

# Surry Treatment Plant

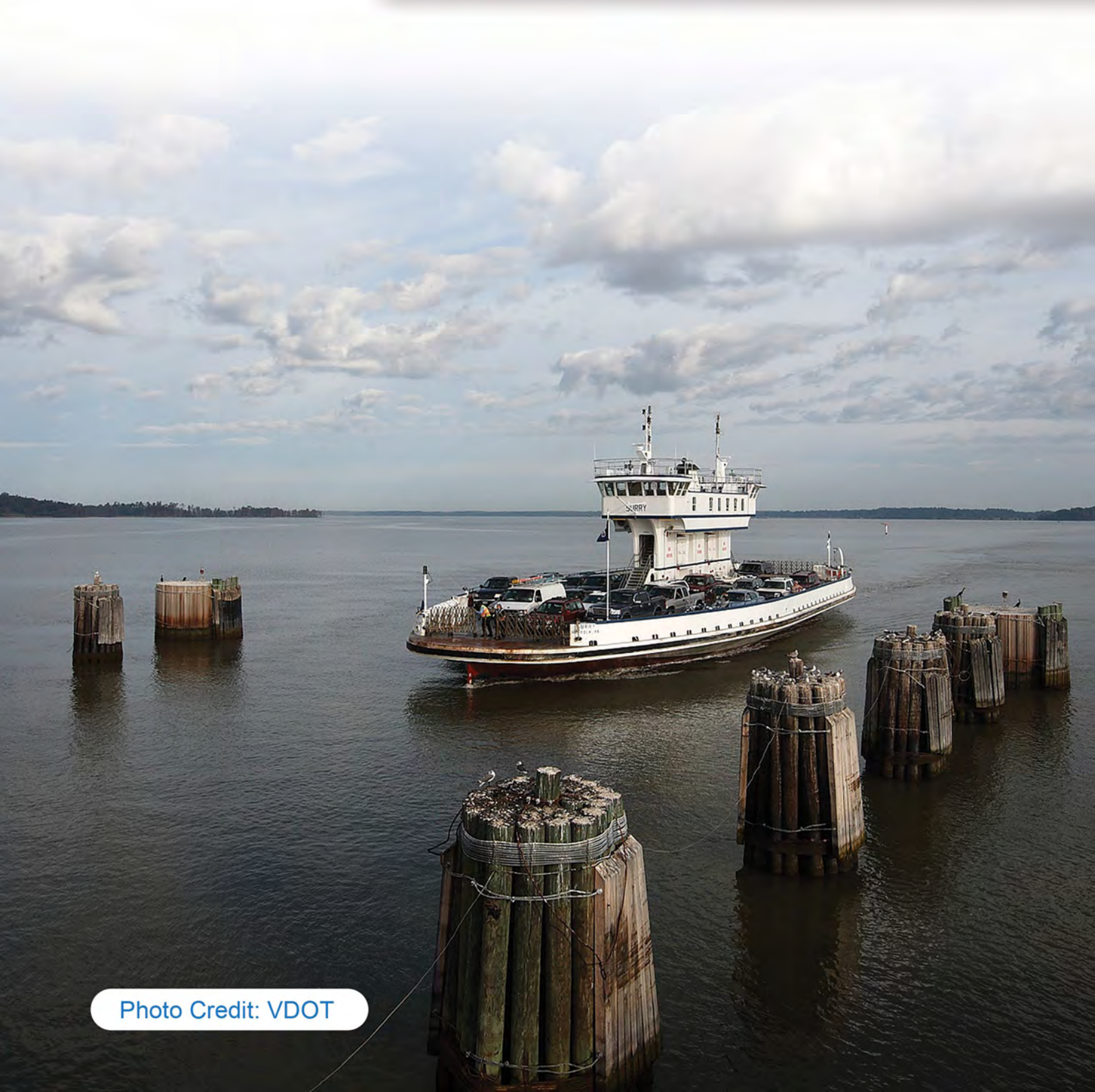


Photo Credit: VDOT



**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**
- HRSD Treatment Plant**
- HRSD Pressure Reducing Station**
- HRSD Pump Station**

