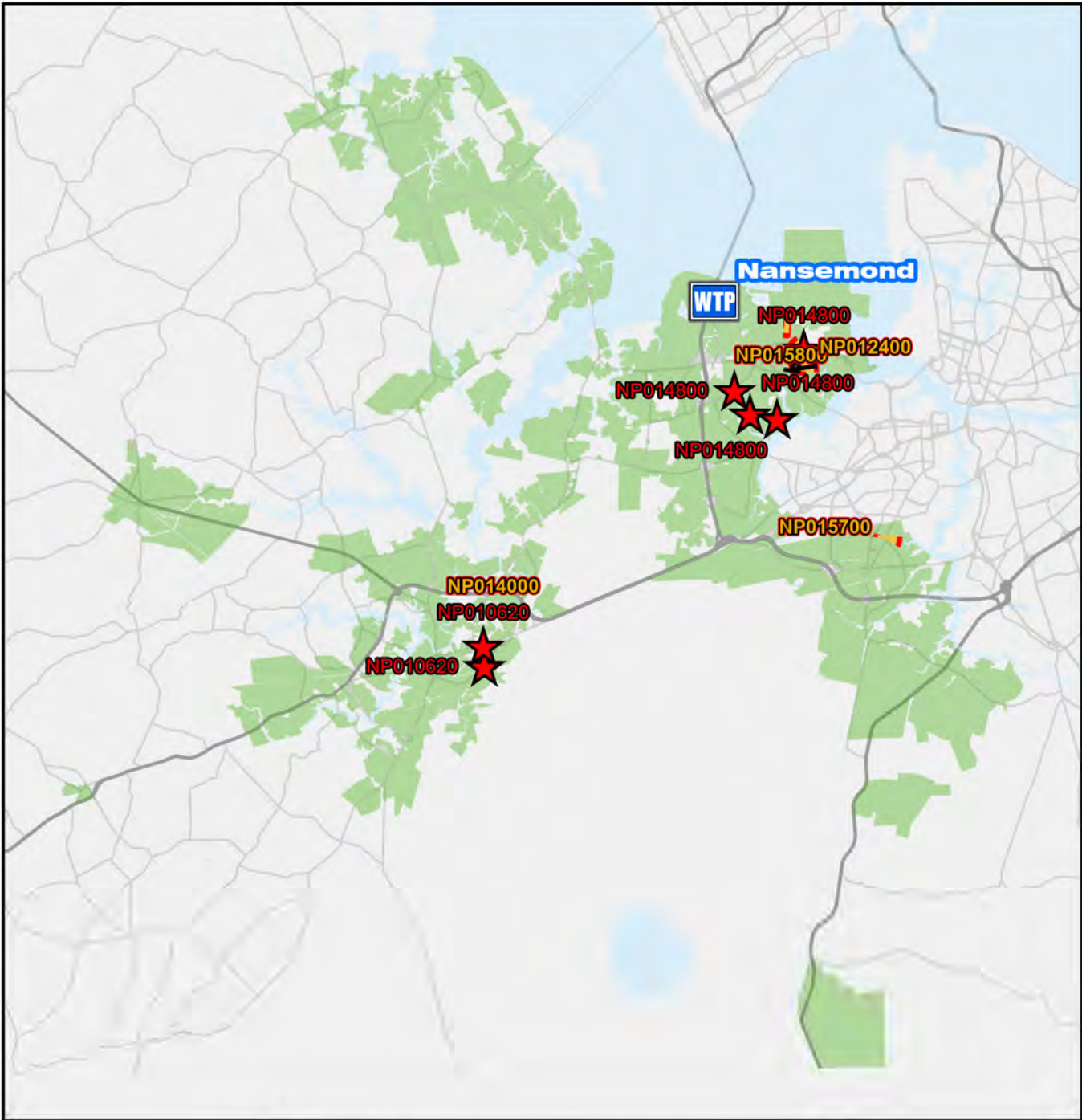




Nansemond Treatment Plant



Legend

- WTP Nansemond
- 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

0 6,500 13,000 26,000 39,000 52,000 Feet

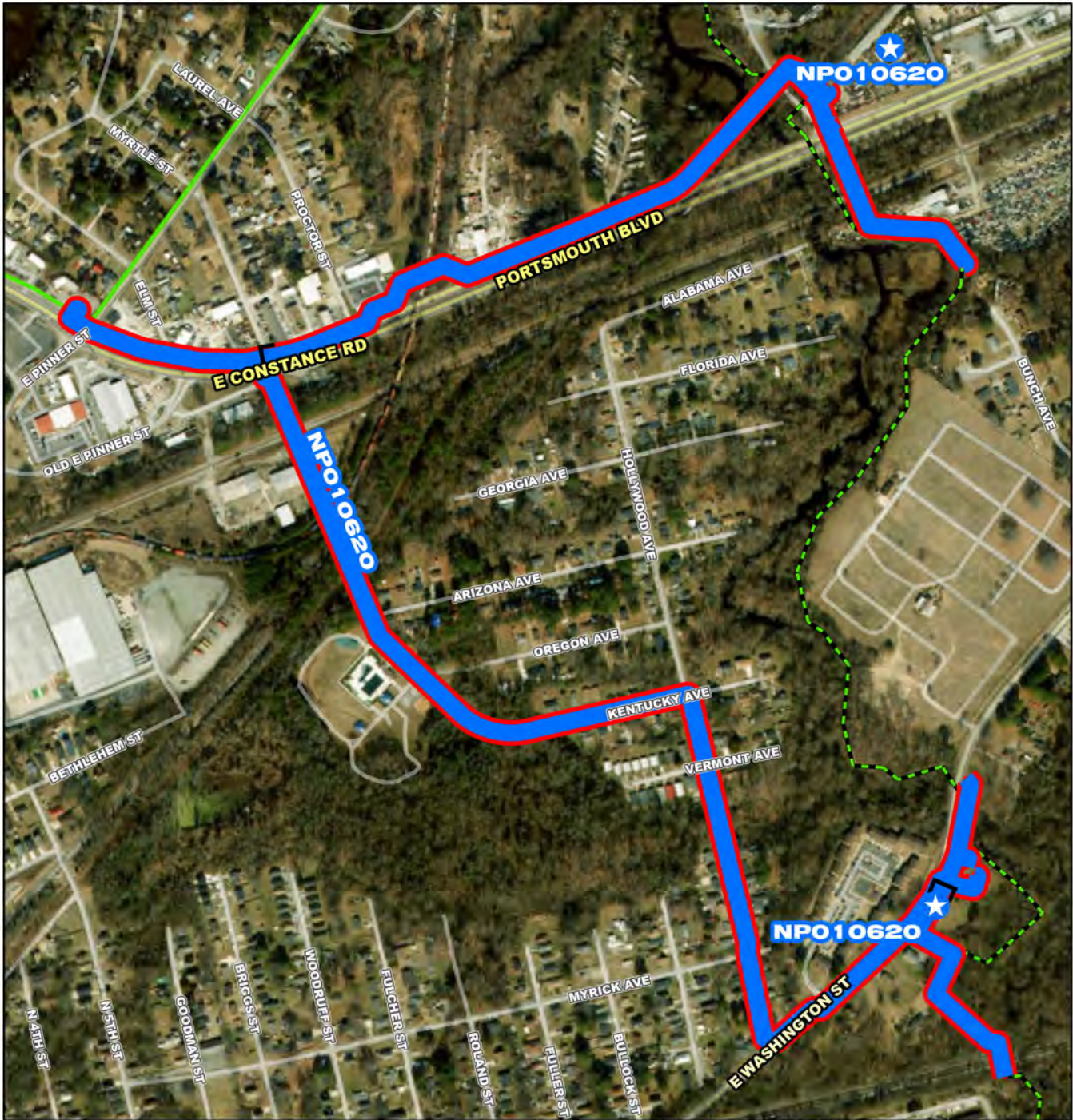
Nansemond Treatment Plant Service Area CIP Projects

Treatment Plant Projects	
GN016380	NP014700
GN016381	NP015100
NP013000	NP015900
NP013700	NP016000
NP013820	

N

CIP Location

Service Area

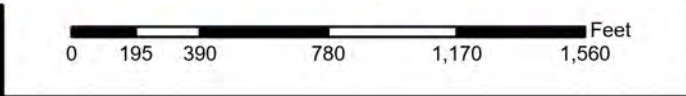


NPO 10620

- 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



NPO 10620

Suffolk Pump Station Replacement

CIP Location

System: Nansemond
 Type: Pump Stations

Driver Category: I&I Abatement-Rehabilitation Plan
 Project Phase: Construction
 Regulatory: Rehab Plan Phase Two

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$52,001	\$32,884	\$19,116	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project is to relocate and replace the existing HRSD Suffolk Pump Station. In lieu of constructing one replacement pump station, two pump stations will be constructed. The benefit of the two pump station scenario includes abandonment/removal of approximately 6,500 linear feet (LF) of 24-inch gravity sanitary sewer and 34 manholes along Shingle Creek. The existing Shingle Creek gravity sewer is located in wetlands with ongoing concerns for potential overflows, pipe failure and difficult access for maintenance. This project will include construction of two new pump stations, 8,000 LF of force main, 2,100 LF of gravity sanitary sewer, 12 sanitary sewer manholes, demolition of the existing Suffolk Pump Station and abandonment/removal of 6,500 LF of 24 inch gravity sewer and 34 manholes. The project includes six trenchless crossings under both CSX and Norfolk Southern Railroad tracks.

PROJECT JUSTIFICATION

This project will replace the existing Suffolk Pump Station with a station that meets the current capacity needs and provides for future expansion to meet anticipated growth. The existing pump station site does not provide the needed space for expansion, is difficult to access with large maintenance equipment/vehicles, and creates nuisance traffic to the surrounding residential neighborhood. The incoming Shingle Creek Gravity Sewer has rehabilitation needs identified in the Rehabilitation Plan. Relocation of the pump station could provide efficiencies in combining these two projects to eliminate a siphon system and creek crossing.

