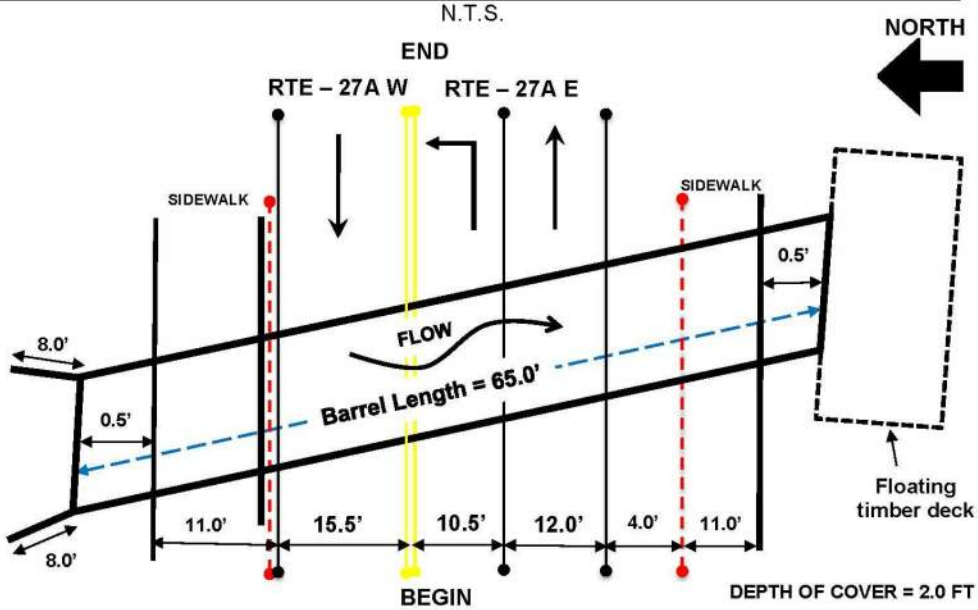
Sketch Number: **2** Sketch Filename: **C050001 General Plan.jpg**

GENERAL PLAN

NYSDOT CULVERT INSPECTION REPORT				Latitude = 40.67013868
SHEET	1	OF	1	Longitude = -73.41352879

Carried:	27A 27A 07051005		CIN:	C050001
Crossed:	AMITYVILLE CREEK		Insp. Date:	10/31/2022
ATL:	C. Carway		TL:	F. Lee

N.T.S.



GUIDERAIL / FENCE	GR		SKEW (DEG)	5°
DOTTED WHITE LINE	DW		DISTANCE TO REF MARKER	0 FT
SOLID WHITE LINE	SW		CURB-CURB	42.0 FT
YELLOW LINE	YL		OUT TO OUT **	64.8 FT
EDGE OF PAVEMENT	EOP			
CULVERT DIMENSIONS	SKEW	THREE-SIDED FRAME W/ SLAB TOP	6.0 FT SPAN	3.0 FT HIGH
CULVERT DIMENSIONS	PERP.	THREE-SIDED FRAME W/ SLAB TOP	6.0 FT SPAN	3.0 FT HIGH
HEADWALL		RIGHT / LEFT	6.0 FT / 6.0 FT	

* Culvert Dimensions: If the culvert is on a skew then culvert span is parallel to road centerline striping
** Out to Out: Dimension taken fascia to fascia perpendicular to road centerline striping

Sketch Description: C050001 General Plan 2022

New York State Department of Transportation
Yellow Flag 0C224SW046

By: Fiacre Lee
Flag Date: October 31, 2022

Superseding Information:
This flag supersedes: YF 0C21EYW030

Structure Information

CIN: **C050001**
Feature Carried: 27A 27A 07051005
Feature Crossed: AMITYVILLE CREEK
Orientation: 3 - EAST

Region: 10 - LONG ISLAND
County: SUFFOLK
Political Unit: Village of AMITYVILLE
Approximate Year Built: 1951

Posted Load Matches Inventory: Yes
Posted Load in field : Not Posted for Load

Primary Owner: New York State Department of Transportation
Primary Maintenance Responsibility: New York State Department of Transportation
Typical or Main Span Type: 1 - Concrete, 19 - Culvert
This Bridge is not a Ramp
Number of Spans: 1

Verbal Notification Information

Person Notified: Not Contacted
Date:

Of:

Signature Information

Signature: Fiacre Lee
Date: October 31, 2022

Reviewed By: Nicholas Demos
Date: November 01, 2022

Attachments: 7

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Flagged Elements

Parent Element	Element	Total Quantity	Unit
	Span Number : 1		
	38 - Reinforced Concrete Slab	390	SQUAR

Flagged Condition Description

The original 55ft portion of the top slab is reinforced with steel beams spaced at 2ft. The bottom flanges of the beams are exposed up to 3in wide. The flange thickness is unknown. The steel beams appear to be the only reinforcement in the slab. (Photos 1 and 2)

Some of the bottom flanges of the beams are heavily corroded with section loss. There is full span exposure of the bottom flanges at 7ft, 24ft, 35ft, and 37ft from the left. There are seven (7) partial exposures throughout the remainder of the slab. Section loss is estimated to be >50% in the exposed areas. (Photos 3 - 7)

No record plans or load rating are available to ascertain the full significance of this condition. No evidence of movement or distress noted.

No significant changes since the previous inspection.
Structure Type: 6ft span x 3ft high x 65ft long 3-sided frame, depth of cover = 2ft.
Culvert carries Route 27A, with Ref. Marker 27A 0705 1005 located above end abutment at right side.

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Flag Photographs

Photo Number: **1** Photo Filename: **22_FL_PA310307.JPG**



Attachment Description: **Left elevation, looking right.**

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Photo Number: **2** Photo Filename: **22_FL_PA310308.JPG**



Attachment Description: **Framing from left inlet, looking right.**

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Photo Number: **3** Photo Filename: **22_FL_PA310313.JPG**



Attachment Description: **Underside of slab, 7ft from left inlet, looking begin.**

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Photo Number: **4** Photo Filename: **22_FL_PA310314.JPG**



Attachment Description: **Underside of slab, 14ft from left inlet, looking begin.**

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Photo Number: **5** Photo Filename: **22_FL_PA310319.JPG**



Attachment Description: **Underside of slab, 24ft from left inlet, looking begin.**

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Photo Number: **6** Photo Filename: **22_FL_PA310326.JPG**



Attachment Description: **Underside of slab, 35ft from left inlet, looking end.**

Yellow Flag 0C224SW046 BIN C050001 Flag Date: October 31, 2022

Photo Number: **7** Photo Filename: **22_FL_PA310327.JPG**



Attachment Description: **Underside of slab, 37ft from left inlet, looking begin.**

New York State Department of Transportation
Yellow Flag 0C224SW047

By: Fiacre Lee
Flag Date: October 31, 2022

Superseding Information:
This flag supersedes: YF 0C21EYW031

Structure Information

CIN: **C050001**
Feature Carried: 27A 27A 07051005
Feature Crossed: AMITYVILLE CREEK
Orientation: 3 - EAST

Region: 10 - LONG ISLAND
County: SUFFOLK
Political Unit: Village of AMITYVILLE
Approximate Year Built: 1951

Posted Load Matches Inventory: Yes
Posted Load in field : Not Posted for Load

Primary Owner: New York State Department of Transportation
Primary Maintenance Responsibility: New York State Department of Transportation
Typical or Main Span Type: 1 - Concrete, 19 - Culvert
This Bridge is not a Ramp
Number of Spans: 1

Verbal Notification Information

Person Notified: Not Contacted
Date:

Of:

Signature Information

Signature: Fiacre Lee
Date: October 31, 2022

Reviewed By: Nicholas Demos
Date: November 01, 2022

Attachments: 7

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Flagged Elements

Parent Element	Element	Total Quantity	Unit
	Span Number : 1		
	BA215 - Reinforced Concrete Abutment	65	ft
	EA215 - Reinforced Concrete Abutment	65	ft
	BA800 - Erosion or Scour	65	ft
	EA800 - Erosion or Scour	65	ft

Flagged Condition Description

The begin and end abutments are intermittently undermined for +/- 50% of their lengths for +/- 4in high x up to 8in deep. The begin and end abutments are continuously undermined from 12ft to 24ft from the right outlet up to 43in deep x 1ft high and up to 39in deep x 1ft-7in high, respectively (Photos 1, 2, 3, and 4)

The structure shows distress along the end abutment from 12' to 24' from the right. The following deficiencies were found at this location:
1. The top slab is separated from the abutment up to 3in high and the gap can be probed up to 4.1ft deep (2021: 3in high, 3.7ft deep). (Photos 5, 6, and 7)
2. The abutment exhibits a 1/2in wide horizontal crack located at +/- 1ft from the top with 6in long x 4in high x 4in deep spalling at 12ft from the right. (Photo 5)
3. The lower portion of the abutment below the waterline is heavily eroded up to 2ft high x up to 3in deep. (Photos 4 and 5)
These conditions are located below the end right quadrant of the Route 27A eastbound shoulder and right travel lane.

No significant changes overall since the previous inspection.
Structure Type: 6ft span x 3ft high x 65ft long 3-sided frame, depth of cover = 2ft.
Culvert carries Route 27A, with Ref. Marker 27A 0705 1005 located above end abutment at right side.

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Flag Photographs

Photo Number: **1** Photo Filename: **22_FL_PA310307.JPG**



Attachment Description: **Left elevation, looking right.**

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Photo Number: **2** Photo Filename: **22_FL_PA310308.JPG**



Attachment Description: **Framing from left inlet, looking right.**

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Photo Number: **3** Photo Filename: **22_FL_PA310338.JPG**



Attachment Description: **Begin abutment stem along waterline, 12ft from right outlet, looking begin.**

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Photo Number: **4** Photo Filename: **22_FL_PA310337.JPG**



Attachment Description: **End abutment stem along waterline, 12ft from right outlet, looking end.**

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Photo Number: **5** Photo Filename: **22_FL_PA310335.JPG**



Attachment Description: **End abutment stem, 12ft from right outlet, looking end left.**

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Photo Number: **6** Photo Filename: **22_FL_PA310332.JPG**



Attachment Description: **End abutment stem along top slab, 12ft from right outlet, looking end right.**

Yellow Flag 0C224SW047 BIN C050001 Flag Date: October 31, 2022

Photo Number: **7** Photo Filename: **22_FL_PA310333.JPG**



Attachment Description: **End abutment stem along top slab, 14ft from right outlet, looking end left.**

Standard Photographs

AbutmentBegin.JPG



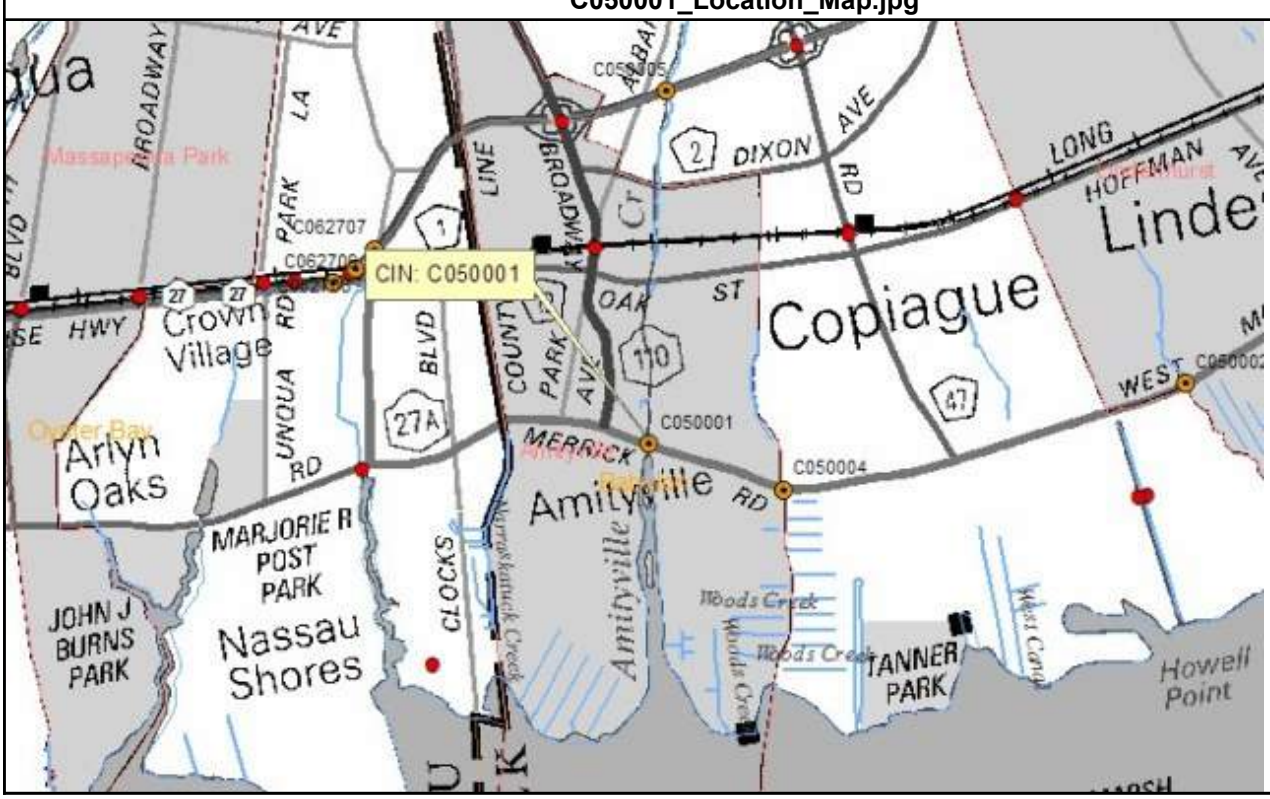
ApproachBegin.JPG



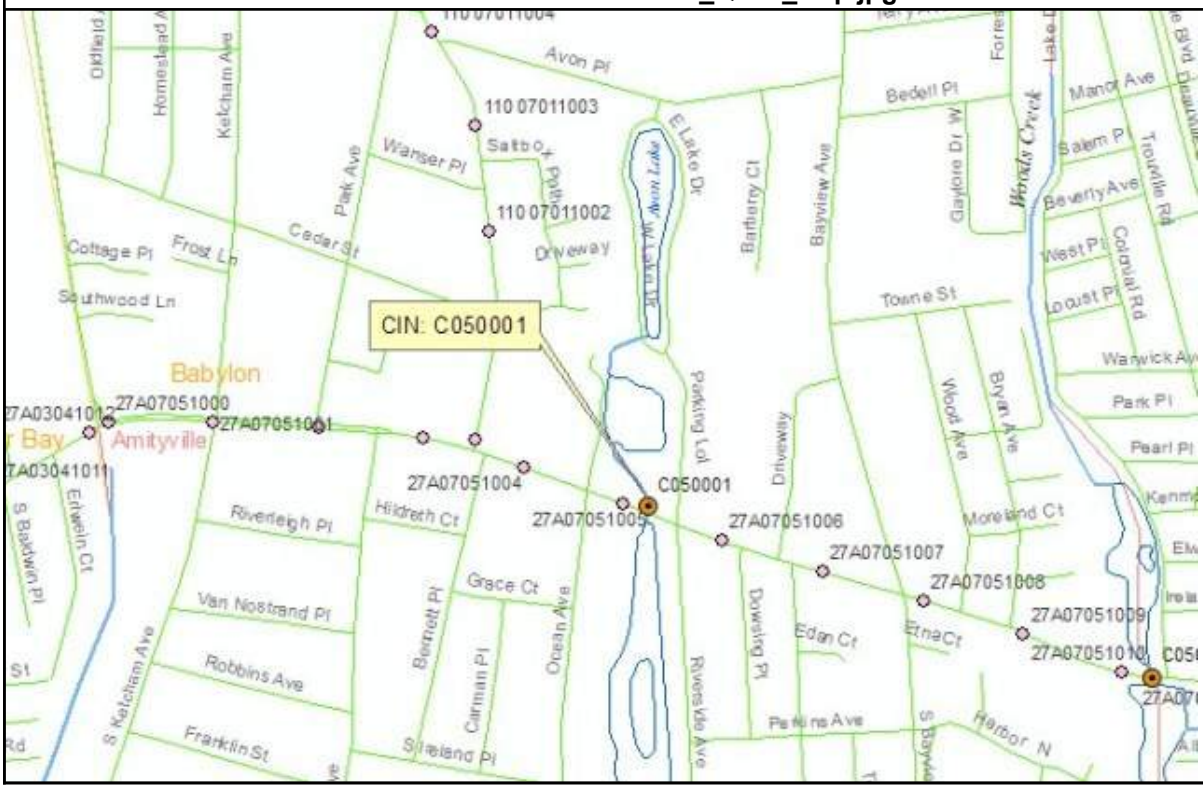
ApproachEnd.JPG



C050001_Location_Map.jpg



C050001_Quad_Map.jpg



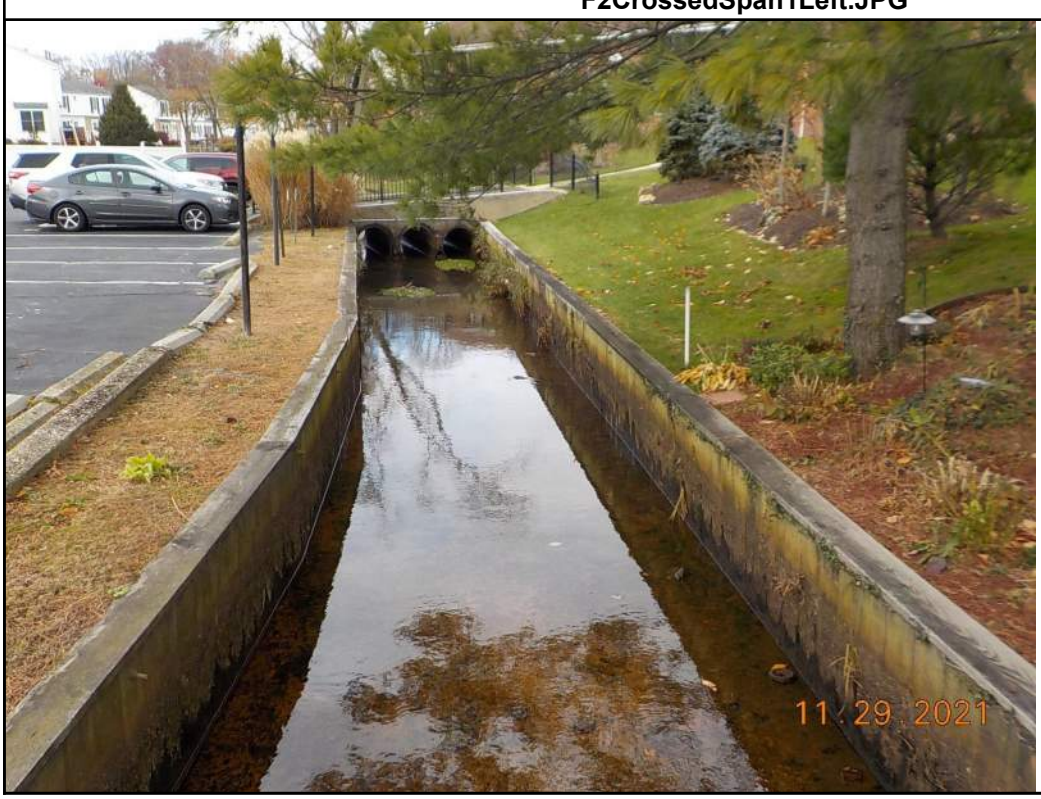
CINPlate.JPG



ElevationSpan1.JPG



F2CrossedSpan1Left.JPG



F2CrossedSpan1Right.JPG



FramingSpan1.JPG



TopOfDeck.JPG



WingwallEndLeft.JPG



ATTACHMENT F

Stakeholders and Public Input

Public Involvement Plan

CROSS Program – Culvert Resiliency of State System
Large Culvert Resiliency Replacement
PIN: 0LC1.01
Crossing in Suffolk County, Region 10
Village of Amityville

Name of Preparer: Neil Desai, AICP **Date Prepared**: 2/10/2023
Preparer's Functional Area: Hardesty & Hanover, Consultant

Current Phase (check one): ☐Scoping ☒Phase I-IV ☐Phase V-VI ☐Construction ☐Other

Project Schedule as of Date Prepared

IPP Approved	February 24, 2021
Scoping Approval	
Design Approval	June 2023
Construction Begins	November 2024
Construction Completion	November 2026

1. IPP Update

$6,384,000. The construction estimate will be updated as the project progresses through the design process.

2. Project Data

Funding (check all that apply): ☒Federal ☒State

Project Type (check one): ☐NEPA Class I ☒NEPA Class II ☐NEPA Class III
☐SEQRA Non-Type II ☒SEQRA Type II

Brief Description of Project Work
This project is part of the CRoSS (Culvert Resiliency of State System) Program, a program to replace and rehabilitate large culverts on the state system with a focus on safety, infrastructure, and hydraulic resiliency, supporting the state's economy and environmental stewardship. The work includes replacing the large culvert located at NY Route 27 A over Amityville Creek. The structure is more than 90 years old and showing signs of structural deterioration. The roadway at this location may be raised to improve resiliency to floods.

NYSDOT person designated as community contact Lizy Varghese, PE (631) 952-6855

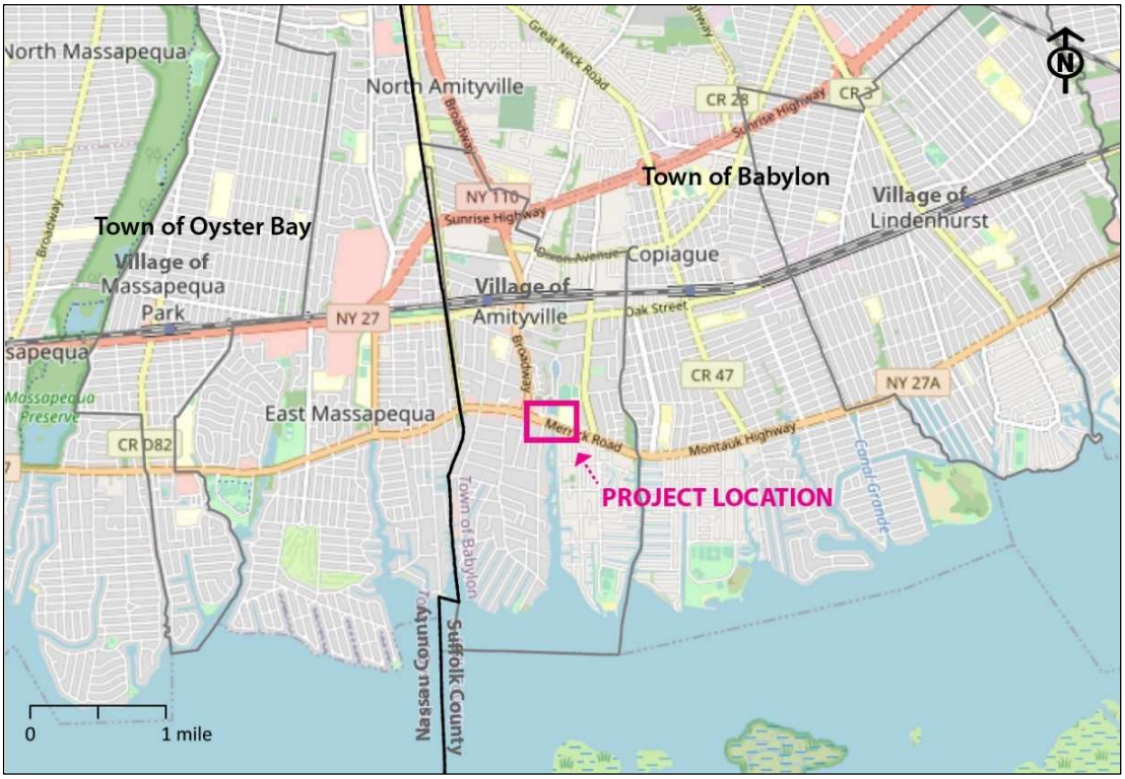
Public Involvement prior to IPP (y/n) N
If yes, describe. N/A
Attach relevant correspondence and/or meeting minutes. N/A

3. Preliminary Design

PI Objectives during Preliminary Design: Introduce the project to the community and local stakeholders, and gain feedback on the preferred reasonable alternatives. Ensure engagement of Environmental Justice (EJ) and Limited English Proficient (LEP) populations. Hold an EDPL public hearing due to the possibility of property acquisition.

4. Information

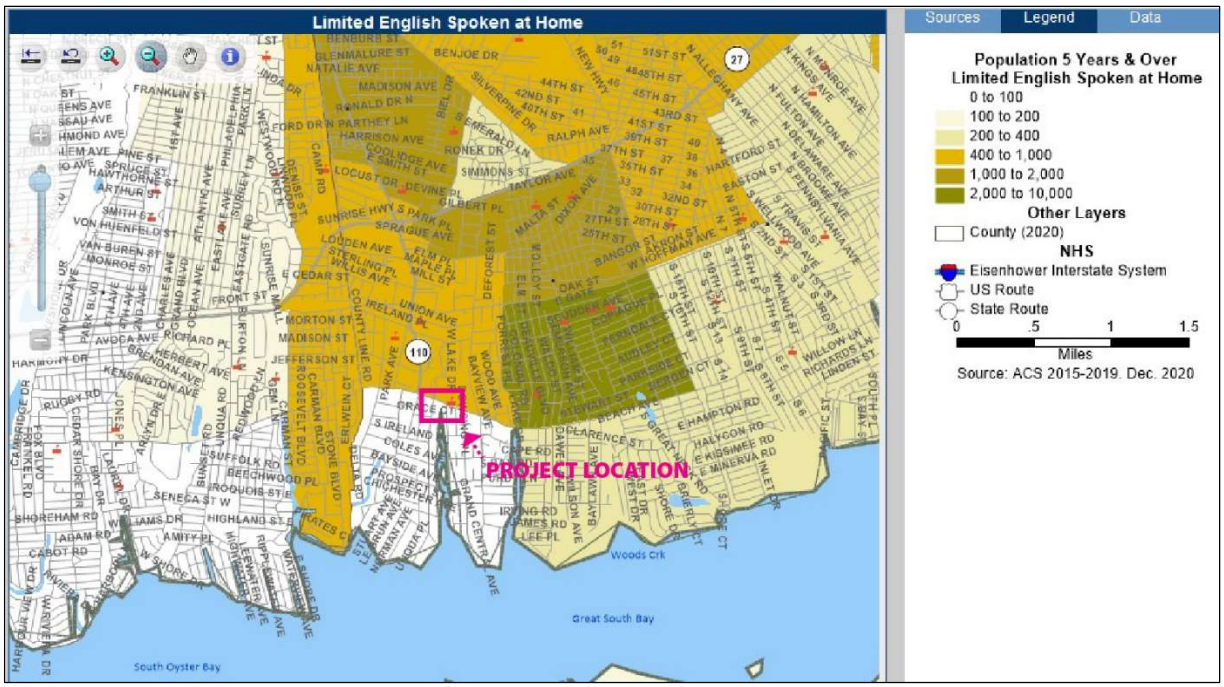
a. Project Location. The project is located along NY27A (Merrick Road) in the Village of Amityville in Suffolk County, NY, as indicated on the map below. The Village of Amityville is located within the Town of Babylon in Suffolk County. The land uses in proximity to the project location include a high school, a park, a marina, commercial businesses, churches, apartment buildings, and detached houses.



b. Limited English Proficient Residents. Individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English are considered “limited English proficient,” or LEP. Federal laws

concerning language access rights and obligations include Title VI of the Civil Rights Act of 1964 and Executive Order 13166. Executive Order 13166, "Improving Access to Services for Persons with Limited-English Proficiency," was signed on August 11, 2000. It states that people who are LEP should have meaningful access to federally funded programs and activities. NYSDOT's Limited English Proficiency Guide designates LEP populations by 1,000 or more people or 5 percent or more of the total population.

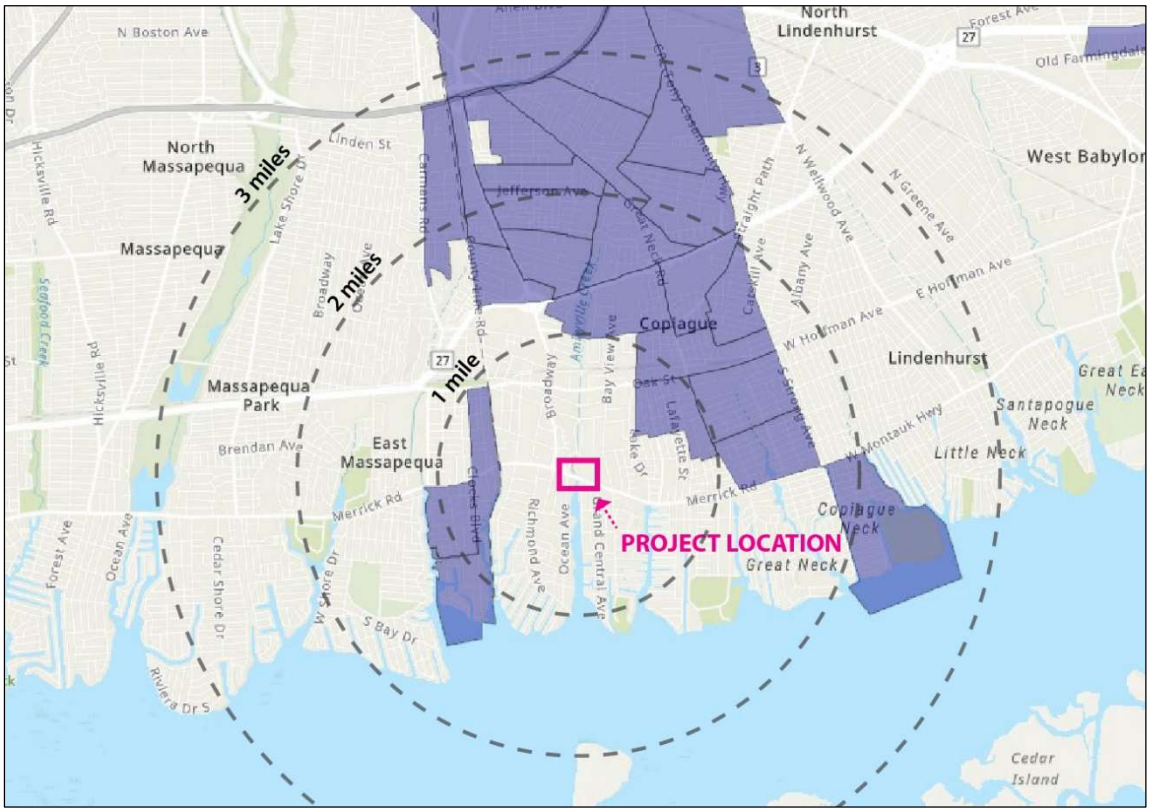
The Project Location is located in proximity to two census tracts that have LEP populations greater than 1,000, according to the map below from the FHWA HEPGIS mapping tool. Spanish is the primarily language spoken at home for the LEP populations in these census tracts. One of these census tracts is located east of the project location within the unincorporated hamlet of Copiague in the Town of Babylon and located within 1 mile of the project location.



c. **Identification of EJ Areas.** Through FHWA Order 6640.23A, FHWA states its longstanding policy to actively ensure nondiscrimination in federally funded activities. FHWA's policy is to identify and prevent discriminatory effects by actively administering its programs, policies, and activities to ensure that social impacts to communities and people are recognized early and continually throughout the transportation decision making process.