0 1,500 3,000 6,000 9,000 12,000 Feet

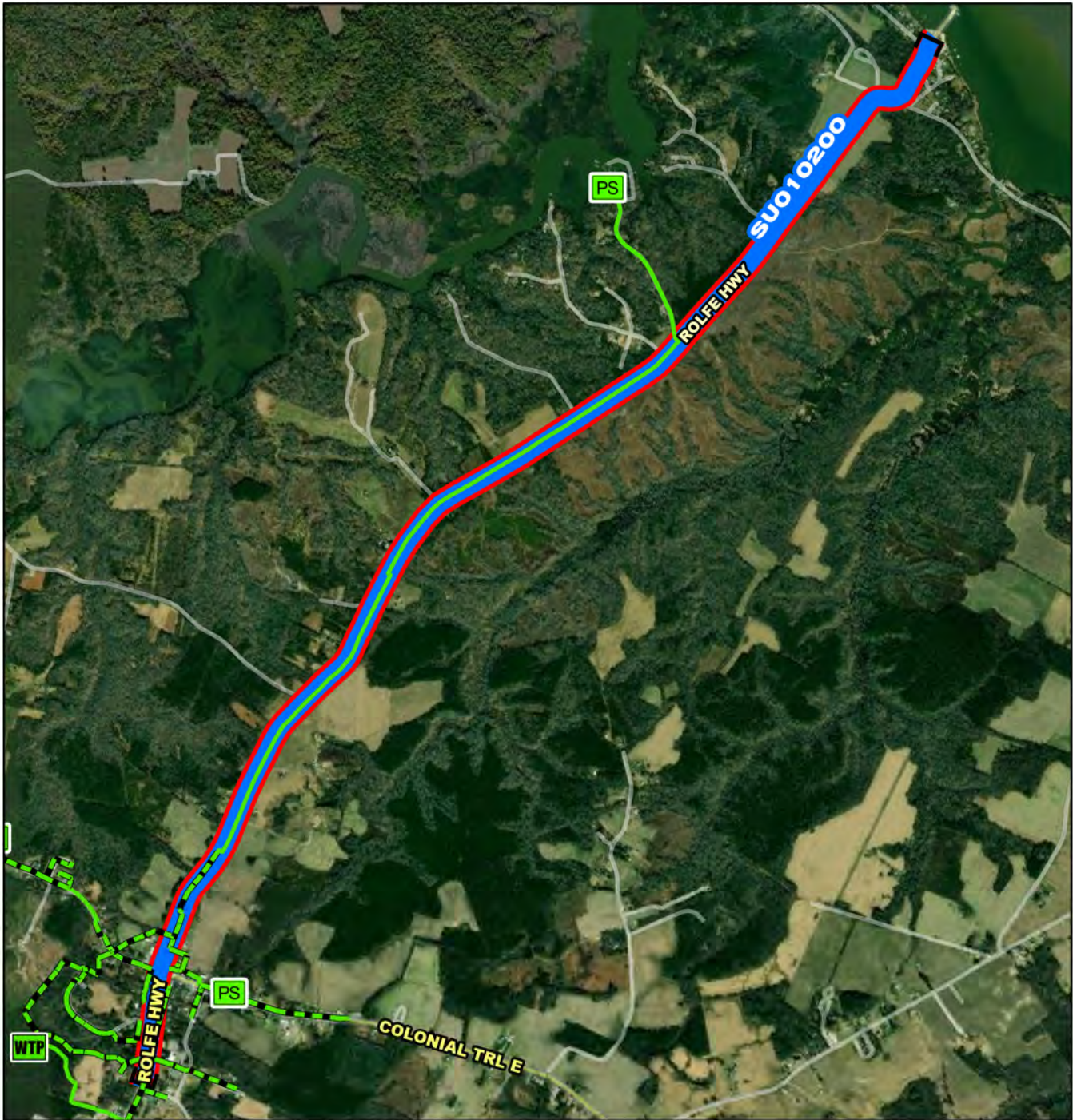
**Surry Service Area CIP Projects**

**Treatment Plant Projects**

N

**CIP Location**

Service Area



**SU010200**

- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station 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

