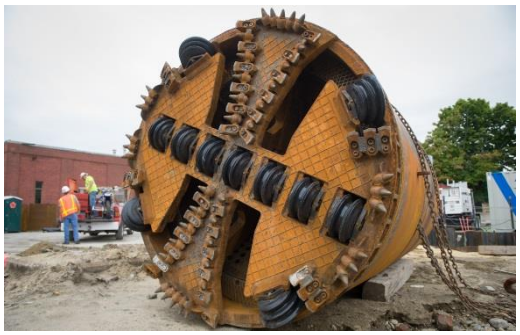
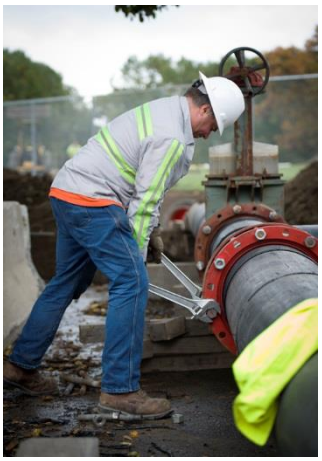
NARRAGANSETT BAY COMMISSION





CAPITAL IMPROVEMENT PROGRAM

FISCAL YEAR 2021 - 2025

Vincent J. Mesolella
Chairman

Laurie Horridge
Executive Director

Capital Improvement Program
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Capital Project Summary for Fiscal Years 2021-2025
(In Thousands)

Project Number	Project Name		Fiscal Years 2021-2025
Wastewater Treatment Facility Improvements			
12400	IM Facilities		$ 3,109
13200	FPWWTF Maintenance Facilities		6,743
20000	WWTF Improvements		2,000
20200	FY 2019 WWTF Improvements		1,801
40101	FPWWTF Facility Electrical Improvements		2,364
81000	BPWWTF UV Disinfection Improvements		5,553
81600	BPWWTF Improvements		5,042
81700	BPWWTF Operations Building		12,526
		Subtotal	39,138
Infrastructure Management			
1140100	River Model Development		127
1140300	Greenhouse Gas Study		60
1140500	NBC Energy Sustainability		77
1140600	RIPDES Compliance Improvements		759
30700	NBC System-wide Facilities Planning		226
40200	NBC System-wide Inflow Reduction		455
40300	Municipal Lateral Sewer Acquisition Impact		295
		Subtotal	1,999
CSO Phase III Facilities			
30800	CSO Phase III A Facilities		17,039
30801	CSO Phase III Facilities Pawtucket Tunnel & Pump Station		306,044
30802	CSO Phase III Facilities - Tunnel Pump Station Fit-out		53,781
30803	CSO Phase III Facilities-OF 205		5,535
30804	CSO Phase III Facilities - OF 210, 213, 214		10,618
30805	CSO Phase III Facilities - OF 217		17,305
30806	CSO Phase III Facilities - OF 218		6,648
30807	CSO Phase III Facilities-Regulator Modifications		1,792
30808	CSO Phase III Facilities - GSI Demonstration		1,243
30809	CSO Phase III - GSI Projects		4,824
30810	CSO Phase III Facilities - BPWWTF Clarifiers and Flow Splitters		18,097
30813	CSO Phase III Facilities - Site Demolition		3,378
		Subtotal	446,303
Sewer System Improvements			
30500	NBC Interceptor Easements Restoration, Various Locations		547
70900	Omega Pump Station Upgrade		1,877
71000	Lincoln Septage Station Replacement		2,550
		Subtotal	4,974
Interceptor Cleaning / Restoration and Construction			
30400M	Interceptor Inspection and Cleaning		2,500
30400C	Interceptor Restoration and Construction		4,950
30315	CSO Phase II - WCSOI OF 046		2,660
30421	Louisquisset Pike Interceptor Improvements		4,594
		Subtotal	14,704
	Total Capital Improvement Program Window		**$ 507,118**

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Capital Improvement Program

The Capital Improvement Program

The Narragansett Bay Commission's (NBC) Capital Improvement Program (CIP) is a planning document which identifies programmed capital investments necessary to comply with current and future regulatory requirements, take advantage of technological advancements, ensure the integrity of NBC's infrastructure and achieve operational efficiencies. The projects, schedules and costs that are included in the CIP have been developed through a planning process that involves NBC's Engineering and Construction staff and incorporates needs identified through NBC's asset management program. These capital improvements include construction of new facilities and rehabilitation and replacement of existing infrastructure, as well as energy efficiency and sustainability projects. The CIP shows programmed expenditures for the current Fiscal Year (FY) 2020 as well as the following five-year period of FY 2021-2025, which is referred to in this document as the "window". Structuring the CIP this way also enables the NBC's program to be easily incorporated into the State of Rhode Island's capital budget.

Capital Improvement Program Overview

This year's CIP identifies a total of 49 projects that are either in progress, to be initiated, or to be completed during FY 2020-2025. The estimated costs for this year's CIP window are $507.1 million, with additional expenditures of $52.4 million in FY 2020 for a total of $559.5 million. The majority or 88% of the expenditures are related to the third and final phase of the Combined Sewer Overflow (CSO) Abatement Facilities. Other projects account for the remaining 12% of the CIP and reflect the continued investment in NBC's wastewater treatment and collection system infrastructure.

FY 2020-2025 CIP Costs
(In thousands)

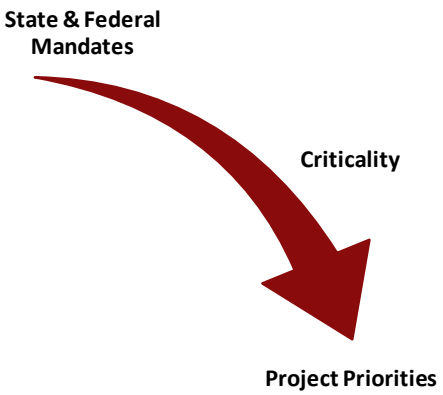
Category	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2021-2025
Administrative	$ 2,259	$ 3,183	$ 3,762	$ 3,337	$ 2,861	$ 1,756	$ 14,899
Land	9,536	-	-	-	-	-	-
A/E Professional	21,925	15,756	12,736	13,760	10,378	5,890	58,520
Construction	15,744	32,531	95,672	130,781	96,646	48,688	404,318
Contingency	2,407	3,787	6,766	6,429	6,573	4,452	28,007
Other	535	546	288	180	175	185	1,374
Total	**$ 52,406**	**$ 55,803**	**$ 119,224**	**$ 154,487**	**$ 116,633**	**$ 60,971**	**$ 507,118**

The CIP document reflects all phases of a construction project, including planning and design, as a single project. In addition, for planning purposes, projects that are substantially complete with only retainage and/or "punch-list" items remaining are considered complete and are not carried in the CIP summary or detailed project listing. These projects are, however, discussed in the completed projects section of the CIP that begins on page 12. The CIP projects are also identified by classifications which rank them in terms of priority. The CIP includes additional information regarding changes in the CIP from the prior year, new projects and the projected operating budget impact of each project.