USDOT Order 5610.2(c) requires the Department to consider Environmental Justice principles in all USDOT programs, policies, and activities. USDOT's Environmental Justice Strategy identifies three fundamental principles of environmental justice that guide USDOT actions: to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic

effects, on minority and low-income populations; to ensure the full and fair participation by all potentially affected communities in the transportation decision making process; and to prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations. The NYS Department of Environmental Conservation (DEC) provides an online mapping tool for identifying Potential Environmental Justice Areas (PEJAs). Portions of PEJAs are located within 1 mile of the project location, according to the map below.



d. **Community Study Area.** The process of identifying EJ populations includes defining a Community Study Area, which should encompass all areas that have the potential to be affected by a proposed action. The Community Study Area for this project is defined as the area within approximately 1 mile of the project location.

e. **Potential Effects.** This subsection identifies the benefits, burdens, and adverse effects to EJ populations. Benefits are positive outcomes of the project. Burdens are potential negative consequences of the action.

Topics & Considerations	*Areas of Considerations*	*Potential Effects (Benefits and Burdens)*
PROPERTY & RIGHTS-OF-WAY Are any residences, businesses, or community resources being relocated?	Property Acquisition	Potential impact on Nautical Park
	Aesthetic Changes	n/a
	Land Use	n/a
TRAFFIC What traffic patterns and operational changes may occur as a result?	Congestion	Providing standard shoulders on the road will likely reduce crash rates for vehicles and make the roadway safer for bicyclists, and pedestrians.
	Permanent Lane Closures	n/a
	Noise	n/a
	Air Quality	n/a
	Pedestrian Route Changes	n/a
TRANSIT What transit changes may occur as a result?	Closing, Relocation, or Adding a Transit Route or Station	n/a
SOCIOECONOMIC Are there potential socio-economic changes?	Community Cohesion and Economic Vitality	Increased resiliency to flooding and resulting reduction of flood risk to properties
	Community Cohesion and Economic Development	Increased safety due to reduced flood risk
EFFECT DUE TO CONSTRUCTION ACTIVITIES	Air Quality	n/a
	Noise	Noise may be emitted during construction
	Traffic Detour	Traffic will be maintained on-site during construction (no detours)

f. EJ Community Representatives. The following organizations should be contacted for assistance in informing both EJ and non-EJ populations about the project and project-related meetings.

Kenneth Miller, Director
Copiague Memorial Library
50 Deauville Blvd.
Copiague, NY 11726
(631) 691-1111
kmiller@copiaguelibrary.org

Todd Schlitt, Director
Amityville Public Library
19 John Street
Amityville, NY 11701
(631) 264-0567
tschlitt@amityvillepubliclibrary.org

g. **Internal Stakeholders:** NYSDOT Region 10, Village of Amityville, Suffolk County Department of Public Works

h. **External Stakeholders:** Local businesses and chambers of commerce, community groups and individual residents, libraries, schools, emergency service providers, affected property owners, and public and elected officials (municipal, county, state, and federal).

5. Communication Methods to be Used

a. **Project Notification Letter.** NYSDOT will send letters to public and elected officials and community groups informing them of the project. See attached letters and list of external stakeholder recipients.

b. **Project Fact Sheet.** NYSDOT will produce a project fact sheet in both English and Spanish for public distribution.

c. **Project Website**. Hardesty & Hanover, Consultant, will have a page for this project with link identified in all public involvement documentation.

d. **Reach out to EJ Community Representatives.** NYSDOT will send a letter and the project fact sheet to EJ Community Representatives to inform them of the project and to seek their assistance in promoting the project to EJ populations. The Amityville Public Library has received NYSDOT's Project Notification Letter.

e. **Public Information Meeting**. A public information meeting will be convened for the project and held at Amityville Memorial High School on April 26, 2023. NYSDOT will coordinate with the Village of Amityville to prepare and distribute to local media outlets a news release that provides information about the project and the public information meeting. NYSDOT will prepare a PowerPoint presentation and display boards that contain project images.

f. **EDPL Public Hearing**. The EDPL Public Hearing will take place on the same day as the Public Information Meeting. The public hearing will have a virtual component that is non-interactive. NYSDOT will draft public notices and certified letters to effected and adjacent property owners.

6. Schedule for Public Involvement Activities

DATE	EVENT
April 5, 2023	Elected Official Briefing(s)
April 13, 2023	Send Letters and Project Fact Sheet to EJ Community Representatives and Community
April 7-15, 2023	Submit News Release for Public Information Meeting
April 12, 2023	EDPL Public Notice (min. 10 days, max. 30 days)
April 26, 2023	Public Information Meeting
April 26, 2023	EDPL Public Hearing
May 8, 2023	EDPL Public Comments

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

KATHY HOCHUL
Governor

MARIE THERESE DOMINGUEZ
Commissioner

NYS Route 27A (Merrick Rd.) over Amityville Creek

Culvert Replacement Project, Village of Amityville, Suffolk County

Project ID. No. 0LC1.01

Info Meeting and EDPL Public Hearing - April 26, 2023, 5:00 p.m. to 9:00 p.m.

ATTENDANCE SHEET

Name *(Nombre)* (please print/*por favor imprima*)	**Organization / Address** (***Organización / Dirección***)	**Telephone No. / E-Mail** (optional)
JUDITH O'NEILL	[redacted]	[redacted]
Diane Mellusi		
KEVIN SMITH		
Fredrick Metzger		
Judith Jurmain		
Doris Reynolds		
DENISE FABRICANT		
Colleen Nugent		
CHIN, TRAVIS		
Edward Falco		

https://www.dot.ny.gov/AmityvilleCreek

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NYS Route 27A (Merrick Rd.) over Amityville Creek

Culvert Replacement Project, Village of Amityville, Suffolk County

Project ID. No. 0LC1.01

Info Meeting and EDPL Public Hearing - April 26, 2023, 5:00 p.m. to 9:00 p.m.

ATTENDANCE SHEET

Name *(Nombre)* (please print/*por favor imprima*)	**Organization / Address** (***Organización / Dirección***)	**Telephone No. / E-Mail** (optional)
DR TONY FULTON	[redacted]	
NICK DE MARCO		
[signature]		
BRYAN O. BURTON JR.		
Bernadette Cruz		
Joan Donnison		
Olivia Buatsi		
TOWNSEND C THORN		
Michael O'Neill		

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NYS Route 27A (Merrick Rd.) over Amityville Creek

Culvert Replacement Project, Village of Amityville, Suffolk County

Project ID. No. 0LC1.01

Info Meeting and EDPL Public Hearing - April 26, 2023, 5:00 p.m. to 9:00 p.m.

ATTENDANCE SHEET

Name *(Nombre)* (please print/*por favor imprima*)	**Organization / Address** (***Organización / Dirección***)	**Telephone No. / E-Mail** (optional)
Douglas Brady	[redacted]	[redacted]
Elizabeth Ranker		
Dennis Siry		
Deidre Uerzi		
Priscilla Prostowich		
Cole Cammarota		
Mary Byrne		
Corinne Budde		
Eniko Ilyes-De Marco		

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NYS Route 27A (Merrick Rd.) over Amityville Creek

Culvert Replacement Project, Village of Amityville, Suffolk County

Project ID. No. 0LC1.01

Info Meeting and EDPL Public Hearing - April 26, 2023, 5:00 p.m. to 9:00 p.m.

ATTENDANCE SHEET

Name *(Nombre)* (please print/*por favor imprima*	**Organization / Address** (***Organización / Dirección***)	**Telephone No. / E-Mail** (optional)
Wendy O'Neill	[redacted]	
Janice Baxter		
Gary Gentile		
Owen Brooks		

https://www.dot.ny.gov/AmityvilleCreek

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

KATHY HOCHUL
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Commissioner

NYS Route 27A (Merrick Rd.) over Amityville Creek

Culvert Replacement Project, Village of Amityville, Suffolk County

Project ID. No. 0LC1.01

Info Meeting and EDPL Public Hearing - April 26, 2023, 5:00 p.m. to 9:00 p.m.

ATTENDANCE SHEET

Name *(Nombre)* (please print/*por favor imprima*	**Organization / Address** (***Organización / Dirección***)	**Telephone No. / E-Mail** (optional)
B. GRIEL	[redacted]	[redacted]
NICK GABRIS		

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation

COMMENT SHEET - *HOJA DE COMENTARIOS*

EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): Doris Reynolds

Address (Dirección): [redacted]

Phone # (Teléfono): [redacted]

E-mail: _____

Affiliation (if applicable): _____

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

Gracias por su interés en el Proyecto de Mejoras de Seguridad en varias localidades en los Condados de Nassau & Suffolk. Su opinión es muy importante para nosotros. Le exhortamos a proveer sus comentarios y preocupaciones sobre este proyecto. Por favor tome un minuto para completar esta hoja. Si necesita más espacio, puede añadir páginas adicionales.

COMMENTS (Comentarios):

Request traffic light at Merrick Rd and Ocean Ave with left turn into Hidden Lake Estates

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

Comentarios son solicitados antes del 8 de Mayo del 2023. Usted puede completar esta hoja de comentarios y enviarlo por correo (vea al reverso) o por correo electrónico al: R10-RPIC@DOT.NY.GOV

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation

COMMENT SHEET - *HOJA DE COMENTARIOS*

EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): B. FRIEL

Address (Dirección): [redacted]

Phone # (Teléfono): [redacted]

E-mail:

Affiliation (if applicable):

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

Gracias por su interés en el Proyecto de Mejoras de Seguridad en varias localidades en los Condados de Nassau & Suffolk. Su opinión es muy importante para nosotros. Le exhortamos a proveer sus comentarios y preocupaciones sobre este proyecto. Por favor tome un minuto para completar esta hoja. Si necesita más espacio, puede añadir páginas adicionales.

COMMENTS (Comentarios):

REQUEST TRAFFIC LIGHT at MERRICK ROAD & OCEAN AVE. with left turn into Hidden Lake Estates

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

Comentarios son solicitados antes del 8 de Mayo del 2023. Usted puede completar esta hoja de comentarios y enviarlo por correo (vea al reverso) o por correo electrónico al: R10-RPIC@DOT.NY.GOV

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation

COMMENT SHEET - *HOJA DE COMENTARIOS*

EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): Priscilla Prostowich

Address (Dir [redacted]

Phone # (Telé

E-mail:

Affiliation (if applicable):

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

Gracias por su interés en el Proyecto de Mejoras de Seguridad en varias localidades en los Condados de Nassau & Suffolk. Su opinión es muy importante para nosotros. Le exhortamos a proveer sus comentarios y preocupaciones sobre este proyecto. Por favor tome un minuto para completar esta hoja. Si necesita más espacio, puede añadir páginas adicionales.

COMMENTS (Comentarios): Please put a traffic light at corner of Ocean Ave and Merrick Rd, for west bound left turn into Hidden Lake Estates.

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

Comentarios son solicitados antes del 8 de Mayo del 2023. Usted puede completar esta hoja de comentarios y enviarlo por correo (vea al reverso) o por correo electrónico al: R10-RPIC@DOT.NY.GOV

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation

COMMENT SHEET - *HOJA DE COMENTARIOS*

EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): DENISE FASELLA

Address (Dirección [redacted]

Phone # (Teléfono)

E-mail:

Affiliation (if applicable):

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

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COMMENTS (Comentarios): OUR COMMUNITY AS WELL AS THOSE TO THE WEST OF US ARE IN NEED OF A LEFT TURN LANE INTO HIDDEN LAKE ESTATES AT 190 MERRICK RD. IT WOULD MAKE IT SAFER TO BE OUT OF WAY OF CARS COMING EAST & WEST ON MERRICK RD.
IN ADDITION, WE WOULD LIKE TO UNDERSTAND IF THERE WILL BE A CHANGE OF THE WATER FLOW & EFFECT ON HIDDEN LAKE FROM THIS CONSTRUCTION.

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): Priscilla Prostawick

Address (Direcc [redacted]

Phone # (Teléfo

E-mail:

Affiliation (if applicable):

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

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COMMENTS (Comentarios): 190 Merrick Road (Hidden Lake Estates) is requesting a left hand turn lane traveling westbound on Merrick Rd. It is a dangerous turn with Eastbound on coming traffic. We must come to a complete stop and wait for a Westbound car to stop to let us turn left.

Thank you

Priscilla A

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): B. FRIEL

Address (Dirección): [redacted]

Phone # (Teléfono): [redacted]

E-mail:

Affiliation (if applicable):

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

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COMMENTS (Comentarios):

REQUESTING TURNING LANE INTO HIDDEN LAKE ESTATES – 190 MERRICK RD AMITYVILLE

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): Deidre Verzi

Address (Dirección): [redacted]

Phone # (Teléfono): [redacted]

E-mail: _____

Affiliation (if applicable): _____

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COMMENTS (Comentarios):

I am a resident at 190 Merrick Road (Hidden Lake Estates). I would love to see a left turning lane (east bound) on Merrick Road. It is very dangerous to make left hand turns out of our development.

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): Doris Reynolds

Address (Dirección): [redacted]

Phone # (Teléfono): [redacted]

E-mail: [redacted]

Affiliation (if applicable):

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

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COMMENTS (Comentarios):

Requesting a turning lane into Hidden Lake Estates - Eastbound left turn on Merrick Road.

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): Deidre Verzi

Address (Dirección): [redacted]

Phone # (Teléfono): [redacted]

E-mail: _____

Affiliation (if applicable): _____

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

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COMMENTS (Comentarios):

Requesting a traffic light at the intersection of Merrick Road + Ocean Avenue

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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EDPL Public Hearing for the Route 27A Amityville Creek Culvert Replacement
(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)

Project ID. No. 0LC1.01

Name (Nombre): Wendy O'Neill

Address (Direc [redacted]

Phone # (Teléf

E-mail:

Affiliation (if applicable):

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

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COMMENTS (Comentarios): Please replace trees removed from this project area + plant in nautical Park I also would like reflectors in road where lighting is low, ie. by the High school.

More signage is needed at Ocean Ave/Rt 27A to make it extra obvious that there are no left turns off of Ocean heading West on 27A.

Maybe add blinking lights @ entrance to Hidden Lakes where cars have difficulty entering + leaving in a safe manner

Thanks!

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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(Audiencia pública para el reemplazo de la alcantarilla de la ruta 27A Amityville Creek)
Project ID. No. 0LC1.01

Name (Nombre): NICK DEMARCO

Address (Dirección) [redacted]

Phone # (Teléfono)

E-mail:

Affiliation (if appl)

Thank you for your interest in the Route 27A (Merrick Road) Culvert Replacement Project at Amityville Creek in the Village of Amityville, Suffolk County. Your input is very important to us. We welcome your comments / concerns on this project, so please take a moment to complete this comment sheet. If you need more space, feel free to attach additional pages.

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COMMENTS (Comentarios): IF THERE'S ANY OPPORTUNITY TO MODIFY THE PARK FENCE AT THE CORNER OF OCEAN AND MERRICK ROAD IT COULD USE A MODIFICATION TO MAKE IT SAFER FOR PEDESTRIANS BY MOVING THE GATE BACK FROM THE CORNER. THE CORNER IS AN ACUTE ANGLE WITH NOT MUCH ROOM AND POOR VISIBILITY FOR PEDESTRIANS AND DRIVERS COMING UP OCEAN AVENUE AS WELL.

ALSO, THE SIDEWALK ON THE WEST CORNER OF RIVERSIDE AND MERRICK IS BLOCKED BY A POLE (WHICH WILL BE REMOVED) BUT ALSO OTHER OBSTRUCTIONS SUCH AS THE CROSSING BUTTONS AND SIGNAL POLES. COULD BE BETTER DESIGNED.

THANKS FOR SHARING AND EXPLAINING!

Comments are requested by May 8, 2023. You may complete this comment sheet and mail (see reverse) or e-mail your comments to: R10-RPIC@DOT.NY.GOV

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DEPARTMENT OF TRANSPORTATION

EDPL PUBLIC HEARING

WEDNESDAY, APRIL 26, 2023 - 5:00 P.M.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

CULVERT REPLACEMENT PROJECT

NYS ROUTE 27A a/k/a MERRICK ROAD

AMITYVILLE CREEK, VILLAGE OF AMITYVILLE

SUFFOLK COUNTY

PROJECT IDENTIFICATION NO. 0LC1.01

RON KUDLA, Project Manager (NYSDOT)

THOMAS BAYER, Public Hearing Moderator

Jennifer Sampugnaro, RPR
Official Court Reporter

MR. CAMMAROTO: Cole, C-O-L-E, Cammaroto, C-A-M-M-A-R-O-T-O, I am a resident I guess you would say. Three Grand Central Avenue, Amityville, New York 11701.

I am pleased about the audible light which is great on the corner of Riverside. I am happy they are going to be replacing the sidewalk from Grand Central through Ocean Avenue which is going to be beneficial, as well as doing the sidewalk on the north side of Merrick Road. It is important to me because there are quite a number of obstacles that are hinderances along my path and I go there two or three dozen times a week, I take that path. And so it will be -- the barriers will be taken away which will be great. It will be a much smoother transition access for me. That covers it.

MR. BUDDE: Richard, R-I-C-H-A-R-D, Budde, B-U-D-D-E. I own 16 Riverside Avenue which is the insurance agency right across the street and, well, I have a number of questions.

They are going to raise the road approximately two feet and it's going to dome -- slowly dome down, however you call it, on both sides. On my side rising tidal waters will hit

that dome and stop. They have nowhere to go. What can we do about that?

I know you are putting a tunnel in there, right or affixing a tunnel. The culvert under Merrick Road is being fixed. Can that have flood water access from above?

In other words, can there be vents put in the dome to allow the water to funnel through?

I also have no sidewalk on the road side of my hedges, so I also want to know -- this is me right here. I want to know if those hedges are going to be ripped out and the trees, if they'll be replaced. I want to know sidewalk goes in, am I going to be responsible to maintain it, as is typical with most sidewalks. Maybe you don't ask for them, you get them and you have to maintain them.

What I have seen in the business is a lot of trip and falls and all of a sudden I am responsible for something I had nothing to do with, especially when they put back trees making it pretty and then the roots from the trees lift up the sidewalk and there you go, who is going to fix that.

So that's all I can think of right now.

I don't understand the purpose or the need of -- for this repair. Sidewalks are nice, I get that, but raising the road seems like a tremendous expense to serve what purpose. It's not fix -- it's not broken, why fix it.

MS. BUDDE: Corinne, C-O-R-I-N-N-E, Budde, B-U-D-D-E, owner of C and 3G's property incorporated right across the street.

The state came in to install the light a couple years ago with no notification whatsoever. Then we have our business sign on the corner. I know they're going to have to change all that again. I am asking that they be a little more considerate and not put all the signs in front of our business sign which it blocks our business sign, and that sign has been there since 1950.

It's quite annoying that we never had any notification that they were even doing that. And my other big request is I would like to see what property line survey they're using in their eminent domain because I have three surveys here, the tax maps of the Town of Babylon, I also have my tax bill from the Town of Babylon, and I have my original survey when that was still a dirt

road, and we took the house which was eminent domain on this property of the high school and moved it to where it is now. And there's three different dimensions, and it's off by a good ten plus feet so that makes a big difference for us there as to how much property is being taken.

What survey are they using? I know they will probably resurvey, but when they do they usually go by what's in maps, so just need, would like to know that. And that's it, I guess.

I mean I have a lot of things to ask, but. Water, where is it all going?

MR. BAYER: Good evening. It is approximately 7:00 o'clock p.m. and we will begin this hearing.

My name is Thomas Bayer. I am with the New York State Department of Transportation and I will be moderating this evening's public hearing.

To start off, would you please stand if you are able, and join me in reciting the pledge of allegiance.

(Whereupon the pledge was said.)

MR. BAYER: In accordance with the provisions of Article II of the Eminent Domain Procedure Law, the New York State Department of

Transportation is conducting this public hearing for a proposed project to replace the culvert at Amityville Creek on New York State Route 27A also known as Merrick Road in the Village of Amityville, Suffolk County.

The project involves the need to obtain right of way from several properties along Merrick Road between Ocean Avenue and Grand Central Avenue.

This Eminent Domain Procedure Law public hearing is being held in an open format. It is called an open form public hearing because it includes an information session that offers the public the opportunity to learn more about the project.

More importantly, New York State Department of Transportation strives to gather valuable input from you, members of the public, on the proposed project.

The proceedings of this hearing are being transcribed by a stenographer, and a written transcript will be prepared and made available for public inspection at the New York State Department of Transportation Regional Design Office, fifth floor, Room 5A-10, 250

Veterans Memorial Highway, Hauppauge, New York, 11788.

Please contact the Amityville Culvert Design Team, phone number (631)952-6654 if you would like to arrange for reviewing the transcript.

Upon entering the school today you received a brochure that briefly summarizes the project. Additional information and exhibits are on display in the lobby, and information tables are staffed by DOT representatives familiar with the planning, engineering, traffic and environmental aspects of the project.

We ask that all people sign in at the registration table located in the lobby to provide us with a record of all those who participated in this hearing.

After these opening remarks followed by a project overview, you'll have the opportunity to make statements.

A podium has been placed in the front of the room for persons making verbal statements. Anyone is invited to make a verbal statement or you may file a written statement or do both.

Written statements may be submitted at

this hearing at the registration desk in the lobby or mailed, postmarked by May 8th, 2023 to the New York State Department of Transportation Amityville Culvert Project Team, 250 Veterans Memorial Highway, room 5A-10, Hauppauge, New York 11788.

You may also email your comments by May 8th to the email address R10-RPIC@DOT.ny.gov.

Written statements will be given the same weight and consideration as verbal statements made at this hearing.

If you wish to make a verbal statement tonight you must first fill out one of the speaker cards at the registration desk. We will not entertain any questions from the floor in this hearing room so that everyone who desires to speak may be heard and their statements made part of the official record.

If you have questions, DOT representatives are available in the auditorium lobby during this hearing and for approximately one-half hour after the hearing to provide information and answer questions about the project.

This hearing is being conducted in

accordance with the provisions of Title 23 US Code Section 128 and Title 40 Code Federal Regulations Parts 1500 to 1508, and in accordance with the provisions of Article VIII of the Environmental Conservation Law which requires public hearings on highway projects to inform the public of environmental information before decisions are made and before actions are taken.

This project is classified under the National Environmental Policy Act, NEPA, as a Class 2 categorical exclusion pursuant to the requirements of Part 771.117C Title 23 of the Code of Federal Regulations.

It is also classified as a type two project under the New York State Environmental Quality Review Act, SEQRA, Part 15, Title 17 of the official compilation of codes, rules and regulations of New York State.

A Type 2 action is one that is of a class or type of action which has been determined to not have a significant affect on the environment.

The New York State Department of Transportation is the lead agency having principal responsibility for carrying out or

approving the proposed project pursuant to Part 15 of Title 17 of the official compilation of codes, rules and regulations of New York State which requires that a draft design report be prepared.

In the weeks immediately following this hearing, the Department will evaluate all the statements made here tonight, as well as those received by or postmarked by May 8th, 2023 and recommend a design alternative for this project.

The New York State Department of Transportation made numerous efforts to inform the public about this hearing. Notices of public hearing prepared by the Department of Transportation were published in five consecutive issues starting April 8th, 2023 in the Suffolk edition of Newsday.

And public notices prepared by the Department of Transportation were published in the weekly Spanish language newspaper Noticia in two consecutive issues starting April 7th, 2023. The notices will be made part of the record of this proceeding.

In addition, copies of the project brochure are available at Amityville village Hall

and at the Amityville Public Library and at the Copiague Memorial Library.

The notices of public hearing included a statement about the availability of the draft design report. Copies of the draft design report are located at the following locations for public review:

New York State Department of Transportation, 250 Veterans Memorial Highway, Room 5A-10, Hauppauge, New York 11788 and Amityville Village Hall, 21 Ireland Place, Amityville, New York 11701.

The draft design report is also available for review on the New York State Department of Transportation website at WWW.dot.ny.gov/amityvillecreek.

The intent of this hearing is to provide an opportunity for formal statements of positions by the public before project decision making.

After the Department has reviewed the public comments and reached a final decision on how to proceed with the project, a notice to that effect will be published in the same newspapers in which the notice of public hearing was

published.

At that time a final design report will be made available for the public for public inspection which will contain a summary of comments made at this public hearing and the department's recommended design alternative for this project.

All comments will be given careful consideration and weighed in the selection of improvements.

At this time I would like to introduce Mr. Ron Kudla who is managing the project for the DOT so he can provide you with a brief introduction to the project.

MR. KUDLA: Thank you, Tom.

Good evening, ladies and gentlemen. My name is Ron Kudla. I am the regional structure engineer for the Long Island Region of the Department of Transportation. My office is responsible for progressing the Amityville culvert replacement project.

This project proposes to replace the aging culvert on Merrick Road at Amityville creek and raise the roadway to reduce the potential for flooding.

The project construction will be along Merrick Road between Ocean Avenue and Grand Central Avenue for a total of about two tenths of a mile.

Design staff are available in the lobby to discuss the specific features of the project and answer any questions you may have.

In addition, our environmental specialists are also available to discuss all environmental improvements and any possible concerns. Our real estate specialists are also available to discuss property acquisitions.

Four project alternatives were developed and studied by the Department. These alternatives as well as the project objectives will be explained in more detail in the video presentation we are about to show you.

Now I will turn the meeting back over to Tom.

MR. BAYER: Thank you, Ron.

Before I call on speakers from the floor we will play a brief prerecorded presentation describing the project.

(Whereupon, the video was played.)

Welcome to the Eminent Domain Procedure

Law, or EDPL, public hearing for the New York State Route 27A culvert replacement project at Amityville Creek in the Village of Amityville, project identification Number 0LC1.01. New York State Route 27A is also known as Merrick Road in the project area.

Your input is valuable to us. We want you to gain a clear understanding of the proposed project, and New York State Depart of Transportation representatives are here to help you.

As part of tonight's proceedings, we want you to become familiar with the existing conditions and the proposed project improvements. We want you to understand the property acquisition needs of this project. And finally, we want to make sure that you have the opportunity to provide meaningful comments on the project.

At the end of this presentation we will provide you with the contact information to submit questions and/or comments to New York State DOT regarding this project.

This map shows the location of the proposed project. The project work limits along

Merrick Road will be between Ocean Avenue and Grand Central Avenue. The proposed replacement culvert is located at Amityville Creek.

The Village of Amityville Nautical Park is located within the project limits on the south side of Merrick Road between Ocean Avenue and Amityville Creek.

The park provides a relaxing place to sit and enjoy the pleasant views. Facilities of this waterside park include benches, paths and a gazebo. Impacts to the park will be minor and the Department is coordinating with local park officials to maintain and improve the historic viewshed of the park.

Amityville High School is also located within the project limits on the north side of Merrick Road. Access to the school will be maintained at all times while the project is under construction.

The DOT will coordinate with the school district during the Final Design Phase of the project to coordinate all special events at the school with the construction schedule. This will ensure minimal impact to students and their families while the project is under construction.

The objectives of this project include constructing a new culvert at Amityville Creek that will last at least 70 years, enhance safety and improve traffic flow along Merrick Road, and raise the roadway to reduce the potential for roadway flooding.

The FEMA floodplain limits shows any land area susceptible to being inundated by floodwaters from any source. Heavy rain and storm surges can flood the roadway within the project limits. This slide shows the FEMA 100-year floodplain limits which is represented by the light blue color.

In this area the FEMA 100-year floodplain limits represents ground elevations less than six feet. The existing culvert that will be replaced is located within the floodplain and is identified on the map.

Merrick Road which has an elevation of less than six feet is prone to flooding during severe weather events. The proposed project seeks to raise the pavement above the floodplain to minimize the potential for roadway flooding.

Four alternatives have been studied for this project, including the no-build alternative.

The no-build alternative will allow continued deterioration of the existing culvert and will eventually require emergency repairs or weight restrictions at the culvert, in order to maintain a safe roadway.

A hydraulic analysis performed as part of the project development indicates that the existing culvert cannot handle the 50-year design flow without overtopping Merrick Road.

In addition, the roadway does not provide standard shoulders to accommodate bicyclists. The no-build alternative does not meet the project objectives and is not considered a feasible alternative.

Alternative one involves replacing the deteriorating culvert while retaining the existing roadway elevation. This alternative will provide a wider culvert that will improve hydraulic capacity, but will not address the potential for roadway flooding on Merrick Road due to severe storms -- as Merrick Road will remain below the FEMA 100-year floodplain elevation.

This alternative does not meet the project objectives, and is therefore eliminated

from consideration for this project.

Alternative two proposes to replace the deteriorating culvert and raise the roadway to meet or exceed the FEMA 100-year floodplain elevation. Merrick Road will be reconstructed to provide a minimum elevation of six feet and the roadway will be less likely flooding during severe weather events.

The new culvert will be made wider for increased hydraulic capacity. And the roadway will be slightly wider to provide continuous shoulders to accommodate bicyclists.

Alternative three involves replacing the deteriorating culvert and raising the roadway two feet above the FEMA 100-year floodplain or eight feet elevation. This alternative is essentially the same as alternative two, but will raise Merrick Road an additional two feet for even better resiliency to storm surges.

However, the higher elevation of the roadway will result in more property impacts which the Department feels is unjustified at this time as other portions of Merrick Road in the vicinity do not meet the eight foot elevation proposed under this alternative. Therefore, this

alternative was eliminated from consideration.

Alternative four would rehabilitate the existing culvert to eliminate its structural deficiencies and retain the existing roadway.

This alternative does not meet the project objectives and is eliminated from further study since it will not improve the hydraulic capacity of the culvert, and it will retain the non-standard shoulder width along Merrick Road.

Alternative two has been selected as the preferred alternative. This alternative meets all the project objectives and proposes to replace the deteriorating culvert and raise the roadway to meet or exceed the FEMA 100-year floodplain elevation, thereby improving hydraulic resiliency in the project area and reducing the potential for roadway flooding.

This alternative will reconstruct Merrick Road between Ocean Avenue and Grand Central Avenue, and provide a slightly wider roadway cross section with standard lane widths.

This alternative will construct a new taller and wider culvert. The new culvert will likely be constructed as a three-sided frame. The three-sided structure will allow for simpler

construction techniques as it can span over the existing stream channel and allow the base flow of the creek to be maintained during construction. It also provides a natural stream bottom which provides a better environment for aquatic species.

