

Eastern Shore

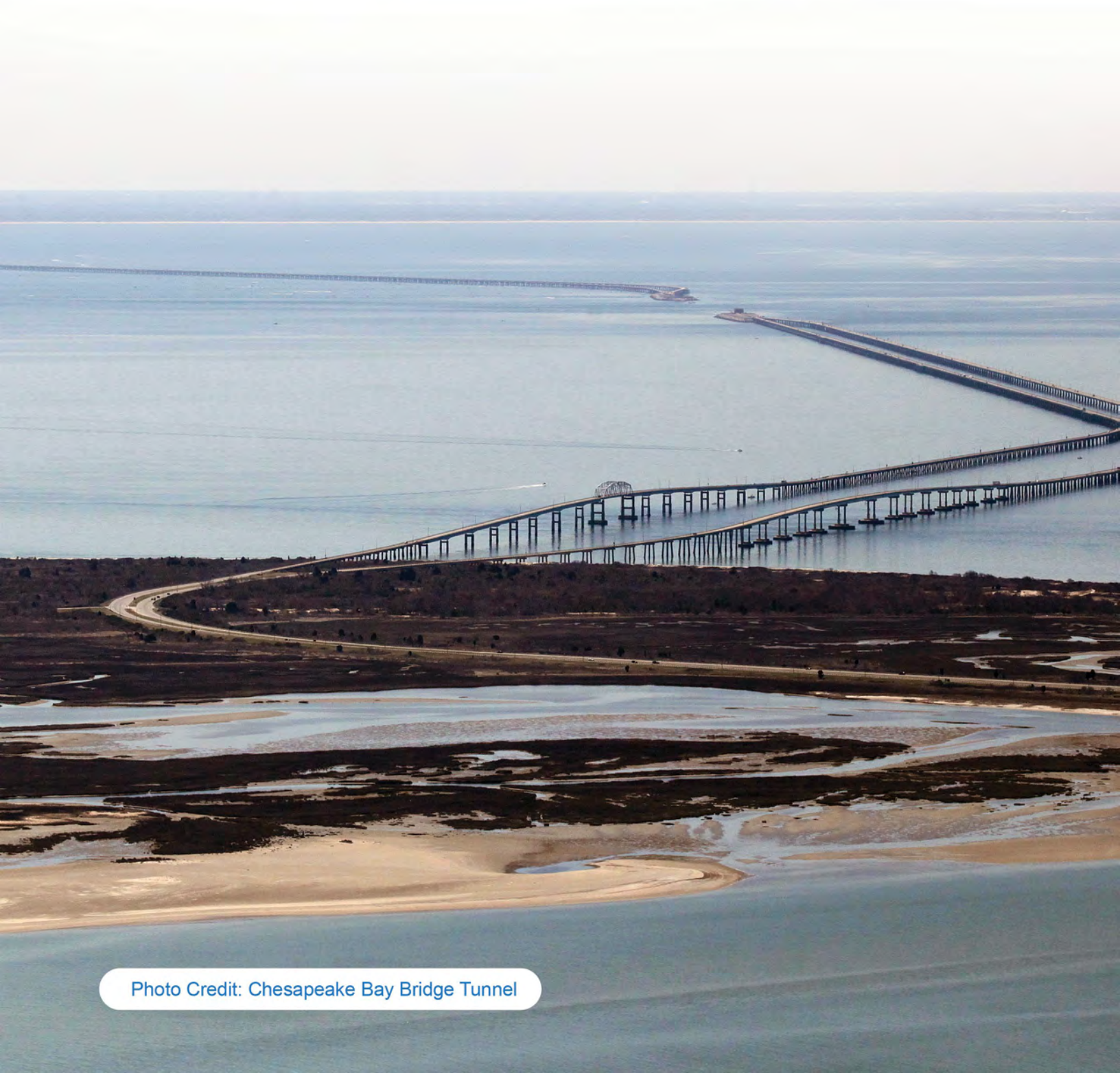


Photo Credit: Chesapeake Bay Bridge Tunnel



Legend



★ **CIP Interceptor Point**

☆ **CIP Pump Station Point**

■ **CIP Interceptor Line**

■ **CIP Abandonment**

■ **Treatment Plant Service Area**

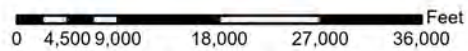
■ **HRSD Interceptor Force Main**

■ **HRSD Interceptor Gravity Main**

■ **WTP HRSD Treatment Plant**

■ **PRS HRSD Pressure Reducing Station**

■ **PS HRSD Pump Station**



Eastern Shore Service Area CIP Projects

Treatment Plant Projects

ES010300

ES010500

ES010600

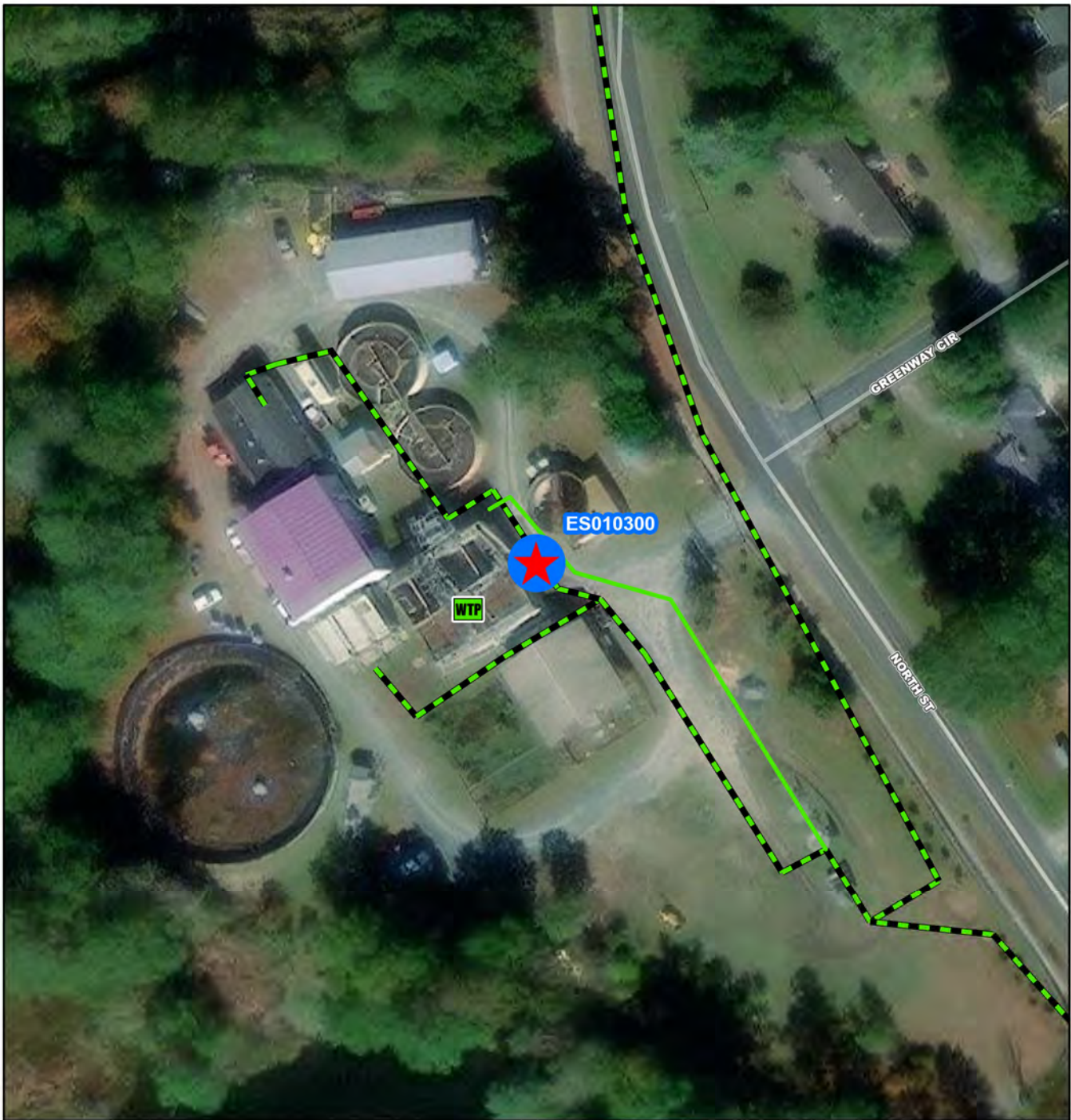
ES010800



CIP Location



Service Area



ES010300

- Project Interceptor Line
- Project Interceptor Point
- Project Location Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- HRSD Treatment Plant
- HRSD Pressure Reducing Station
- HRSD Pump Station

0 25 50 100 150 200 Feet

ES010300

Onancock Treatment Plant Administration Building Upgrade



CIP Location





Onancock Treatment Plant Administration Building Upgrade

PR_ES010300

System: Eastern Shore
Type: Facilities, Buildings and Capital Equipment

Driver Category: Aging Infrastructure/Rehabilitation
Project Phase: Proposed
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