Capital Improvement Program Development

NBC's comprehensive capital improvement planning process takes into consideration the project's relationship to the strategic plan, program priorities, the permitting process, project readiness, scheduling and other factors. The CIP drives NBC's long-term financing requirements, and therefore the particulars of each project are an essential component of NBC's financial plan.

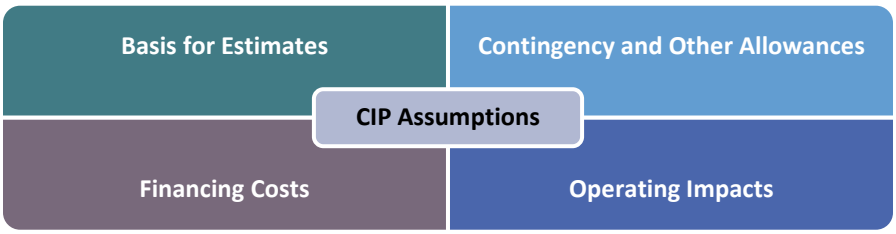
NBC's Project Managers begin the annual CIP process with the development of detailed justifications for each capital project including project scope, basis for the cost estimate and key factors impacting costs and schedules. The Project Managers also explain modifications from the prior year's CIP and provide the overall project schedule. A timeline with all of the detailed project schedules can be found in the Appendix. The CIP Review Committee reviews the proposed capital projects including the assignment of priorities and schedules. Projects approved for inclusion in the CIP are subsequently analyzed to assess major program changes, overall capital funding needs, the strength of the project's connection to the objectives in NBC's Strategic Plan, as well as financing and operating cost impacts.



Capital Improvement Program Assumptions

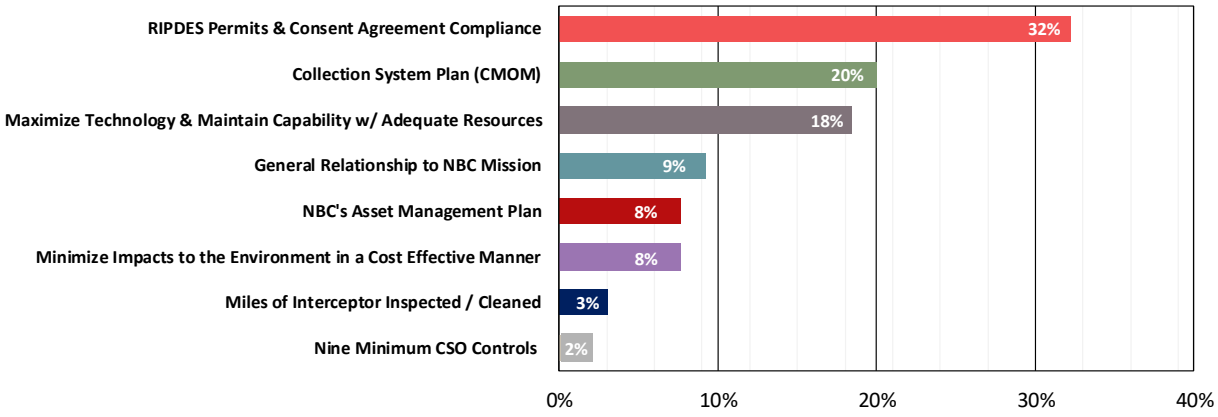
The costs and schedules included in this year's CIP reflect NBC's best estimates and are based on a number of assumptions as follows:

- Costs and cash flows are based on planning or design estimates and/or bids once available.
- The majority of construction projects include a 10% contingency based on the original construction cost estimate, which reflects recent industry experience. CSO Phase III A cost estimates include a 15% contingency based on the recommendation of the design engineer and the complexity of the project. Project contingencies may be subsequently modified based upon the bids. Cost estimates for new design and construction projects include a 7% allowance for NBC staff salary and fringe associated with project management, based on historical experience.
- Financing costs and debt service associated with the CIP are not included in the CIP expenditures or the project cash flows. Financing costs are capitalized and amortized over the length of the debt payment schedule and debt service is included as an expense in the annual operating budget.
- The CIP does not include the acquisition or replacement of certain assets included in the five-year Operating Capital Program as part of the Capital Budget.
- Impacts of CIP projects on the Operating Budget are estimated based on prior experience and engineering estimates.



Capital Projects by Strategic Objective

NBC's Strategic Plan ensures NBC's ability to meet water quality objectives set forth by regulatory requirements through achieving short-term and long-term objectives at a reasonable cost. As part of the CIP development process, Project Managers identify the one or more strategic goals that a project will address. The following chart illustrates the percentage of capital projects in this year's CIP aligned with each Strategic Objective.

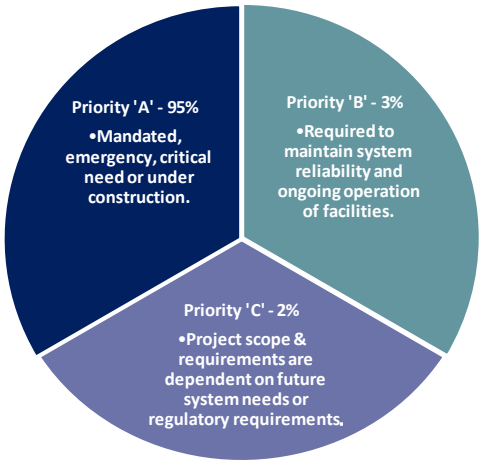


Of the 49 CIP projects, the highest percentage, or 32%, are aligned with the RIPDES Permit/RIDEM Consent Agreement strategic objective. NBC's Collection System Plan strategic objective, which includes interceptor restoration and construction projects, comprises 20% of the projects in the CIP while 18% of the projects are aligned with the Maximize Technology & Maintain Capability with Adequate Resources strategic objective. The remaining projects are aligned with NBC's Asset Management Plan, General Relationship to NBC Mission and Minimize Impacts to the Environment in a Cost Effective Manner objectives.