Standard lane widths will be provided and a continuous four-foot shoulder will be rebuilt on both sides of Merrick Road throughout the project limits.

This should help to reduce the accident rate within the project limits by widening the roadway and improving accommodations for bicycles by providing dedicated space for their operation.

Currently there is no shoulder in the westbound lane of Merrick Road between Ocean Avenue and Riverside Avenue.

Drainage improvements along Merrick Road will also be included in the project. New drainage basins will be added throughout the project limits to collect roadway runoff and remove standing water from the roadway. New sidewalks will also be provided on both sides of the road within the project limits.

In many places the sidewalks will be

improved from four feet wide to our standard width of five feet. There is currently no continuous sidewalk on the south side of Merrick Road between Riverside avenue and Grand Central Avenue. An additional sidewalk will be constructed within these limits.

This slide shows the limits of the new construction and the profile of the proposed roadway along Merrick Road.

In addition to the new culvert at Amityville Creek, the roadway will be reconstructed between Ocean Avenue and Grand Central Avenue.

The profile shows that Merrick Road will be raised approximately two feet to be above the FEMA 100-year floodplain elevation of 60 at the low point in the roadway.

Adjacent portions of Merrick Road east and west of the project area have a minimum pavement elevation of approximately six feet. So the preferred alternative will provide a roadway elevation consistent with these adjacent sections of Merrick Road.

Note that the project area is also one of the lowest sections of Merrick Road in the

Amityville vicinity and is prone to flooding during severe storms.

This slide shows proposed typical roadway section. The proposed roadway will include sidewalks on both sides of the road, four foot wide shoulders and eleven-foot wide travel lanes in both directions, as well as an eleven-foot wide turning lane in the center of the roadway.

Existing utility poles on the south side of Merrick Road will be removed and the utility wires will be relocated to the poles on the north side of the road.

The existing trees on the south side of Merrick Road between the curb and sidewalk will be removed and new trees planted within Nautical Park near the existing ornamental fence. The existing ornamental fence and pilasters will be reset in the same location to accommodate roadway grading from the raising of the roadway.

At the new culvert decorative bridge barriers will replace the existing fencing and provide additional protection from drop-off hazards. And the existing wood dock on the south side will be removed.

This is the existing view looking eastbound on Merrick Road at Nautical Park. Nautical Park is located on the right side of the roadway. The street trees and utility poles obstruct the view of the park.

Note that the westbound lane approaching us in the photo does not have a dedicated shoulder.

This is a photo simulation depicting the same view on Merrick Road at Nautical Park with the proposed project enhancements.

The decorative lighting and ornamental fence will be retained adjacent to Nautical Park. New trees will be planted within the park instead of along the roadway to improve the view of the lighting and fencing from the roadway.

The existing utility poles on the south side of Merrick Road will be removed, and the wires relocated to the utility poles on the north side.

This will also improve the view shed into Nautical Park and restore the historic character of the property. The existing ornamental fence and pilasters for the light bulbs will be reset, as required, in the same

location to accommodate roadway grading from the raising of the roadway.

This is the existing view looking westbound on Merrick Road toward the culvert. Note that the existing fence does not provide any protection for errant vehicles from Amityville Creek. The shoulder and sidewalk will be reconstructed in the proposed project.

This is a photo simulation depicting the same view looking westbound on Merrick Road with proposed enhancements that include a decorative concrete parapet wall that replaces the existing fence.

The new parapet wall is designed to resist crashes and will have openings for an improved view of the surrounding shoreside.

In order to construct the new roadway and drainage systems, some property acquisitions are necessary. These acquisitions are minor and stem from the sidewalk improvement, drainage improvements and leveling of the surrounding ground.

A temporary easement is land that the Department needs to occupy temporarily in order to complete the proposed work. The Department

will acquire this land temporarily and return it to the owner upon completion of the work.

The owners of these lands are compensated so the Department can use the land for our construction project.

A partial fee property acquisition is land that the Department permanently acquires for public use and is needed to properly support our highway. The owners of such property are compensated at fair market value.

This map identifies the property acquisition needs for this project. The tan color indicates properties subject to a temporary easement for work area. The blue color indicates partial fee property acquisitions necessary to support the highway.

Property acquisitions are mainly needed due to raising the roadway above the FEMA 100-year floodplain limits. However, between Riverside Avenue and Grand Central Avenue on the south side of Merrick Road, the property acquisitions are mostly related to the sidewalk addition at this location.

The table on this slide lists the properties that may be affected by the project.

These are the same properties that are highlighted on the previous map as needing neither a temporary easement for work area or a partial fee property acquisition.

Fee acquisitions comprise less than 40 percent of the combined property acquisition for the project and totals a sum of just over one-tenth of an acre for all the affected properties.

The acquisition process begins by contacting the affected property owner and inspecting the property. The owner will receive an introductory letter with a preliminary copy of the acquisition map and an information packet including a booklet titled, "How Does New York State Acquire Property For Public Purposes" which contains a list of many frequently asked questions. An office of Right-of-Way representative will schedule an appointment to meet with the owners to explain the effects of the proposed construction and the appraisal/acquisition process.

The next step is determining an appropriate compensation for the acquisition. A real estate appraiser will prepare an appraisal

to estimate the fair market value of the acquisition. The affected property owners will receive an offer of just compensation which is based off the highest approved appraised amount. Owners have the option of signing an agreement of adjustment, which is a full settlement or an advanced payment agreement which allows the property owners to be compensated while still retaining the right to continue settlement discussions or file a claim in the New York State Court of Claims.

Once the offer has been presented and the property owner confirms receipt and all questions concerning the offer have been addressed, the state acquires title by filing a copy of the appropriation map with the County Clerk's Office.

In the absence of a signed agreement with the property owner, the State Comptroller's Office will deposit the full amount of that offer in an interest bearing account.

Once the map has been filed and the funds have been deposited or paid, acquisition is complete. At that point contractors are allowed on the property for construction purposes.

Once all closing papers have been signed by the property owner and approved by DOT's legal representatives, property owners will usually receive payment within eight weeks.

If you have any questions about the property acquisition process, please contact New York State DOT Real Estate specialist Krista Vinogradov at (631)952-6159 or you may email her at the address shown here. Krista.vinogradov@dot.ny.gov.

Today is the EDPL public hearing. An opportunity to make comments about the project will be afforded to participants after the conclusion of this presentation.

It is anticipated that the Right-of-Way acquisition process will be completed by the fall of 2024 and project bidding will occur shortly thereafter.

Construction is anticipated to start early in 2025, and the project is anticipated to be completed in the spring of 2026.

Comments on the proposed project can be made several ways. They can be made in person tonight, by email, or by regular male.

At the meeting tonight you will be

given the opportunity to speak publically during the open microphone session after this presentation, or you may fill out a written comment card and leave it in our drop box outside the auditorium.

You also may have spoken privately with our stenographer during the informal information meeting prior to the start of the public hearing. Any persons who spoke with the stenographer earlier has already placed their comment on the record.

Should you wish to provide comments by email or mail, please use the information shown here on the screen. The email address is R10-RPIC@dot.ny.gov.

The mailing address is New York State Department of Transportation Regional Design Group. Attention to the Amityville Culvert Replacement Project Team, Room 5A-10, 250 Veterans Memorial Highway, Hauppauge, New York 11788.

This information is also located on our project website and can be found at www.dot.ny.gov/AmityvilleCreek. All comments must be received by May 8th, 2023.

Thank you for participating in this public meeting and EDPL public hearing. Your comments are valuable to us so that we can design a project that meets the needs of the entire community.

We are now ready to hear from those of you who wish to make statements.

I remind you that anyone who wishes to speak at this hearing must fill out the speaker card at the registration desk in the lobby.

Elected officials will be given the first opportunity to speak followed by appointed officials having executive responsibilities and appointed officials having advisory responsibilities.

Representatives of organizations and individual citizens will then be called to make their statement in the order in which they registered.

In order to allow as many persons as possible to be heard, it is necessary that we restrict individual comments to three minutes. Time will be monitored with the countdown timer located on the stage. At the end of three minutes your allotted time to speak will have

ended and I will call the next person to speak.

If your comments are in writing you can simply place them in the comment drop box in the lobby or hand them to a Department representative who will place them in the drop box.

If you have written comments, but also want to be heard, please briefly summarize your points in an oral presentation so others can be heard as well.

If you previously filled -- filed comments in response to the Department's notice of public hearing you do not need -- you do not have to resubmit them because they are already part of this record.

Written comments will be accepted by the Department up to May 8th, 2023.

We are now ready to hear from those of you who have filled out speaker cards and wish to make statements.

When you step up to speak, please give your name, address and any affiliations you may have with a group that is interested with the project. Please spell your name since these proceedings are being recorded by a stenographer and speak loudly, slowly and clearly.

I will call two names at a time so that the second person is ready to speak once the first person is finished.

Our first speaker this evening will be Joan Donnison of the Bay Village Civic Association.

MS. DONNISON: Good evening. Joan Donnison D-O-N-N-I-S-O-N, 150 South Ketcham Avenue, Amityville, president of the Bay Village Civic Association.

Thank you for having this hearing. Several things came to mind. The first thing I thought about was why this has been determined a CE designation.

I realize it is a relatively small area we are talking about, but it impacts bodies of water, it impacts the entrance to the high school. It is also one of the primary access areas to streets and houses in the village, and I was concerned that it didn't have some kind of an EIS, environmental impact statement. It could be an arbitrary decision that it is not a significant project, but to me it does seem to have some impact certainly on water.

Also I was concerned about how much

time you're going to have the temporary access at the high school entrance because although you're saying it's not going to impact the school, we had many situations, one was just the replacement of a traffic signal that caused quite a bit of delay and problems entering the high school.

I realize there are people here from the school who will probably be addressing that. I just hope all of these things will be taken into consideration when all of this is planned out. It really is very conservative about that.

There is always something going on at the high school. There is an access road on Bayview, but that has proved in the past not to be sufficient if one of the entrances is closed. So I am concerned about that as well.

I am very disappointed that the trees have to come down. They are street trees. It just makes the area look barren. I understand it's lovely, it's going to be more pedestrian friendly and bike friendly, but it is unfortunate that those mature trees have to be removed.

I am glad to see that other trees will be planted, but we have been through this already when the county changed Oak Street and did some

modifications there and took down all the oak trees for which the street was named. It just takes so long. It changes the character of the street and the community.

I'm pleased that you are doing something to ameliorate flooding, but there are always repercussions, and I just hope all of these are being adequately addressed. Thank you.

MR. BAYER: Our next speaker this evening will be Peter Grassel, 200 Merrick Road Corporation.

MR. GRASSEL: Good evening. I'm Peter Grassel, G-R-A-S-S-E-L. I represent 200 Merrick Road Corporation, the property next door to the high school on the north side, northwest side.

My concerns are twofold. The temporary acquisition map which show an unnecessary or certainly a large burden to the property owners at 200 Merrick Road which is a cooperative establishment.

I am on the Board of Directors of that co-op. The co-op name is 200 Merrick Road Corp. The temporary acquisition would wipe out many of our parking spaces in our property which is an undue burden for our shareholders. There is no

other place to park.

As you may or may not know Amityville does not allow overnight parking on the street, so I don't know where we would park our cars. We would lose at least eight to ten of our spots, and I think we only have 24 of them.

So we are looking at about a loss of eight parking spots. That is an undue burden on us. I don't know where else we would be able to park our cars. These are people that live here.

My other concern is the change or the construction of the culvert and whether or not that would have an effect on Amityville Creek which runs behind our property at 200 Merrick Road. It's sort of a pond.

My concern is that the level of that creek may increase or decrease based on the construction of the culvert.

That's it, thank you for your time.

MR. BAYER: Our next speaker this evening will be Olivia Buatsi from the Amityville School District.

MS. BUATSI: Thank you very much for putting this together. You myself and the superintendent of school have already spoken

extensively about this, but I am very concerned about the timeline to make comments because we would like the plans and specs to be reviewed by our own architects because then they would speak on our behalf.

So can you send us all the plans and specs ASAP so that we can get together and review it and give you our comments within the timelines that you have specified.

MR. KUDLA: We're not answering questions today.

MR. BAYER: We currently have no more registered speakers.

Is there anyone else present who would like to make a statement regarding the project? Please step up to the microphone and state your name and please spell it out for our stenographer.

MS. GRUNZ: Bernadette Grunz, G-R-U-N-Z. I'm from 200 Merrick Road. I am the president of the Board at 200 Merrick Road.

One of my big concerns is they're saying there is not going to be an impact on the traffic on Merrick Road. Well, there's a huge impact on the traffic on Merrick Road now so how

they can say there is not going to be an impact or it's not going to cause more backups, you know, when I leave at 5:00 a.m. there is no backups. When I come home at 4:00 it's backed up past Bayview.

So that's my concern, what the traffic is going to be like for at least, what, a year and-a-half they are saying this is going to take. That's my concern.

MR. BAYER: We noticed one other person in the audience. Is there anyone else present who would like to make a statement regarding the project?

Please step up to the microphone and state your name and spell your name for our stenographer. Thank you.

MS. PROSTOWICH: Good evening. My name is Priscilla, P-R-I-S-C-I-L-L-A, Prostowich, P-R-O-S-T-O-W-I-C-H. I live at 190 Merrick Road, Unit 34, Hidden Lake Estates.

Thank you for putting on this power point presentation.

Hidden Lake flows down a waterfall and through a small waterway that feeds into the canal. My question is or I would like to know,

at any time would that waterway be blocked? Because if it is blocked then that four townhouses in the front building I'm sorry, no, there are two buildings, we have flooded before.

If the water isn't able to disperse into the canal and it will come up above our bulkhead we'll have flooding in those units, at least four townhouses that run along that canal. Thank you.

MR. BAYER: Is there anyone else present this evening who would like to make a statement about the project?

We will hold this hearing open a while longer in order to afford any latecomers an opportunity to make a statement.

At this time I will call for a recess in these proceedings until such time as someone requests an opportunity to make a statement.

The time is now 7:51 p.m.

(Whereupon, the meeting is in recess awaiting anyone who would like to make a statement.)

MR. BAYER: Good evening again everyone.

We are going to resume the meeting, the

hearing. We have a guest who would like to make a statement for the record.

Good evening. Please state your name and spell it for our stenographer.

MS. BAXTER: Janice, J-A-N-I-C-E, Baxter, B-A-X-T-E-R. I'm just a resident here in Amityville, 16 Purdy Lane in Amityville, New York.

I've lived here a long time. You're talking about the water in just the areas that are on Merrick Road and I lived on Union Avenue. There used to be -- there's a stream. So all this water that is coming now goes from say Merrick Road, Avon, Union Avenue to Oak Street and still goes up north.

All this water -- I did it reverse, but the water is going to becoming down. What are you going to do? I mean when we lived on Union Avenue and the water got clogged it used to build up and it would flood areas.

So has anybody taken into consideration how far back all this water is coming from? I mean just something to say that maybe that has to be looked into as well before you decide on how the water is going to be redirected coming down.

I mean it's been this way for years and there's always been a problem of backup, but there's a bunch of lakes so I don't know. Just something to think about before you make decisions on either blocking it or redirecting it. Thank you.

MR. BAYER: Thank you.

Please state your name and spell it.

MS. MELLISH: Diane, D-I-A-N-E, Mellish, M-E-L-L-I-S-H, 22 South Ketcham Avenue.

I just have a comment. I don't know if there is a plan or not. I know we are raising the road in front of Nautical Park. I don't know if we are going to raise like how -- is it going to be just a wall going up to Nautical Park, is it going to be sloped down?

Just another question I had about how the new raised road is going to fit in with the level of Nautical Park as it is right now. Thank you.

MR. BAYER: Thank you.

Please state your name.

MR. BROOKS: Good evening. My name is Owen, O-W-E-N, Brooks, B-R-O-O-K-S.

I am a trustee here in the Village. I

just wanted to make a comment that I would like it to be considered seriously in that we don't solve one problem and cause another. Specifically raising Merrick Road may help protect it against coastal flooding.

I want to make sure we don't create a problem where we cause barriers to the drainage at Grand Central Avenue, Dowsing Place, Riverside Avenue, west driveway to the high school and prevent the proper drainage of rainwater from those areas which currently do flood.

So I would like that to be considered as part of the program. Thank you.

MR. BAYER: Thank you.

Is there anyone else in the audience this evening who would like to make a statement about the project?

The time is now 8:05, we will hold the hearing open for a little while longer to afford any latecomers an opportunity to make a statement.

At this time I will call for our second recess in these proceedings. The time is 8:05.

(Whereupon, the meeting is in recess awaiting anyone who would like to make a

statement.)

MR. BAYER: The time is now 8:11. Before we close the hearing, is there anyone else here that would like to make a statement regarding the project?

The time is now 8:11, seeing no individuals would like to make anymore statements, this hearing is now concluded.

Thank you everyone for participating. And on behalf of the Department of Transportation, I wish you all a good evening.

Our design staff, our DOT staff will be around for another 20 minutes or so to answer any questions anyone has in the lobby. Thank you everyone.

* * *

C E R T I F I C A T E

I, Jennifer Sampugnaro, an official court reporter of the State of New York, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes.



JENNIFER SAMPUGNARO, RPR
SENIOR COURT REPORTER

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May 2, 2023

VIA FEDERAL EXPRESS, FIRST-CLASS MAIL,
& EMAIL TO: r10-rpic@dot.ny.gov

NYS DOT Regional Design Group
Amityville Culvert Replacement
Project Team – Room 5A – 10
250 Veterans Memorial Highway
Hauppauge, New York 11788

Re: Project - Merrick Rd. (27A) over Amityville Creek
CIN- C 050001, PIN - 0LC1.01

Dear Project Team:

I am the attorney for 200 Merrick Road Corp., a private Co-op housing community consisting of twenty-four (24) Co-op units located at 200 Merrick Road, Amityville, New York whose property lies north and adjacent to the Culvert Project site (101-8-1-23). Based upon the notations of hatch markings appearing on the Abstract Request, the Co-op will lose seven (7) parking spaces assigned to shareholders in its westerly parking lot and five (5) visitor parking spaces in its easterly lot. The Co-op awaits confirmation whether any of these parking spaces will be permanently lost.

Parking areas for the Co-op were established in accordance with plans approved by the Village of Amityville Building Department and various municipal Boards. There are a total of thirty-four (34) parking spaces, twenty-four (24) of which are assigned to specific shareholder units with ten (10) set aside for visitors and an area reserved by law for emergency access. There is no area available anywhere else on the property to create additional or even temporary parking.

The loss of twelve (12) parking spaces for the projected two-year duration of the project will create a huge hardship for all Co-op residents and especially for those shareholders who hold reserved parking spaces in the area to be appropriated. The loss of available spaces will reduce the Co-op's parking inventory by thirty-five (35%) percent. It will reduce visitor parking by fifty (50%) percent, both reductions having a direct impact on families, especially those who are physically challenged. Further, the Village of Amityville Fire Department mandates that certain access areas in the lots remain unimpeded for ambulance and fire apparatus access. The

anticipated congestion and activity created by the DOT 's use of the parking areas as a staging point for the Project will have a serious impact on these priorities.

In addition to the emergency access concerns, the congestion anticipated on the lots will give rise to dangerous conditions since the area available to maneuver vehicles will be substantially diminished. The Code of the Village of Amityville (Code) §183.129 requires a mandatory turning radius for vehicles and parking spaces of a particular length and width along with one (1) parking space for each bedroom in a unit. The Certificate of Occupancy for the Co-op complex requires that all municipal rules and regulations be complied with to maintain the occupancy of these twenty-four (24) Co-op units (§183.128). The extended loss of available parking will place the Co-op squarely in violation of the Village Code as well as expose the Co-op residents to gross inconvenience and more importantly, dangerous conditions. The Co-op must now explore the impact of those conditions upon its insurance coverages and premiums, which are likely to increase.

A survey of the surrounding areas will reveal that there is absolutely no available alternate or overnight parking anywhere in the vicinity. Village Code §172-26 prohibits overnight parking on all Village streets. The Village Board of Trustees may approve emergency parking for a limited period, but only for a few consecutive nights. Even then the Village imposes a Temporary Parking Permit Fee for such street parking. Violators are subject to parking fines (Village Code §172.20). When coupled with the loss of parking spaces at the adjacent High School, the lack of available parking will become even more acute. Shareholders will scramble to arrange parking on private property and will surely pay a premium to reserve that privilege.

The conflicts within the Village Code will result in applications to the Village for special relief and exceptions. The Co-op will be put to additional expense to negotiate solutions with the Village. It is presumed that the Village will grant overnight and daytime parking along Ocean Avenue and Riverside Avenue. Such parking will require shareholders and guests to cross Merrick Road which is a busy east-west corridor for cars, trucks, and school buses. There is no traffic light at Ocean Avenue. This arrangement will place senior residents and children at high risk.

Aside from the safety and inconvenience factors, the interruptions caused by the project's activities, both on and off the Co-op property (including noise, dust, and vibrations) will not only diminish the quality of life at the Co-op, but also property values for the duration. 200 Merrick Road Co-op is a desirable community with regular sales to young professionals and seniors. The presence of such activities on the site together with a loss of parking and amenities will

substantially impact property values, having a negative effect upon those shareholders who cannot wait to sell their units until the conclusion of this project. The hoped for resolution is that the DOT finds an alternate site for staging and that it will diminish the area to be appropriated for project improvements. If that is not possible, then the leasing fees and partial condemnation damages to be paid by the DOT to the Co-op and the affected shareholders must be commensurate with the project's bearing.

The DOT's interest in redesigning the culvert is premised upon an apparent study or engineering assumption that the area is prone to flooding during substantial storms. Frankly, an anecdotal survey of Amityville residents reveals that no one has encountered or can even recall flooding upon Merrick Road at or near the culvert, either prior to or after Super Storm Sandy (2012). Sandy was the sole occasion. As such, it is asserted that Public Hearings should be held to access the storm water impacts so that the need for the entire project can be reassessed. Further, the study which determined that the project is a priority should be made public.

Last week's hearing at Amityville High School revealed that the culvert may be closed off (perhaps redirected) during the project. There was a suggestion that the DEC has already approved the project. Please provide information regarding the DEC approval and where the entire DEC Report can be viewed. The Co-op has legitimate concerns that Avon Lake and Hidden Lake, as well as the channel which feeds the culvert passing through the Co-op's property will see a rise in water levels and that plant and waterfowl life will be adversely affected.

The DOT states on its website that "*the focus of the Culvert Replacement Project includes... safety and environmental stewardship.*" Of particular concern is the environmental impact upon the surrounding trees and landscape. The Co-op is blessed with a series of stately oak trees situated along Merrick Road adjacent to the Nautical Park. The loss of those trees will substantially affect the aesthetics of the immediate area as well as impact sound, dust and the avian population. The destruction of those noble trees along Merrick Road would thrust the area to a city-like appearance which will be unwelcomed by the entire Amityville community.

A review of the available information online fails to show any plans for the restoration of the Co-op property upon completion of the project. It is respectfully asserted that representatives of the Co-op be actively engaged when plans for paving and landscaping are being drafted, especially as they affect Co-op property. This should include considerations such as plantings, trees, fencing, signage, lighting, and revisions for ingress, egress, and parking space planning.

The Nautical Park is directly opposite the Co-op. Although beautifully landscaped, it is urged that the Park area be utilized instead as the staging area. This would entirely alleviate the need to compromise the Co-op's parking lots and solve some of the primary concerns for safety, parking availability and interference with the shareholders' property rights and values.

It is respectfully requested that representatives of the Department of Transportation meet with a small delegation of the Co-op Board of Directors so that these issues can be thoroughly explored with a view toward the best outcome for all interests at stake.

Sincerely,

Richard G. Handler
General Counsel

cc: Board of Directors
Marie Therese Dominguez, Esq.
Commissioner of NYS Dept. of Transportation
Timothy B. Lennon, Esq.
General Counsel – NYS Dept. of Transportation
Richard B. Causin, P.E.
Regional Director, Region 10 – NYS Dept. of Transportation
Village of Amityville, Board of Trustees

SUMMARY AND ANALYSIS OF COMMENTS RECEIVED

1.1 Public Information Meeting & EDPL Public Hearing

Pursuant to the provisions of Title 23, U.S. Code, Section 128 and Title 40, Code of Federal Regulations, Parts 1500 to 1508, and in accordance with the provisions of Article 8 of the Environmental Conservation Law, the New York State Department of Transportation (NYSDOT), being the agency having principal responsibility for carrying out or approving the proposed project, and acting as the lead agency pursuant to Part 15 of Title 17 of the Official Compilation of Codes, Rules and Regulations of New York State (17 NYCRR Part 15), published a "Notice of EDPL Public Hearing and Availability of Draft Design Report" for the proposed project.

A legal advertisement for the "Notice of EDPL Public Hearing and Availability of Draft Design Report" was published locally in the April 8, 2023 through April 12, 2023 issues of the daily newspaper *Newsday* and in the April 7, 2023 and April 14, 2023 issues of the Spanish language weekly *Noticia*. The advertisement included the date, time, and location of the public information meeting and public hearing; the project website (www.dot.ny.gov/AmityvilleCreek) and the WebEx link for participants electing to participate virtually; and how the Draft Design Report can be viewed in-person or online.

Certified letters were mailed to all affected property owners where a need for a property taking was identified. Certified letters were also sent to owners of properties adjacent to these affected property owners. The certified letters informed recipients of the need for a property taking and of the Public Information Meeting and EDPL Public Hearing scheduled for April 26, 2023.

In accordance with the Public Involvement Plan and Environmental Justice Public Engagement Plan prepared for the project, a project information brochure was produced in both English and Spanish and delivered, in advance of the Public Information Meeting and EDPL Public Hearing, to Amityville Village Hall, Amityville Public Library, Copiague Memorial Library, an apartment complex located near the culvert, and a grocery store that primarily serves Spanish-speaking residents. A portable variable message sign was displayed in front of the Amityville Memorial High School in advance of the EDPL Public Hearing to notify more local residents of the event. Copies of the brochures were also distributed at the Public Information Meeting and EDPL Public Hearing. Furthermore, a Spanish interpreter was present during both events.

The Public Information Meeting and EDPL Public Hearing for the project was held on April 26, 2023 at Amityville Memorial High School. The Public Information Meeting was designed so that participants could walk around the room and view a series of exhibits describing various aspects of the project while also asking informal questions of NYSDOT staff present. NYSDOT supplied comment cards on which participants could supply written comments during or after the Public Information Meeting and EDPL Public Hearing. Participants were also given the opportunity to make verbal statements or comments during the EDPL Public Hearing.

The EDPL Public Hearing started with a pre-recorded presentation describing the project that was followed by a moderated formal comment period with a stenographer recording the proceedings. The presentation was also broadcast virtually via WebEx, with online participants being able to submit comments through a chat box.

2.2 Public Comments

More than 20 comments were submitted verbally, as recorded by the stenographer, and in writing through the comment cards. Several comments were received via e-mail and letter after the Public Information Meeting and EDPL Public Hearing of April 26. The following is a summary of the comments received and any actions taken by NYSDOT in response.

1. ***Comment from Resident (written) – Request traffic light at Merrick Rd and Ocean Ave with left turn into Hidden Lake Estates.***

   NYSDOT does not believe that a traffic signal is needed at the intersection of Merrick Road and Ocean Avenue, as there are alternate traffic signals that motorists can utilize to access Merrick Road from public roads south of Merrick Road. Hidden Lakes Estates is a private property and public funds cannot be used to perform a traffic signal warrant analysis for their benefit. The property owner can conduct a study and NYSDOT will review the study and, if in agreement, issue a permit for the private entity to install the signal.

   However, in lieu of a traffic signal at Ocean Ave and Merrick Road, a short-left turn lane will be introduced in the project for the eastbound movement turning into Hidden Lake Estates.

2. ***Comment from Resident (written) - Request traffic light at Merrick Rd and Ocean Ave with left turn into Hidden Lake Estates.***

   See response to Comment #1.

3. ***Comment from Resident (written) - Please put a traffic light at corner of Ocean Ave and Merrick Rd for westbound left turn into Hidden Lake Estates.***

   See response to Comment #1.

4. ***Comments from Resident (written) – Our community as well as those to the west of us are in need of a left turn lane into Hidden Lake Estate at 190 Merrick Rd. It would make it safer to be out of way of cars coming east and west on Merrick Rd. In addition, we would like to understand if there will be a change of the water flow and the effect on Hidden Lake from the construction.***

   See response to Comment #1.

   The proposed project will maintain the flow of water under Merrick Road during construction and there will be no disruption to the stream flow from Hidden Lake into Amityville Creek. Please take note that the spillway at the south end of Hidden Lake regulates water into Amityville Creek and this spillway is not being altered in any way. Therefore, there will be no effect on Hidden Lake water levels during construction or after construction is complete.

5. ***Comment from Resident (written) - 190 Merrick Road (Hidden Lake Estates) is requesting a left hand turn lane traveling westbound on Merrick Rd. It is a dangerous turn with Eastbound oncoming traffic. We must come to a complete stop and wait for a westbound car to stop to let us turn left.***

   See response to Comment #1. Note that a left turn lane for westbound cars on Merrick Road turning into Ocean Avenue already exists.

6. ***Comment from Resident (written) - Requesting turning lane into Hidden Lake Estates - 190 Merrick Rd, Amityville***

   See response to Comment #1.

7. ***Comment from Resident (written) - I am a resident at 190 Merrick Road (Hidden Lake Estates). I would love to see a left turning lane (eastbound) on Merrick Road. it is very dangerous to make lefthand turns out of our development.***

   See response to Comment #1.

8. ***Comment from Resident (written) - Requesting a turning lane into Hidden Lake Estates - Eastbound left turn on Merrick Road.***

   See response to Comment #1.

9. ***Comment from Resident (written) - Requesting a traffic light at the intersection of Merrick Road and Ocean Ave***

   See response to Comment #1.

10. ***Comment from Resident (written) - Please replace trees removed from this project area and plant in Nautical Park. I also would like reflectors in road where lighting is low, i.e. by the High School. More signage is needed at Ocean Ave/Rt 27A to make it extra obvious that there are no left turn lanes off of Ocean Avenue heading west on 27A. Maybe add blinking lights at the entrance to Hidden Lakes where cars have difficulty entering and leaving in a safe manner.***

    The existing street trees along Merrick Road in front of Nautical Park must be removed in order to provide new sidewalks and curbs. These trees have exposed roots that will be damaged by the construction and the new fill placed upon the roots will also cause damage to the trees. We will investigate saving the tree closest to Ocean Avenue during final design. At the request of several residents, we will investigate planting some additional trees within the project area.. In addition, we will be planting some new trees inside Nautical Park as well.

    New line striping that meets NYSDOT reflectivity standards will be placed on the new pavement and will enhance the drivers view of the roadway at night.