FUNDING TYPE CONTACTS

Funding Type: Revenue Bond

Contacts-Requesting Dept: Operations-Interceptors
 Contacts-Dept Contacts: Tim Marsh
 Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE COST ESTIMATE

PrePlanning	02/01/2013
PER	03/31/2013
Design Delay	06/02/2014
Design	02/01/2013
Bid Delay	04/29/2021
PreConstruction	02/01/2013
Construction	03/01/2025
Closeout	03/01/2027

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$154,150
Design	\$3,845,805
PreConstruction	\$21,020
Construction	\$47,974,602
Closeout	\$5,000
Est. Program Cost	\$52,000,577
Contingency Budget	\$3,918,682
Est. Project Costs	\$55,919,259



NPO 12400

- 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

Feet

0 195 390 780 1,170 1,560

NPO 12400

Western Branch Sewer System Gravity Improvements

CIP Location

System: Nansemond
 Type: Pipelines

Driver Category: I&I Abatement-Rehabilitation Plan
 Project Phase: Construction
 Regulatory: Rehab Plan Phase Two

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$8,813	\$3,898	\$4,915	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project is to rehabilitate and/or replace 5600 linear feet (LF) of gravity pipeline with associated manholes. Pipe diameters range from 15 to 30-inches. Project extends from MH-SG-035-18453 to MH-SG-034-14607 and from MH-SG-033-1782 to MH-SG-035-16720.

PROJECT JUSTIFICATION

Condition assessment activities originally indicated that these assets present a material risk of failure due to I/I and the repair was deemed a High Priority Project. A subsequent HART study suggested capacity upgrades were required for approximately 1700 LF. Observations from flow monitoring suggested borderline capacity sufficiency and the HRSD opted to increase capacity along SG-035 in concert with the HPP.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

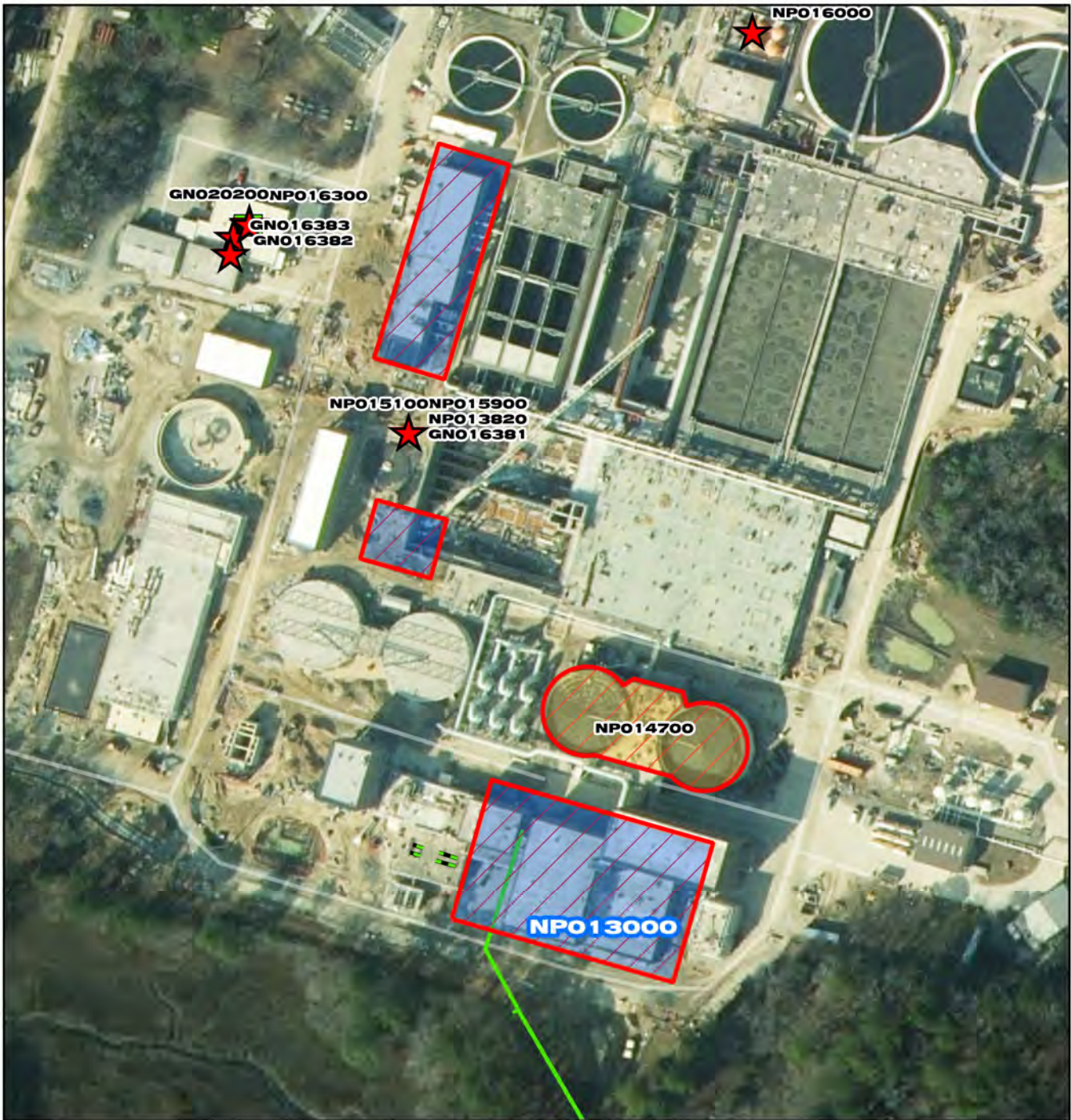
Contacts-Requesting Dept: Operations-Interceptors
 Contacts-Dept Contacts: Nick Taschner
 Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	03/31/2021
PER	03/22/2022
Design Delay	10/06/2022
Design	12/21/2022
Bid Delay	02/06/2024
PreConstruction	02/07/2024
Construction	11/01/2025
Closeout	06/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$72,937
Design	\$291,161
PreConstruction	\$14,578
Construction	\$8,419,149
Closeout	\$14,728
Est. Program Cost	\$8,812,554
Contingency Budget	\$1,100,000
Est. Project Costs	\$9,912,554

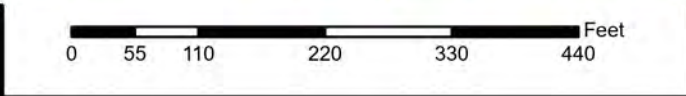


NPO13000

- 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



NPO 13000

Nansemond Treatment Plant Motor Control Center Replacements

CIP Location



System: Nansemond
Type: Electrical

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

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$3,497	\$2,472	\$1,025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project is to replace six motor control centers (MCCs). The MCCs were installed in the early 1980s. The MCC's feed the primary pump station #1, Float Thickening Building, Primary Pump Station #2, Clarified Recycle (CRCY) Pump Station, and Nitrified Recycle (NRCY)/CRCY Pump Station.

PROJECT JUSTIFICATION

This project will replace 32 year old MCC's nearing the end of their useful life. The main breakers on the MCC's are no longer available and replacement parts are not available. The replacement of the MCC's will improve reliability to ensure critical unit processes are not adversely impacted. In addition, this project will reduce hazards to employees associated with arc flash.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

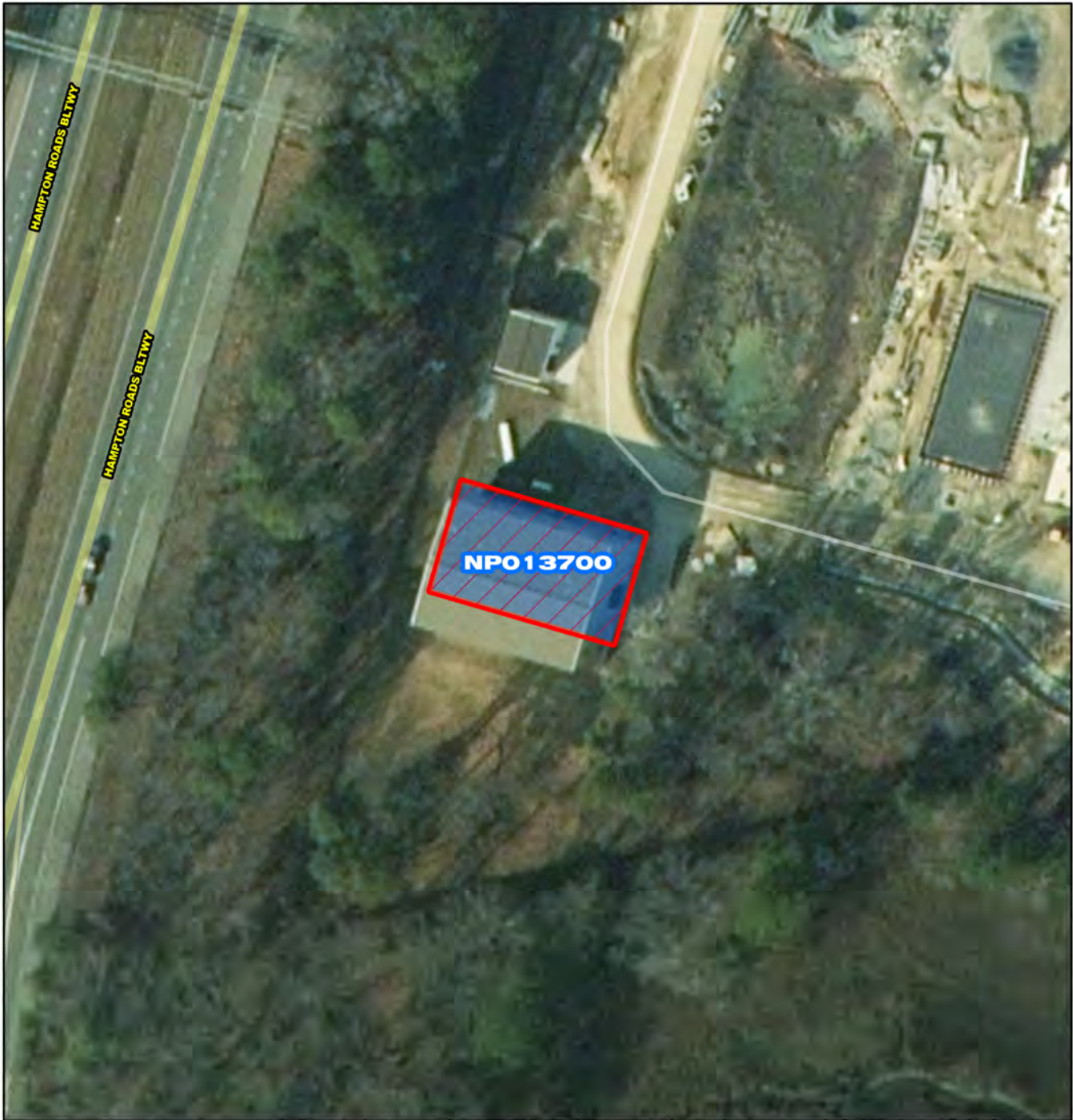
Contacts-Requesting Dept: Operations-Treatment
Contacts-Dept Contacts: Sherman Pressey
Contacts-Managing Dept: Operations-Support Systems