Capital Project by Priority

As part of the CIP program development, a priority ranking is assigned based on an assessment of the project's criticality. Projects with a priority ranking of "A" represent a critical need and are either mandated, an emergency or currently under construction. Approximately 95% of the project costs identified in the window are prioritized with an "A" ranking with a total estimated cost of $483.8 million.

Projects with a priority ranking of "B" are required to maintain system reliability and ongoing operations of NBC's facilities. In this year's CIP, 3% of project costs have been ranked as a "B" priority with a total estimated cost of $14.8 million. Lastly, projects with a "C" ranking are identified for planning purposes and may be undertaken if it is determined that they are needed to meet future system needs or regulatory requirements. Of the total CIP, 2% of the project costs or $8.5 million are identified with a priority ranking of "C".



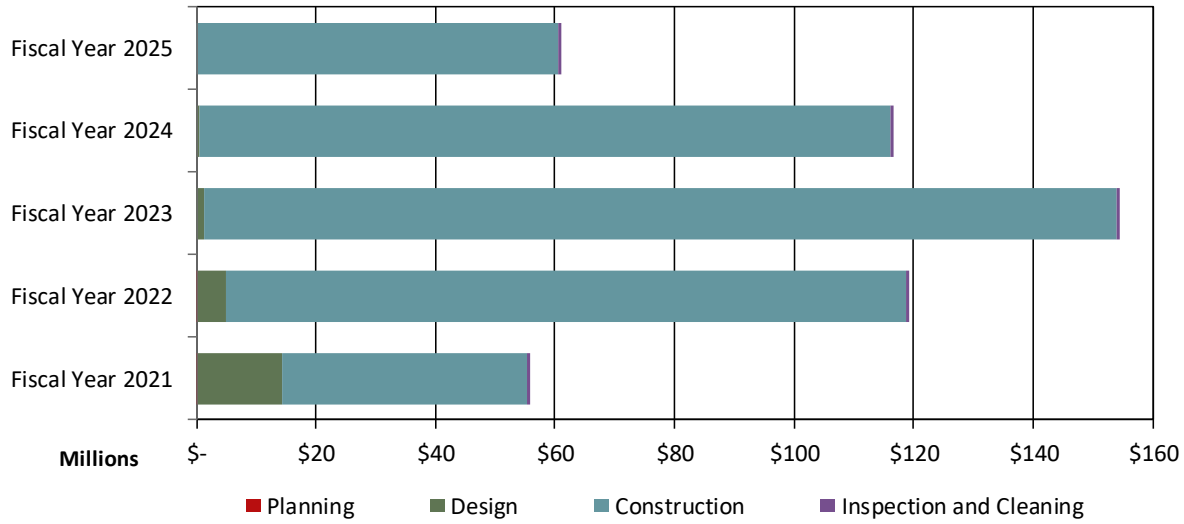
*Percentage calculated on project cost

Capital Expenditure by Phase

NBC's construction projects are generally comprised of three phases including planning, design, and construction. Planning consists of tasks such as feasibility studies and determination of the technology to be implemented. The design phase includes the development of plans and specifications and the acquisition of

easements and permits. During the construction phase, facility improvements and infrastructure are constructed. The CIP also includes some programmed capital projects which are not broken down into phases, such as the inspection, cleaning, and repair of NBC's interceptors, or other one-time special studies. As is evident in the chart below, the majority, or 95% of the programmed expenditures during the five-year CIP window, relate to the construction phase at $483.6 million.

Capital Expenditure by Phase

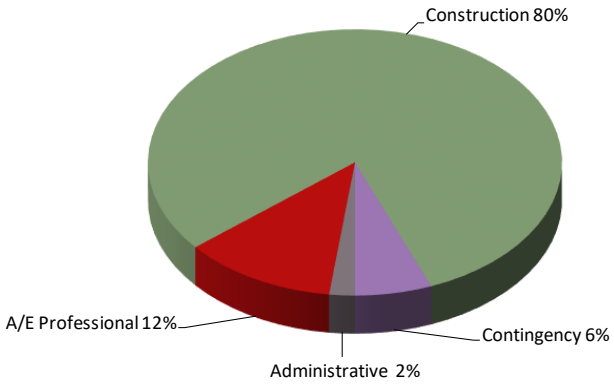


Capital Expenditure by Cost Category

For planning purposes, the project costs are shown by categories including the Administrative category, which includes NBC's project management costs as well as police, legal and advertising expense. The Architectural/Engineering (A/E) Professional cost category includes costs for professional planning or design services. The Construction cost category reflects contractor and outside construction management costs. Lastly, the Contingency cost category includes an allowance for construction cost increases based upon industry experience related to construction cost factors.

As shown in the chart below, Construction costs represent $404.3 million, or approximately 80% of the total costs within the FY 2021-2025 window. A/E Professional services represent approximately $58.5 million or 12% of the costs during this same period.

CIP Costs by Type of Activity



Capital Expenditures by Functional Area

For planning purposes, NBC also groups capital projects into functional areas, according to the scope and tasks involved with the capital project. The functional areas are described below.

Functional Area	Project Examples
Wastewater Treatment Facility (WWTF)	Blower Improvements, Biogas Reuse, UV Disinfection and WWTF Improvements
Infrastructure Management (IM)	RIPDES Compliance Improvements
CSO Phase III Facilities	CSO Phase III A ,B, C, and D
Sewer System Improvements	Easement Restoration, Sewer System and Pump Station Improvements
Interceptor Inspection and Cleaning (IIC)	Remote Television Inspection and Grit/Debris Removal and Disposal
Interceptor Restoration and Construction (IRC)	Interceptor Expansion, Improvements, Lining and Manhole Rehabilitation

The following table shows how the CIP costs have shifted by functional area on a year-to-year basis. The most significant change from the prior year is the $131.3 million or 42% increase in the cost of the CSO Phase III A Facilities. This is primarily the result of the shift in the CIP window to include an additional year of construction in FY 2025. Costs programmed in the Wastewater Treatment Facility functional area increased 90% from the prior year as additional projects at both Field's Point and Bucklin Point facilities have been identified. Sewer System Improvements increased 29% or approximately $1.1 million as design and construction estimates for the Omega Pump Station Upgrade project have increased. Overall, programmed expenditures are $150.2 million or 42% more in the current CIP window compared to last year.