    The "no left turn" restriction for northbound Ocean Avenue to westbound NYS Route 27A is being studied further. If this restriction is needed, signs of

appropriate size and reflectivity standards will be installed so that it will be more visible to motorists.

11. ***Comment from Resident (written) - If there's an opportunity to modify the park fence at the corner of Ocean and Merrick Road it could use a modification to make it safer for pedestrians by moving the gate back from the corner. The corner is an acute angle with not much room and poor visibility for pedestrians and drivers coming up Ocean Avenue as well. Also, the sidewalk on the west corner of Riverside and Merrick is blocked by a pole (which will be removed) but also other obstructions such as the crossing buttons and signal poles could be better designed. Thanks for sharing and explaining.***

    The current design will not disturb the park fence at the corner of Ocean Avenue and Merrick Road and the existing conditions at that corner meet all clearances and standards of the Americans with Disabilities Act (ADA). The new design will maintain all ADA standards at each intersection within the reconstruction limits.

12. ***Verbal comment from Resident (Stenographer (before PH)) - I am pleased about the audible light which is great on the corner of Riverside. I am happy they are going to be replacing the sidewalk from Grand Central through Ocean Avenue which is going to be beneficial, as well as doing the sidewalk on the north side of Merrick Road. It is important to me because there are quite a number of obstacles that are hinderances along my path and I go there two or three dozen times a week, I take that path. And so it will be -- the barriers will be taken away which will be great. It will be a much smoother transition access for me. That covers it.***

    Thank you for the feedback. By adding sidewalk where none currently exist, the proposed design will provide improved accommodations for pedestrians on both sides of the Merrick Road.

13. ***Verbal comment from Resident (Stenographer (before PH)) - I own 16 Riverside Avenue which is the insurance agency right across the street and, well, I have a number of questions. They are going to raise the road approximately two feet and it's going to dome -- slowly dome down, however you call it, on both sides. On my side rising tidal waters will hit that dome and stop. They have nowhere to go. What can we do about that? I know you are putting a tunnel in there, right or affixing a tunnel. The culvert under Merrick Road is being fixed. Can that have flood water access from above? In other words, can there be vents put in the dome to allow the water to funnel through? I also have no sidewalk on the road side of my hedges, so I also want to know -- this is me right here. I want to know if those hedges are going to be ripped out and the trees, if they'll be replaced. I want to know sidewalk goes in, am I going to be responsible to maintain it, as is typical with most sidewalks. Maybe you don't ask for them, you get them and you have to maintain them. What I have seen in the business is lot of trip and falls and all of a sudden I am responsible for something I had nothing to do with, especially when they put back trees making it pretty and then the roots from the trees lift up the sidewalk and there you go, who is going to fix that. So that's all I can think of right now. I don't understand the***

purpose or the need of -- for this repair. Sidewalks are nice, I get that, but raising the road seems like a tremendous expense to serve what purpose. It's not fix -- it's not broken, why fix it.

Daily tidal waters do not rise to the normally dry ground of your property. So tidal waters do not collect on your property during daily tide cycles.

If tidal waters from the Great South Bay rise above the Riverside Avenue pavement elevation (due to a major storm surge event or hurricane), some of that water may still reach your property regardless of the pavement elevation at Merrick Road.Should tidal waters rise significantly above Riverside Avenue, the culvert at Amityville Creek under Merrick Road will allow those waters to flow under Merrick Road and equalize on both sides of Merrick Road – so water levels at your property will be unchanged as a result of the proposed project. In fact, the larger opening of the new culvert will allow excessively high tides to flow quicker under Merrick Road resulting in a faster time to create a state of tidal equilibrium on the north and south sides of Merrick Road.

As far as rain-water is concerned, your property is currently at a lower elevation than Merrick Road, which forces any rain water that collects in your side yard to remain there until absorbed into the ground. Raising Merrick Road, as proposed in this project, will not increase the water that collects on your property as all rainwater that falls onto Merrick Road will be collected in catch basins and piped away from your property directly to Amityville Creek.

A sidewalk along Merrick Road adjacent to your property is being added to improve accommodations for pedestrians and connect the existing sidewalk gap on the south side of Merrick Road between Riverside Avenue and Grand Central Avenue. The property owner will be compensated for the property acquisition and for any landscaping that must be removed to construct the new sidewalk. During the property acquisition process, Department staff can explain the options you have for restoring your landscaping and hedges. In accordance with Highway Law, the adjacent property owner is responsible for maintaining the sidewalk along the State highway.

14. ***Verbal comment from Resident (Stenographer (before PH)) - owner of C and 3G's property incorporated right across the street. The state came in to install the light a couple years ago with no notification whatsoever. Then we have our business sign on the corner. I know they're going to have to change all that again. I am asking that they be a little more considerate and not put all the signs in front of our business sign which it blocks our business sign, and that sign has been there since 1950. It's quite annoying that we never had any notification that they were even doing that. And my other big request is I would like to see what property line survey they're using in their eminent domain because I have three surveys here, the tax maps of the Town of Babylon, I also have my tax bill from the Town of Babylon, and I have my original survey when that was still a dirt road, and we took the house which was eminent domain on this property of the high school and moved it to where it is now. And there's three different dimensions, and it's off by a good ten plus feet so that makes a big difference for us there as to how much property is being taken. What survey***

are they using? I know they will probably resurvey, but when they do they usually go by what's in maps, so just need, would like to know that. And that's it, I guess. I mean I have a lot of things to ask, but. Water, where is it all going?

The corner signs and pedestrian crossing countdown lights and buttons must be placed in accordance with proper standards. We will do our best to design these features so that they do not adversely impact the corner of your property.

Property impacts are determined from a survey of the properties performed by a NYS licensed land surveyor following the NYSDOT Land Surveying standards and practices. You have the right to challenge the condemnation of your property via judicial review as explained in the *Legal Notice of Eminent Domain Procedure Law Determination and Findings* that is mailed to each property owner affected by the project.

15. ***Verbal comment from Resident (Stenographer) - Thank you for having this hearing. Several things came to mind. The first thing I thought about was why this has been determined a CE designation. I realize it is a relatively small area we are talking about, but it impacts bodies of water, it impacts the entrance to the high school. It is also one of the primary access areas to streets and houses in the village, and I was concerned that it didn't have some kind of an EIS, environmental impact statement. It could be an arbitrary decision that it is not a significant project, but to me it does seem to have some impact certainly on water. Also I was concerned about how much time you're going to have the temporary access at the high school entrance because although you're saying it's not going to impact the school, we had many situations, one was just the replacement of a traffic signal that caused quite a bit of delay and problems entering the high school. I realize there are people here from the school who will probably be addressing that. I just hope all of these things will be taken into consideration when all of this is planned out. It really is very conservative about that. There is always something going on at the high school. There is an access road on Bayview, but that has proved in the past not to be sufficient if one of the entrances is closed. So I am concerned about that as well. I am very disappointed that the trees have to come down. They are street trees. It just makes the area look barren. I understand it's lovely, it's going to be more pedestrian friendly and bike friendly, but it is unfortunate that those mature trees have to be removed. I am glad to see that other trees will be planted, but we have been through this already when the county changed Oak Street and did some modifications there and took down all the oak trees for which the street was named. It just takes so long. It changes the character of the street and the community. I'm pleased that you are doing something to ameliorate flooding, but there are always repercussions, and I just hope all of these are being adequately addressed. Thank you.***

    The Department has added language to the report That better explains why the project does not meet the requirements for an Environmental Impact Statement or Environmental Assessment. Please see Attachment B in the Final Design Report.

The existing street trees along Merrick Road in front of Nautical Park must be removed in order to provide new sidewalks and curbs. These trees have exposed roots that will be damaged by the construction and the new fill placed upon the roots will also cause damage to the trees. Replacement trees will be added inside Nautical Park near Merrick Road. We will also investigate saving the tree closest to Ocean Avenue during final design.

At the request of several residents, we will investigate planting some additional street trees within the project area.

Access to the high school will be maintained during construction and the Department is coordinating with the High School to ensure that the construction has minimal impact to the school operations.

16. ***Verbal comment from Resident (Stenographer) - I represent 200 Merrick Road Corporation, the property next door to the high school on the north side, northwest side. My concerns are twofold. The temporary acquisition map which show an unnecessary or certainly a large burden to the property owners at 200 Merrick Road which is a cooperative establishment. I am on the Board of Directors of that co-op. The co-op name is 200 Merrick Road Corp. The temporary acquisition would wipe out many of our parking spaces in our property which is an undue burden for our shareholders. There is no other place to park. As you may or may not know Amityville does not allow overnight parking on the street, so I don't know where we would park our cars. We would lose at least eight to ten of our spots, and I think we only have 24 of them. So we are looking at about a loss of eight parking spots. That is an undue burden on us. I don't know where else we would be able to park our cars. These are people that live here. My other concern is the change or the construction of the culvert and whether or not that would have an affect on Amityville Creek which runs behind our property at 200 Merrick Road. It's sort of a pond. My concern is that the level of that creek may increase or decrease based on the construction of the culvert. That's it, thank you for your time.***

The Department is coordinating with the board of 200 Merrick Road Corporation, and several meetings have already been held to better explain the project and mitigate the impacts to your property.

During construction, there will be a limited impact to approximately 3 or 4 parking spaces while the Contractor restores the driveway access to Merrick Road. Impacts will be for a short period of time and mostly only during the traditional work day (approx. 9am to 3pm, Mon.-Fri.) so that residents will be able to park in many of the disturbed parking spaces at the end of each work day. Residents will have access to the parking lot each day and access for emergency vehicles will be maintained at all times.

We are working with the board to provide some additional temporary parking spaces within your parking lots during construction to mitigate any temporary loss of parking while our Contractor is restoring the driveway access. And the Village of Amityville has also agreed to work with the residents to allow on street overnight parking when construction has an impact on your parking lot.

Upon completion of construction there will be no loss of parking and every parking space will be restored to their original configuration.

Additionally, a hydraulic analysis of the culvert was performed and the flow of water, and water levels, in the creek adjacent to your property will not be altered. During construction the flow will be maintained in the existing channel while the new wider culvert is under construction. And after construction the water levels will have the same elevation due to the fact that the creek is an open channel connected directly to the bay. And the water elevation in the channel along your property will follow the tidal water levels from the Great South Bay - just as they do now. The spillway at the south end of Hidden Lake controls the amount of water flow to the creek and that spillway is not being altered. Therefore, the water flow along your property will be the same is the existing water flow.

17. ***Verbal comment from Resident (Stenographer) - Thank you very much for putting this together. You myself and the superintendent of school have already spoken extensively about this, but I am very concerned about the timeline to make comments because we would like the plans and specs to be reviewed by our own architects because then they would speak on our behalf. So can you send us all the plans and specs ASAP so that we can get together and review it and give you our comments within the timelines that you have specified.***

    The Department is coordinating with the School District to get them all information requested in a timely manner to ensure comments can be received within the required timeline.

18. ***Verbal comment from Resident (Stenographer) - I am the president of the Board at 200 Merrick Road. One of my big concerns is they're saying there is not going to be an impact on the traffic on Merrick Road. Well, there's a huge impact on the traffic on Merrick Road now so how they can say there is not going to be an impact or it's not going to cause more backups, you know, when I leave at 5:00 a.m. there is no backups. When I come home at 4:00 it's backed up past Bayview. So that's my concern, what the traffic is going to be like for at least, what, a year and-a-half they are saying this is going to take. That's my concern.***

    One lane of traffic in each direction will be maintained on Merrick Road during construction. This is the same as the existing conditions for through traffic. There will be some inevitable construction delays due to the nature of the work and the temporary loss of some shoulder space and left turn lanes. The Department will continue to work with the community during final design to minimize traffic impacts during construction. The traffic signal at Riverside Avenue will likely control the traffic flow and we may be able to alter the signal timing during construction to reduce some traffic congestion during peak times.

    Upon completion of the project, all traffic patterns will be restored to their original condition with the exception of the proposed eastbound left turn lane into Hidden Lake Estates. The addition of continuous shoulders on Merrick Road and sidewalk improvements may help to improve traffic flow.

19. ***Verbal comment from Resident (Stenographer) - I live at 190 Merrick Road, Unit 34, Hidden Lake Estates. Thank you for putting on this power point presentation. Hidden Lake flows down a waterfall and through a small waterway that feeds into the canal. My question is or I would like to know, at any time would that waterway be blocked? Because if it is blocked then that four townhouses in the front building I'm sorry, no, there are two buildings, we have flooded before. If the water isn't able to disperse into the canal and it will come up above our bulkhead we'll have flooding in those units, at least four townhouses that run along that canal. Thank you.***

    The waterway will not be blocked during the construction of this project. The proposed project will maintain the flow of water under Merrick Road at all times during construction and there will be no disruption to the stream flow from Hidden Lake into Amityville Creek.

20. ***Verbal comment from Resident (Stenographer) - I'm just a resident here in Amityville, 16 Purdy Lane in Amityville, New York. I've lived here a long time. You're talking about the water in just the areas that are on Merrick Road and I lived on Union Avenue. There used to be -- there's a stream. So all this water that is coming now goes from say Merrick Road, Avon, Union Avenue to Oak Street and still goes up north. All this water -- I did it reverse, but the water is going to becoming down. What are you going to do? I mean when we lived on Union Avenue and the water got clogged it used to build up and it would flood areas. So has anybody taken into consideration how far back all this water is coming from? I mean just something to say that maybe that has to be looked into as well before you decide on how the water is going to be redirected coming down. I mean it's been this way for years and there's always been a problem of backup, but there's a bunch of lakes so I don't know. Just something to think about before you make decisions on either blocking it or redirecting it. Thank you.***

    The proposed project will maintain the flow of water under Merrick Road during construction and there will be no disruption to the stream flow from Hidden Lake into Amityville Creek or any points upstream of that. Please take note that the spillway at the south end of Hidden Lake regulates water into Amityville Creek and this spillway is not being altered in any way. Therefore, both during and after construction, there will be no effect on Hidden Lake water levels and all waters upstream of that location.

21. ***Verbal comment from Resident (Stenographer) - 22 South Ketcham Avenue. I just have a comment. I don't know if there is a plan or not. I know we are raising the road in front of Nautical Park. I don't know if we are going to raise like how -- is it going to be just a wall going up to Nautical Park, is it going to be sloped down? Just another question I had about how the new raised road is going to fit in with the level of Nautical Park as it is right now. Thank you.***

    The Department is coordinating with park officials and the ground will be re-graded (ie: sloped down) into the park where the roadway is raised. No wall will be constructed. The design intent for the park frontage is to reset the existing

decorative fence, stone pilasters, and lighting in essentially the same location and gradually slope the ground to blend in with the existing ground.

22. ***Verbal comment from Resident (Stenographer) - I just wanted to make a comment that I would like it to be considered seriously in that we don't solve one problem and cause another. Specifically raising Merrick Road may help protect it against coastal flooding. I want to make sure we don't create a problem where we cause barriers to the drainage at Grand Central Avenue, Dowsing Place, Riverside Avenue, west driveway to the high school and prevent the proper drainage of rainwater from those areas which currently do flood. So I would like that to be considered as part of the program. Thank you.***

    All existing drainage patterns will be maintained and there will be no adverse flooding impacts caused by this project. Re-paving the road will provide an opportunity to eliminate any puddle areas at the intersections with Merrick Road in the project area.

23. ***Written comment from Resident (Letter from 200 Merrick Road Corp representation).***
    Dear Project Team:

    I am the attorney for 200 Merrick Road Corp., a private Co-op housing community consisting of twenty-four (24) Co-op units located at 200 Merrick Road, Amityville, New York whose property lies north and adjacent to the Culvert Project site (101-8-1-23). Based upon the notations of hatch markings appearing on the Abstract Request, the Co-op will lose seven (7) parking spaces assigned to shareholders in its westerly parking lot and five (5) visitor parking spaces in its easterly lot. The Co-op awaits confirmation whether any of these parking spaces will be permanently lost.

    Parking areas for the Co-op were established in accordance with plans approved by the Village of Amityville Building Department and various municipal Boards. There are a total of thirty-four (34) parking spaces, twenty-four (24) of which are assigned to specific shareholder units with ten (10) set aside for visitors and an area reserved by law for emergency access. There is no area available anywhere else on the property to create additional or even temporary parking.

    The loss of twelve (12) parking spaces for the projected two-year duration of the project will create a huge hardship for all Co-op residents and especially for those shareholders who hold reserved parking spaces in the area to be appropriated. The loss of available spaces will reduce the Co-op's parking inventory by thirty-five (35%) percent. It will reduce visitor parking by fifty (50%) percent, both reductions having a direct impact on families, especially those who are physically challenged. Further, the Village of Amityville Fire Department mandates that certain access areas in the lots remain unimpeded for ambulance and fire apparatus access. The anticipated congestion and activity created by the DOT 's use of the parking areas as a staging point for the Project will have a serious impact on these priorities.

In addition to the emergency access concerns, the congestion anticipated on the lots will give rise to dangerous conditions since the area available to maneuver vehicles will be substantially diminished. The Code of the Village of Amityville (Code) §183.129 requires a mandatory turning radius for vehicles and parking spaces of a particular length and width along with one (1) parking space for each bedroom in a unit. The Certificate of Occupancy for the Co- op complex requires that all municipal rules and regulations be complied with to maintain the occupancy of these twenty-four (24) Co-op units (§183.128). The extended loss of available parking will place the Co-op squarely in violation of the Village Code as well as expose the Co- op residents to gross inconvenience and more importantly, dangerous conditions. The Co-op must now explore the impact of those conditions upon its insurance coverages and premiums, which are likely to increase.

A survey of the surrounding areas will reveal that there is absolutely no available alternate or overnight parking anywhere in the vicinity. Village Code §172-26 prohibits overnight parking on all Village streets. The Village Board of Trustees may approve emergency parking for a limited period, but only for a few consecutive nights. Even then the Village imposes a Temporary Parking Permit Fee for such street parking. Violators are subject to parking fines (Village Code §172.20). When coupled with the loss of parking spaces at the adjacent High School, the lack of available parking will become even more acute. Shareholders will scramble to arrange parking on private property and will surely pay a premium to reserve that privilege.

The conflicts within the Village Code will result in applications to the Village for special relief and exceptions. The Co-op will be put to additional expense to negotiate solutions with the Village. It is presumed that the Village will grant overnight and daytime parking along Ocean Avenue and Riverside Avenue. Such parking will require shareholders and guests to cross Merrick Road which is a busy east-west corridor for cars, trucks, and school buses. There is no traffic light at Ocean Avenue. This arrangement will place senior residents and children at high risk.

Aside from the safety and inconvenience factors, the interruptions caused by the project's activities, both on and off the Co-op property (including noise, dust, and vibrations) will not only diminish the quality of life at the Co-op, but also property values for the duration. 200 Merrick Road Co-op is a desirable community with regular sales to young professionals and seniors. The presence of such activities on the site together with a loss of parking and amenities will substantially impact property values, having a negative effect upon those shareholders who cannot wait to sell their units until the conclusion of this project. The hoped for resolution is that the DOT finds an alternate site for staging and that it will diminish the area to be appropriated for project improvements. If that is not possible, then the leasing fees and partial condemnation damages to be paid by the DOT to the Co-op and the affected shareholders must be commensurate with the project's bearing.

The DOT's interest in redesigning the culvert is premised upon an apparent study or engineering assumption that the area is prone to flooding during substantial storms. Frankly, an anecdotal survey of Amityville residents reveals that no one has encountered or can even recall flooding upon Merrick Road at or near the culvert, either prior to or after Super Storm Sandy (2012). Sandy was the sole occasion. As such, it is asserted that Public Hearings should be held to access the storm water impacts so that the need for the entire project can be reassessed. Further, the study which determined that the project is a priority should be made public.

Last week's hearing at Amityville High School revealed that the culvert may be closed off (perhaps redirected) during the project. There was a suggestion that the DEC has already approved the project. Please provide information regarding the DEC approval and where the entire DEC Report can be viewed. The Co-op has legitimate concerns that Avon Lake and Hidden Lake, as well as the channel which feeds the culvert passing through the Co-op's property will see a rise in water levels and that plant and waterfowl life will be adversely affected.

The DOT states on its website that "the focus of the Culvert Replacement Project includes... safety and environmental stewardship." Of particular concern is the environmental impact upon the surrounding trees and landscape. The Co-op is blessed with a series of stately oak trees situated along Merrick Road adjacent to the Nautical Park. The loss of those trees will substantially affect the aesthetics of the immediate area as well as impact sound, dust and the avian population. The destruction of those noble trees along Merrick Road would thrust the area to a city-like appearance which will be unwelcomed by the entire Amityville community.

A review of the available information online fails to show any plans for the restoration of the Co-op property upon completion of the project. It is respectfully asserted that representatives of the Co-op be actively engaged when plans for paving and landscaping are being drafted, especially as they affect Co-op property. This should include considerations such as plantings, trees, fencing, signage, lighting, and revisions for ingress, egress, and parking space planning.

The Nautical Park is directly opposite the Co-op. Although beautifully landscaped, it is urged that the Park area be utilized instead as the staging area. This would entirely alleviate the need to compromise the Co-op's parking lots and solve some of the primary concerns for safety, parking availability and interference with the shareholders' property rights and values.

It is respectfully requested that representatives of the Department of Transportation meet with a small delegation of the Co-op Board of Directors so that these issues can be thoroughly explored with a view toward the best outcome for all interests at stake.

The Department is coordinating with the board of 200 Merrick Road Corporation, and several meetings have already been held to better explain the project and mitigate the impacts to the property.

Parking Impacts:
The design has been revised to limit temporary impacts to parking only near the driveway entrances and ongoing coordination with the Co-op board will continue throughout the design process. At a recent meeting with the board, a concept of providing some temporary parking during construction was discussed and NYSDOT will continue to explore this option with the board as the design progresses.

For additional information about parking impacts, please see the response to comment #16.

Permits:
The presence of noise, dust and vibrations are an inevitable byproduct of highway construction. The project will require a stormwater pollution prevention plan (SWPPP) that identifies how these items, as well as stormwater permitting items, will be addressed and meet all industry and permitting agency requirements. These permits are procured during final design of the project.

The New York State Department of Environmental Conservation (NYSDEC) does not grant approval for the proposed project. However, permits from NYSDEC are required for construction of the new culvert.

The Department will apply for all permits required for construction of the proposed project and will coordinate as necessary with each permitting entity. All permits must be in hand prior to the start of construction.

Raising the Highway:
The proposed roadway raise will allow the new culvert to pass the flow of water from the 100-year design storm and also raise the roadway to the Federal Emergency Management Agency (FEMA) 100-yr floodplain elevation. Thus, improving the roadway's resiliency to potential flooding.

Hydraulic Analysis of the Culvert:
Attachment H in the Final Design Report contains the hydraulic analysis for the new culvert. The analysis shows that the existing culvert is overtopped when subjected to the 50 year design storm.

Tree Replacement:
Please see the response to comment #15 for information about the street trees that must be removed for the project. Tree replacement in the project area will be provided to mitigate the loss of trees. A Landscape plan will be developed in final design that can be shared with the board at 200 Merrick Road Corporation.

Staging Area:
The property of 200 Merrick Road Corporation will not be used as a contractor staging area. The Department revisited the property acquisition needs for the project and significantly reduced the impacts to your property.

Nautical Park cannot be used as a staging area since it is a public park and protected from such adverse impacts under the USDOT Transportation Act of 1966 (Section 4f).

Water Levels in the Channel Passing by the Co-op's Property:
Water levels in the channel adjacent to the Co-op's property will not be changed during or after construction. For additional information, please see the response to comment numbers 16, 19, and 20.

NOTICE OF EMINENT DOMAIN PROCEDURE LAW (EDPL)
DETERMINATION AND FINDINGS OF PUBLIC HEARING HELD APRIL 26, 2023
NEW YORK STATE DEPARTMENT OF TRANSPORTATION
PROJECT IDENTIFICATION NO. PIN 0LC1.01
NYS STATE ROUTE 27A OVER AMITYVILLE CREEK CULVERT REPLACEMENT PROJECT
VILLAGE OF AMITYVILLE, SUFFOLK COUNTY

In accordance with the Eminent Domain Procedure Law (EDPL), the following is a synopsis of the determination and findings that have been made regarding the proposed project to replace an aging culvert at Amityville Creek under NYS Route 27A (Merrick Road) in the Village of Amityville in Suffolk County.

These determinations and findings have been made in consideration of comments submitted by the public both during and after the public hearing held for this project. This project will proceed toward a letting scheduled for the Fall of 2024. Acquisition of the right-of-way required is scheduled to begin in the Fall of 2024.

The basic design of this project has not been changed, consisting of replacing the deteriorating culvert and reconstructing Merrick Road between Ocean Avenue and Grand Central Avenue to raise the roadway elevation to the FEMA 100-year floodplain elevation. Since the EDPL hearing, slight modifications in the proposed roadway profile and typical sections have been made to further minimize impacts to the community and surrounding properties.

The project will widen the existing culvert to increase the hydraulic capacity and reduce the potential for roadway flooding during severe weather events. Continuous sidewalks and shoulders on both sides of the road will be provided to improve safety and line striping will be modified to improve traffic flow. The proposed project will not have any adverse cumulative effects on the surrounding areas or the environment.

Construction is currently scheduled to begin early in 2025. One lane of traffic in each direction will be maintained along Merrick Road during construction. No off-site detours will be required and access to all homes and businesses will be maintained throughout construction.

The action under EDPL involves property acquisitions (FEE), permanent easements (P.E.), and temporary easements (T.E.) at the following properties:

PROPERTY ADDRESS	TAX MAP NO.	AT EDPL HEARING			FINAL		
		FEE (ft^2)	P.E. (ft^2)	T.E. (ft^2)	FEE (ft^2)	P.E. (ft^2)	T.E. (ft^2)
HIDDEN LAKES ESTATES, INC.	0101-007.00-05.00-011.001			323	No Property Taking		
200 MERRICK ROAD CORP.	0101-008.00-01.00-023.000	503		2,742	167	73	287
AMITYVILLE HIGH SCHOOL	0101-008.00-01.00-022.00	1,068		2,429	960		
NAUTICAL PARK (SUFFOLK COUNTY)	0101-007.00-08.00-006.000	50		121		69	
NAUTICAL PARK (SUFFOLK COUNTY)	0101-007.00-08.00-007.000	119			32	162	
AMITYVILLE CREEK (TOWN OF BABYLON)	0101-012.00-02.00-001.000	530		1,084	489		977
217 MERRICK ROAD	0101-010.00-02.00-001.001	41			41		
217 MERRICK ROAD	0101-010.00-02.00-067.000	186		218	242		
16 RIVERSIDE AVENUE	0101-01.00-02.00-020.0001	1,574		336	416	1,256	
5 DOWSING PLACE	0101-010.00-02.00-021.000	660		212	371	483	
6 DOWSING PLACE	0101-010.00-02.00-039.000	21		151	No Property Taking		
3 GRAND CENTRAL AVENUE	0101-010.00-02.00-040.000			63	No Property Taking		

Copies of this determination and findings will be forwarded upon written request without cost.

Those property owners who may wish to challenge condemnation of their property via judicial review may do so only on the basis of issues, facts, and objections raised at the hearing (§ 202 (C) (2) of Article 2, EDPL).

Each individual assessment record billing owner ("property owner") or his or her attorney of record whose property may be acquired shall note that, under § 207 (A), a petition to seek judicial review of the condemnor's determination and findings must be filed within 30 days after the condemnor's completion of its publication of its determination and findings. Further, the exclusive venue for judicial review of the condemnor's determination and findings is the appellate division of the supreme court in the judicial department where any part of the property to be condemned is located (§ 207 (B), § 208).

Further information on this project is available upon request during normal working hours. Direct inquiries to:

NYSDOT Regional Design Group
Amityville Culvert Replacement Team
250 Veterans Memorial Highway, Room 5A-10, Hauppauge, New York 11788
631.952.6654 r10-rpic@dot.ny.gov

ATTACHMENT G

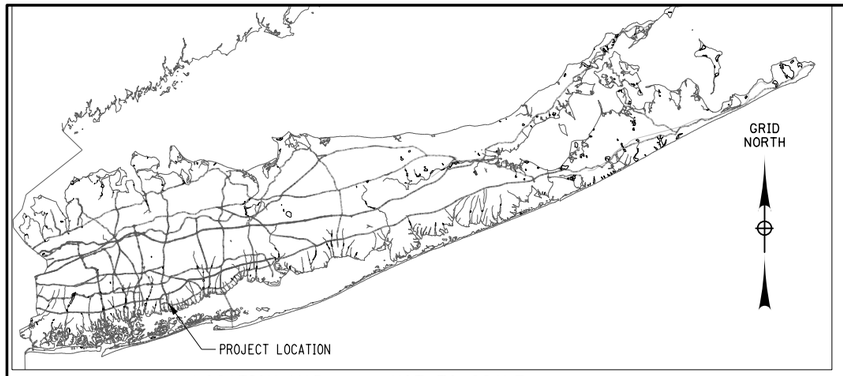
Right-of-Way Information

NEW YORK STATE
DEPARTMENT OF TRANSPORTATION

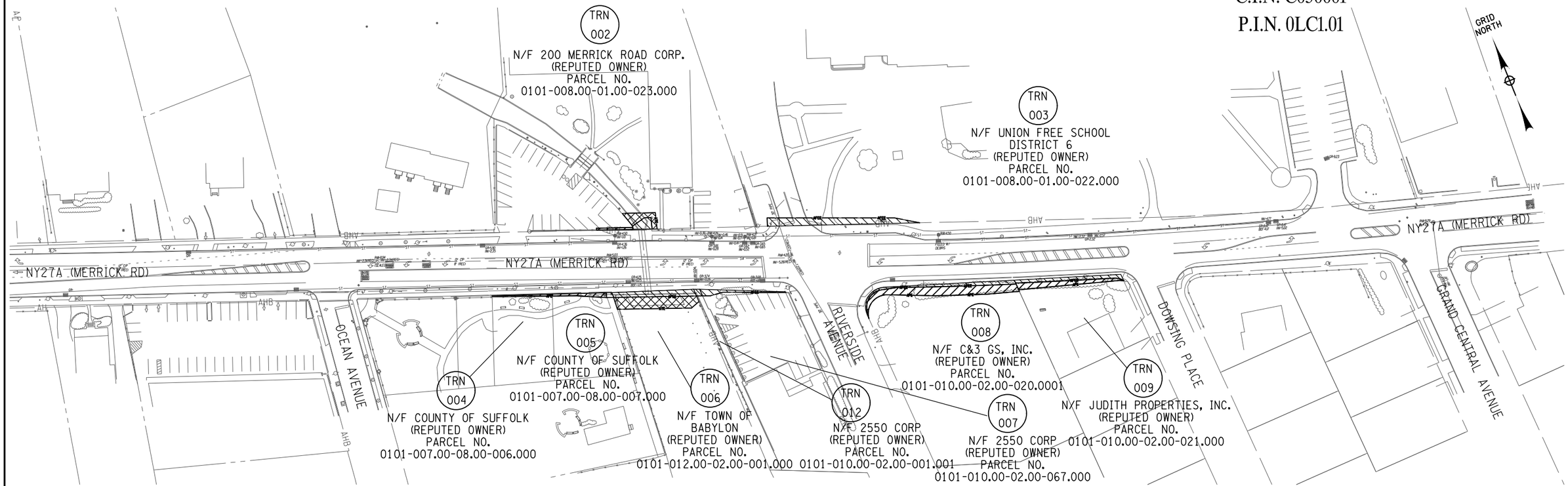
ABSTRACT REQUEST MAP

ROUTE 27A OVER AMITYVILLECREEK
VILLAGE OF AMITYVILLE
SUFFOLK COUNTY

C.I.N. C050001
P.I.N. 0LC1.01



LOCATION MAP NOT TO SCALE



TRN	REPUTED OWNER	TAX MAP INFO SECTION	BLOCK	LOT	DEED REFERENCE LIBER	PAGE	CARTRIDGE	FRAME	AREA OF ACQUISITIONS (S.F.) FEE	P.E.	T.E.	REMARKS
	S.H. NO. 5300 MERRICK RD											
2	200 MERRICK ROAD CORP.	008	01	23	10387	13			167	73	287	
3	UNION FREE SCHOOL DISTRICT 6	008	01	22	2976	286			960			
4	COUNTY OF SUFFOLK	007	08	6	12047	11				69		
5	COUNTY OF SUFFOLK	007	08	7	12818	620			32	162		
6	TOWN OF BABYLON	012	02	1					489		977	
7	2550 CORP	010	02	67	9062	390			242			
8	C&3 GS, INC.	010	02	20.0001	12296	255			416	1256		
9	JUDITH PROPERTIES, INC.	010	02	21	12601	265			371	483		
12	2550 CORP	010	02	1.1	9062	390			41			

NOTE: AREA IS ONLY APPROXIMATE AND TO BE USED BY THE OFFICE OF RIGHT OF WAY FOR THE SOLE PURPOSE OF DETERMINING TYPE OF TITLE DATA REQUIRED.