0 500 1,000 2,000 3,000 4,000 Feet

## SU010200

### Surry Hydraulic Improvements and Interceptor Force Main

N  
W E  
S

**CIP Location**



System: Surry  
Type: Pipelines

Driver Category: Aging Infrastructure/Rehabilitation  
Project Phase: Design  
Regulatory: Consent Decree - Surry

**PROGRAM CASH FLOW PROJECTION (\$,000)**

Prog Cost	Exp to Previous Year	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
\$42,696	\$42,040	\$655	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**PROJECT DESCRIPTION**

The project will include the design and construction of three new pump stations; replacement of three existing pump stations and upgrades to two existing pump station upgrades in addition to electrical, instrumentation and controls, a generator at each pump station, SCADA for three existing pump stations, an equalization tank, approximately 131,200 LF of force main ranging from 4-inch diameter to 10-inch diameter; and the closure of both the Surry County Wastewater Treatment Plant (WWTP) and the Town of Surry WWTP. Flow will be conveyed to existing HRSD infrastructure in the Town of Smithfield, and will ultimately be treated at Nansmond Treatment Plant.

**PROJECT JUSTIFICATION**

HRSD is under a consent order with the state to decommission the Town of Surry Treatment Plant. Consent Order deadline of December 31, 2022 was met (Substantial Completion for Consent Order work was achieved on November 17, 2022).

**FUNDING TYPE**

Funding Type: Revenue Bond

**CONTACTS**

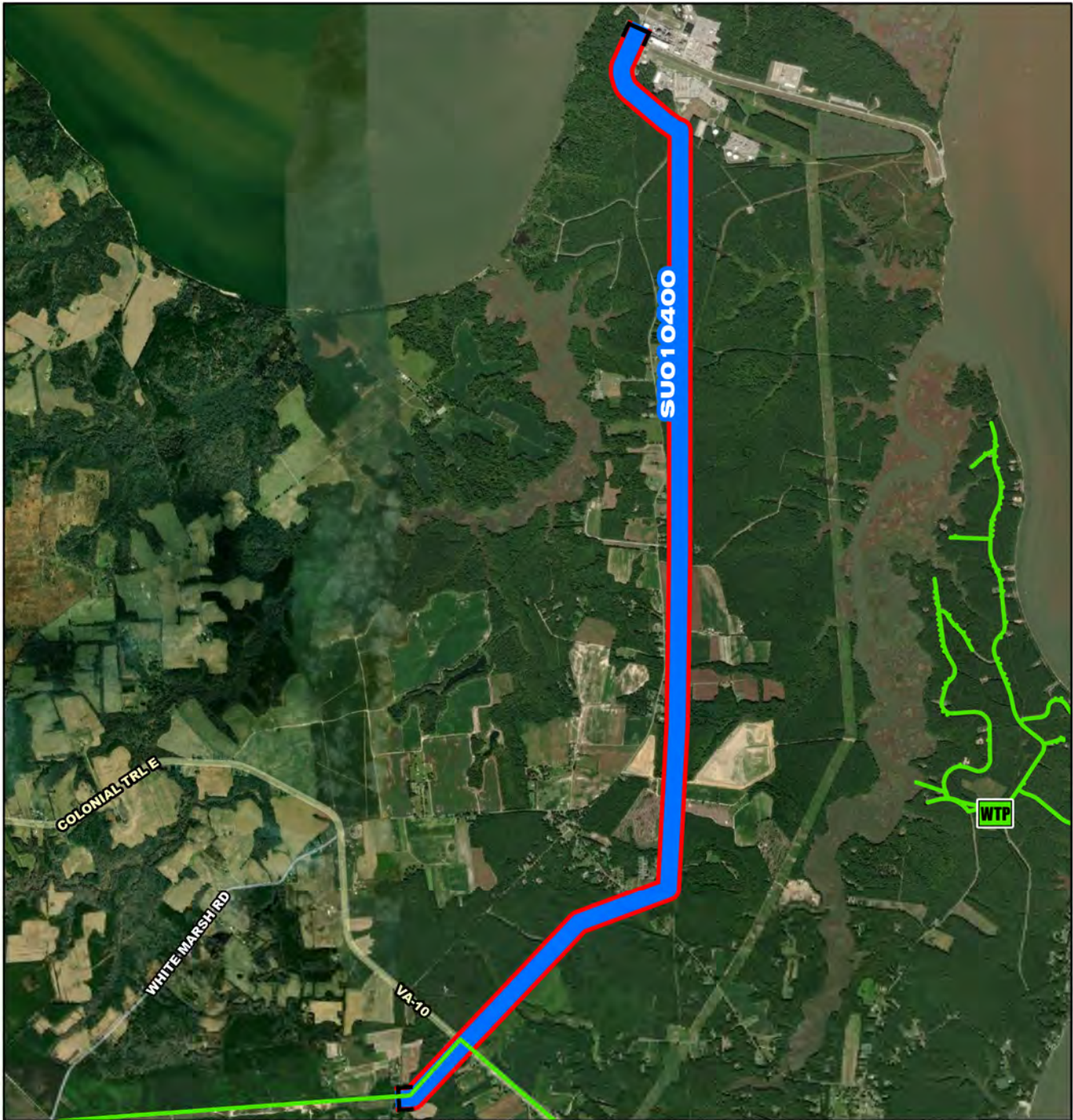
Contacts-Requesting Dept: General Manager  
Contacts-Dept Contacts: Ann Copeland  
Contacts-Managing Dept: Engineering