PROPOSED SCHEDULE START DATE

PrePlanning	04/30/2017
PER	05/01/2017
Design Delay	04/30/2017
Design	04/30/2017
Bid Delay	05/01/2017
PreConstruction	05/01/2017
Construction	01/01/2018
Closeout	04/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 3 (-10% to +30%)
PrePlanning	\$0
PER	\$0
Design	\$0
PreConstruction	\$0
Construction	\$3,496,923
Closeout	\$0
Est. Program Cost	\$3,496,923
Contingency Budget	\$331,045
Est. Project Costs	\$3,827,968

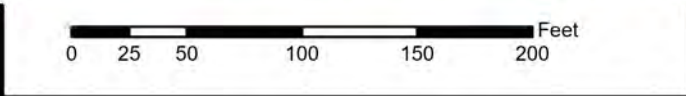


NPO 13700

-  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



NPO 13700

Nansemond Treatment Plant Struvite Recovery Facility Improvements




CIP Location





System: Nansemond
Type: Wastewater Treatment

Driver Category: Performance Upgrades
Project Phase: Construction
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$45,429	\$41,315	\$4,113	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project involves the implementation of the WASSTRIP (Waste Activated Sludge Stripping to Remove Internal Phosphorus) process and improvements to the Struvite Recovery Facility (SRF). The WASSTRIP process consists of the storage of thickened WAS in a tank for a period sufficient to allow phosphorus and magnesium release, followed by post thickening, and transfer of thickened solids to digestion. The thickening filtrate (WASSATE) will be transferred to the SRF separate from the centrate stream. This project includes the addition of a solids removal step for centrate and WASSATE and a small equalization tank for the WASSATE. The SRF upgrade includes the transition from magnesium chloride and sodium hydroxide to a magnesium oxide slaker and feed system, overall control system upgrades, additional reactor capacity, and replacement of the struvite product drying equipment. This project will be completed as one construction project in unison with NP014700.

PROJECT JUSTIFICATION

This project will achieve the following improvements for NTP: Improve biological phosphorus removal reliability and decrease effluent phosphorus concentrations, which is important for the decrease in the James River waste load allocation; Allow for treatment of all centrate flow through the SRF and overcome capacity limitations that currently require bypassing of some centrate; provide SRF reactor redundancy to allow for maintenance activities; Improve solids dewatering performance and decrease polymer demand; Nearly quadruple facility production of Crystal Green (when considering Boat Harbor flow); Decrease the frequency of digester cleaning due to less struvite accumulation; and Decrease operational costs associated with nuisance accumulation of struvite in piping and equipment upstream of the SRF.

FUNDING TYPE

Funding Type: Cash

CONTACTS

Contacts-Requesting Dept: Operations-Treatment
Contacts-Dept Contacts: Angela Weatherhead
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	08/01/2017
PER	08/01/2017
Design Delay	04/02/2018
Design	04/02/2018
Bid Delay	01/03/2022
PreConstruction	01/03/2022
Construction	08/01/2022
Closeout	01/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$86,879
Design	\$2,549,421
PreConstruction	\$14,173
Construction	\$42,278,040
Closeout	\$500,000
Est. Program Cost	\$45,428,513
Contingency Budget	\$7,600,000
Est. Project Costs	\$53,028,513

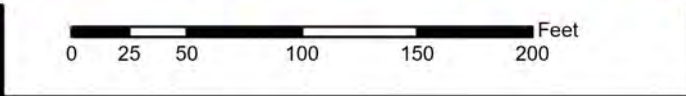


NPO13820

- 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



NPO 13820

Nansmond Treatment Plant Advanced Nutrient Reduction Improvements Phase II

CIP Location



Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Phase II

PR_NP013820

System: Nansemond
Type: SWIFT

Driver Category: Nutrient Reduction
Project Phase: Construction
Regulatory: Integrated Plan-SWIFT

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$321,143	\$290,220	\$29,349	\$1,574	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project is for the design and construction of improvements to Nansemond Treatment Plant to support reliable treatment of raw, screened wastewater from the Boat Harbor Treatment Plant service area and raw influent from the Nansemond Treatment Plant service area. A Capacity Study determined that nutrient removal and hydraulic upgrades would be required to treat both flows and loads to meet the targeted effluent concentrations. The scope includes equalization of primary effluent and upgrades to preliminary and secondary treatment, disinfection facilities, odor control system, effluent pump station and drain pump station. This effort will include all associated pumping, piping, tankage, mechanical, and electrical equipment. This estimate assumes all necessary ancillary facilities will be upgraded as required.

PROJECT JUSTIFICATION

These improvements will be required to treat the flows from the Boat Harbor Treatment Plant Service area and provide stable source water quality that meets the influent requirements of the full scale SWIFT facility at Nansemond Treatment Plant.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

Contacts-Requesting Dept: Engineering
Contacts-Dept Contacts: Adam Werner
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	04/01/2020
PER	11/02/2020
Design Delay	01/30/2023
Design	02/24/2022
Bid Delay	06/29/2021
PreConstruction	03/15/2021
Construction	12/12/2022
Closeout	02/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$2,743,291
Design	\$18,788,312
PreConstruction	\$663,264
Construction	\$298,948,264
Closeout	\$0
Est. Program Cost	\$321,143,132
Contingency Budget	\$0
Est. Project Costs	\$321,143,132

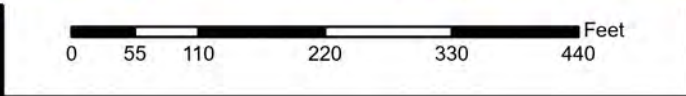


NPO 14000

- 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



NPO 14000

Wilroy Pressure Reducing Station and Off-line Storage Facility

CIP Location

System: Nansemond
 Type: Offline Storage

Driver Category: I&I Abatement-IP/RWWMP
 Project Phase: Construction
 Regulatory: Integrated Plan-HPP 1

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$61,424	\$11,632	\$24,846	\$24,846	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

The project will install a new pressure reducing station (PRS) and a new 3-million gallon storage tank. These facilities are required as part of the Integrated Plan and are needed to reduce the likelihood of sanitary sewer overflows (SSOs) in the Cities of Chesapeake and Suffolk.

PROJECT JUSTIFICATION

As part of HRSD's Integrated Plan, a program of High Priority RWWMP Projects (HPP) will be constructed through 2030. These projects were selected based on their ability to provide the greatest environmental and human health benefits. Further, this \$200+ million program investment will reduce SSO volume at the 5-year level of service by 47 percent.