AHB — APPROXIMATE HIGHWAY BOUNDARY
℄ — APPROXIMATE PROPERTY LINE
ATE — APPROXIMATE PROPOSED TEMPORARY EASEMENT
APE — APPROXIMATE PROPOSED PERMANENT EASEMENT
AFEE — APPROXIMATE PROPOSED FEE

TRN 000 — TEMPORARY REFERENCE NUMBER

LEGEND

T.E.
P.E.
FEE

100 0 100 200′
1" = 100′

P.I.N. 0LC1.01	DATE: JULY 21, 2023
MERRICK RD S.H. NO. 5300	
VILLAGE OF AMITYVILLE	
COUNTY OF SUFFOLK	
FILE NAME: C50001_ARM_ROW.DGN	

THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, THE DRAWING CONTENTS ARE NOT AN APPROVED FINAL CONSTRUCTION CONTRACT DOCUMENT.

ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED

ABSTRACT REQUEST MAP
ROUTE 27A OVER AMITYVILLE CREEK
VILLAGE OF AMITYVILLE
SUFFOLK COUNTY

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

SHEET 1 OF 1

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 10

CHECKED BY
DRAFTED BY
ESTIMATED BY
DESIGNED BY
CHECKED BY
JOB MANAGER
DESIGN SUPERVISOR

FILE NAME = nyuLr8.nbavl.dgn
DATE/TIME = 21-JUL-2023 16:58
USER = cjenne

ATTACHMENT H

Hydraulics and Preliminary Drainage Report

PIN 0LC101

CULVERT REPLACEMENT AT NYS RTE 27A (MERRICK RD)
OVER AMITYVILLE CREEK
CULVERT IDENTIFICATION NUMBER (CIN): C050001
VILLAGE OF AMITYVILLE, TOWN OF BABYLON
SUFFOLK COUNTY

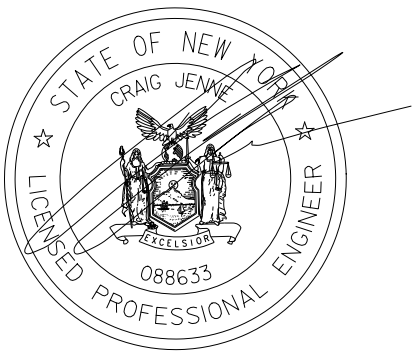
WATERSHED REPORT
FOR DOT PROJECTS

Prepared in Accordance With
Chapter 8 of the NYSDOT Highway Design Manual (HDM)
and the NYSDOT Bridge Manual (BM)

Prepared By:

Hardesty & Hanover, LLC
New York, NY

Date: February 2023



Note: *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*

Contents

Background: 4
Construction History: 4
Historic Flooding: 4
Hydrology: 4
Further Investigation for Special Circumstances: 4
Design Flow Rates: 5
Modelling Method: 6
References: 7
Appendix 1: Flow Information
Appendix 2: Model Results

Background:

The replacement of C050001, NY-27A over Amityville Creek, is necessary due to the significant structural deterioration noted in the last several annual inspections. The culvert is modeled using HY-8 software.

Construction History:

The original 6 ft wide x 3 ft tall culvert segment was constructed prior to 1930 and was retained in the 1930 widening of the roadway (SH No. 5300, now NY 27A) per Contract RC2036. The headwalls on both sides of the culvert were replaced in 1983 under Contract D250408.

Historic Flooding:

The culvert, roadway, and upstream channel and ponds are located in FEMA Zone AE with a Base Flood Elevation (BFE) of 6 and the existing roadway is approximately elevation 4-5 and experiences flooding during storm events. A Comprehensive Storm Drainage Improvement Study for the Village of Amityville reports that areas south of Merrick Road (NY 27A) and adjacent to the creeks, canals, and shoreline experience severe flooding, especially when the peak of storms occurs at high tide.

Hydrology:

The watershed for Amityville Creek at the downstream end of CIN 050001 was delineated from the USGS Water Data for the Nation using the monitoring station #309349 of Amityville Creek at Amityville, NY. The tributary watershed extends to the north to the Republic Airport and the Ronkonkoma Branch of the Long Island Railroad (LIRR). The watershed area encompasses approximately 3,000 acres (4.68 sq miles). Upstream of the culvert, there is a series of several pond/lakes connected by the Amityville Creek. Due to the storage capacities of these ponds and lake, the flows that ultimately reach the culvert are restricted by the outlet control structures at the water bodies that flow into Amityville Creek. Further discussion is included in the “Further Investigation for Special Circumstances” section below.

The watershed information was not available in StreamStats and the associated regression equations do not apply due to the project being located on Long Island.

The crossing location was investigated online via the Federal Emergency Management Agency (FEMA) Flood Map Service Center. The FEMA Flood Insurance Rate Map (FIRM) for Suffolk County (Village of Amityville, Suffolk Co), NY, Panel 36103C0841H dated 09/25/2009, indicates that the crossing is located in Zone AE with BFE of 6.

The waterbody conveyed by the crossing is shown to be within the Approximate 1% annual chance floodplain (100-year floodplain) of Amityville Creek. The FIS 36103CV000A was investigated, and no flow rates are given.

The gage locations in SIR 2006-5112 were investigate and there is no known stream gage along this waterway that is within a reasonable distance to help determine flow rates.

Further Investigation for Special Circumstances:

There is known regulation in the watershed. Further investigation into the watershed is required and described below.

Field observations of the crossing and the upstream offsite areas indicated that several control structures in the Amityville Creek restrict flow from the pond to the culvert entrance. Detailed measurements were

taken in the field during low tide in dry weather to ensure that accurate measurements of channel, culvert, and weir openings were taken.

There is a concrete rectangular open channel connecting a pond to the upstream end of the culvert which contains three structures that restrict flow. The flow capacities of the open channel and the three restricting structures were analyzed to determine the flow rate that reaches the culvert opening. It was assumed that the channel was designed to convey the 10-year design storm as required by HDM Exh 8-3 for a Minor Arterial roadway (NY 27A). At the pond outlet, there is a sharp crested metal weir plate with 26" vertical opening reaching up to the sides of the channel walls. Approximately 80 feet downstream of the upper metal weir, there is a compound weir consisting of concrete blocks in the channel with submerged metal weir plates between them. Approximately 160 feet downstream of the lower compound weir, there are three 36" parallel RCP culverts located underneath a foot bridge. At the upstream end of the culvert, the rectangular open channel section was modeled, assuming the water level was at the elevation of the stainline measured in the field and the bottom portion of the channel was ineffective flow up to the elevation of the mean tide.

A comparison of flow rate at each location is in the table below.

Location Description	Flowrate (cfs)
Upper weir	102.0
Lower weir	94.1
Triple 36" RCP Culvert	101.5
Rectangular Open Channel	124.2

The three control structures and the open channel between the pond and culvert crossing produced flowrates within 20% of each other therefore the highest flowrate was selected as a conservative value for the flowrate contained within the channel during a 10-year storm event. The 10-year flowrate was scaled using the NOAA rainfall data assuming a 60-minute time of concentration in order to obtain flow rates for other design storms, as summarized below.

Storm Event	NOAA Rainfall Depth at 60-min (inches)	Interpolated Flowrate (cfs)
2-yr	1.32	82.4
10-yr	1.99	124.2
50-yr	2.71	169.1
100-yr	3.05	190.4

Design Flow Rates:

The flow rates were chosen based on the independent flow analysis included in the "further investigation" section above. The flow rates were increased by 20% for Region 10 to determine the Projected (Design) Flow Rates.

Flow	Chosen	Projected (Design)
Q2	82.4	98.9
Q10	124.2	149.0
Q50	169.1	203.0
Q100	190.4	228.4

Due to the site's proximity to the Atlantic Ocean and Great South Bay, the culvert crossing's tailwater is controlled by stillwater elevations during large storm events. The FIS 36103CV000A was investigated and includes a summary of stillwater elevations in NAVD88 for the Great South Bay shoreline from the Suffolk County line to the entrance of the Carlls River. Summary of stillwater elevations is in the table below and in Appendix A.

Flooding Source and Location	Elevation (feet NAVD88)		
	10-year	50-year	100-year
Great South Bay (Shoreline from the county line to near the entrance of Carlls River)	4.4	5.0	5.3

Modelling Method:

Hy-8 was chosen as the modelling method as the culvert section is uniform and the stream channel is of relatively uniform dimensions and grade.

Modeling results are tabulated in the body of the Design Report. Modelling program outputs are included in the Watershed Report.

References:

Highway Design Manual, Chapter 8, NYSDOT, 50 Wolf Road, Albany, NY 12232
https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm/chapter-8

Bridge Manual, NYSDOT, 50 Wolf Road, Albany, NY 12232
https://www.dot.ny.gov/divisions/engineering/structures/manuals

New York State Flood Risk Management Guidance for Implementation of the Community Risk and Resiliency Act, NYSDEC, ;7:%Gwtfi|f~Fgfs~S^%7788
https://www.dec.ny.gov/docs/administration_pdf/crrafloodriskmgmtgdnc.pdf

Flood Insurance Study #36103CV000A, Suffolk Co, NY, Federal Emergency Management Agency (FEMA)
https://msc.fema.gov/portal

Flood Insurance Rate Map No. 36103C0841H, Effective September 25, 2009, Federal Emergency Management Agency (FEMA)
https://msc.fema.gov/portal

Comprehensive Storm Drainage Improvement Study For the Village of Amityville, Town of Babylon, Suffolk County, New York, Nelson & Pope, 527 Walt Whitman Road, Melville, NY
https://amityville.com/download/Amityville-Drainage-Report-June-26-2018.pdf

Amityville Creek At Amityville, NY 309349 - USGS Water Data for the Nation
https://waterdata.usgs.gov/monitoring-location/01309349/#period=P1Y

APPENDIX 1

FLOW INFORMATION

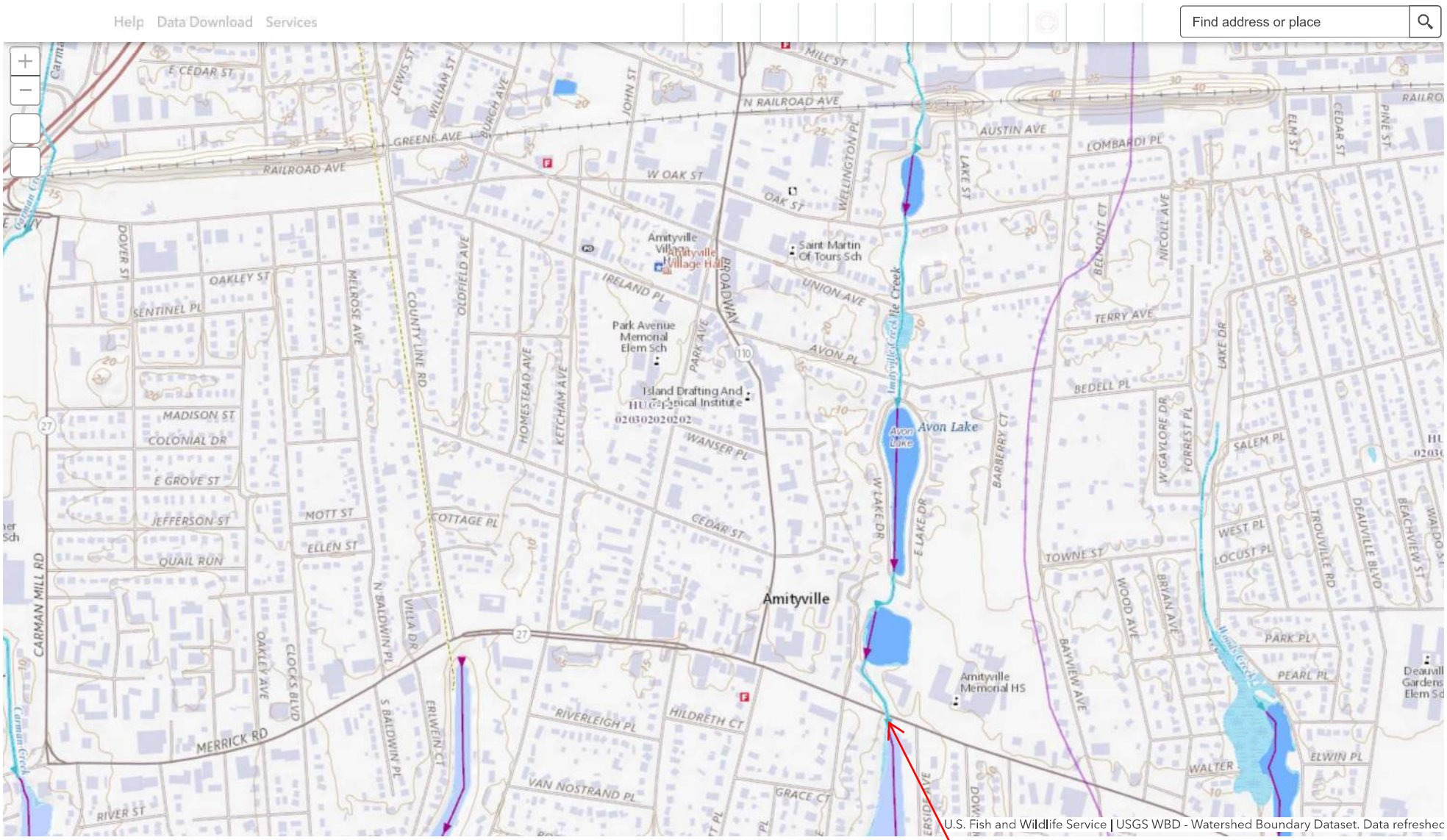
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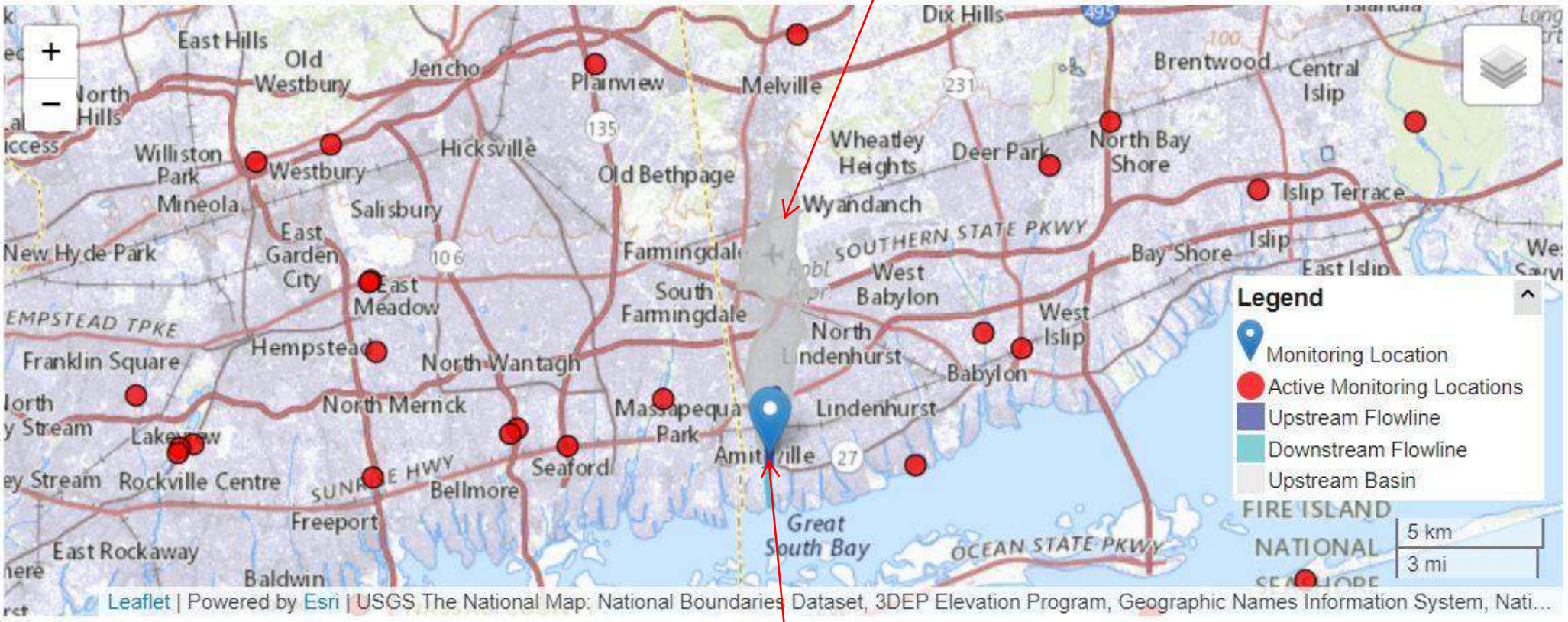
FEMA

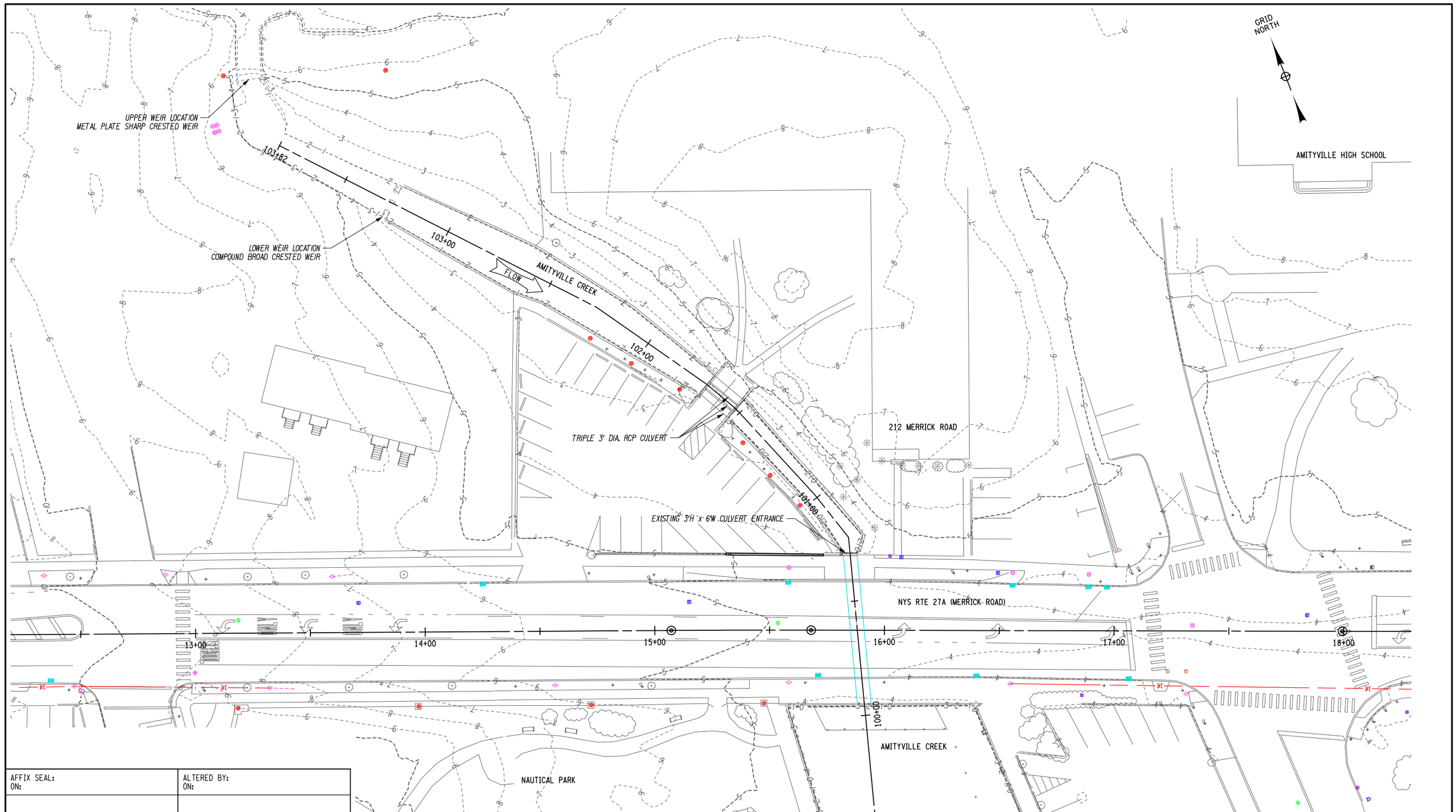


)HHW

%DVHPS 86 DWLRQDO 2FHDQLF DQG $WPRVSKHULF $GPLQLVWUDWLRQ


Help
Data Download
Services
Find address or place
E CEDAR ST
RAILROAD AVE
GREENE AVE
N RAILROAD AVE
W OAK ST
OAK ST
MILL ST
AUSTIN AVE
LOMBARDI PL
OAKLEY ST
SENTINEL PL
IRELAND PL
UNION AVE
TERRY AVE
AVON PL
BEDELL PL
SALEM PL
MADISON ST
COLONIAL DR
E GROVE ST
JEFFERSON ST
MOTT ST
ELLEN ST
QUAIL RUN
COTTAGE PL
WANSER PL
CEDAR ST
TOWNE ST
WEST PL
LOCUST PL
PARK PL
PEARL PL
ELWIN PL
WALTER
MERRICK RD
RIVERLEIGH PL
HILDRETH CT
VAN NOSTRAND PL
GRACE CT
RIVER ST
CARMAN MILL RD
COUNTY LINE RD
OLDFIELD AVE
MELROSE AVE
HOMESTEAD AVE
KETCHAM AVE
PARK AVE
BROADWAY
WELLINGTON PL
LAKE ST
BELMONT CT
NICOLL AVE
ELM ST
CEDAR ST
PINE ST
LAKE DR
W GAYLORE DR
FORREST PL
BARBERRY CT
W LAKE DR
E LAKE DR
WOOD AVE
BRYAN AVE
BAYVIEW AVE
TROUVILLE RD
DEAUVILLE BLVD
BEACHVIEW ST
CLOCKS BLVD
OAKLEY AVE
N BALDWIN PL
S BALDWIN PL
VILLA DR
ERLWEIN CT
Amityville
Amityville Village Hall
Saint Martin Of Tours Sch
Park Avenue Memorial Elem Sch
Island Drafting And Technical Institute
020302020202
Amityville Memorial HS
Avon Lake
Amityville Creek
Carman Creek
Deauville Gardens Elem Sch
U.S. Fish and Wildlife Service | USGS WBD - Watershed Boundary Dataset. Data refreshed
Project Location
Scale: 1:9,028
Zoom Level: 16
600ft
-73.397 40.680 Lat Long


Watershed Area
Approximately 3,000 Acres (4.68 sq. mi.)
Legend
Monitoring Location
Active Monitoring Locations
Upstream Flowline
Downstream Flowline
Upstream Basin
5 km
3 mi
Leaflet | Powered by Esri | USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, Nati…
Project Location and USGS
Monitoring Location



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CULVERT REPLACEMENT NYS RTE 27A TOWN OF BABYLON COUNTY: SUFFOLK REGION: 10	PIN OLC1.01	BRIDGES	CULVERTS C050001	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED HYDRAULICS EXHIBIT NY 27 (MERRICK RD)	CONTRACT NUMBER DXXXXXX DRAWING NO. X-XXX SHEET NO. XXX

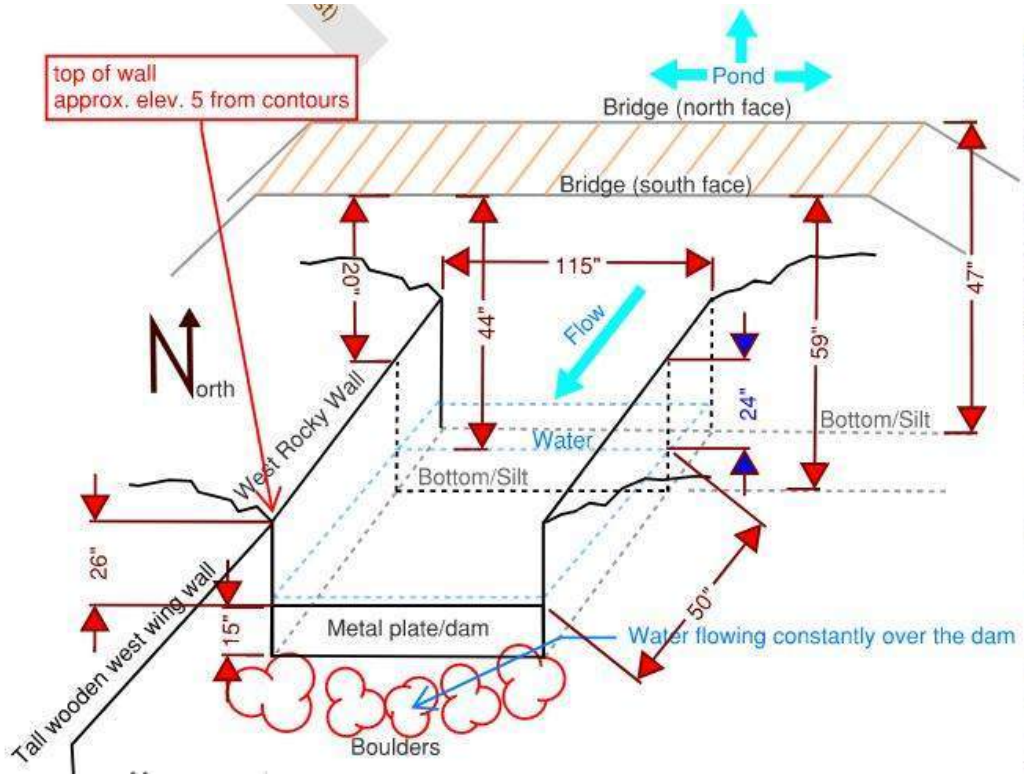
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

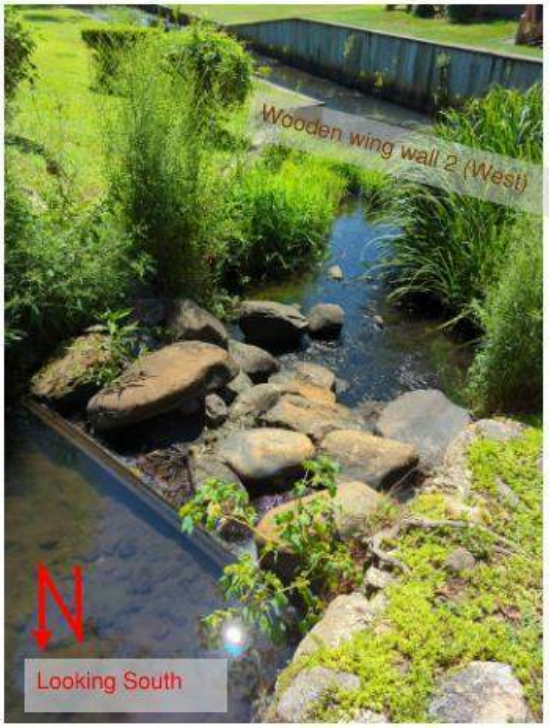
NEW YORK STATE OF OPPORTUNITY. Department of Transportation

DESIGN SUPERVISOR R. KUDLA, PE
JOB MANAGER L. VARGHESE, PE
DESIGN E. LEI
CHECK A. MADDEN, PE
DRAFTING E. LEI
PROJECT MANAGER C. JENNE, PE
CHECK A. MADDEN, PE

FILE NAME = 05-DEC-2022 17:10
DATE/TIME = amadden
USER =

Upper Weir


top of wall
approx. elev. 5 from contours
Pond
Bridge (north face)
Bridge (south face)
20"
115"
44"
47"
59"
Flow
North
West Rocky Wall
24"
Bottom/Silt
Water
Bottom/Silt
26"
Tall wooden west wing wall
15"
Metal plate/dam
50"
Water flowing constantly over the dam
Boulders


Wooden wing wall 2 (West)
N
Looking South

Weir Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Wednesday, Nov 30 2022

Upper Weir (full channel)