\$5,080	\$53	\$183	\$233	\$1,760	\$2,758	\$92	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

Replacement of the Onancock Treatment Plant Administrative and Laboratory Building.

PROJECT JUSTIFICATION

The existing building is in poor condition and is not rated as a ride-out shelter. The office and lunch areas are on bare concrete floors with old cinderblock walls and deteriorated windows and doors. There is no shower or locker room and there are no private spaces or offices for supervisors. The proposed building will be built to HRSD standards and will provide offices for supervisors, a new laboratory space, a locker room with a shower and laundry area, and a conference room for meetings and apprenticeship courses. This proposed building will serve all Eastern Shore staff which will be increasing as additional infrastructure comes online and act as a ride-out shelter for all Eastern Shore staff.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

Contacts-Requesting Dept: Operations-Treatment
Contacts-Dept Contacts: Rebecca Currall
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	
PER	04/01/2025
Design Delay	12/01/2025
Design	01/01/2026
Bid Delay	07/01/2027
PreConstruction	10/01/2027
Construction	12/01/2027
Closeout	06/01/2029

COST ESTIMATE

Cost Estimate Class:	Class 10
PrePlanning	\$0
PER	\$120,000
Design	\$350,000
PreConstruction	\$10,400
Construction	\$4,500,000
Closeout	\$100,000
Est. Program Cost	\$5,080,400
Contingency Budget	\$1,125,000
Est. Project Costs	\$6,205,400



ES010500

-  Project Interceptor Line
-  Project Interceptor Point
-  Project Location Point
-  Project Area

Legend

-  CIP Interceptor Point
-  CIP Pump Station Point
-  CIP Interceptor Line
-  CIP Abandonment
-  CIP Project Area
-  HRSD Interceptor Force Main
-  HRSD Interceptor Gravity Main
-  HRSD Treatment Plant
-  HRSD Pressure Reducing Station
-  HRSD Pump Station

0 25 50 100 150 200 Feet

ES010500

Chincoteague Treatment Plant Improvements



CIP Location



System: Eastern Shore
Type: Wastewater Treatment

Driver Category: Aging Infrastructure/Rehabilitation
Project Phase: Design
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
\$10,162	\$1,303	\$5,519	\$3,310	\$20	\$10	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will include the installation of two packaged treatment plants, an outfall and appurtenances, the demolition of the two existing packaged treatment plants and site work needed to make new connections to the treatment plants. Adjacent property acquisition will also be included to facilitate construction, create a buffer from the public, and facilitate future projects.