FUNDING TYPE CONTACTS

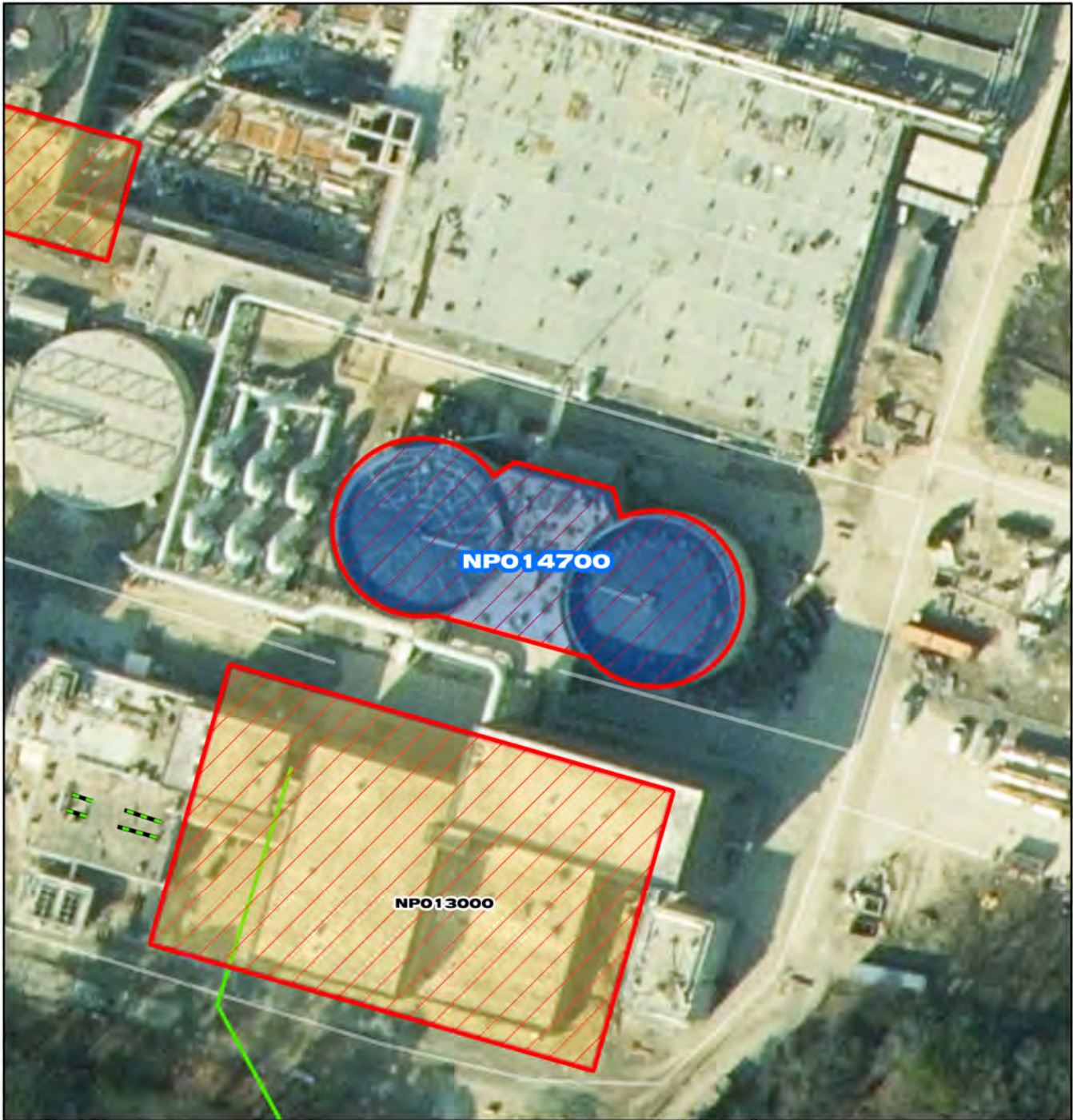
Funding Type: Revenue Bond

Contacts-Requesting Dept: Operations-Interceptors
 Contacts-Dept Contacts: Kayla McCoy
 Contacts-Managing Dept: Engineering

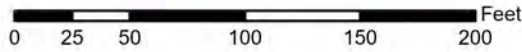
PROPOSED SCHEDULE START DATE COST ESTIMATE

PrePlanning	01/04/2021
PER	12/01/2021
Design Delay	01/02/2023
Design	01/02/2023
Bid Delay	11/01/2025
PreConstruction	11/01/2025
Construction	04/01/2026
Closeout	07/01/2028

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$623,849
Design	\$4,357,000
PreConstruction	\$0
Construction	\$56,343,000
Closeout	\$100,000
Est. Program Cost	\$61,423,849
Contingency Budget	\$2,818,000
Est. Project Costs	\$64,241,849



- NPO14700**
- 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



CIP Location



NPO 14700

Nansmond Treatment Plant Digester Capacity Upgrades



System: Nansemond
Type: Wastewater Treatment

Driver Category: Capacity Improvements
Project Phase: Construction
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$40,526	\$39,986	\$539	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will improve and replace peripheral equipment associated with the Nansemond Treatment Plant (NTP) anaerobic digester process in advance of receiving consolidated wastewater from the Boat Harbor Treatment Plant (BHTP) service area. The following equipment will be evaluated under this CIP for capacity and condition and required upgrades or replacements to meeting projected FY2026 loading will be designed and constructed: Digester mixing pumps and piping; centrifuge feed pumps; process boilers; sludge heat exchangers; digester gas collection, metering and waste gas burners, digestion process instrumentation and controls; digestion process electrical systems. Additionally, this project will construct a new final dewatering centrate equalization tank and a new sidestream nitrogen removal (SNR) process (deammonification). This project will be completed as one construction project in unison with NP013700.

PROJECT JUSTIFICATION

Wastewater from the BHTP service area is to be diverted and combined with existing NTP primary influent beginning in the first half of FY2026. The additional loading on NTP will require capacity upgrades to the anaerobic digestion process, including the ability of the current digestion system to treat pre-dewatered primary and waste activated solids up to a concentration of 7% total dry solids. By providing the capability of treating thicker solids in the existing anaerobic digesters, this project alleviates the need to construct additional anaerobic digester volume, which reduces overall NTP upgrade costs and reserves limited on-site space for future needs. Additionally, this project will include SNR for nitrogen removal upstream of the SRF.

FUNDING TYPE

Funding Type: Cash

CONTACTS

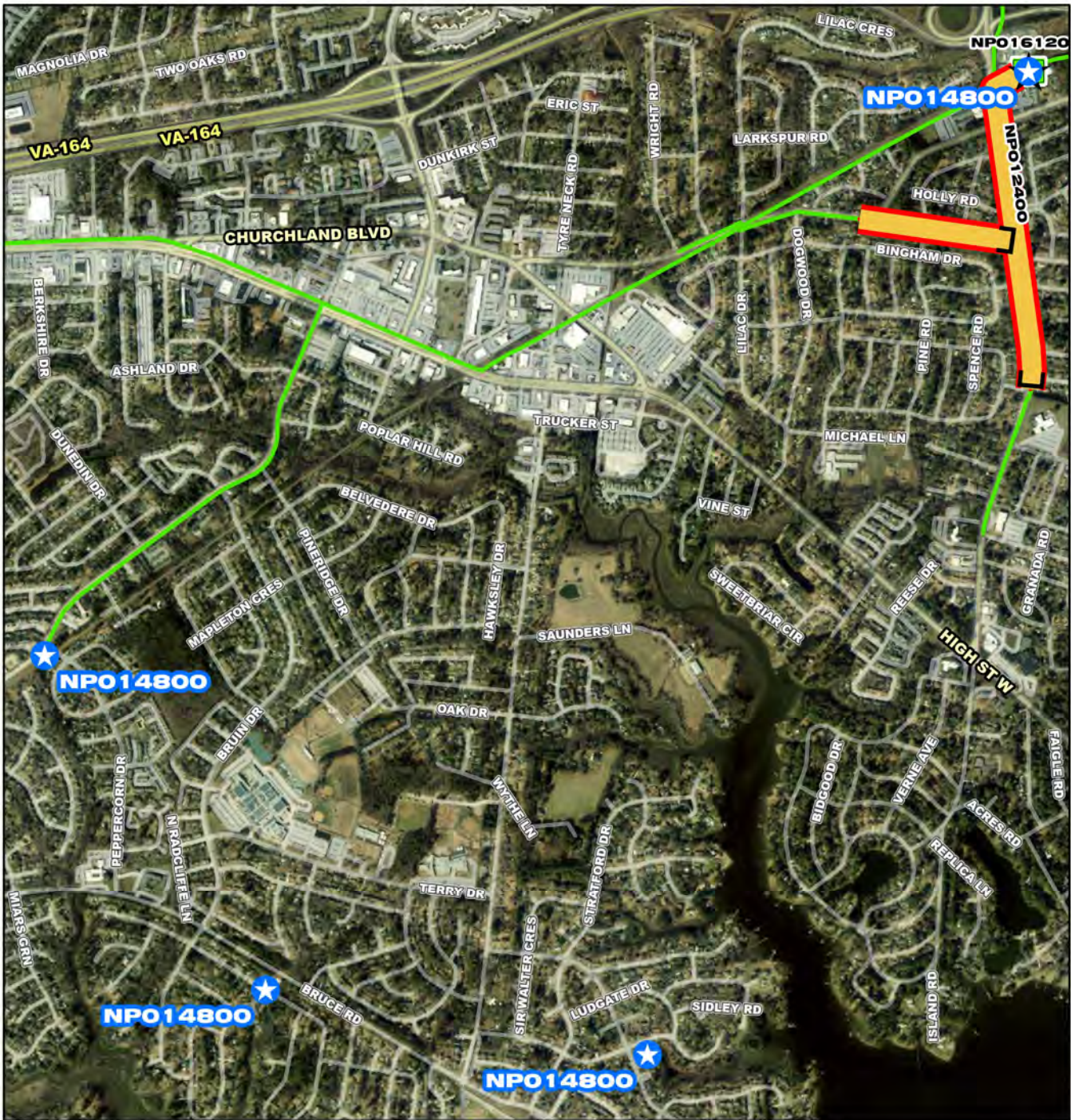
Contacts-Requesting Dept: Operations-Treatment
Contacts-Dept Contacts: Angela Weatherhead
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

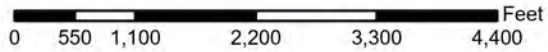
PrePlanning	
PER	12/01/2020
Design Delay	05/17/2021
Design	05/17/2021
Bid Delay	01/03/2022
PreConstruction	01/03/2022
Construction	08/01/2022
Closeout	08/01/2026

COST ESTIMATE

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$194,603
Design	\$1,696,625
PreConstruction	\$48,068
Construction	\$38,455,182
Closeout	\$131,031
Est. Program Cost	\$40,525,510
Contingency Budget	\$1,800,000
Est. Project Costs	\$42,325,510



- NPO 14800**
- 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



NPO 14800

High Priority Projects Round 2 Project 8



CIP Location



System: Nansemond
 Type: Pipelines

Driver Category: I&I Abatement-IP/RWWMP
 Project Phase: Proposed
 Regulatory: Integrated Plan-HPP 2