**PROPOSED SCHEDULE START DATE**

PrePlanning 08/15/2017  
PER 05/01/2018  
Design Delay 02/01/2019  
Design 02/01/2019  
Bid Delay 02/01/2019  
PreConstruction 02/01/2019  
Construction 02/01/2019  
Closeout 12/01/2023

**COST ESTIMATE**

<b>Cost Estimate Class:</b>	<b>Class 1</b>
PrePlanning	\$0
PER	\$0
Design	\$42,615,671
PreConstruction	\$0
Construction	\$79,909
Closeout	\$0
<b>Est. Program Cost</b>	<b>\$42,695,580</b>
Contingency Budget	\$1,825,830
<b>Est. Project Costs</b>	<b>\$44,521,410</b>



**SUO10400**

- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station 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 1,250 2,500 5,000 7,500 10,000

## SUO 10400

### Surry Force Main and Pump Station- Dominion Power Extension

N  
W E  
S

**CIP Location**



**Surry Force Main and Pump Station-Dominion Power Extension**

**PR\_SU010400**

System: Surry  
Type: Pipelines

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

**PROGRAM CASH FLOW PROJECTION (\$,000)**

Prog Cost	Exp to Previous Year	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
\$8,314	\$3,509	\$4,804	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**PROJECT DESCRIPTION**

This project will provide a new 6.7 mile force main and pump station extending from the Surry Nuclear Power Plant to HRSD's Mt. Ray Pump Station. The project will be fully reimbursed through a cost sharing agreement with Dominion Virginia Power.

**PROJECT JUSTIFICATION**

Dominion has contacted HRSD about the possibility of abandoning their existing wastewater treatment plant and connecting to HRSD's Surry Interceptor Force Main at the Mt. Ray Pump Station. This proposed 6-inch force main will be located along both public and private property along the suggested route. A pump station will be constructed at the Surry Nuclear Power Facility and will be ultimately owned and operated by HRSD. A multi-step cost sharing agreement process will be used to consider the feasibility of this project. Most of the project costs will be borne by Dominion.

**FUNDING TYPE**

Funding Type: Cash

**CONTACTS**

Contacts-Requesting Dept: Operations-Interceptors  
Contacts-Dept Contacts: Ann Copeland  
Contacts-Managing Dept: Engineering

**PROPOSED SCHEDULE START DATE**

PrePlanning 04/27/2021  
PER 06/02/2021  
Design Delay 02/14/2022  
Design 01/01/2023  
Bid Delay 08/01/2023  
PreConstruction 08/01/2023  
Construction 03/01/2024  
Closeout 05/01/2025

**COST ESTIMATE**

**Cost Estimate Class: Class 1**  
PrePlanning \$0  
PER \$0  
Design \$8,243,277  
PreConstruction \$0  
Construction \$0  
Closeout \$0  
**Est. Program Cost \$8,243,277**  
Contingency Budget \$2,470,000  
**Est. Project Costs \$10,713,277**