PROJECT JUSTIFICATION

The two existing packaged treatment plants are at the end of their useful life and are at full capacity; permitted outfalls are located in multiple locations and run under private buildings and private property. Additional treatment capacity is needed to provide service to properties along Main Street and Maddox Boulevard in the Town of Chincoteague. The United States Coast Guard treatment facility is interested in connecting to the HRSD treatment plant. The permitted outfall capacity should be consolidated to an accessible outfall.

FUNDING TYPE

Funding Type: Congressional Directed Spending

CONTACTS

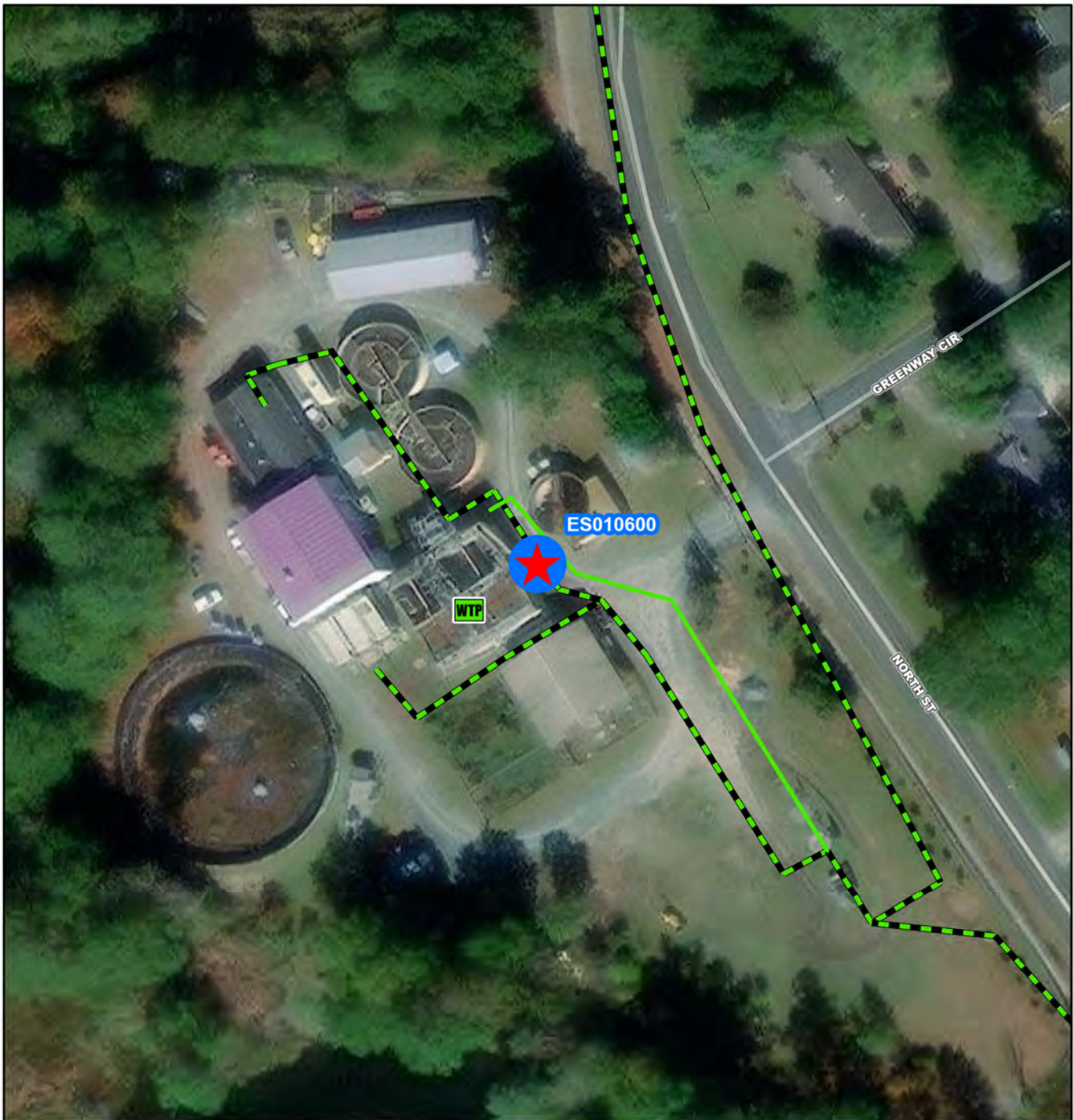
Contacts-Requesting Dept: Operations
Contacts-Dept Contacts: Shirley Smith
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	
PER	03/26/2019
Design Delay	02/05/2024
Design	02/01/2024
Bid Delay	06/01/2025
PreConstruction	06/01/2025
Construction	09/01/2025
Closeout	01/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 3 (-10% to +30%)
PrePlanning	\$0
PER	\$0
Design	\$1,293,654
PreConstruction	\$28,525
Construction	\$8,800,000
Closeout	\$40,000
Est. Program Cost	\$10,162,179
Contingency Budget	\$1,600,000
Est. Project Costs	\$11,762,179