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$12,781	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,075	\$2,038	\$6,668

PROJECT DESCRIPTION

High Priority Project (HPP) Round 2 Project 8 consists of the following Regional Wet Weather Management Plan (RWWMP) Project IDs and general descriptions:
 NA-RWWMP-14 Cedar Lane Pump Station Upgrade
 NA-RWWMP-16 Western Branch Pressure Reducing Station
 NA-RWWMP-19 Chesapeake City System Improvements

PROJECT JUSTIFICATION

As part of the RWWMP submitted to the DEQ and EPA, HRSD developed an approach to recognize the highest-priority system improvements with the greatest relative environmental benefit. The result being the identification of High-Priority Projects (HPPs). The initial HPPs (Round 1) were identified in the RWWMP, submitted to EPA in September of 2017, and are scheduled to be constructed between plan approval and 2030. Further review of RWWMP projects was conducted in 2019 to find beneficial solutions to implement as a second set of HPPs (identified as Round 2). A prioritization methodology was used to identify improvements to minimize sanitary sewer overflow (SSO) volume. Rounds 1 and 2 of High-Priority Projects were scheduled with consecutive 10-year implementation periods starting with Round 1 being completed between plan approval and 2030. Prior to commencement, HRSD will review the Round 2 projects to confirm that they are still expected to meet the desired result and confirm this in a check in with the EPA/DEQ. To modify the list of specific Round 2 HPP projects, HRSD will show that the revised set of projects will attain a minimum of the same percent reduction, or better.

FUNDING TYPE CONTACTS

Funding Type: Revenue Bond

Contacts-Requesting Dept: Engineering
 Contacts-Dept Contacts: John Dano
 Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE COST ESTIMATE

PrePlanning	07/01/2033
PER	08/02/2033
Design Delay	10/03/2033
Design	06/02/2034
Bid Delay	09/04/2034
PreConstruction	05/02/2035
Construction	07/02/2035
Closeout	04/02/2038

Cost Estimate Class:	Class 10
PrePlanning	\$1,528,136
PER	\$1,528,136
Design	\$3,056,272
PreConstruction	\$0
Construction	\$18,337,633
Closeout	\$0
Est. Program Cost	\$24,450,177
Contingency Budget	\$6,112,544
Est. Project Costs	\$30,562,721

System: Nansemond
Type: Facilities, Buildings and Capital Equipment

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

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$19,390	\$830	\$763	\$11,858	\$5,934	\$5	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

The purpose of this project is to replace the current outdated and undersized administration building with a new facility which will include required new workspaces associated with full scale SWIFT, as well as consolidating all administrative, shop, locker and staff facilities into one building. This will include all spaces needed for both the Wastewater Treatment Plant and SWIFT laboratory, to include a larger control room, and all administrative, and maintenance activities, including an effective maintenance shop large enough for both sides of the plant.

PROJECT JUSTIFICATION

This space is required for SWIFT operations and will need to be constructed prior to SWIFT startup at NTP. Additionally, this space will house increased plant staff due to the inclusion of BHTP flow and recent plant upgrades, and allow for the consolidation of staff onsite into one central facility. This facility will be the designated hurricane ride out facility for the plant. This project replaces the existing undersized admin building that is in failing condition, providing safer working conditions.

FUNDING TYPE CONTACTS

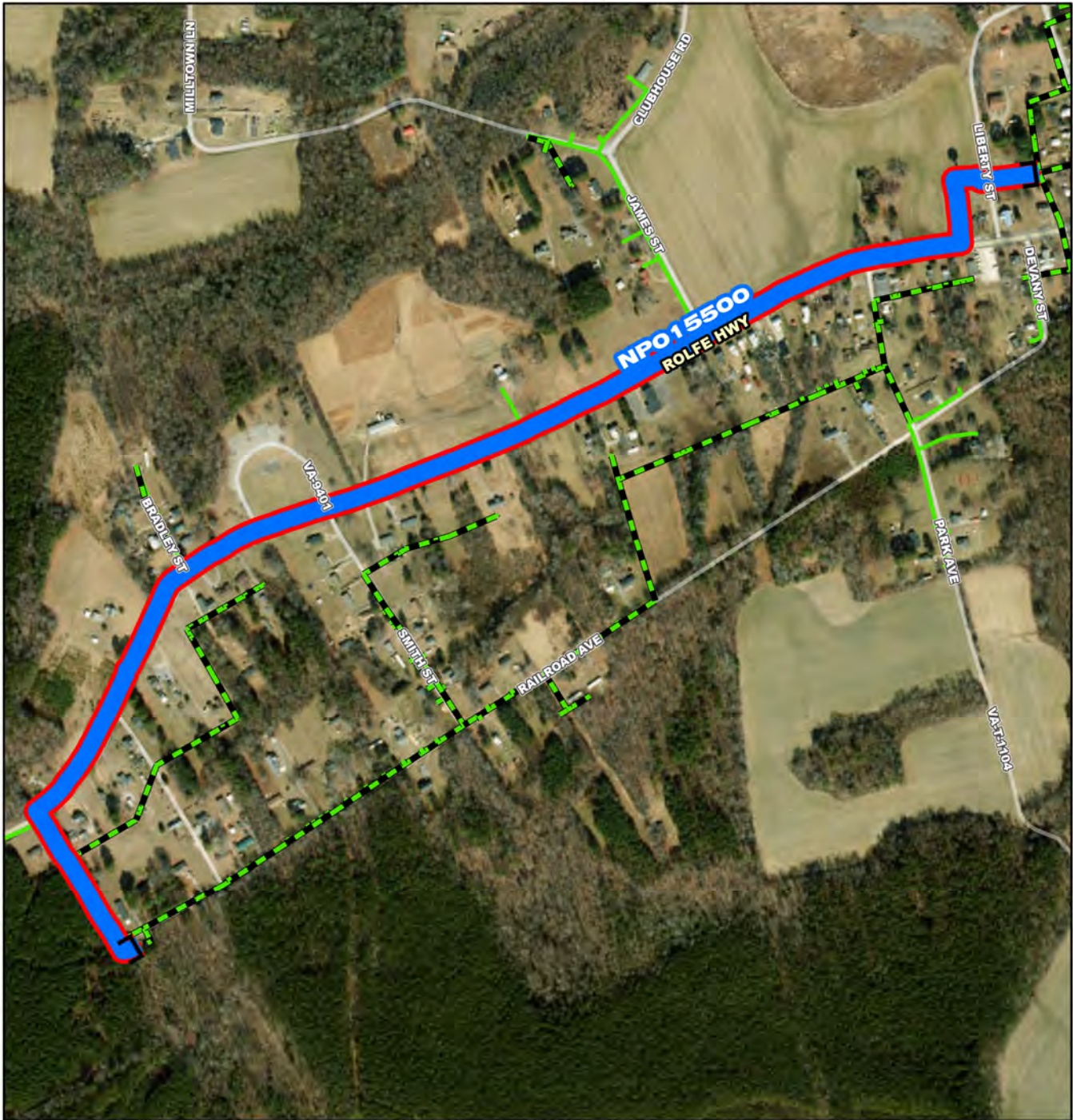
Funding Type: Revenue Bond

Contacts-Requesting Dept: Operations-Treatment
Contacts-Dept Contacts: Angela Weatherhead
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE COST ESTIMATE

PrePlanning	07/01/2024
PER	03/03/2025
Design Delay	10/10/2025
Design	02/01/2026
Bid Delay	01/01/2027
PreConstruction	01/01/2027
Construction	07/01/2027
Closeout	01/01/2029

Cost Estimate Class:	Class 3 (-10% to +30%)
PrePlanning	\$0
PER	\$216,608
Design	\$1,349,853
PreConstruction	\$26,925
Construction	\$17,786,932
Closeout	\$10,000
Est. Program Cost	\$19,390,318
Contingency Budget	\$2,181,285
Est. Project Costs	\$21,571,603

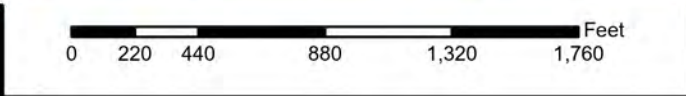


NPO 15500

- 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



NPO 15500

Town of Dendron Discharge Force Main Replacement

CIP Location

System: Nansemond
 Type: Pipelines

Driver Category: Capacity Improvements
 Project Phase: Design
 Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$3,039	\$347	\$2,679	\$12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will replace 6,300 linear feet of 3-inch PVC force main of PS-01 Dendron B in Surry, VA. The force main's current alignment is adjacent to Rolfe Highway and discharges into a gravity system located between Liberty Street and First Church Street. This project will evaluate the Dendron B service area and make improvements to the pump station and discharge force main, as necessary, to eliminate wet weather sanitary sewer overflows.

PROJECT JUSTIFICATION

The Town of Dendron Sanitary Sewer pipeline was constructed by the Town of Surry in 2007 and turned over to HRSD. PS-01 Dendron B has had numerous overflows since 2020. This is due to the pump station becoming locked out because it is unable to overcome the friction losses in the force main during rain events. This project will evaluate the Dendron B service area and make improvements to the pump station and discharge force main, as necessary, to eliminate wet weather sanitary sewer overflows.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

Contacts-Requesting Dept: Operations-Interceptors
 Contacts-Dept Contacts: Virginia Opp
 Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

PrePlanning	07/03/2023
PER	07/03/2023
Design Delay	08/01/2025
Design	08/01/2025
Bid Delay	10/01/2026
PreConstruction	10/01/2026
Construction	01/01/2027
Closeout	07/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 4 (-15% to +50%)
PrePlanning	\$118,595
PER	\$64,695
Design	\$232,800
PreConstruction	\$23,300
Construction	\$2,587,545
Closeout	\$11,600
Est. Program Cost	\$3,038,535
Contingency Budget	\$258,755
Est. Project Costs	\$3,297,290

System: Nansemond
 Type: Pump Stations

Driver Category: Performance Upgrades
 Project Phase: Proposed
 Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$200	\$0	\$0	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This study will evaluate the installation of a new pump station and force main for the Lawnes Point Service area to include the Lawnes Point Subdivision and Isle of Wight service areas in this corridor. The study will evaluate decommissioning or repurposing of plant facilities and ponds.