Functional Area (In thousands)	Prior Year CIP (FY 2020-2024)	Current Year CIP (FY 2021-2025)	% Change
Wastewater Treatment Facility	$ 20,582	$ 39,138	90%
Infrastructure Management	2,191	1,999	(9%)
CSO Phase III A Facilities	314,972	446,303	42%
Sewer System Improvements	3,863	4,974	29%
Interceptor Inspection and Cleaning	2,500	2,500	0%
Interceptor Restoration and Construction	12,791	12,204	(5%)
Total	**$ 356,899**	**$ 507,118**	**42%**

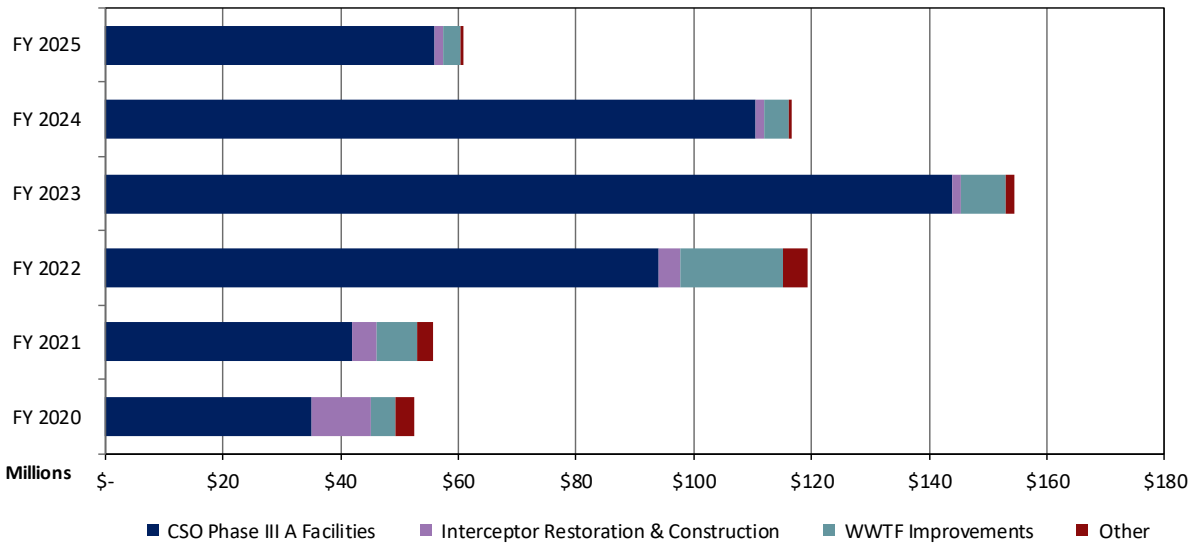
Significant Capital Improvement Projects

The most significant project included in this year's CIP is the CSO Phase III A Facilities which comprise $446.3 million or 88% of the CIP's programmed costs. Expenditures on this project are expected to significantly increase when construction begins in FY 2022. Other projects account for the remaining 12% of the CIP programmed costs. The following table and graph show the programmed expenditures for the CSO Phase III A Facilities and other major projects included in the CIP window.

Expenditures by Major Project

Project (in Thousands)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total Costs FY 2021 - 2025	% of Five Year Window
CSO Phase III A Facilities	$ 34,981	$ 41,879	$ 94,086	$143,803	$110,546	$ 55,989	$ 446,304	88%
WWTF Improvements	4,069	6,920	17,534	7,674	4,030	2,981	$ 39,138	8%
Interceptor Restoration & Construction	10,192	4,160	3,544	1,500	1,500	1,500	$ 12,204	2%
Other	3,164	2,844	4,060	1,511	557	500	$ 9,472	2%
Total	**$ 52,406**	**$ 55,803**	**$119,224**	**$154,488**	**$116,633**	**$ 60,970**	**$ 507,118**	**100%**

Expenditures by Major Project



Improvements to the WWTF's account for 8% of the total costs in the five-year window of the CIP. These projects include Phase II of the Blower Improvements at $8.8 million and Maintenance Facilities at $6.7 million at Field's Point as well as a new Operations Building at $13.2 million, WWTF Improvements at $5.4 million and Ultraviolet (UV) Disinfection Improvements at $6.3 million at Bucklin Point. In addition, NBC has allocated $500 thousand annually for improvements to the wastewater treatment facilities to ensure funding is available to support required investments as they are identified through asset management and inspection.

In addition, 2% of the CIP costs are for various Interceptor Restoration and Construction Projects. Two larger projects include the Moshassuck Valley Interceptor at a cost of $10.0 million and the Providence River Siphon at a cost of $8.0 million. These projects will ensure the integrity of these large interceptors that transport flow for treatment. NBC has also programmed Improvements to Interceptors at $5.8 million which includes the lining of various diameter interceptors ranging from 6" to 66" and the rehabilitation of various manholes throughout the NBC service area, the Louisquisset Pike Interceptor Improvements at $4.6 million and the CSO Phase II – WCSOI at $3.9 million.

Lastly, other projects account for the remaining 2% of the costs in the CIP. This includes the Lincoln Septage Station replacement at a cost of $2.8 million and the Omega Pump Station Upgrade at $2.1 million. Additionally, this year's CIP includes two easement restoration projects totaling $1.5 million.

Overall, the total programmed expenditures for non-CSO projects has increased by $31.3 million compared to the prior year's CIP, as shown in the table below.