ES010600

- Project Interceptor Line
- Project Interceptor Point
- Project Location Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- HRSD Treatment Plant
- HRSD Pressure Reducing Station
- HRSD Pump Station

0 25 50 100 150 200 Feet

ES010600

Onancock Meter Replacement



CIP Location



System:
Type:

Eastern Shore
Locality and Private Property

Driver Category:
Project Phase:
Regulatory:

Performance Upgrades
Construction
None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
\$935	\$470	\$463	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project includes locating, inspecting, and replacing approximately 800 water meters in the Town of Onancock.

PROJECT JUSTIFICATION

The existing water meters are assumed to be outdated and in questionable condition. Upon confirming during inspection, HRSD has agreed to replace the water meters with new meters with automated reading features to ensure accurate billing moving forward.

FUNDING TYPE

Funding Type: Cash

CONTACTS

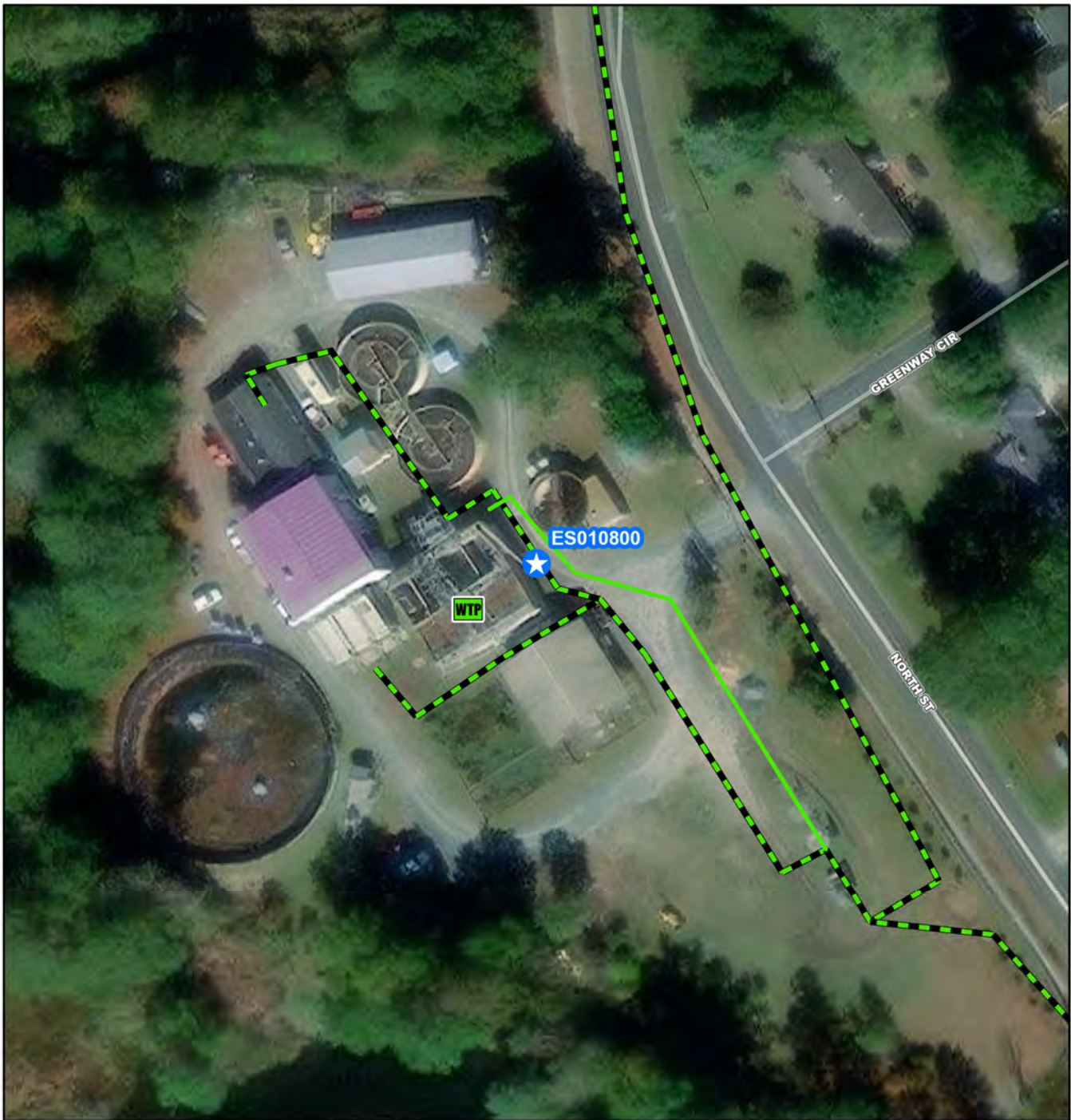
Contacts-Requesting Dept: Engineering
Contacts-Dept Contacts: Shirley Smith
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	05/01/2023
PER	06/01/2023
Design Delay	02/02/2024
Design	02/02/2024
Bid Delay	09/06/2024
PreConstruction	09/01/2024
Construction	04/01/2025
Closeout	12/01/2025

COST ESTIMATE

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$104,646
Design	\$72,063