PROJECT JUSTIFICATION

On February 29, 2016, the HRSD Commission adopted an agreement and formally assumed ownership of the Lawnes Point Treatment Plant and its associated sewer collection facilities. In order to effectively deliver sewer services to the residents of Lawnes Point, HRSD initiated a pump and haul operation in lieu of operating the treatment plant. In 2022, HRSD completed the Surry Transmission Force Main Project allowing flows to be conveyed from Surry to the Nansemond Treatment Plant. Recognizing that Lawnes Point Treatment Plant will never be operational, even upon full development of Lawnes Point, this project will allow for Lawnes Point and other areas within Isle of Wight to be served. The construction of a permanent conveyance system for Lawnes Point's wastewater is necessary to end pump and haul operations of this facility. Once completed, this system will allow for the decommissioning of the Lawnes Point Treatment plant and the elimination of its permit and associated outfall.

FUNDING TYPE CONTACTS

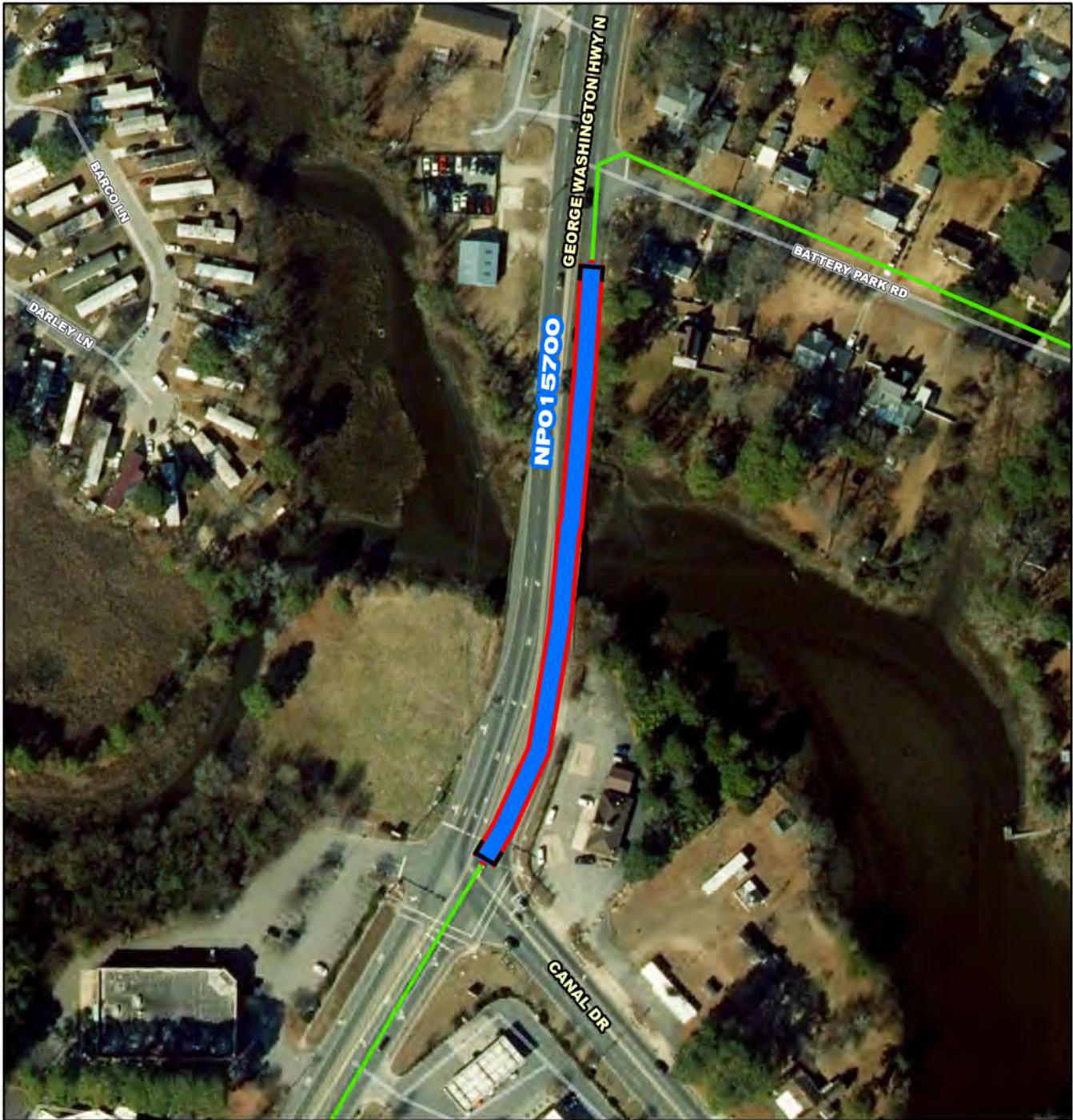
Funding Type: Cash

Contacts-Requesting Dept: Operations-Interceptors
 Contacts-Dept Contacts: Santino Granato
 Contacts-Managing Dept: Operations-Interceptors

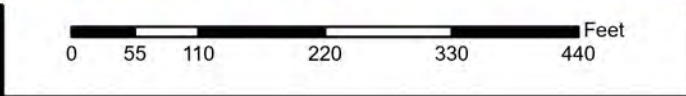
PROPOSED SCHEDULE START DATE COST ESTIMATE

PrePlanning	07/01/2028
PER	07/01/2029
Design Delay	07/01/2029
Design	07/01/2029
Bid Delay	07/01/2029
PreConstruction	07/01/2029
Construction	07/01/2029
Closeout	07/01/2029

Cost Estimate Class:	Class 5 (-20% to +100%)
PrePlanning	\$200,000
PER	\$0
Design	\$0
PreConstruction	\$0
Construction	\$0
Closeout	\$0
Est. Program Cost	\$200,000
Contingency Budget	\$0
Est. Project Costs	\$200,000

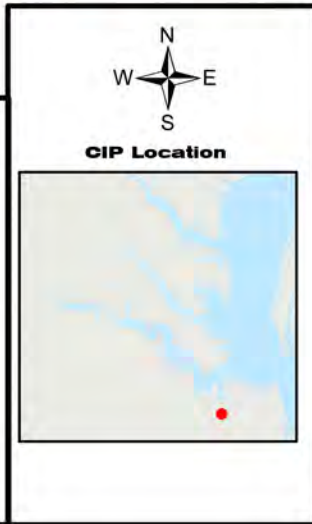


- NPO 15700**
- Project Interceptor Line
 - Project Interceptor Point
 - Project Location Point
 - Project Area
- Legend**
- CIP Interceptor Point
 - CIP Pump Station Point
 - CIP Interceptor Line
 - CIP Abandonment
 - CIP Project Area
 - HRSD Interceptor Force Main
 - HRSD Interceptor Gravity Main
 - HRSD Treatment Plant
 - HRSD Pressure Reducing Station
 - HRSD Pump Station



NPO 15700

**George Washington Interceptor
Force Main Extension Part 2
(SF-140) Segmental Replacement at
St. Julian's Cr**





System: Nansemond
Type: Pipelines

Driver Category: Risk Mitigation
Project Phase: Design
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$2,887	\$255	\$1,771	\$858	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will replace up to 600 feet of 12-inch ductile iron of exposed crossing and 14-inch cast iron buried piping of the Interceptor Force Main (SF-140) along George Washington Highway in Chesapeake, VA.

PROJECT JUSTIFICATION

This project will provide for segmental replacement of interceptor force main crossing St. Julian Creek (secured to bottom of bridge deck) identified during condition assessment to have excessive pipe wall loss due to interior and exterior corrosion. Due to environmental exposure to brackish water, the replacement considers eliminating the exposed crossing with a trenchless crossing. The trenchless crossing is assumed to be horizontal directional drill due to water body crossing.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

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

PROPOSED SCHEDULE START DATE

PrePlanning	07/01/2024
PER	10/01/2024
Design Delay	08/01/2025
Design	08/01/2025
Bid Delay	09/01/2026
PreConstruction	09/01/2026
Construction	01/01/2027
Closeout	10/01/2027

COST ESTIMATE

Cost Estimate Class:	Class 3 (-10% to +30%)
PrePlanning	\$0
PER	\$85,438
Design	\$223,928
PreConstruction	\$16,980
Construction	\$2,549,040
Closeout	\$11,700
Est. Program Cost	\$2,887,086
Contingency Budget	\$700,412
Est. Project Costs	\$3,587,498

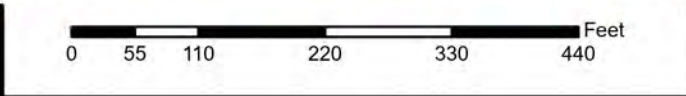


NPO 15800

- 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



NPO 15800

North Churchill Interceptor Force Main (SF-206) Segmental Replacement at Swannanoa Drive

CIP Location

System: Nansemond
Type: Pipelines

Driver Category: Risk Mitigation
Project Phase: PER
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$4,478	\$188	\$187	\$1,123	\$2,969	\$12	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will replace up to 1,800 feet of 16-inch ductile iron interceptor force main (SF-164) along Swannanoa Drive in the City of Portsmouth.