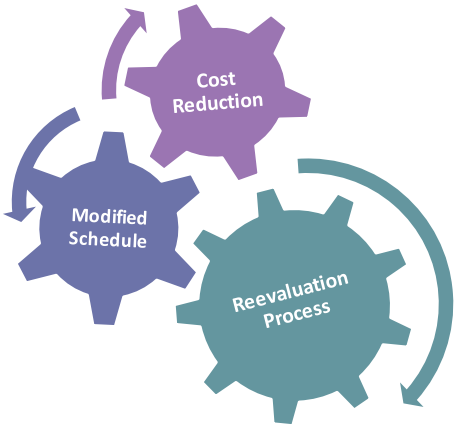
Year-over-Year Difference in the Non-CSO Capital Improvement Program by Major Project						
	FY 2020	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Total**
WWTF Improvements	$ 1,490	$ 1,935	$ 10,866	$ 1,824	$ 3,530	$ 19,645
Interceptor Restoration & Construction	3,401	2,660	2,044	-	-	8,105
Other	(464)	33	3,203	781	29	3,582
Total Change Non-CSO Projects	**$ 4,427**	**$ 4,628**	**$ 16,113**	**$ 2,605**	**$ 3,559**	**$ 31,332**
Percent Change in Non-CSO Projects	**34%**	**50%**	**179%**	**32%**	**141%**	**75%**

CSO Phase III Facilities (Project 308)

The NBC is under a Consent Agreement with RIDEM to implement a federally mandated CSO Program that will address the Commission's 65 CSOs in both the Field's Point and Bucklin Point service areas. The CSO Program will be completed in three phases. Approximately 98% of the annual CSO volume will receive treatment when all three phases are completed. The CSO Phase I Facilities addresses 40% of the CSO volume that will be treated and has been in service since November, 2008. The NBC constructed additional CSO facilities in Phase II which went into operation in December, 2014

NBC's 18-month reevaluation of the third and final phase as set forth in the RIDEM-approved 1998 Conceptual Design Report Amendment concluded in June 2015, and resulted in the selection of an alternative that the NBC determined would provide the best combination of affordability and water quality improvement. The reevaluation report was submitted to RIDEM in July 2015, and RIDEM provided comments to NBC in March 2016. NBC incorporated RIDEM's comments into a revised reevaluation report, which was approved by RIDEM in December 2017. NBC's Consent Agreement was renegotiated and signed in January 2019.

As a result of the reevaluation process, the CSO Phase III Program was subdivided into four phases to be completed by 2041. The program also incorporates Green Stormwater Infrastructure (GSI) facilities to be constructed in each of the four phases to reduce stormwater inflow to the existing CSO system by implementing stormwater infiltration projects, with expenditures of $10 million on GSI in each phase.



The total pre-design estimate, which includes "other" costs (NBC labor, police, etc.), for the four phases of the CSO Phase III Facilities is $803.7 million in 2018 dollars, with expenditures of approximately $35.0 million in FY 2020 and $446.3 in the five-year period of FY 2021-2025.

NBC has commenced preliminary design of the CSO Phase III A and B Facilities. Project 30811, the CSO Phase III High Street Demolition is underway and involves the site preparation for the first GSI installation. Estimated costs and schedules for the four phases are summarized below.

CSO Phase III Facilities - in Millions				
	Phase	Amount	Start Date	End Date
Phase III A	Design	$ 72.3	April-2013	December-2021
	Construction	454.8	August-2018	December-2026
Phase III B	Construction	28.5	December-2027	December-2030
Phase III C	Design	23.1	May-2032	June-2034
	Construction	141.5	April-2034	June-2037
Phase III D	Design	13.2	April-2037	September-2039
	Construction	70.3	August-2039	December-2041
	Total	$ 803.7		

* Pre-design estimates in 2018 $'s with cost and schedule subject to change

A description of the facilities to be constructed in each of the four phases are as follows.

Phase III A

This Phase includes design and construction of a deep rock tunnel in Pawtucket approximately 13,000 feet in length along the Seekonk and Blackstone Rivers, a pump station to convey flow to the Bucklin Point WWTF in East Providence, drop shafts and consolidation conduits. Additionally, this project includes the design of the Upper BVI relief, CSO 105 relief sewer, CSO 206 sewer separation, GSI and regulator modifications which will be constructed in Phase III B.

In last year's CIP, design and construction of Phase III A was shown as a single project number. As this first phase has proceeded through design, it was broken down into thirteen separate construction contracts. The estimated construction costs and schedules will be updated as additional information becomes available. The following table shows the estimated cost of each of the CSO Phase III A construction contracts as well as the project delivery method.

CSO Phase III A Construction Contracts
(in thousands)

Project Number	Project Name	Total Estimated Project Cost	Delivery Method
30801	CSO Phase III Facilities Pawtucket Tunnel & Pumps Station	$ 307,274	Design-Build
30802	CSO Phase III Facilities - Tunnel Pump Station Fit-out	71,340	Design-Bid-Build
30803	CSO Phase III Facilities-OF 205	5,535	Design-Bid-Build
30804	CSO Phase III Facilities - OF 210, 213, 214	10,618	Design-Bid-Build
30805	CSO Phase III Facilities - OF 217	17,305	Design-Bid-Build
30806	CSO Phase III Facilities - OF 218	7,266	Design-Bid-Build
30807	CSO Phase III Facilities-Regulator Modifications	1,874	Design-Bid-Build
30808	CSO Phase III Facilities - GSI Demonstration	2,745	Design-Bid-Build
30809	CSO Phase III - GSI Projects	6,543	Design-Bid-Build
30810	CSO Phase III Facilities - BPWWTF Clarifiers and Flow Splitters	18,097	Design-Bid-Build
30811	CSO Phase III High Street Demo	304	Design-Bid-Build
30812	CSO Phase III Facilities - Dexter Street Stormwater Infrastructure	1,396	Design-Bid-Build
30813	CSO Phase III Facilities - Site Demolition	4,505	Design-Bid-Build
		$ 454,802	

Phase III B

This Phase involves the construction of the Upper BVI Relief, CSO 206 sewer separation, CSO 105 relief sewer, regulator modifications and green stormwater infrastructure.

Phase III C

This Phase consists of the design and construction of a stub tunnel that will convey flow from CSO OF 220 to the Pawtucket tunnel constructed in Phase III A.

Phase III D

This Phase includes the design and construction of an interceptor that will store flow from OF 039 and OF 056 which accumulates during a storm and later release the flow into the system as capacity allows.