Rectangular Weir

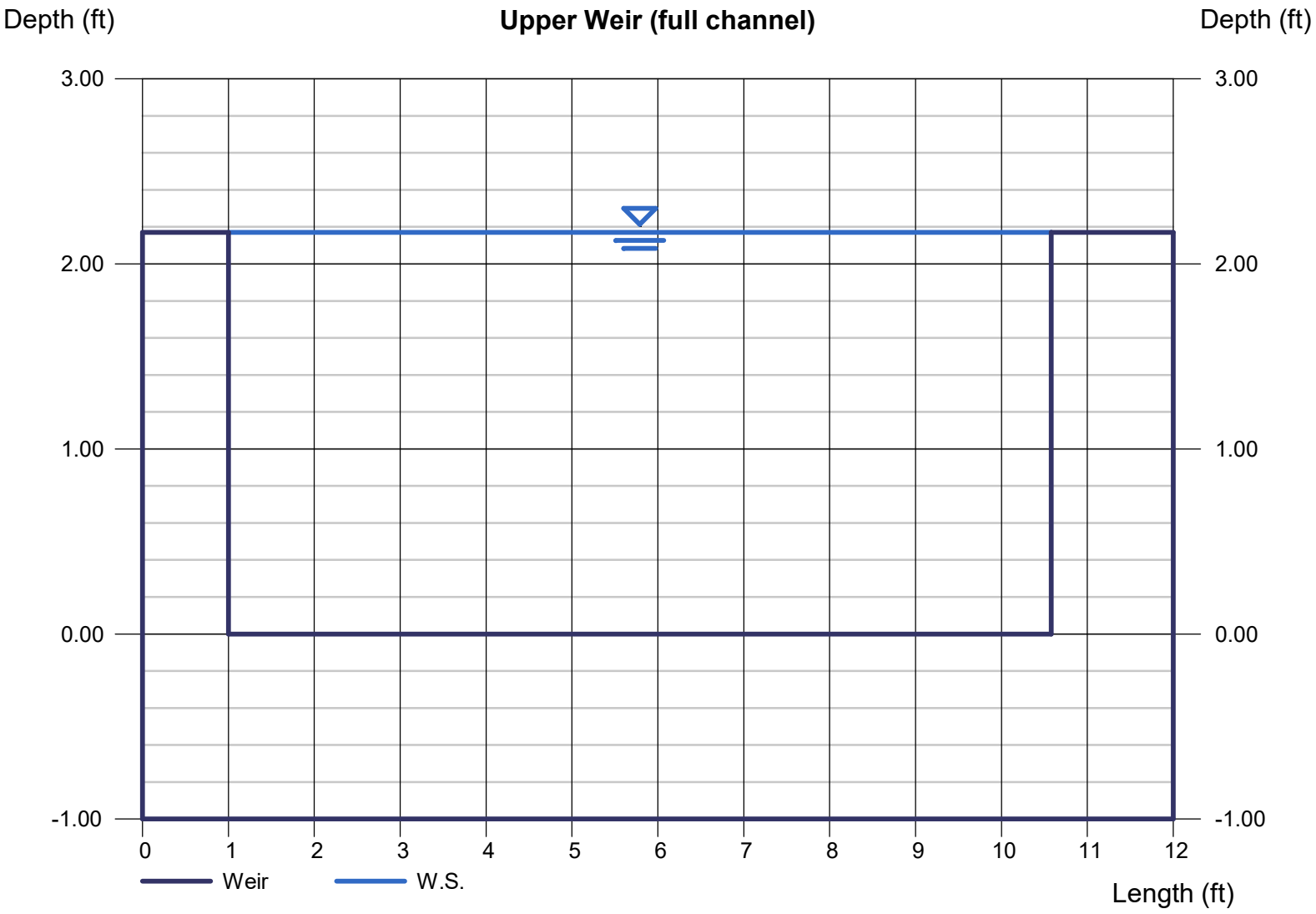
Crest	= Sharp
Bottom Length (ft)	= 9.58
Total Depth (ft)	= 2.17

Calculations

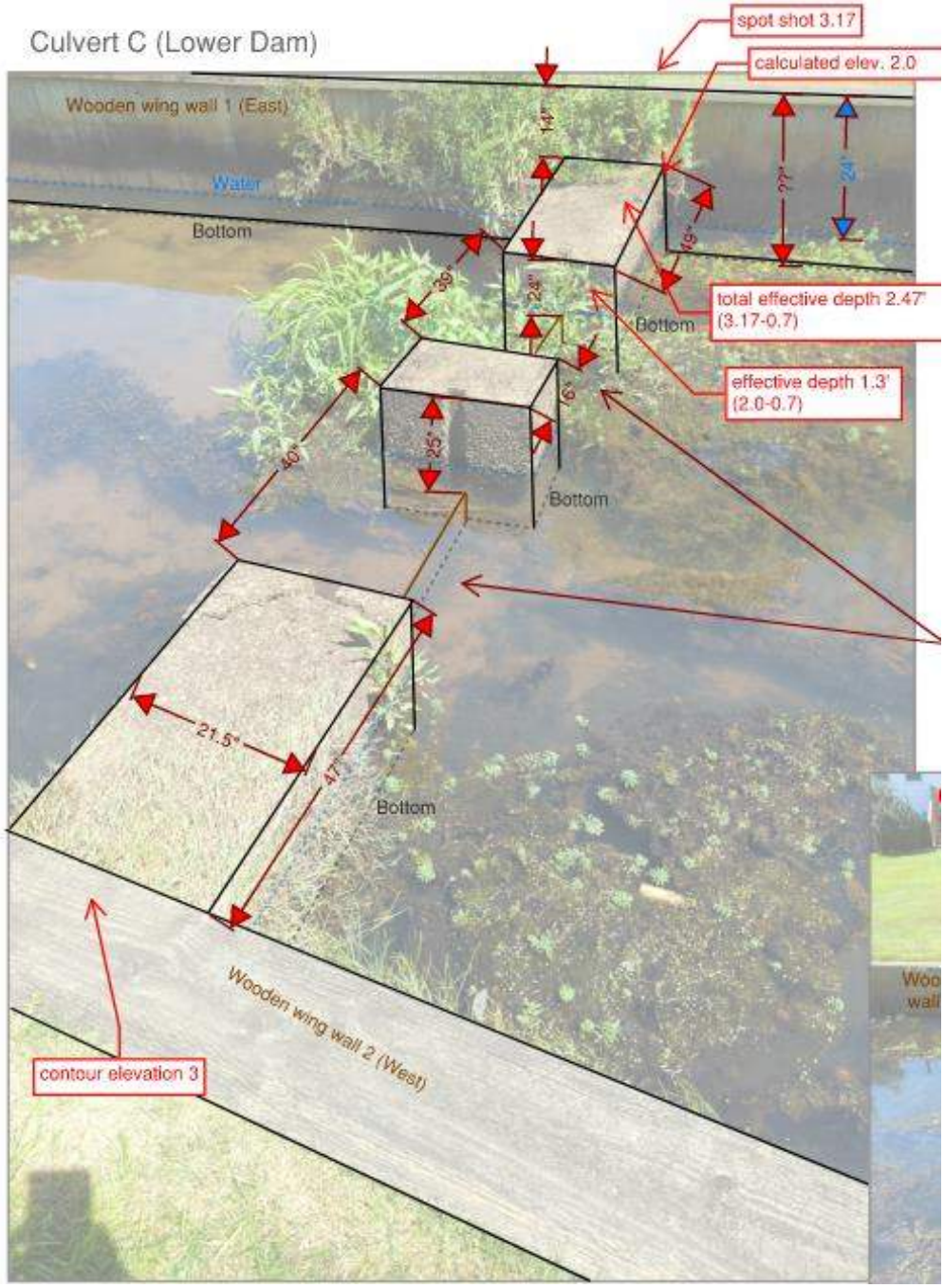
Weir Coeff. Cw	= 3.33
Compute by:	Known Depth
Known Depth (ft)	= 2.17

Highlighted

Depth (ft)	= 2.17
Q (cfs)	= 101.98
Area (sqft)	= 20.79
Velocity (ft/s)	= 4.91
Top Width (ft)	= 9.58



Lower Weir


Culvert C (Lower Dam)
spot shot 3.17
calculated elev. 2.0
Wooden wing wall 1 (East)
Water
Bottom
14"
77"
24"
46"
36"
24"
Bottom
total effective depth 2.47'
(3.17-0.7)
effective depth 1.3'
(2.0-0.7)
6"
25"
40"
Bottom
21.5"
47"
Bottom
Wooden wing wall 2 (West)
contour elevation 3

Weir Report

Lower Weir (full channel, 0.7 water level)

Compound Weir

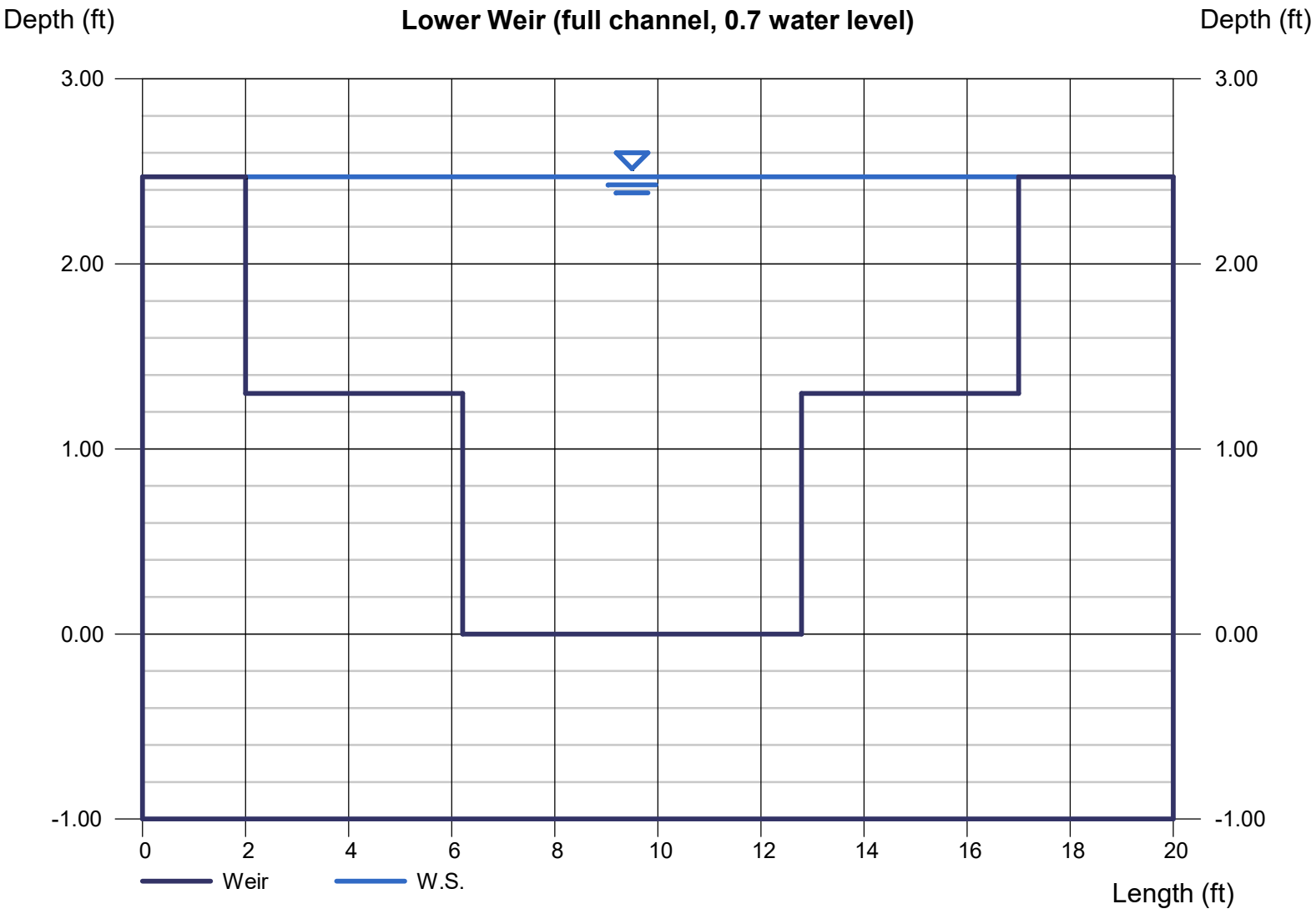
Crest	= Broad
Bottom Length (ft)	= 15.00
Total Depth (ft)	= 2.47
Length, x (ft)	= 6.58
Depth, a (ft)	= 1.30

Highlighted

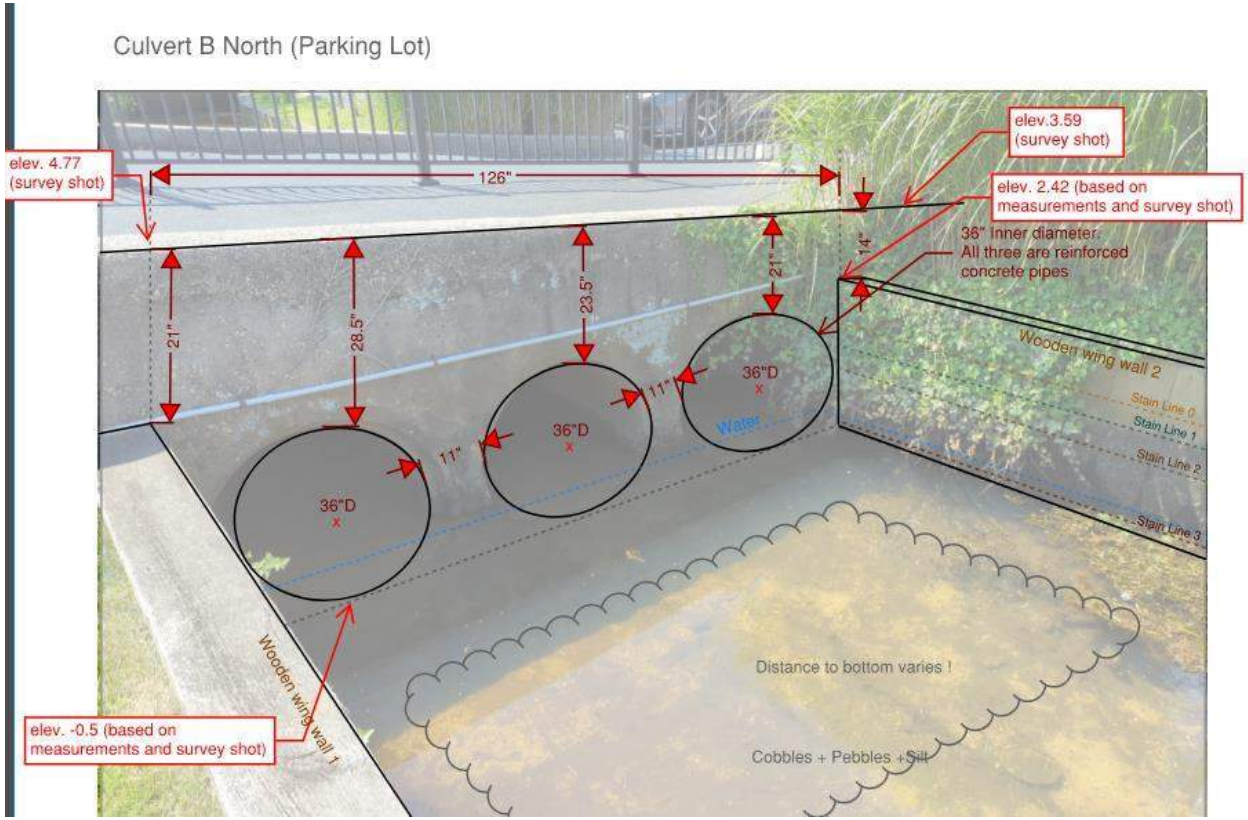
Depth (ft)	= 2.47
Q (cfs)	= 94.12
Area (sqft)	= 26.10
Velocity (ft/s)	= 3.61
Top Width (ft)	= 15.00

Calculations

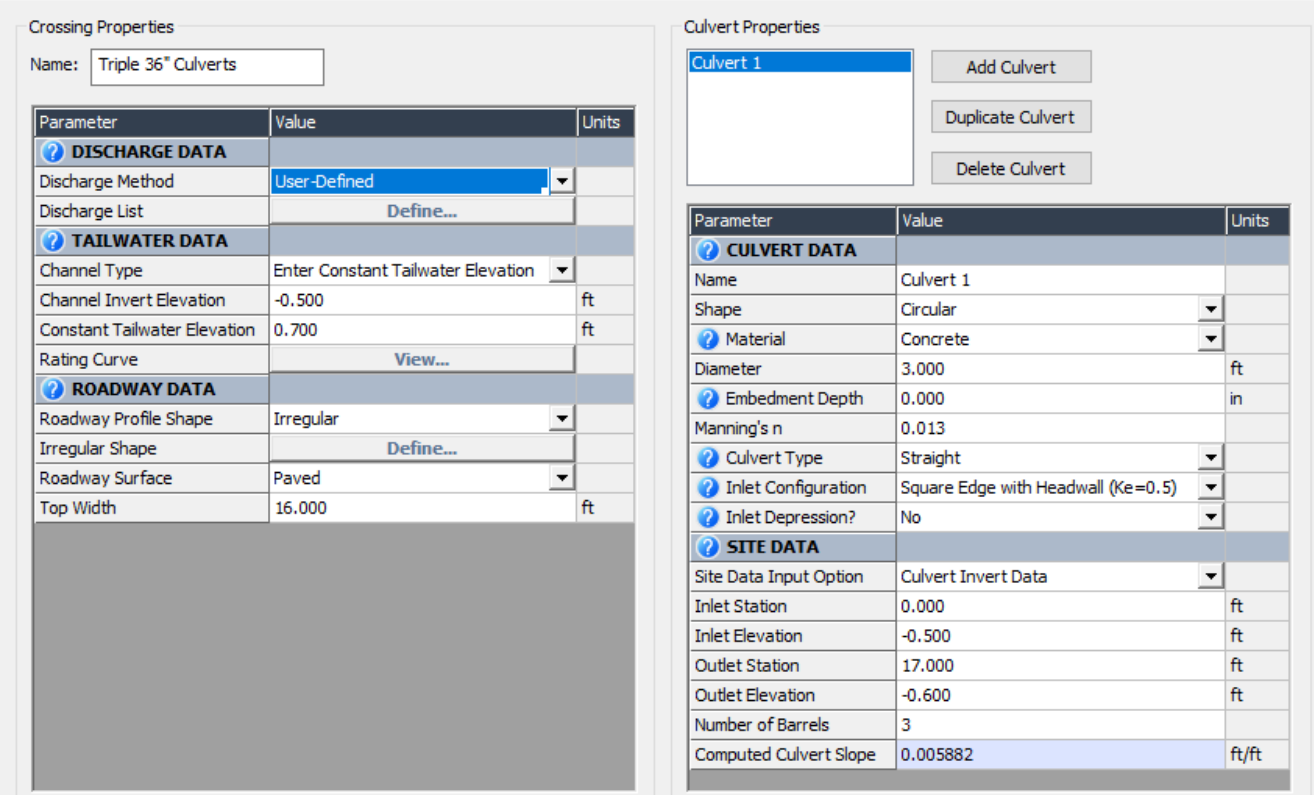
Weir Coeff. Cw	= 2.60
Compute by:	Known Depth
Known Depth (ft)	= 2.47



Triple 36” culvert



Existing Triple 36” Culvert Capacity Analysis



Crossing Properties

Name: Triple 36" Culverts

Parameter	Value	Units
DISCHARGE DATA		
Discharge Method	User-Defined	
Discharge List	Define...	
TAILWATER DATA		
Channel Type	Enter Constant Tailwater Elevation	
Channel Invert Elevation	-0.500	ft
Constant Tailwater Elevation	0.700	ft
Rating Curve	View...	
ROADWAY DATA		
Roadway Profile Shape	Irregular	
Irregular Shape	Define...	
Roadway Surface	Paved	
Top Width	16.000	ft

Culvert Properties

Culvert 1

Add Culvert

Duplicate Culvert

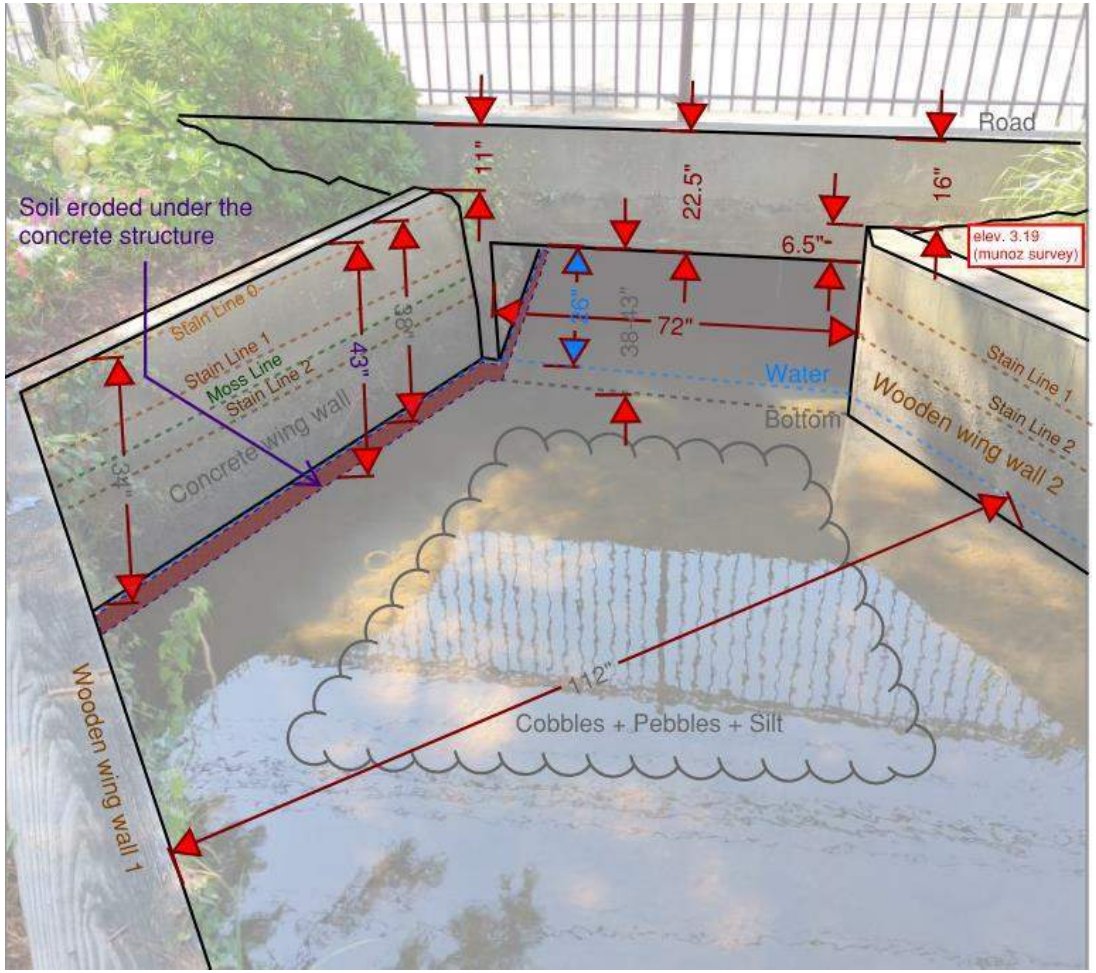
Delete Culvert

Parameter	Value	Units
CULVERT DATA		
Name	Culvert 1	
Shape	Circular	
Material	Concrete	
Diameter	3.000	ft
Embedment Depth	0.000	in
Manning's n	0.013	
Culvert Type	Straight	
Inlet Configuration	Square Edge with Headwall (Ke=0.5)	
Inlet Depression?	No	
SITE DATA		
Site Data Input Option	Culvert Invert Data	
Inlet Station	0.000	ft
Inlet Elevation	-0.500	ft
Outlet Station	17.000	ft
Outlet Elevation	-0.600	ft
Number of Barrels	3	
Computed Culvert Slope	0.005882	ft/ft

Headwater reaches elevation 2.42 (top of channel wall) at Q=101.50 cfs

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth(ft)	Outlet Control Depth(ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
100.00	100.00	2.39	**2.89**	2.33	1-S2n	1.76	1.87	1.79	1.20	7.57	0.00
101.00	101.00	2.41	**2.91**	2.36	1-S2n	1.77	1.88	1.80	1.20	7.60	0.00
101.50	101.50	2.42	**2.92**	2.37	1-S2n	1.78	1.89	1.81	1.20	7.61	0.00
102.00	102.00	2.43	**2.93**	2.38	1-S2n	1.79	1.89	1.81	1.20	7.62	0.00
103.00	103.00	2.45	**2.95**	2.40	1-S2n	1.80	1.90	1.82	1.20	7.64	0.00

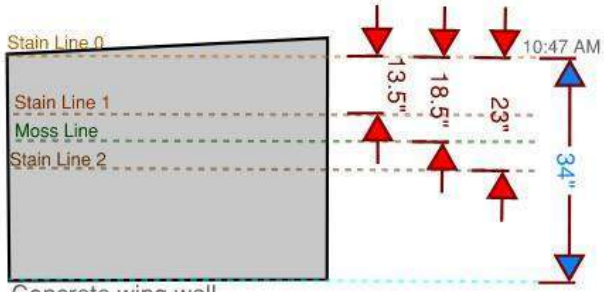
Culvert C050001 Entrance- Open rectangular Channel



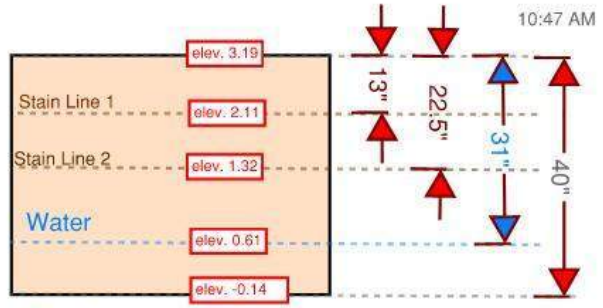
Stain Line 1 = Light brown, visible on both concrete and wooden walls.

Moss Line = Green line, matches the top edge of the moss growth area.

Stain Line 2 = Dark brown, just below green moss, visible on both concrete and wooden walls.



Concrete wing wall
(East wall, left wall in photo)



Wooden wing wall 2 (West wall, right wall in photo)

Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Tuesday, Nov 29 2022

Channel flowing to brown stain line, elev. 0.7 mean tide

Rectangular

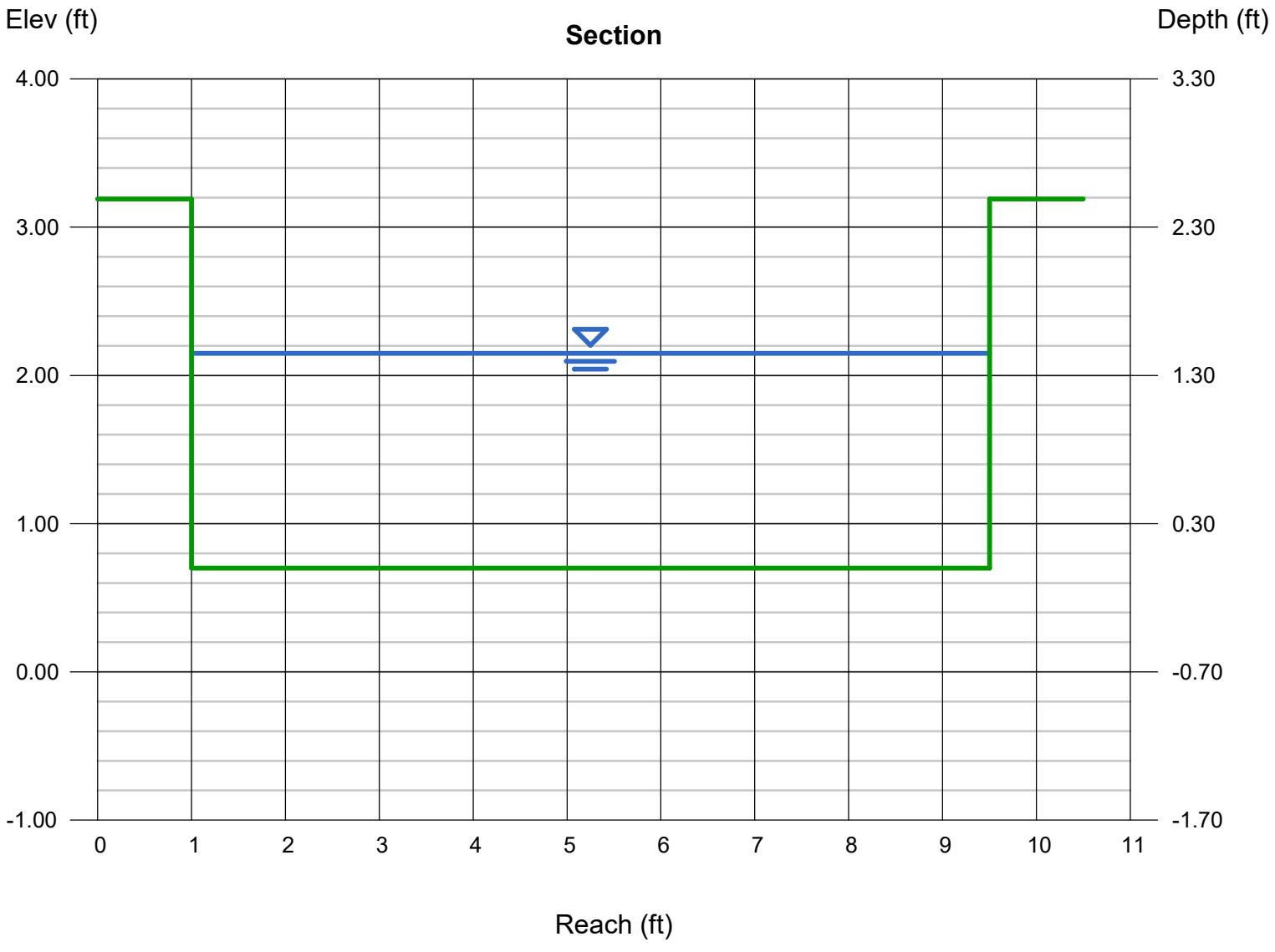
Bottom Width (ft)	= 8.50
Total Depth (ft)	= 2.49
Invert Elev (ft)	= 0.70
Slope (%)	= 0.70
N-Value	= 0.013

Calculations

Compute by:	Known Depth
Known Depth (ft)	= 1.45

Highlighted

Depth (ft)	= 1.45
Q (cfs)	= 124.17
Area (sqft)	= 12.33
Velocity (ft/s)	= 10.07
Wetted Perim (ft)	= 11.40
Crit Depth, Yc (ft)	= 1.88
Top Width (ft)	= 8.50
EGL (ft)	= 3.03