PROJECT JUSTIFICATION

This project will provide for a segmental replacement of interceptor force main on Swannanoa Drive resulting from three previous failures (2009, 2014, 2023) and an assessment that found extensive pipe wall loss due to interior and exterior corrosion. The most recent failure at the intersection of Swannanoa Drive and Summerset Drive (June 2023) required a segment of the pipe to be encased in concrete as a temporary repair. In total approximately 600 linear feet of ductile iron pipe at this location was determined to have similar pipe wall thickness and a very high likelihood of failure (LoF = 5.0). An additional investigation performed of the upstream pipe segment, west of Summerset Drive also revealed severe degradation of the pipe's internal wall thickness and was also deemed to have a high likelihood of failure over the next 2 - 3 years. It is recommended the force main be replaced along Swannanoa from the intersection of Weyanoke Drive, west to the intersection of Twin Pines Road to eliminate these risks.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

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

PROPOSED SCHEDULE START DATE

PrePlanning	07/01/2024
PER	10/01/2024
Design Delay	01/01/2026
Design	11/01/2025
Bid Delay	04/01/2027
PreConstruction	10/01/2027
Construction	04/01/2028
Closeout	03/01/2029

COST ESTIMATE

Cost Estimate Class:	Class 4 (-15% to +50%)
PrePlanning	\$0
PER	\$104,804
Design	\$269,894
PreConstruction	\$11,782
Construction	\$4,073,248
Closeout	\$18,700
Est. Program Cost	\$4,478,427
Contingency Budget	\$1,093,406
Est. Project Costs	\$5,571,833

System: Nansemond
Type: Biosolids

Driver Category: Nutrient Reduction
Project Phase: Pre Planning
Regulatory: Nutrient Reduction

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$26,071	\$273	\$1,226	\$1,333	\$4,667	\$9,274	\$9,274	\$25	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will add additional digestion capacity to Nansemond Treatment Plant (NTP), likely in the form of a third 1MG (nominal) anaerobic digester tank, to meet solids loading requirements following the completion of Boat Harbor Treatment Plant closure, NTP SWIFT and anticipated future (37 MGD) flow conditions. Alternatives to achieve the needed increase in digester capacity will be considered during pre-planning. Siting of new facilities and process integration with the existing digestion, biogas, and dewatering systems will be a critical aspect of this project. This project will also include the replacement of the floating covers on existing digester nos 1 and 2.

PROJECT JUSTIFICATION

The Nansemond Treatment Plant (NTP) is currently undergoing upgrade from 30 MGD to 50 MG rated design flow (NP013820) to allow closure of the Boat Harbor Treatment Plant in 2026 and SWIFT facilities will be constructed for operation beginning in 2028 (GN016380). Solids loading with these facilities online will result in operational risk (digester upset) and regulatory risk (too low solids retention time to meet Class B biosolids requirements) during max month loading and any time a single digester is out of service. This project is proposed in lieu of separate solids management facilities as part of NTP SWIFT.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

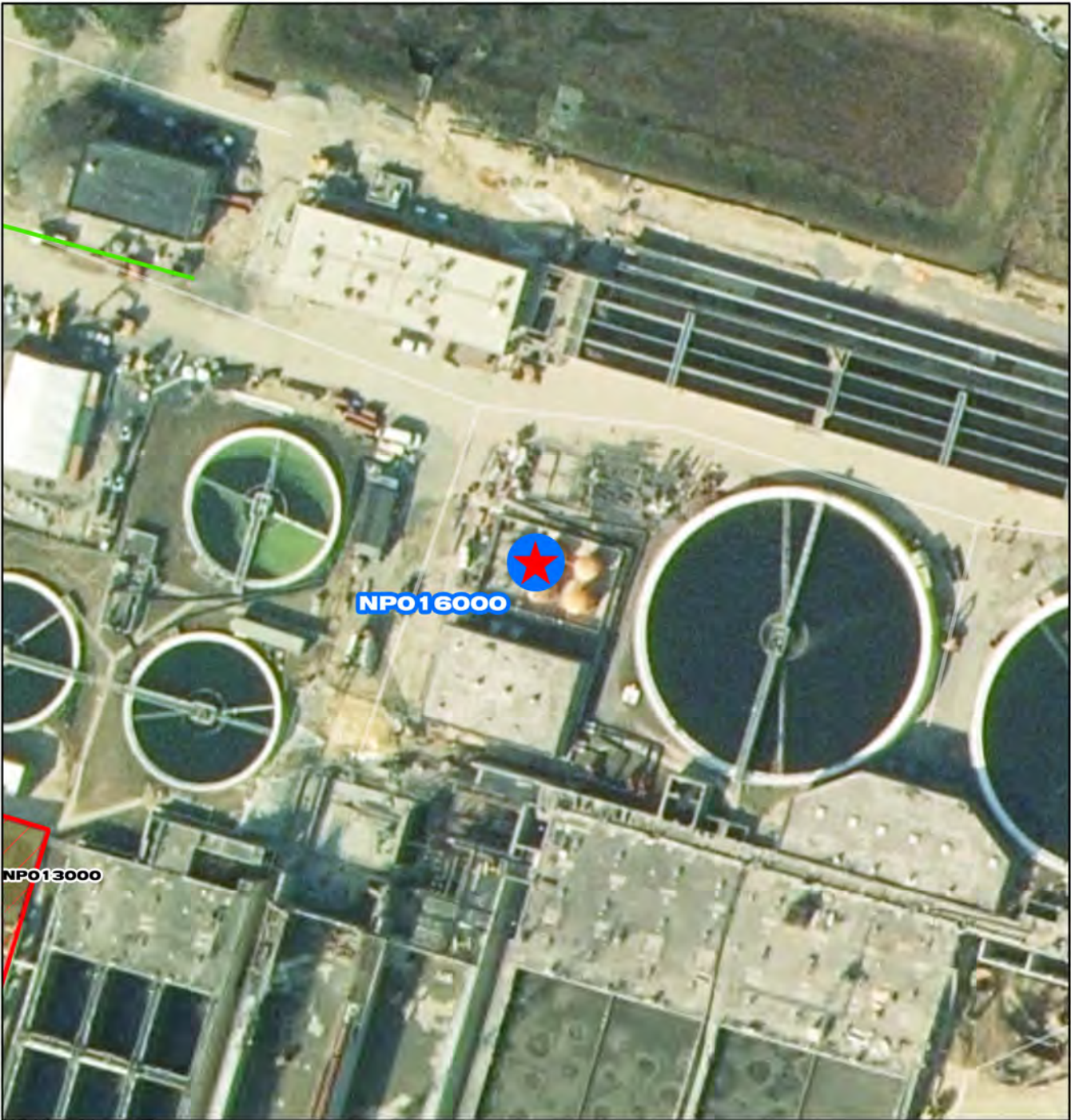
Contacts-Requesting Dept: Operations
Contacts-Dept Contacts: Angela Weatherhead
Contacts-Managing Dept: Engineering

PROPOSED SCHEDULE START DATE

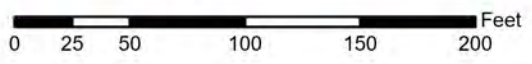
PrePlanning	02/01/2026
PER	09/01/2026
Design Delay	01/01/2027
Design	01/01/2027
Bid Delay	07/01/2028
PreConstruction	07/01/2028
Construction	01/01/2029
Closeout	07/01/2031

COST ESTIMATE

Cost Estimate Class: Class 5 (-20% to +100%)	
PrePlanning	\$381,832
PER	\$450,000
Design	\$2,000,000
PreConstruction	\$30,000
Construction	\$23,184,000
Closeout	\$25,000
Est. Program Cost	\$26,070,832
Contingency Budget	\$11,592,000
Est. Project Costs	\$37,662,832



- NPO16000**
- 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



NPO 16000

Nansemond Treatment Plant Fire Suppression System Upgrades



System: Nansemond
Type: Wastewater Treatment

Driver Category: Safety Compliance
Project Phase: Proposed
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$1,069	\$0	\$0	\$0	\$0	\$1,064	\$5	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will address the replacement or upgrades of the fire suppression system at the Nansemond Treatment Plant methanol facility. Currently, the fire suppression system at this plant's methanol facility utilizes an Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF) that contains Perfluoroalkyl and Polyfluoroalkyl (PFAS). Refilling the existing extinguishers with AR-AFFF will no longer be permitted due to the environmental and health concerns associated with PFAS. The new or upgraded systems will utilize a non-PFAS fluorine free foam to extinguish fires.

PROJECT JUSTIFICATION

The current methanol fire suppression systems use AR-AFFF which contains PFAS. AR-AFFF foam is being phased out due to the Federal Forever Chemical Regulation Accountability Act of 2024. If the fire suppression systems is discharged the existing system cannot be re-charged. In the past, some of these fire suppression systems have experienced false alarms and equipment malfunctions causing activation of the AR-AFFF.

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	12/01/2026
PER	12/01/2026
Design Delay	12/01/2026
Design	12/01/2026
Bid Delay	12/01/2026
PreConstruction	07/01/2029
Construction	10/01/2029
Closeout	07/01/2030

COST ESTIMATE

Cost Estimate Class:	Class 4 (-15% to +50%)
PrePlanning	\$0
PER	\$0
Design	\$0
PreConstruction	\$21,311
Construction	\$1,043,130
Closeout	\$4,785
Est. Program Cost	\$1,069,226
Contingency Budget	\$267,307
Est. Project Costs	\$1,336,532

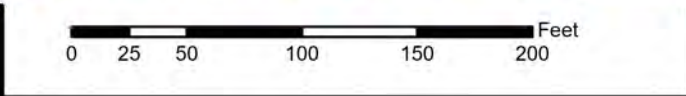


NPO16120

- 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



NPO16120

**Cedar Lane Pump Station (PS 104)
Modifications**

N
W — E
S

CIP Location

System: Nansemond
 Type: Pump Stations

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

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$1,879	\$0	\$162	\$507	\$1,203	\$8	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will perform targeted rehabilitation of the Cedar Lane Pump Station (PS 104), which was originally constructed in 1963. The proposed upgrades include extensive wet well rehabilitation, installation of a new wet well exhaust fan and odor control system, and associated electrical, instrumentation, and control upgrades to support the replaced systems.