Regulatory Compliance

In anticipation of increasingly stringent permit discharge limitations and other permit requirements that may necessitate improvements to existing facilities or the construction of new facilities, this year's CIP includes a RIPDES Compliance Improvements Project. This project incorporates previous initiatives that were reflected individually in the CIP including the Site Specific Study that was established to address metals and the Upper Bay Dissolved Oxygen Evaluation related to potential nitrogen permit reductions. The project also incorporates the development of a climate resiliency plan that may be required to protect critical functions as part of the RIPDES permit issued by RIDEM.

Photo: Greenhouse Gas Collection

As part of NBC's environmental performance goals of minimizing environmental impact, NBC has programmed a Green House Gas Study which involves quantifying NBC's overall carbon footprint by measuring the gas emissions from the wastewater collection and treatment process. The results will enable NBC to respond quickly to new emissions regulatory requirements. NBC also plans to maximize energy efficiencies and renewable resources through the Energy Sustainability Program which involves the identification and implementation of conservation methods, improved efficiency and sustainable renewable energy resources.

Wastewater Treatment Facility Improvements

This year's CIP includes $56.9 million in programmed funding for projects related to NBC's wastewater treatment facilities. One of the major projects at Field's Point is Phase II of the Blower Improvements (10908) which includes a new blower building and aeration blowers to ensure a reliable air source for the aeration treatment process. The CIP also includes construction of maintenance and equipment storage facilities as part of the FPWWTF Maintenance Facilities Project (13200). In addition, the FY 2019 WWTF Improvements Project (20200) focuses on the rehabilitation of isolation gates and actuators, BNR switchgear and froth spray line as well as modifications and enhancements to the aeration tanks, screw lift pumping station, blower building and the CSO Tunnel Odor Control facilities at Field's Point.

Photo: Ultraviolet Disinfection System at Bucklin Point

With respect to Bucklin Point, the CIP includes funding for a new Operations Building Project (81700) that will contain additional office space, training and locker rooms, and the Supervisory Control and Data Acquisition (SCADA) Room. Also included is the UV Disinfection Improvements Project (81000) that will replace the UV disinfection equipment that is nearing the end of its useful life with a more energy efficient system. BPWWTF Improvements (81600) involves improvements and upgrades to the Bucklin Point facilities including the repair or replacement of boilers, hydronic piping systems, and isolation gates. Other improvements include modifications to HVAC systems and installation of redundant power and electrical sump pump systems.

Photo: Field's Point Electrical Facility

This year's CIP includes two projects developed to ensure the integrity of electrical equipment and facilities. The NBC Facility Electrical Improvements Project (40100) involves the evaluation of existing electrical equipment and facilities along with the identification and implementation of improvements needed to ensure reliable, continuous operation. The FPWWTF Facility Electrical Improvements Project (40101) consists of the assessment and installation of standby power capabilities for critical facilities and the upgrade or replacement of the electrical and control systems at Field's Point. In addition, the COB Facilities

Improvements Project (90900) encompasses the renovation and reconfiguration of portions of the Corporate Office Building, as well as the Laboratory to address aging facilities and organizational needs.

On a system-wide basis NBC continues to program $500 thousand annually for wastewater treatment facility improvements to ensure resources are available in years that do not have specific projects identified in order to maintain the integrity of the treatment facilities. Lastly, the CIP has funding programmed for the construction of new IM Facilities (12400) that would be needed should NBC be required by legislation to assume ownership of lateral sewers currently owned by local municipalities within its district.

The following table shows the wastewater treatment facility projects programmed in FY 2020-2025.

Project Number	Project Name	Costs (in thousands)
10908	FPWWTF Blower Improvements Phase II	$ 8,761
12400	IM Facilities	6,735
13200	FPWWTF Maintenance Facilities	6,743
20000	WWTF Improvements	2,500
20200	FY 2019 WWTF Improvements	3,590
40100	NBC Facility Electrical Improvements	130
40101	FPWWTF Facility Electrical Improvements	2,539
81000	BPWWTF UV Disinfection Improvements	6,252
81600	BPWWTF Improvements	5,381
81700	BPWWTF Operations Building	13,166
90900	COB Facilities Improvements	1,080
	Total	$ 56,877

Collection System Infrastructure

This CIP includes several collection system infrastructure projects totaling $42.3 million. The major projects include the replacement of the Moshassuck Valley Interceptor (30444), replacement of the Providence River Siphon (30457) interceptor and increasing the capacity of the Louisquisset Pike Interceptor (30421).

Photo: Infrastructure Repairs

In addition, the Improvements to Interceptors FY 2019 Project (30467) consists of lining various diameter interceptors ranging from 6" to 66" and the rehabilitation of various manholes throughout the NBC service area. Lastly, NBC is committed to maintaining its infrastructure and collection system by programming an allocation of $500 thousand for interceptor inspection and cleaning and $1.5 million for interceptor restoration and construction annually in years that do not have specific projects identified.

Completed and New Capital Projects

Completed Projects

NBC considers a project complete when the project has been deemed substantially complete and has only retainage and/or “punch list” items remaining. In FY 2019, NBC completed seven capital projects at a cost of $16.2 million.

Two projects that rehabilitated or replaced critical components of the treatment process were completed, including FY 17 WWTF Improvements (20100) and the WWTF Electrical Improvements (40102) at a cost of $1.5 million and $348 thousand respectively. The North Providence, Johnston, and Lincoln Interceptor Inspection

and Cleaning (30476) was completed at a cost of $166 thousand. Four interceptor improvement projects were also completed in FY 2019. Two of the projects, Johnston Sewer Improvements/Greenville Avenue (30460) at a cost of $8.2 million and Johnston Sewer Improvements/Hartford Avenue (30464) at a cost of $3.2 million, extended the sewer lines in Johnston. The Field's Point Drive Interceptor Improvements (30465) were completed at a cost of $1.2 million and Improvements to Interceptors FY 2018 (30466) which involved lining 6,000 feet of interceptors and the rehabilitation of 61 manholes was completed at a cost of $1.6 million.