PreConstruction	\$11,684
Construction	\$743,793
Closeout	\$2,401
Est. Program Cost	\$934,587
Contingency Budget	\$96,053
Est. Project Costs	\$1,030,640



ES010800

-  Project Interceptor Line
-  Project Interceptor Point
-  Project Location Point
-  Project Area

Legend

-  CIP Interceptor Point
-  CIP Pump Station Point
-  CIP Interceptor Line
-  CIP Abandonment
-  CIP Project Area
-  HRSD Interceptor Force Main
-  HRSD Interceptor Gravity Main
-  HRSD Treatment Plant
-  HRSD Pressure Reducing Station
-  HRSD Pump Station

0 25 50 100 150 200 Feet

ES010800

Onancock Treatment Plant Solids Handling Improvements



CIP Location



System: Eastern Shore
Type: Biosolids

Driver Category: Aging Infrastructure/Rehabilitation
Project Phase: Design
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
\$16,077	\$1,480	\$5,858	\$8,719	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will utilize the completed PER for the Onancock Solids Handling Upgrades project (formerly CIP ES010000) and carry this project through Design and Construction. This project will include the construction of a new 100,000 gallon Aerobic Digester with Coarse Bubble Aeration and associated infrastructure, new screw press with polymer feed system and cake storage, new surface wasting system, and yard piping upgrades. This project will also incorporate a Distributed Control System (DCS) system for the entire plant.