PROJECT JUSTIFICATION

This project will address the extensive concrete wall loss and surface degradation identified during a July 2025 internal investigation, as well as the findings of Study NP016100 completed in January 2026. Elevated concentrations of hydrogen sulfide, combined with insufficient ventilation, have accelerated deterioration over the past 19 years. Rehabilitation efforts completed in 2007 are no longer effective in protecting the concrete walls from continued degradation, leaving the wet well structure vulnerable to further deterioration and potential failure if rehabilitation is not completed urgently. The installation of adequate ventilation and an odor control system will minimize hydrogen sulfide saturation time within the wet well and mitigate potential odor impacts during atmospheric discharge. Electrical, instrumentation, and control upgrades associated with the pump station improvements will also be included.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

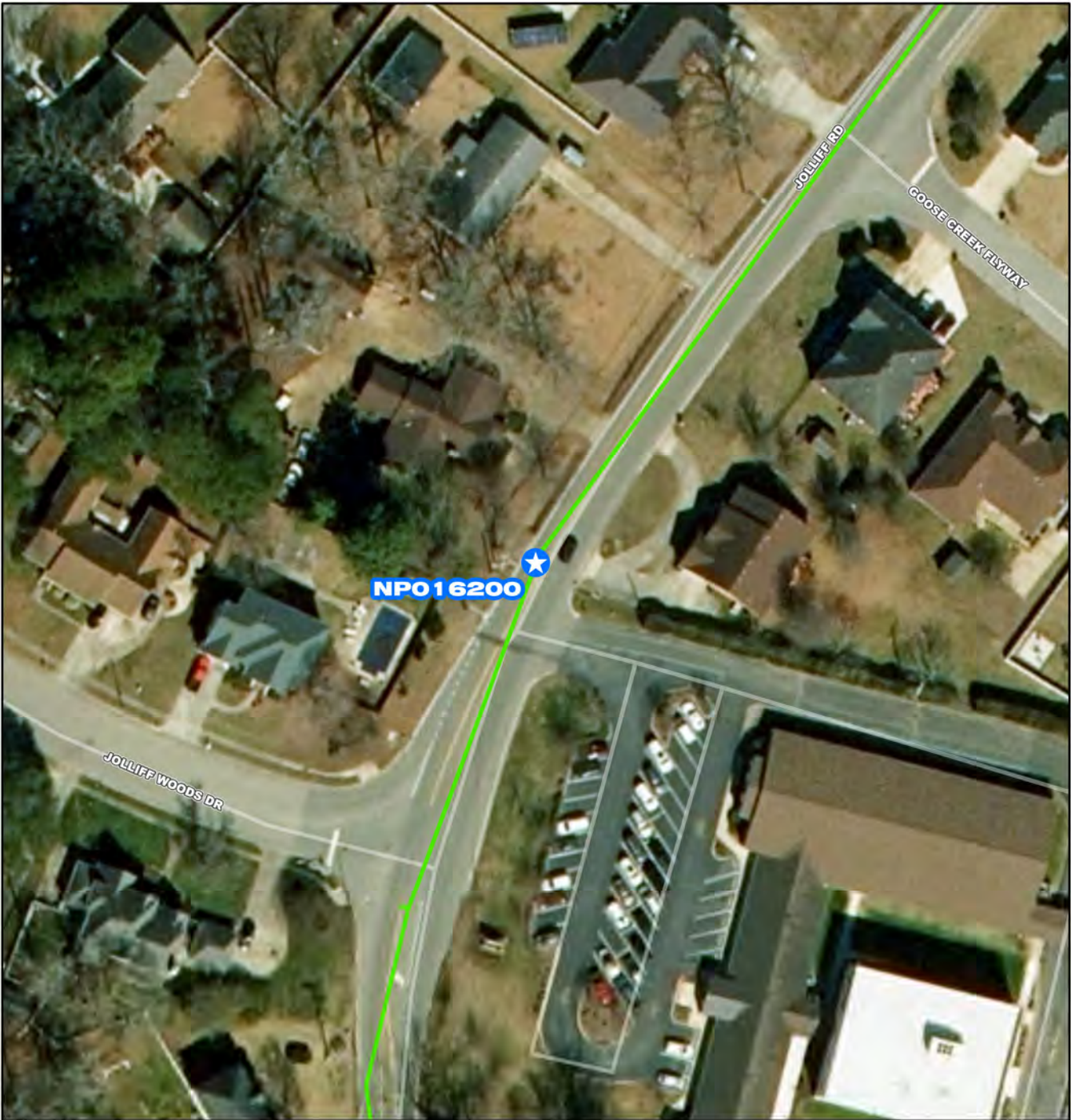
Contacts-Requesting Dept: Operations-Interceptors
 Contacts-Dept Contacts: Lyndsey Davis
 Contacts-Managing Dept: Operations-Interceptors

PROPOSED SCHEDULE START DATE

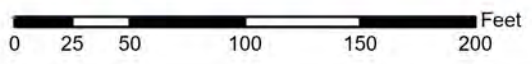
PrePlanning	07/01/2026
PER	07/01/2026
Design Delay	03/01/2027
Design	03/01/2027
Bid Delay	12/01/2027
PreConstruction	12/01/2027
Construction	04/01/2028
Closeout	04/01/2029

COST ESTIMATE

Cost Estimate Class: Class 5 (-20% to +100%)	
PrePlanning	\$0
PER	\$88,749
Design	\$165,000
PreConstruction	\$15,000
Construction	\$1,600,000
Closeout	\$10,000
Est. Program Cost	\$1,878,749
Contingency Budget	\$469,687
Est. Project Costs	\$2,348,436



- NPO 16200**
- 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



NPO 16200

**Bowers Hill Interceptor Force Main
Section II (SF-136) Emergency
Repair**

HRSD



System: Nansemond
Type: Pipelines

Driver Category: Risk Mitigation
Project Phase: Construction
Regulatory: None

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$1,700	\$1,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project will replace the damaged 30-inch prestressed concrete cylinder pipe located on Jolliff Road in the City of Chesapeake.

PROJECT JUSTIFICATION

The SF-136 failure occurred on a 30-inch prestressed concrete cylinder pipe installed in 1979, cause unknown at the time of project initiation. An emergency repair is deemed necessary since the section of force main cannot be isolated or diverted, and extensive traffic control is required to safely perform the work. Line stop/bypass will be utilized to isolate the section of damaged pipe so the damaged section of pipe can be repaired. An emergency declaration was authorized on February 28, 2026 to perform the emergency repair.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

Contacts-Requesting Dept: Operations-Interceptors
Contacts-Dept Contacts: Lyndsey Davis
Contacts-Managing Dept: Operations-Interceptors

PROPOSED SCHEDULE START DATE

PrePlanning	03/01/2026
PER	03/01/2026
Design Delay	03/01/2026
Design	03/01/2026
Bid Delay	03/01/2026
PreConstruction	03/01/2026
Construction	03/01/2026
Closeout	05/01/2026

COST ESTIMATE

Cost Estimate Class:	Class 1 (-3% to +15%)
PrePlanning	\$0
PER	\$0
Design	\$0
PreConstruction	\$0
Construction	\$1,700,000
Closeout	\$0
Est. Program Cost	\$1,700,000
Contingency Budget	\$300,000
Est. Project Costs	\$2,000,000

System: Nansemond
Type: Electrical

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

PROGRAM CASH FLOW PROJECTION (\$,000)

Prog Cost	Exp to Previous Year	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
\$2,075	\$0	\$0	\$2,075	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PROJECT DESCRIPTION

This project is to update key elements for the Emerson Distributed Control System (DCS) Treatment Plants across HRSD utilizing the Emerson "Evergreen" program. This manages and eliminates system obsolescence by ensuring key elements of the control system are updated with the latest validated software, workstations, networks, I/O, security, High-Performance Graphics, and optimization technology. This upgrade will effectively protect the initial system investment, therefore prolonging and sustaining the system's life. Each treatment plant will require regular upgrades under the Evergreen program every seven (7) years beginning in FY 2027.

PROJECT JUSTIFICATION

A technological "refresh" of DCS components at HRSD treatment plants is a necessary investment to ensure that the control systems are maintained in a reliable manner. This refresh extends the life of our investment by sustaining current, or incorporating new, technology in the system. It addresses the changing needs of system security requirements and includes security features to comply with newly instituted regulations, avoids emerging maintenance issues caused by aging technology, and adopts new I/O or digital bus technology and takes advantage of the associated asset maintenance and management tools.

FUNDING TYPE

Funding Type: Revenue Bond

CONTACTS

Contacts-Requesting Dept: Operations-E&I
Contacts-Dept Contacts: Shawn Hawley
Contacts-Managing Dept: Operations-E&I

PROPOSED SCHEDULE START DATE

PrePlanning	07/01/2027
PER	07/01/2027
Design Delay	07/01/2027
Design	07/01/2027
Bid Delay	07/01/2027
PreConstruction	07/01/2027
Construction	07/01/2027
Closeout	07/01/2028

COST ESTIMATE

Cost Estimate Class:	Class 2 (-5% to +20%)
PrePlanning	\$0
PER	\$0
Design	\$0
PreConstruction	\$0
Construction	\$2,075,160
Closeout	\$0
Est. Program Cost	\$2,075,160
Contingency Budget	\$518,790
Est. Project Costs	\$2,593,950