Project Number	Project Name	Cost (In thousands)
20100	FY 17 WWTF Improvements	$ 1,535
40102	WWTF Electrical Improvements	348
30476	N. Providence, Johnston, Lincoln Interceptor Inspection & Clean	166
30460	Johnston Sewer Improvements/Greenville Avenue	8,166
30464	Johnston Sewer Improvements/Hartford Avenue	3,189
30465	Field's Point Drive Interceptor Improvements	1,212
30466	Improvements to Interceptors FY 2018	1,615
	Total	**$ 16,231**

New Projects

This year's CIP includes seven new capital projects totaling $33.2 million. The new projects and their estimated costs are summarized in the following table and are discussed below.

Project Number	Project Name	Estimated Cost (In thousands)
20200	FY 2019 WWTF Improvements	$ 3,590
81600	BPWWTF Improvements	5,381
81700	BPWWTF Operations Building	13,166
90900	COB Facilities Improvements	1,080
30477	Cleaning & Inspection of Selected Siphons, Various Locations	275
30315	CSO Phase II - WCSOI OF 046	3,915
30467	Improvements to Interceptors FY 2019	5,813
	Estimated Total	**$ 33,220**

The most significant new project is construction of a new Operations Building at Bucklin Point (81700). The new building is needed for additional office space, training and locker rooms, and will provide a better environment for computer equipment as well as a new SCADA Control Room. This project is estimated to cost $13.2 million. Project 20200, FY 2019 WWTF Improvements, includes improvements and upgrades to the Field's Point facilities including the rehabilitation of various isolation gates and actuators, BNR switchgear and froth spray line. Project 81600, BPWWTF Improvements, involves modifications and upgrades to the Bucklin Point facilities including the repair or replacement of boilers, hydronic piping systems, and isolation gates. Project 90900, COB Facilities Improvements involves rehabilitation of portions of the Corporate Office Building and will address aging systems such as HVAC and other items.

Lastly, this year's CIP includes funding for three new collection system infrastructure projects. Cleaning and inspection of selected siphons throughout the NBC service area are programmed as part of Project 30477. Construction of facilities to eliminate surcharging from the Woonasquatucket CSO Interceptor during extreme wet weather events is carried as Project 30315, CSO Phase II – WCSOI OF 046. Lastly, Project 30467, Improvements to Interceptors FY 2019, includes the rehabilitation of various manholes throughout the NBC service area.

Financial Impact

NBC recognizes the importance of planning for capital expenditures and is committed to minimizing ratepayer impact through an assessment of both operating costs and financing impacts. NBC has incorporated an expanded analysis and presentation of these impacts in the CIP. The project specific information is included in the following discussion rather than on the individual project sheets. Certain capital improvements will directly impact the operating budget either through increased revenue, increased expense, or cost savings. NBC has identified these impacts on a project by project basis. The following table describes the impact categories and should be used to interpret the figures in the detailed operating impact tables in this section of the CIP.

Impact	Description	Refection in Tables
Savings	A reduction in operating costs resulting from no longer operating facilities, reduced energy consumption, and/or the purchase of electricity	Shown as a reduction in Operating Costs
Increased Expense	An increase in operating costs resulting from new facilities becoming operational	Shown as an increase in Operating Costs
Increased Revenue	An increase in revenue through new user charges, incentives, and/or the sale of Renewable Energy Credits	Shown as an increase in Operating Revenue or Non-Operating Revenue

FY 2020 Revenue and Expense Impacts

Of the projects scheduled to be completed in FY 2020, only one will have a financial impact on operations within the CIP window. The FPWWTF Blower Improvements Phase II is projected to have an operating impact resulting in a $28,153 increase in expense in FY 2020. The following section describes the project and impact.

FPWWTF - Blower Improvements Phase II

The FPWWTF Blower Improvements Phase II Project (10908) includes construction of a new blower building that will house four new centrifugal blowers to provide a reliable air source for the aeration treatment process. The estimated annual ongoing maintenance expense is $28,153. All start-up costs are carried in the project.

FPWWTF - Blower Improvements Phase II			
	FY 2020	FY 2021	Annual
Increased Expense			
Maintenance	$ 28,153	$ 28,153	$ 28,153
Expense Impact	**$ 28,153**	**$ 28,153**	**$ 28,153**

FY 2021-2025 Revenue and Expense Impacts

The following table summarizes the projected impact of new capital projects scheduled to become operational in FY 2020-2025. Projects that involve inspection, studies, cleaning and rehabilitation generally do not have operating cost impacts and are excluded from this list. In FY 2025, the estimated impact as a result of these projects is increased annual revenue of $268,610, savings of $201,000 and increased expense of $320,019. Projects with revenue, savings or expense impacts are discussed in the following section.

Incremental CIP Impacts							
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Increased Revenue							
Louisquisset Pike Interceptor Replacement		-	-	22,384	268,610	268,610	268,610
Revenue Impact		**$ -**	**$ -**	**$ 22,384**	**$ 268,610**	**$ 268,610**	**$ 268,610**
Savings							
BPWWTF UV Disinfection Improvements		-	-	-	(201,000)	(201,000)	(201,000)
	Subtotal	-	-	-	(201,000)	(201,000)	(201,000)
Increased Expense							
FPWWTF - Blower Improvements Phase II		28,153	28,153	28,153	28,153	28,153	28,153
New IM Facilities		-	-	-	-	28,785	172,709
FPWWTF Maintenance Facilities		-	-	-	-	16,156	38,774
BPWWTF Operations Building		-	-	-	60,287	80,383	80,383
	Subtotal	28,153	28,153	28,153	88,440	153,477	320,019
Net O&M Impact		**$ 28,153**	**$ 28,153**	**$ 28,153**	**$ (112,560)**	**$ (47,523)**	**$ 119,019**

Louisquisset Pike Interceptor Replacement

The Louisquisset Pike Interceptor Replacement Project (30421) is scheduled to be completed in FY 2022. The project involves construction of a larger replacement interceptor in the northern section of the Town of Lincoln to accommodate additional flow. Preliminary estimates indicate that the flow will generate additional sewer user fee revenue of $268,610 annually. The estimated operating expense is $10,000 every 5 years for ongoing maintenance of the collection system estimated to begin in FY 2027. There are no start-up costs associated with the construction of this interceptor.