PROJECT JUSTIFICATION

The existing solids handling components have reached their end of useful life. The equipment being utilized cannot keep up with the existing solids accumulating in the plant and will require periodic contracted dewatering to alleviate treatment strain. Flows to the Onancock Treatment Plant are expected to double by FY 2025 and this will greatly exacerbate this problem.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

Contacts-Requesting Dept: Operations-Treatment
Contacts-Dept Contacts: Rebecca Currall
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	
PER	05/01/2023
Design Delay	05/01/2023
Design	05/01/2023
Bid Delay	07/01/2025
PreConstruction	09/01/2025
Construction	01/01/2026
Closeout	04/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 3 (-10% to +30%)
PrePlanning	\$0
PER	\$0
Design	\$1,480,000
PreConstruction	\$50,000
Construction	\$14,520,000
Closeout	\$26,500
Est. Program Cost	\$16,076,500
Contingency Budget	\$1,452,000
Est. Project Costs	\$17,528,500



ES011000

- Project Interceptor Line
- Project Interceptor Point
- Project Location Point
- Project Area

Legend

- ★ CIP Interceptor Point
- ☆ CIP Pump Station Point
- Orange line CIP Interceptor Line
- Red line CIP Abandonment
- Red area CIP Project Area
- Green line HRSD Interceptor Force Main
- Black dashed line HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station

0 110 220 440 660 880 Feet

ES011000

Onancock Pump Station Improvements

N
W E
S

CIP Location

System: Eastern Shore
Type: Pump Stations

Driver Category: Aging Infrastructure/Rehabilitation
Project Phase: Proposed
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
\$3,765	\$25	\$335	\$1,378	\$2,017	\$10	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will bring ON-PS-01, ON-PS-02, and ON-PS-03 pump stations to HRSD standards and provide reliable service and operation for the Onancock Collection system.

PROJECT JUSTIFICATION

The ON-PS-01 pumps half of the flow generated by the Town of Onancock to the existing treatment plant. The pump station building was constructed in 1959 and has reached its useful life. The station will need to be demolished, and an external control cabinet should be installed to replace the existing pump station's controls. The control cabinet should be above the 100-year flood plain. The pumps will need to be evaluated for current capacity, as this station has shown to have capacity issue. Additionally, the existing generator is permanently mounted and will need to be replaced with a current model that meets HRSD's current decibel requirements due to its proximity to neighbors. ON-PS-02, the metering base is within the existing wet well and must be relocated outside the wet well. Pumps will need to be evaluated for current capacity. An additional pump will need to be installed; there is currently no redundancy to prevent overflow. The pump station structure will need to be rehabilitated or replaced due to the condition of the pump station lids. Additionally, an emergency pump connection will need to be installed. ON-PS-03 was installed in 1960 and has reached the end of its useful life. An additional pump will need to be installed; there is currently no redundancy to prevent overflow. Due to its condition and surrounding infrastructure, the pump station structure will need replacement. This project will correct these deficiencies and safety concerns and bring this facility to current HRSD standards.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

Contacts-Requesting Dept: Operations-Treatment
Contacts-Dept Contacts: Delane Carty
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	06/01/2025
PER	06/01/2025
Design Delay	12/01/2025
Design	12/01/2025
Bid Delay	10/01/2026
PreConstruction	10/01/2026
Construction	02/01/2027
Closeout	03/01/2028

COST ESTIMATE

Cost Estimate Class: Class 5 (-20% to +100%)	
PrePlanning	\$0
PER	\$150,000
Design	\$300,000
PreConstruction	\$30,000
Construction	\$3,270,000
Closeout	\$15,000
Est. Program Cost	\$3,765,000
Contingency Budget	\$941,250
Est. Project Costs	\$4,706,250