NOAA Atlas 14, Volume 10, Version 3
Location name: Amityville, New York, USA*
Latitude: 40.67°, Longitude: -73.4134°
Elevation: 4.17 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.366** (0.277-0.481)	**0.439** (0.333-0.578)	**0.559** (0.422-0.738)	**0.659** (0.495-0.871)	**0.796** (0.583-1.09)	**0.898** (0.648-1.25)	**1.01** (0.711-1.45)	**1.14** (0.760-1.64)	**1.33** (0.860-1.97)	**1.50** (0.946-2.24)
10-min	**0.518** (0.393-0.681)	**0.622** (0.471-0.819)	**0.792** (0.597-1.04)	**0.933** (0.701-1.24)	**1.13** (0.827-1.55)	**1.27** (0.917-1.77)	**1.43** (1.01-2.05)	**1.61** (1.08-2.32)	**1.89** (1.22-2.78)	**2.12** (1.34-3.17)
15-min	**0.610** (0.462-0.802)	**0.732** (0.554-0.963)	**0.932** (0.704-1.23)	**1.10** (0.824-1.45)	**1.33** (0.972-1.82)	**1.50** (1.08-2.08)	**1.68** (1.19-2.41)	**1.90** (1.27-2.73)	**2.22** (1.43-3.28)	**2.49** (1.58-3.73)
30-min	**0.851** (0.645-1.12)	**1.02** (0.776-1.35)	**1.31** (0.987-1.72)	**1.54** (1.16-2.04)	**1.87** (1.37-2.55)	**2.11** (1.52-2.93)	**2.36** (1.67-3.39)	**2.67** (1.78-3.85)	**3.12** (2.01-4.61)	**3.50** (2.22-5.25)
60-min	**1.09** (0.828-1.44)	**1.32** (0.997-1.73)	**1.68** (1.27-2.22)	**1.99** (1.49-2.63)	**2.40** (1.76-3.29)	**2.71** (1.96-3.78)	**3.05** (2.15-4.37)	**3.44** (2.30-4.96)	**4.02** (2.60-5.94)	**4.51** (2.86-6.76)
2-hr	**1.43** (1.09-1.87)	**1.72** (1.31-2.25)	**2.20** (1.67-2.88)	**2.59** (1.96-3.40)	**3.13** (2.30-4.25)	**3.53** (2.55-4.87)	**3.96** (2.80-5.62)	**4.45** (2.99-6.37)	**5.17** (3.35-7.58)	**5.76** (3.66-8.56)
3-hr	**1.66** (1.27-2.15)	**1.99** (1.52-2.59)	**2.53** (1.93-3.31)	**2.99** (2.26-3.91)	**3.61** (2.66-4.88)	**4.08** (2.95-5.60)	**4.57** (3.23-6.45)	**5.13** (3.45-7.31)	**5.94** (3.86-8.68)	**6.61** (4.21-9.80)
6-hr	**2.07** (1.59-2.68)	**2.49** (1.91-3.22)	**3.17** (2.43-4.11)	**3.74** (2.85-4.87)	**4.52** (3.35-6.08)	**5.11** (3.72-6.97)	**5.72** (4.07-8.05)	**6.44** (4.34-9.12)	**7.48** (4.88-10.9)	**8.36** (5.33-12.3)
12-hr	**2.51** (1.94-3.22)	**3.03** (2.34-3.89)	**3.88** (2.98-4.99)	**4.58** (3.51-5.92)	**5.55** (4.14-7.42)	**6.27** (4.60-8.52)	**7.04** (5.05-9.87)	**7.96** (5.39-11.2)	**9.33** (6.09-13.4)	**10.5** (6.71-15.3)
24-hr	**2.89** (2.25-3.69)	**3.54** (2.75-4.52)	**4.60** (3.56-5.88)	**5.48** (4.22-7.03)	**6.69** (5.01-8.89)	**7.59** (5.59-10.2)	**8.55** (6.15-11.9)	**9.68** (6.58-13.5)	**11.4** (7.46-16.3)	**12.8** (8.21-18.6)
2-day	**3.22** (2.51-4.07)	**4.01** (3.13-5.08)	**5.31** (4.13-6.74)	**6.39** (4.95-8.14)	**7.87** (5.92-10.4)	**8.98** (6.63-12.0)	**10.2** (7.31-14.0)	**11.5** (7.84-16.0)	**13.4** (8.84-19.1)	**15.1** (9.69-21.7)
3-day	**3.47** (2.72-4.38)	**4.32** (3.39-5.46)	**5.72** (4.47-7.24)	**6.88** (5.34-8.74)	**8.47** (6.39-11.1)	**9.67** (7.16-12.9)	**10.9** (7.90-15.0)	**12.4** (8.47-17.1)	**14.5** (9.56-20.6)	**16.3** (10.5-23.4)
4-day	**3.71** (2.91-4.66)	**4.59** (3.60-5.77)	**6.03** (4.72-7.61)	**7.22** (5.62-9.15)	**8.87** (6.71-11.6)	**10.1** (7.50-13.4)	**11.4** (8.27-15.6)	**12.9** (8.85-17.8)	**15.2** (10.0-21.5)	**17.1** (11.0-24.5)
7-day	**4.39** (3.46-5.49)	**5.29** (4.18-6.62)	**6.77** (5.33-8.50)	**8.00** (6.26-10.1)	**9.70** (7.38-12.6)	**11.0** (8.18-14.5)	**12.3** (8.98-16.8)	**13.9** (9.56-19.1)	**16.4** (10.8-23.0)	**18.4** (11.9-26.3)
10-day	**5.07** (4.01-6.32)	**5.99** (4.74-7.48)	**7.50** (5.92-9.38)	**8.76** (6.87-11.0)	**10.5** (8.00-13.6)	**11.8** (8.81-15.5)	**13.1** (9.60-17.9)	**14.8** (10.2-20.2)	**17.3** (11.5-24.2)	**19.4** (12.6-27.5)
20-day	**7.20** (5.73-8.91)	**8.20** (6.53-10.2)	**9.84** (7.81-12.2)	**11.2** (8.84-14.0)	**13.1** (10.00-16.8)	**14.5** (10.9-18.9)	**16.0** (11.6-21.3)	**17.6** (12.2-23.9)	**19.9** (13.3-27.7)	**21.8** (14.2-30.8)
30-day	**8.97** (7.17-11.1)	**10.0** (8.02-12.4)	**11.8** (9.39-14.6)	**13.3** (10.5-16.5)	**15.3** (11.7-19.4)	**16.8** (12.6-21.7)	**18.3** (13.3-24.2)	**20.0** (13.9-26.9)	**22.2** (14.8-30.6)	**23.8** (15.5-33.5)
45-day	**11.1** (8.94-13.7)	**12.3** (9.86-15.1)	**14.2** (11.3-17.5)	**15.8** (12.5-19.5)	**17.9** (13.8-22.7)	**19.6** (14.7-25.1)	**21.3** (15.4-27.8)	**22.9** (15.9-30.7)	**24.9** (16.7-34.3)	**26.4** (17.3-37.0)
60-day	**12.9** (10.4-15.8)	**14.2** (11.4-17.4)	**16.2** (12.9-19.8)	**17.8** (14.2-22.0)	**20.1** (15.5-25.3)	**21.9** (16.4-27.9)	**23.6** (17.1-30.7)	**25.2** (17.6-33.8)	**27.3** (18.3-37.4)	**28.7** (18.8-40.0)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Suffolk County, New York.

All or portions of the flooding sources listed in Table 2 were studied by detailed methods. Limits of detailed study for riverine flooding sources are indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

TABLE 2 - FLOODING SOURCES STUDIED BY DETAILED METHODS

Coastal/Tidal
Atlantic Ocean
Barley Field Cove
Bellport Bay
Block Island Sound
Centerport Harbor
Cherry Harbor
Chocomant Cove
Coecles Inlet
Conscience Bay
Cutchogue Harbor
Dering Harbor
Fishers Island Sound
Flanders Bay
Fort Pond Bay
Gardiners Bay
Great Peconic Bay
Great South Bay
Greenport Harbor
Hay Harbor
Huntington Bay
Huntington Harbor
Lake Montauk
Little Peconic Bay
Lloyd Harbor
Long Island Sound
Majors Harbor
Moriches Bay
Napeague Bay
Nicoll Bay
North Race
Northport Bay
Northport Harbor
Northwest Harbor
Noyack Bay
Orient Harbor
Patchogue Bay
Pettys Bright
Pipes Cove
Port Jefferson Harbor
Oyster Bay
Reeves Bay
Sag Harbor Bay
Shelter Island Sound
Shinnecock Bay
Smith Cove
Smithtown Bay
Southold Bay
Stony Brook Harbor
Tobaccolot Bay
West Harbor
West Neck Harbor

Riverine
Northeast Branch Nissequogue River

TABLE 6 - SUMMARY OF STILLWATER ELEVATIONS - continued

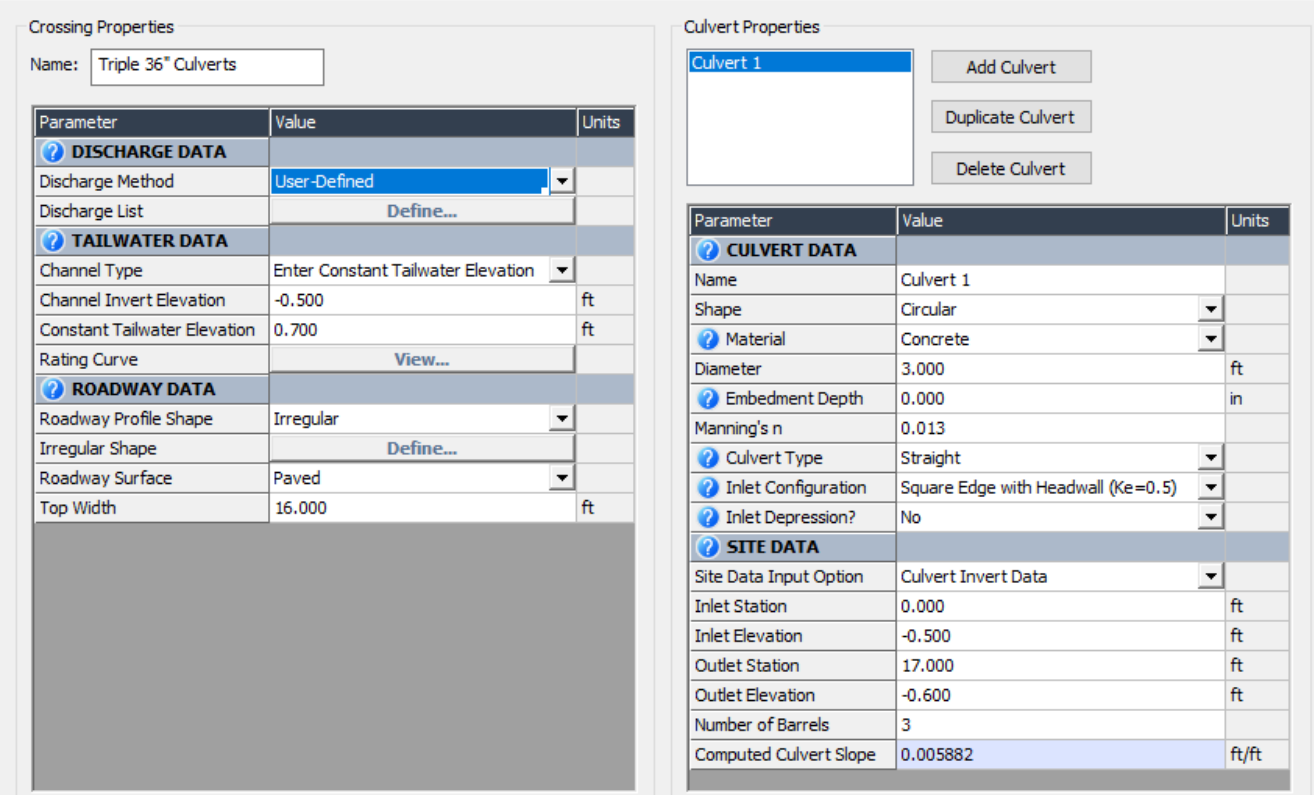
FLOODING SOURCE AND LOCATION	ELEVATION (feet NAVD 88*)			
	10-PERCENT 10-yr	2-PERCENT 50-yr	1-PERCENT 100-yr	0.2-PERCENT 500-yr
GREAT PECONIC BAY				
Shoreline from Simmons Point to Kimogener Point	4	5.2	5.5-5.9	9.6
Red Cedar Point to Cow Neck Point	4	5.2	5.5-5.8	9.6
Western shoreline of Robins Island	4	5.2	5.5	9.6
GREAT SOUTH BAY				
Shoreline from the county line to near the entrance of Carlls River	4.4	5	5.3	5.8
Shoreline from near the entrance of Carlls River to Nicoll Point	3.7-3.9	4-4.6	4.2-4.8	4.4-5.2
Green Point to Blue Point	4.1	4.6	4.8	5.2
Shoreline from the eastern limit of Patchogue Bay to Howells Point	4	4.8	5.1	5.8
Northern shoreline of Fire Island from Fire Island Inlet to the entrance of Narrow Bay	4-4.3	4.6-4.8	4.8-5.1	5.2-5.8
GREENPORT HARBOR				
Entire shoreline	4.2	5.4	5.8	6.7
HUNTINGTON BAY				
Entire shoreline	7-7.1	8.1-8.2	8.8-8.9	10.5
HUNTINGTON HARBOR				
Entire shoreline	7.1	8.2	8.9	10.5
LAKE MONTAUK				
Entire shoreline	3.5	4.9	5.3	7.2
LITTLE PECONIC BAY				
Entire shoreline	4	5.2	5.5	9.6
LLOYD HARBOR				
Entire shoreline	7	8.1	8.8	10.5
LONG ISLAND SOUND				
Shoreline from Lloyd Point to East Fort Point	7.2-7.3	8.4-8.6	9.2-9.3	10.8-10.9
Shoreline from Eatons Neck Point to the entrance of Port Jefferson Harbor	6.8-7.1	8.1-8.3	8.7-8.9	10.3-10.5

*North American Vertical Datum of 1988

APPENDIX 2

MODEL RESULTS

Existing Triple 36” Culvert Capacity Analysis



Crossing Properties

Name: Triple 36" Culverts

Parameter	Value	Units
DISCHARGE DATA		
Discharge Method	User-Defined	
Discharge List	Define...	
TAILWATER DATA		
Channel Type	Enter Constant Tailwater Elevation	
Channel Invert Elevation	-0.500	ft
Constant Tailwater Elevation	0.700	ft
Rating Curve	View...	
ROADWAY DATA		
Roadway Profile Shape	Irregular	
Irregular Shape	Define...	
Roadway Surface	Paved	
Top Width	16.000	ft

Culvert Properties

Culvert 1

Add Culvert

Duplicate Culvert

Delete Culvert

Parameter	Value	Units
CULVERT DATA		
Name	Culvert 1	
Shape	Circular	
Material	Concrete	
Diameter	3.000	ft
Embedment Depth	0.000	in
Manning's n	0.013	
Culvert Type	Straight	
Inlet Configuration	Square Edge with Headwall (Ke=0.5)	
Inlet Depression?	No	
SITE DATA		
Site Data Input Option	Culvert Invert Data	
Inlet Station	0.000	ft
Inlet Elevation	-0.500	ft
Outlet Station	17.000	ft
Outlet Elevation	-0.600	ft
Number of Barrels	3	
Computed Culvert Slope	0.005882	ft/ft

Headwater reaches elevation 2.42 (top of channel wall) at Q=101.50 cfs

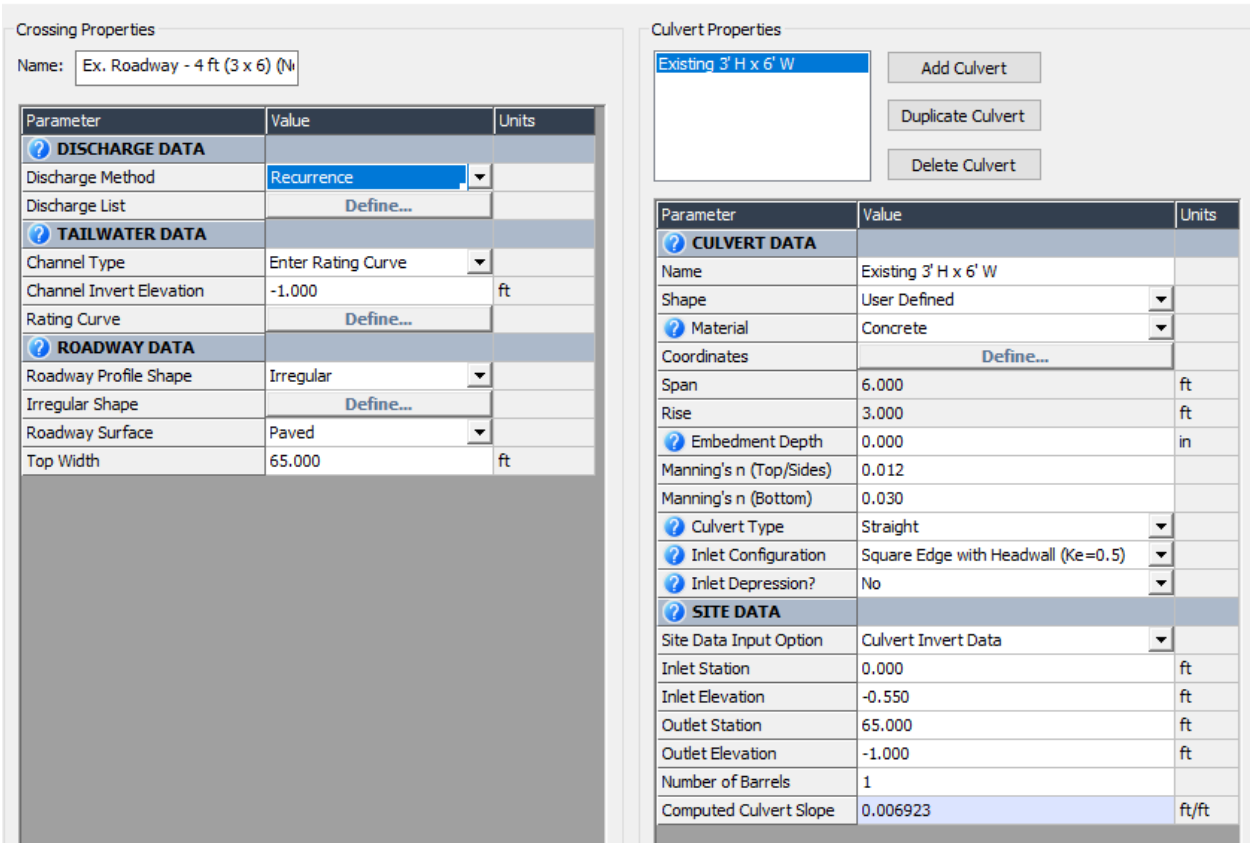
Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth(ft)	Outlet Control Depth(ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
100.00	100.00	2.39	**2.89**	2.33	1-S2n	1.76	1.87	1.79	1.20	7.57	0.00
101.00	101.00	2.41	**2.91**	2.36	1-S2n	1.77	1.88	1.80	1.20	7.60	0.00
101.50	101.50	2.42	**2.92**	2.37	1-S2n	1.78	1.89	1.81	1.20	7.61	0.00
102.00	102.00	2.43	**2.93**	2.38	1-S2n	1.79	1.89	1.81	1.20	7.62	0.00
103.00	103.00	2.45	**2.95**	2.40	1-S2n	1.80	1.90	1.82	1.20	7.64	0.00

NY Rte 27A (Merrick Rd) over Amityville Creek

PIN	0LC1.01	CIN	C050001	**No-Build Alternative**	
Roadway Criticality	Non-Critical	Signficant Location?	No	Stream Type	Tidal
FEMA Floodplain or Floodway?	Floodplain	FEMA Zone	AE	Base Flood Elevation	6 ft
Repair Type	Replacement	Repair Notes			

Design Criteria and Design Approach					
Criteria	Values		Standards		
Existing Conditions - Existing Culvert with Projected Flows					
Existing Culvert Depth	3	ft			
Existing Culvert Width	6	ft			
Existing Upstream Invert	-0.55	ft			
Existing Downstream Invert	-1	ft			
Number of Barrels/Openings	1				
Existing OHW*1.25 Width	Too Narrow				
Existing Low Shoulder El.	3.62	ft			
Existing Low Roadway Crest El.	4.05	ft			
Existing 50-Year HW/D Ratio	1.86	Resize	HW/D < 1.5 Req'd	HDM Ch 8.6.1.1 C, Exhibit 8-12	
Existing 100-Year HW/D Ratio	1.95	---	---		
Existing 50-Year Freeboard	-1.41	ft		> 1.5 ft Req'd	From Low Shoulder
Existing 100-Year Freeboard	-1.69	ft		> 1.5 ft Req'd	
50-Year Analysis					
Inlet Control Water Depth	0.87	ft			
Outlet Control Water Depth	5.58	ft			
Controlling Type	Outlet Controlled		Reference HDM Ch 8.6.3.1 B		
Controlling Water Elevation	5.03	ft	Reference HDM Ch 8.6.1.1		
Flow Type	4-FFf				
100-Year Analysis					
Inlet Control Water Depth	0.64	ft			
Outlet Control Water Depth	5.86	ft			
Controlling Type	Outlet Controlled		Reference HDM Ch 8.6.3.1 B		
Controlling Water Elevation	5.31	ft	Reference HDM Ch 8.6.1.1		
Flow Type	4-FFf				

Existing Culvert with Projected Flows



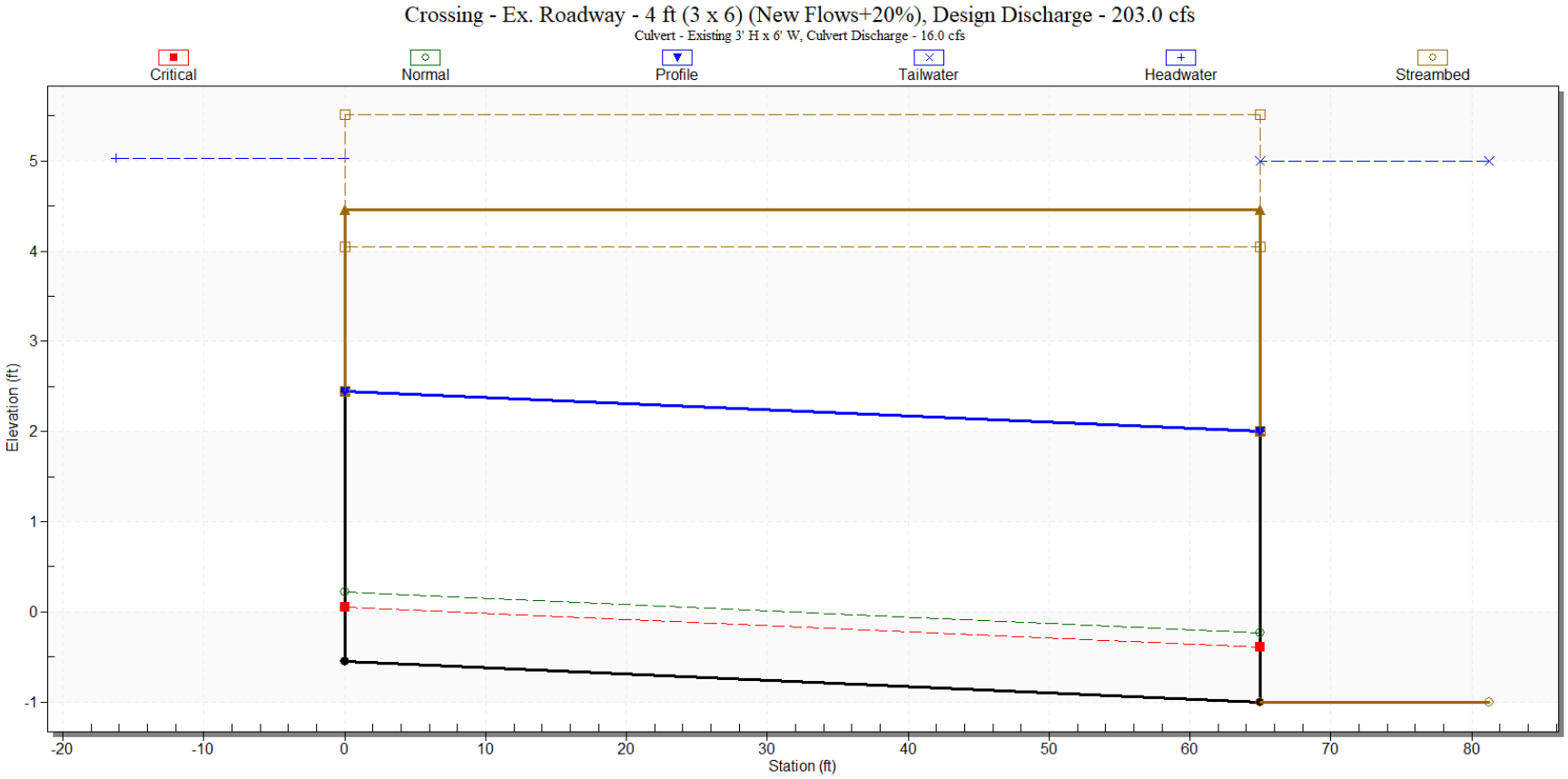
Existing Condition: Ex. Roadway - 4 ft (3 x 6) (Flows+20%)

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	Existing 3' H x 6' W Discharge (cfs)	Roadway Discharge (cfs)	Iterations
2.95	2 year	98.90	98.90	0.00	1
4.67	10 year	149.00	47.82	101.23	3
4.81	25 year	179.70	29.82	150.15	6
5.03	50 year	203.00	16.03	187.06	5
5.31	100 year	228.40	10.17	218.81	5
4.05	Overtopping	113.82	113.82	0.00	Overtopping

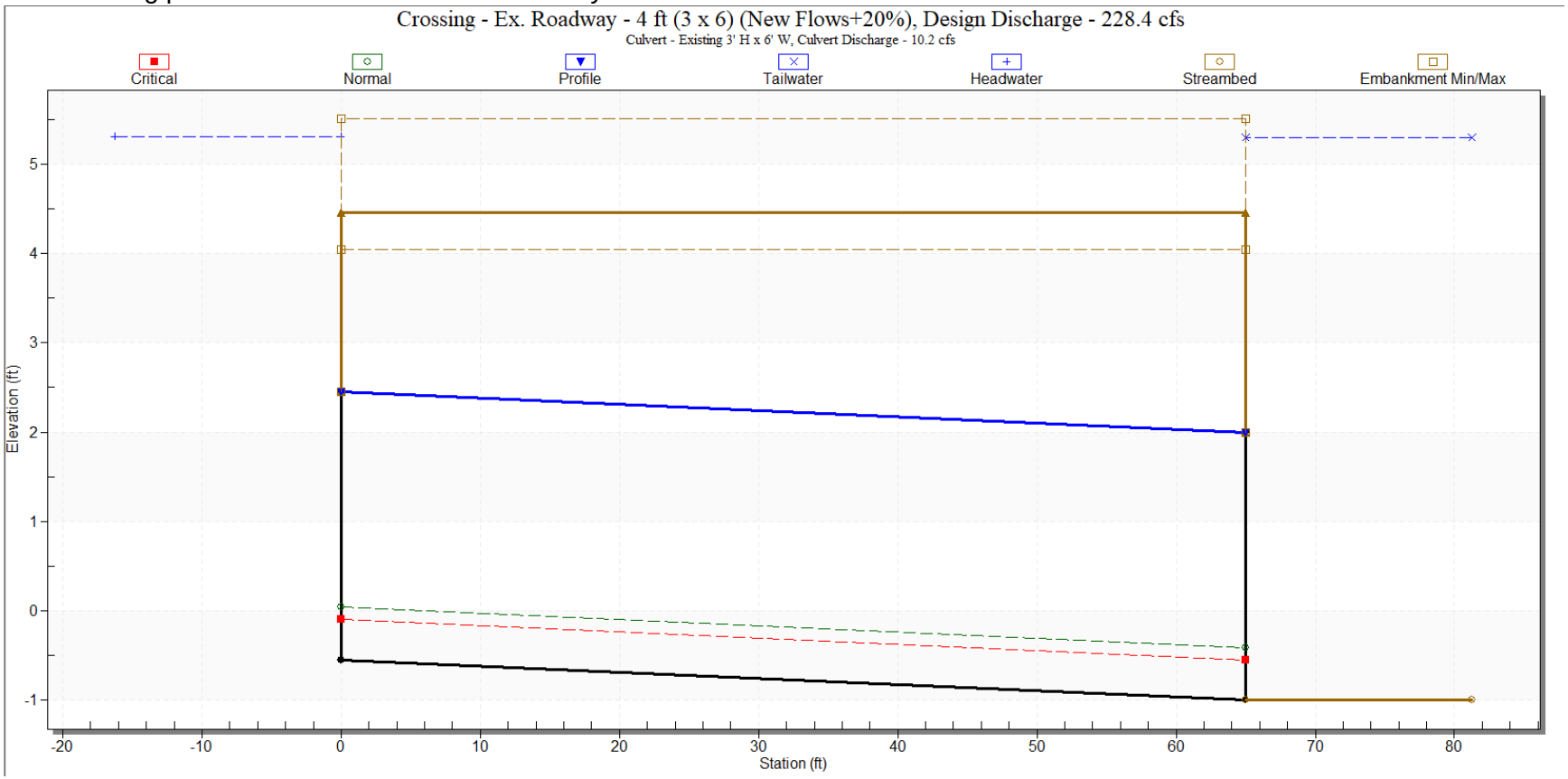
Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)
2 year	98.90	98.90	2.95	3.02	3.50	7-M1t	2.29	2.04	2.70	2.70	6.10
10 year	149.00	47.82	4.67	1.80	5.22	4-FFf	1.48	1.25	3.00	5.40	2.66
25 year	179.70	29.82	4.81	1.32	5.36	4-FFf	1.12	0.92	3.00	5.70	1.66
50 year	203.00	16.03	5.03	0.87	5.58	4-FFf	0.77	0.61	3.00	6.00	0.89
100 year	228.40	10.17	5.31	0.64	5.86	4-FFf	0.59	0.45	3.00	6.30	0.56

Existing Culvert with Projected Flows

The following profile shows conditions for the 50-year flows.



The following profile shows conditions for the 100-year flows.

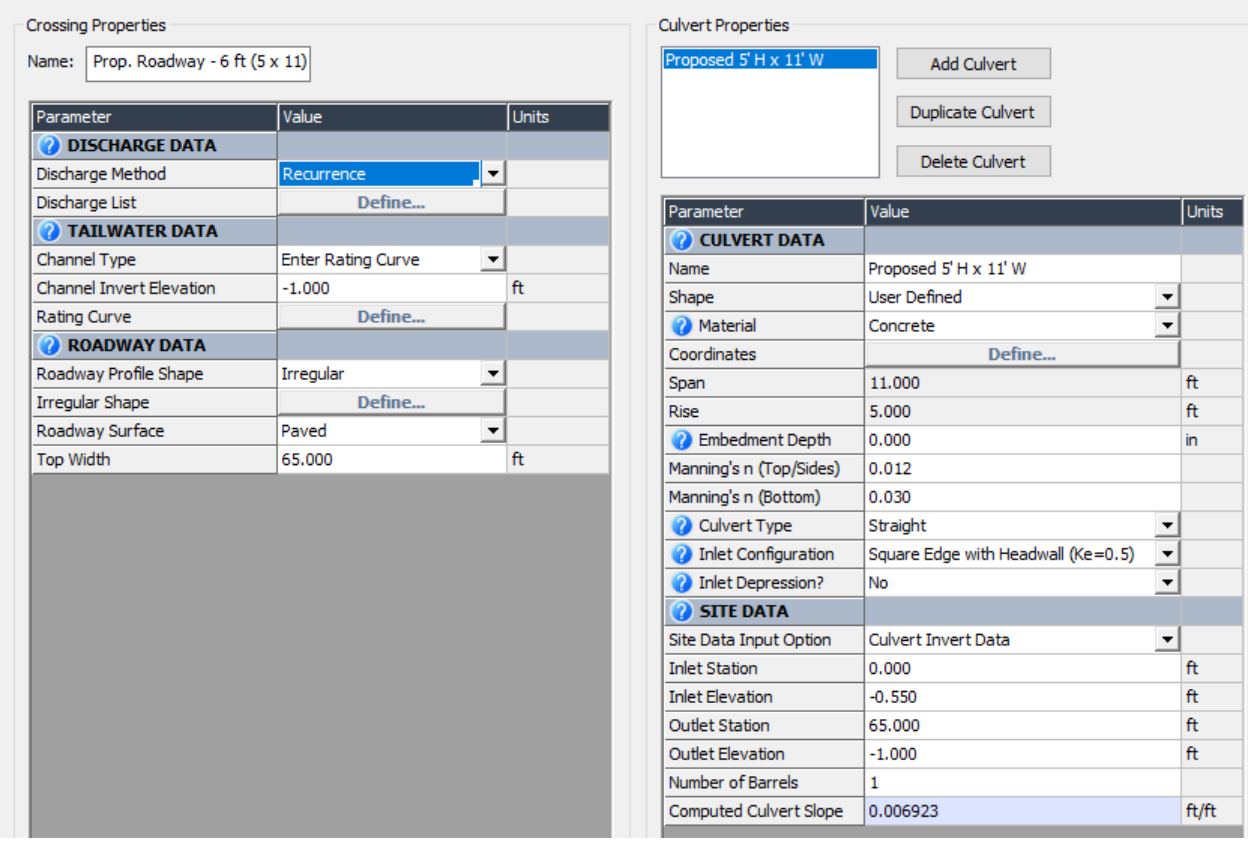


NY Rte 27A (Merrick Rd) over Amityville Creek

PIN	0LC1.01	CIN	C050001	**Alternative 2: Minimum roadway elevation 6 ft**	
Roadway Criticality	Non-Critical	Signficant Location?	No	Stream Type	Tidal
FEMA Floodplain or Floodway?	Floodplain	FEMA Zone	AE	Base Flood Elevation	6 ft
Repair Type	Replacement	Repair Notes			

Design Criteria and Design Approach					
Criteria	Values		Standards		
Proposed Conditions - Proposed Culvert with Projected Flows					
Proposed Culvert Depth	5	ft			
Proposed Culvert Width	11	ft			
Existing Upstream Invert	-0.55	ft			
Existing Downstream Invert	-1	ft			
Number of Barrels/Openings	1				
Proposed OHW*1.25 Width	O.K.				
Proposed Low Shoulder El.	6	ft			
Proposed Low Roadway Crest El.	6.56	ft			
Proposed 50-Year HW/D Ratio	1.19	O.K.	HW/D <= 1.2 for D=5'	HDM Ch 8.6.1.1 C, Exhibit 8-12	
Proposed 100-Year HW/D Ratio	1.28	---------	---------		
Proposed 50-Year Freeboard	0.58	ft		> 1.5 ft Req'd	From Low Shoulder
Proposed 100-Year Freeboard	0.16	ft		> 1.5 ft Req'd	
50-Year Analysis					
Inlet Control Water Depth	3.16	ft			
Outlet Control Water Depth	5.97	ft			
Controlling Type	Outlet Controlled		Reference HDM Ch 8.6.3.1 B		
Controlling Water Elevation	5.42	ft	Reference HDM Ch 8.6.1.1		
Flow Type	4-FFf				
100-Year Analysis					
Inlet Control Water Depth	3.44	ft			
Outlet Control Water Depth	6.39	ft			
Controlling Type	Outlet Controlled		Reference HDM Ch 8.6.3.1 B		
Controlling Water Elevation	5.84	ft	Reference HDM Ch 8.6.1.1		
Flow Type	4-FFf				

Alternative 2 Proposed Culvert with Projected Flows



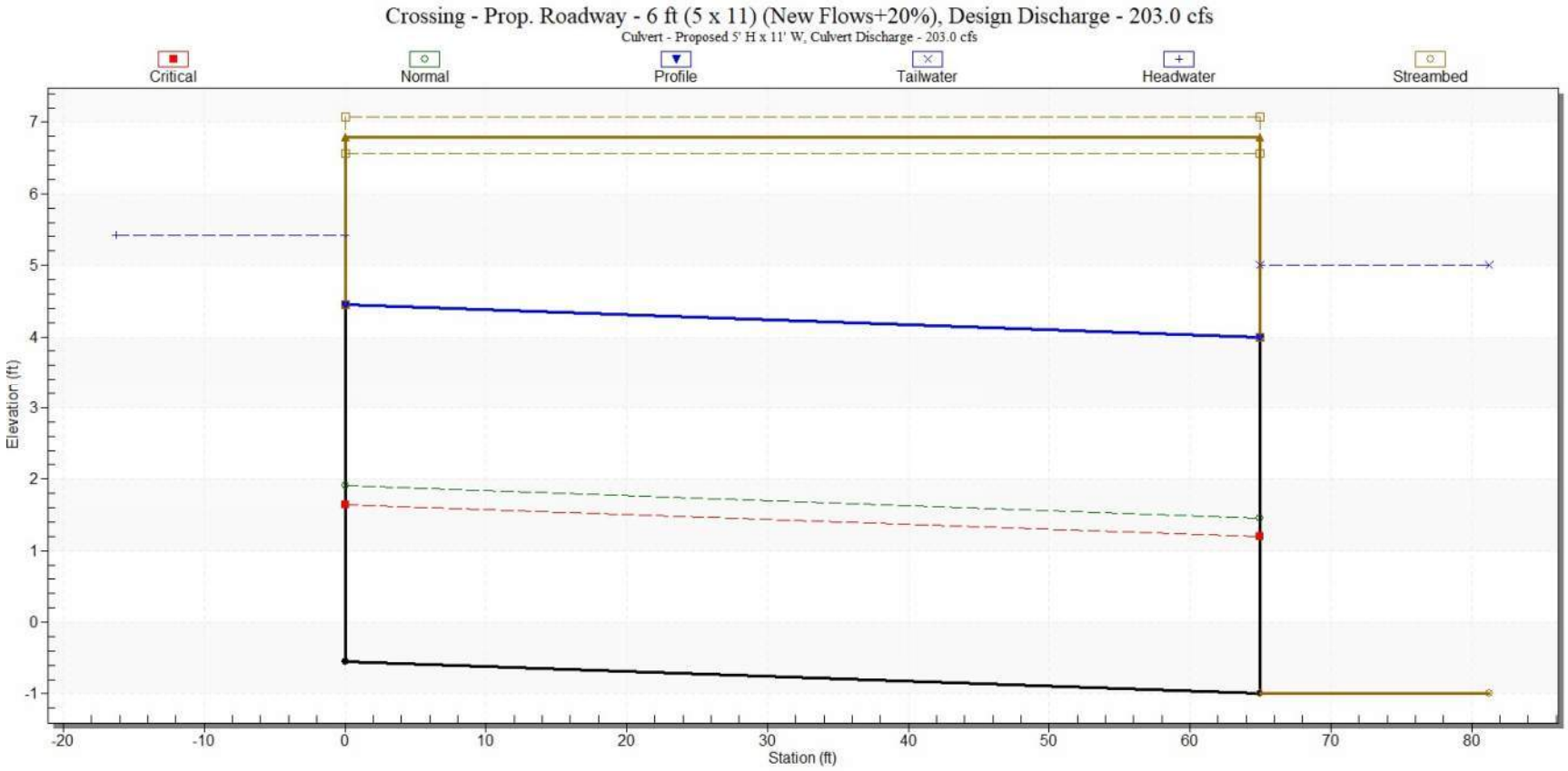
Alternative 2: Prop. Roadway - 6 ft (5 x 11) (Flows+20%)

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	Proposed 5' H x 11' W Discharge (cfs)	Roadway Discharge (cfs)	Iterations
2.10	2 year	98.90	98.90	0.00	1
4.60	10 year	149.00	149.00	0.00	1
5.03	25 year	179.70	179.70	0.00	1
5.42	50 year	203.00	203.00	0.00	1
5.84	100 year	228.40	228.40	0.00	1
6.56	Overtopping	350.33	350.33	0.00	Overtopping

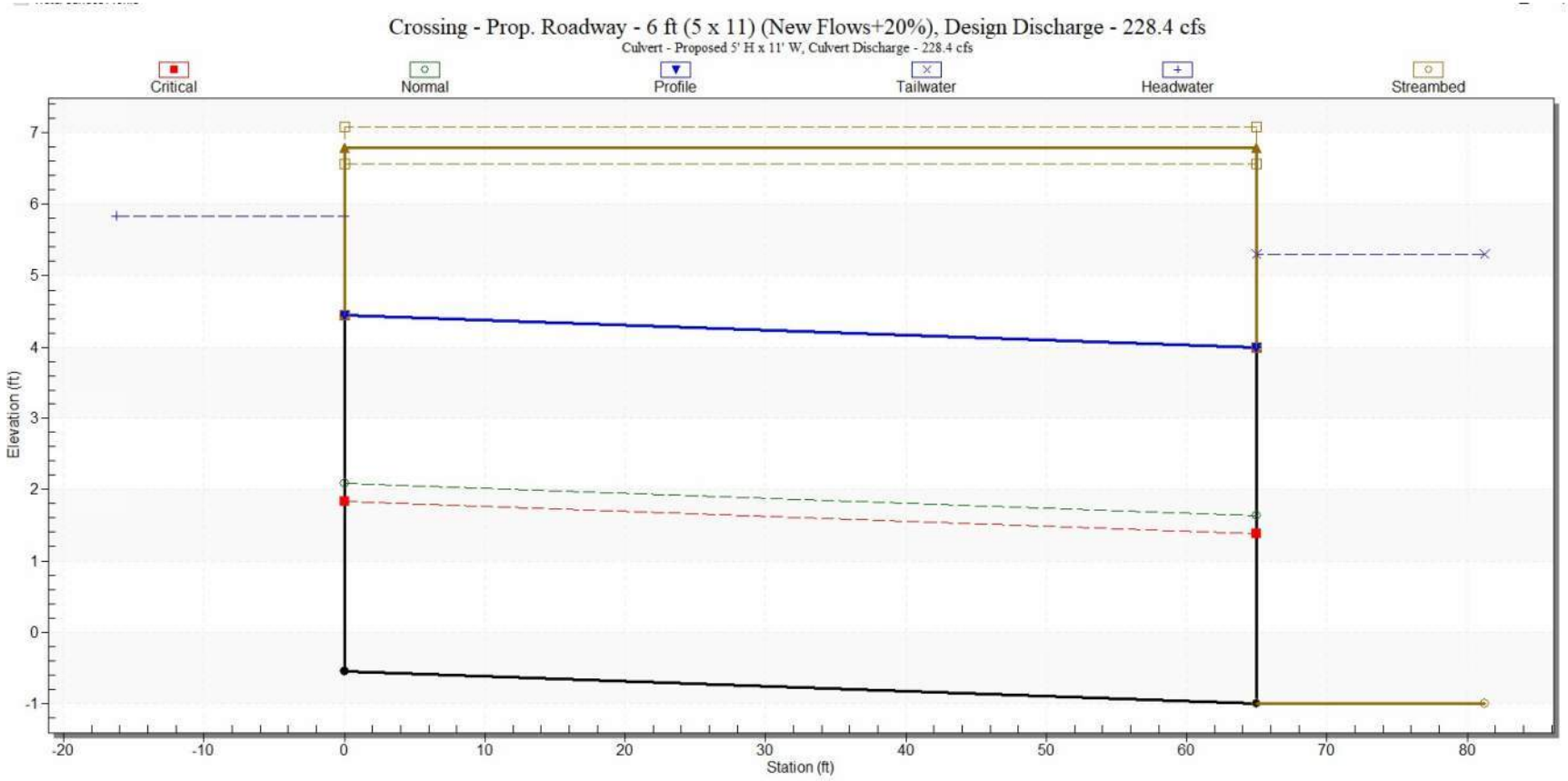
Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)
2 year	98.90	98.90	2.10	1.96	2.65	3-M1t	1.59	1.36	2.70	2.70	3.33
10 year	149.00	149.00	4.60	2.57	5.15	3-M1f	2.04	1.79	5.00	5.40	2.71
25 year	179.70	179.70	5.03	2.91	5.58	4-FFf	2.28	2.02	5.00	5.70	3.27
50 year	203.00	203.00	5.42	3.16	5.97	4-FFf	2.46	2.20	5.00	6.00	3.69
100 year	228.40	228.40	5.84	3.44	6.39	4-FFf	2.63	2.37	5.00	6.30	4.15

Alternative 2 Proposed Culvert with Projected Flows

The following profile shows conditions for the 50-year flows.



The following profile shows conditions for the 100-year flows.

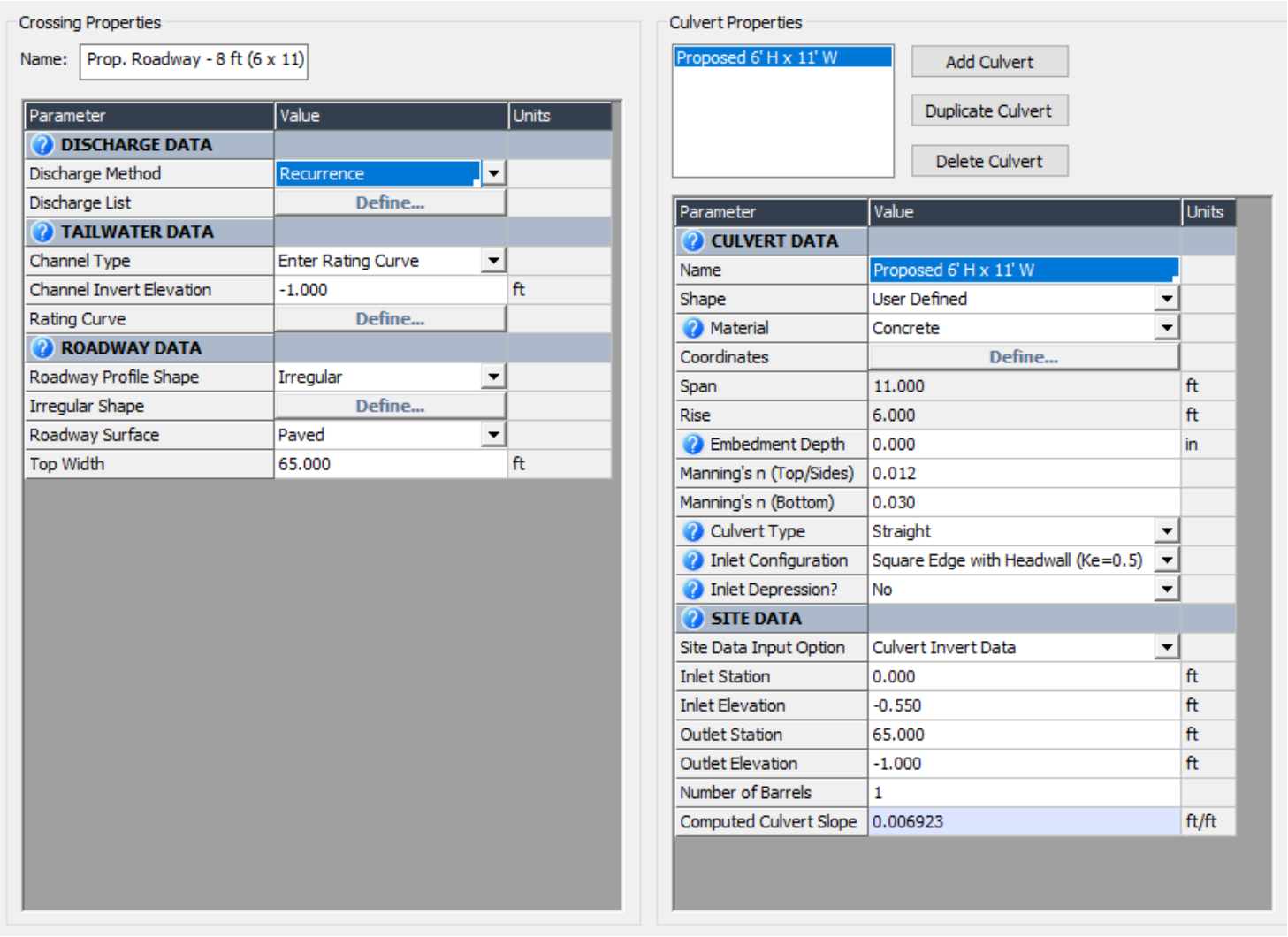


NY Rte 27A (Merrick Rd) over Amityville Creek

PIN	0LC1.01	CIN	C050001	**Alternative 3: Minimum roadway elevation 8 ft**	
Roadway Criticality	Non-Critical	Signficant Location?	No	Stream Type	Tidal
FEMA Floodplain or Floodway?	Floodplain	FEMA Zone	AE	Base Flood Elevation	6 ft
Repair Type	Replacement	Repair Notes			

Design Criteria and Design Approach					
Criteria	Values		Standards		
Proposed Conditions - Proposed Culvert with Projected Flows					
Proposed Culvert Depth	6	ft			
Proposed Culvert Width	11	ft			
Existing Upstream Invert	-0.55	ft			
Existing Downstream Invert	-1	ft			
Number of Barrels/Openings	1				
Proposed OHW*1.25 Width	O.K.				
Proposed Low Shoulder El.	8	ft			
Proposed Low Roadway Crest El.	8.56	ft			
Proposed 50-Year HW/D Ratio	0.98	O.K.	HW/D <= 1 for D>5'		HDM Ch 8.6.1.1 C, Exhibit 8-12
Proposed 100-Year HW/D Ratio	1.03	---	---		
Proposed 50-Year Freeboard	2.65	ft	O.K.	> 1.5 ft Req'd	From Low Shoulder
Proposed 100-Year Freeboard	2.38	ft	O.K.	> 1.5 ft Req'd	
50-Year Analysis					
Inlet Control Water Depth	3.15	ft			
Outlet Control Water Depth	5.90	ft			
Controlling Type	Outlet Controlled		Reference HDM Ch 8.6.3.1 B		
Controlling Water Elevation	5.35	ft	Reference HDM Ch 8.6.1.1		
Flow Type	3-M1f				
100-Year Analysis					
Inlet Control Water Depth	3.41	ft			
Outlet Control Water Depth	6.17	ft			
Controlling Type	Outlet Controlled		Reference HDM Ch 8.6.3.1 B		
Controlling Water Elevation	5.62	ft	Reference HDM Ch 8.6.1.1		
Flow Type	3-M1f				

Alternative 3 Proposed Culvert with Projected Flows



Crossing Properties

Name: Prop. Roadway - 8 ft (6 x 11)

Parameter	Value	Units
DISCHARGE DATA		
Discharge Method	Recurrence	
Discharge List	Define...	
TAILWATER DATA		
Channel Type	Enter Rating Curve	
Channel Invert Elevation	-1.000	ft
Rating Curve	Define...	
ROADWAY DATA		
Roadway Profile Shape	Irregular	
Irregular Shape	Define...	
Roadway Surface	Paved	
Top Width	65.000	ft

Culvert Properties

Proposed 6' H x 11' W

Add Culvert

Duplicate Culvert

Delete Culvert

Parameter	Value	Units
CULVERT DATA		
Name	Proposed 6' H x 11' W	
Shape	User Defined	
Material	Concrete	
Coordinates	Define...	
Span	11.000	ft
Rise	6.000	ft
Embedment Depth	0.000	in
Manning's n (Top/Sides)	0.012	
Manning's n (Bottom)	0.030	
Culvert Type	Straight	
Inlet Configuration	Square Edge with Headwall (Ke=0.5)	
Inlet Depression?	No	
SITE DATA		
Site Data Input Option	Culvert Invert Data	
Inlet Station	0.000	ft
Inlet Elevation	-0.550	ft
Outlet Station	65.000	ft
Outlet Elevation	-1.000	ft
Number of Barrels	1	
Computed Culvert Slope	0.006923	ft/ft

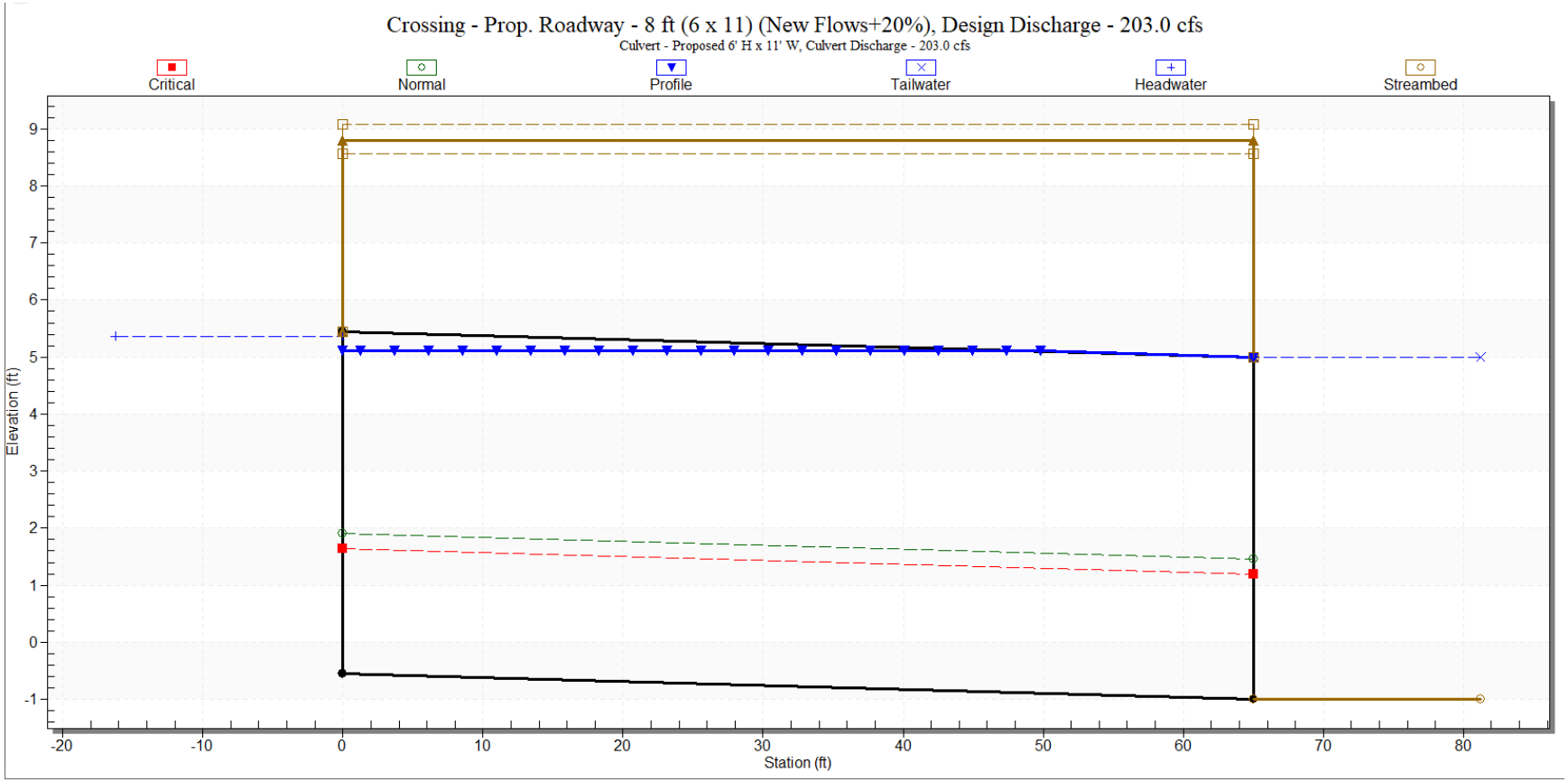
Alternative 3: Prop. Roadway - 8 ft (6 x 11) (Flows+20%)

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	Proposed 6' H x 11' W Discharge (cfs)	Roadway Discharge (cfs)	Iterations
2.10	2 year	98.90	98.90	0.00	1
4.58	10 year	149.00	149.00	0.00	1
4.93	25 year	179.70	179.70	0.00	1
5.35	50 year	203.00	203.00	0.00	1
5.62	100 year	228.40	228.40	0.00	1
8.56	Overtopping	695.28	695.28	0.00	Overtopping

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)
2 year	98.90	98.90	2.10	1.96	2.65	3-M1t	1.59	1.36	2.70	2.70	3.33
10 year	149.00	149.00	4.58	2.57	5.13	3-M1t	2.04	1.79	5.40	5.40	2.51
25 year	179.70	179.70	4.93	2.91	5.48	3-M1t	2.28	2.02	5.70	5.70	2.87
50 year	203.00	203.00	5.35	3.15	5.90	3-M1f	2.46	2.20	6.00	6.00	3.08
100 year	228.40	228.40	5.62	3.41	6.17	3-M1f	2.63	2.37	6.00	6.30	3.46

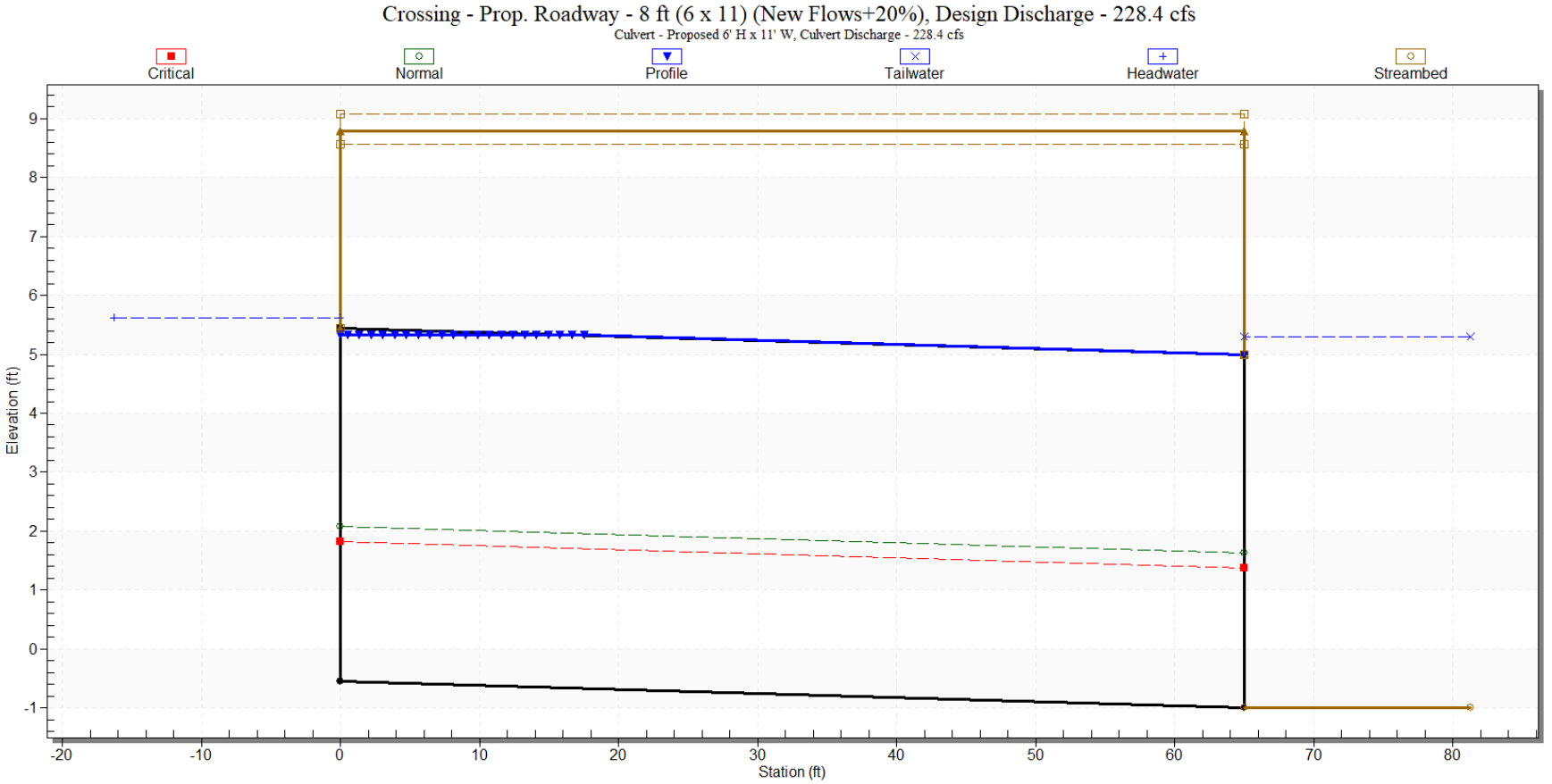
Alternative 3 Proposed Culvert with Projected Flows

The following profile shows conditions for the 50-year flows.



Alternative 3 Proposed Culvert with Projected Flows

The following profile shows conditions for the 100-year flows.



ATTACHMENT I

Other

Smart Growth Screening Tool

PIN 0LC1.01

Prepared By:

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: Culvert Replacement

Location of Project: Village of Amityville, NY

Brief Description: Replacement of deteriorating culvert

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 an aging, deteriorating culvert.

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)

The project will add pedestrian and bicycle facilities to the roadway, which may reduce the need for driving motor vehicles

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)

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)

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)

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)

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: 0LC1.01

Project Name: Culvert Replacement

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:

- Will restore the culvert to a general recommendation of 5 (a rating of 5 means that the crossing remains in fully functional and in a fair condition) or greater.
- Provide a design life of at least 70 years (site identified as a significant location defined by NYSDOT Highway Design Manual (HDM) Exhibit 8-15) for the replacement or rehabilitation of the culvert (or extend the service life required to achieve the design life of the existing crossing by repairs, including invert paving), using measures that minimize the life cycle cost of the structure
- Address any highway geometric and operational deficiencies to enhance safety, traffic flow and facilitate traffic operations.
- Where feasible, design the culvert hydraulic opening and raise the roadway elevation to accommodate the vertical flood elevation and corresponding flows from the applicable recommendations in the NYS Flood Risk Management Guidelines and HDM Ch. 8.6.1.1.
-
-

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
Title	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):

Glenn R. Murrell
Signature

8/10/23
Date

Regional Planning & Program Manager
Title

Glenn R. Murrell
Printed Name