Louisquisset Pike Interceptor Replacement			
	Savings	**Increased Expense**	**Increased Revenue**
User Fees	$ -	$ -	$ 268,610
Maintenance	-	10,000	-
Total	**$ -**	**$ 10,000**	**$ 268,610**

BPWWTF UV Disinfection Improvements

The BPWWTF UV Disinfection Improvements Project (81000) involves replacement of the aging UV disinfection system with new and more efficient technology. It is estimated that the new technology will use 1.7 million kWh less per year and will also require less maintenance, resulting in estimated savings of $201,000 annually. Completion of this project is scheduled for FY 2023.

BPWWTF UV Disinfection Improvements			
	Savings	**Increased Expense**	**Increased Revenue**
Electricity	$ (195,600)	$ -	$ -
Maintenance	$ (5,400)		
Total	**$ (201,000)**	**$ -**	**$ -**

IM Facilities

The IM Facilities Project (12400) is scheduled for completion in FY 2024. This project includes the construction of a new building that will be necessary if NBC is required by legislation to assume ownership of lateral sewers currently owned by local municipalities within the service area. The new building will include an administrative

area, garage area and storage yard to house the existing IM staff and equipment. The increased expense associated with the new building is approximately $172,709 annually for utilities and maintenance costs. All project startup costs, such as staff and equipment relocation are included in the project cost.

New IM Facilities			
	Savings	Increased Expense	Increased Revenue
Electricity	$ -	$ 21,317	$ -
Natural Gas	-	28,767	-
Water	-	10,500	-
Maintenance	-	112,126	-
Total	**$ -**	**$ 172,709**	**$ -**

FPWWTF Maintenance Facilities

The FPWWTF Maintenance Facilities Project (13200) involves the design and construction of a new maintenance building and facilities at Field's Point. While not critical to plant operations, it will improve efficiency in maintenance support, since the existing maintenance building was originally built in 1900 and is insufficient to meet the needs of operations. The new facilities are scheduled for completion in FY 2024 and estimated to have increased expense of $38,774 for utilities.

FPWWTF Maintenance Facilities			
	Savings	Increased Expense	Increased Revenue
Electricity	$ -	$ 15,226	$ -
Natural Gas	-	20,548	-
Water	-	3,000	-
Total	**$ -**	**$ 38,774**	**$ -**

BPWWTF Operations Building

The BPWWTF Operations Building Project (81700) involves the design and construction of a new Operations Building at the Bucklin Point campus. This building will contain additional office space, training and locker rooms, and the SCADA Control Room. The increased expense associated with the new building is approximately $80,383 annually for utilities and maintenance costs. All project startup costs, such as staff and equipment relocation are included in the project cost.

BPWWTF Operations Building			
	Savings	Increased Expense	Increased Revenue
Electricity	$ -	$ 21,317	$ -
Natural Gas	-	28,767	-
Water	-	3,000	-
Maintenance	-	27,300	-
Total	**$ -**	**$ 80,383**	**$ -**

Projects in Progress or Initiated but Not Completed in FY 2021-2025

CSO Phase III Facilities

CSO Phase III A operating impacts are estimated to commence in FY 2027. Increased expense of $1.0 million includes electricity to pump flow and provide dehumidification in the tunnel pump station, natural gas for heating, screening and grit disposal, biosolids disposal, water, treatment chemicals, maintenance and labor costs. The start-up costs are included in this project phase. The operating impacts of the remaining three phases will be determined once the design plans are available.

CSO Phase III Facilities				
Capital Project	**Projected Year Facilities Online**	**Savings**	**Increased Expense**	**Increased Revenue**
CSO Phase III A Facilities				
Electricity	FY 2027	$ -	$ 646,950	$ -
Natural Gas	FY 2027	-	64,240	-
Screening & Grit	FY 2027	-	49,660	-
Biosolids	FY 2027	-	194,866	-
Water	FY 2027	-	968	-
Hypochlorite	FY 2027	-	12,110	-
Sodium Bisulfite	FY 2027	-	4,942	-
Maintenance	FY 2027	-	29,033	-
Personnel	FY 2027	-	9,811	-
	Total	**$ -**	**$ 1,012,580**	**$ -**
CSO Phase III B Facilities	FY 2031	None	TBD	None
CSO Phase III C Facilities	FY 2037	None	TBD	None
CSO Phase III D Facilities	FY 2042	None	TBD	None

Project Financing

In addition to operating cost impacts, the debt service related to financing NBC's Capital Improvement Program also impacts the operating budget. NBC's Operating Budget includes principal and interest payments as well as a debt service coverage line item. NBC uses a long-term financial model to identify capital funding needs and sources and to project debt issuance. The debt service and user fee projections associated with financing the CIP are identified in the Long-Term Plan section of the Operating Budget. Traditionally, NBC has financed the Capital Improvement Program through the issuance of debt.

The Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) is a federal credit program administered by the U.S. Environmental Protection Agency (EPA) which provides long-term, low-cost credit assistance for up to 49% of and eligible project's costs. In July, 2018 NBC submitted a Letter of Interest to EPA for WIFIA funding of the CSO Phase III A facilities. NBC was selected from a pool of 62 prospective borrowers to apply for funding of $251 million to finance CSO Phase III A. NBC plans to submit its application in spring of 2019. If the loan is approved, NBC will work with EPA to structure the WIFIA loan so that ratepayer impact is mitigated.

Incentives and Reimbursements

It is anticipated that NBC will receive approximately $135 thousand in energy efficiency incentives related to the UV Disinfection Improvements. Additionally, NBC plans to establish a system of cost recovery from new connections to the new sewer along Hartford Avenue in Johnston. The incentives and reimbursements are outlined in the table below.

Capital Investment Incentives & Reimbursements				
Project	**Source**		**Incentives**	**Reimbursements**
BPWWTF UV Disinfection Improvements	National Grid		$ 135,000	$ -
Johnston Sewer Improvements/Hartford	Impact Fees		-	2,771,000
		Total	**$ 135,000**	**$ 2,771,000**

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Capital Project Summary by Fiscal Year

(In Thousands)

Project Number	Project Name	Project Priority	Pre-Fiscal Year 2020	Fiscal Year 2020	Fiscal Years 2021-2025	Post-Fiscal Year 2025	Total Estimated Project Cost
Wastewater Treatment Facility Improvements							
10908	FPWWTF Blower Improvements Phase II	A	$ 8,718	$ 43	$ -	$ -	$ 8,761
12400	IM Facilities	C	-	-	3,109	3,626	6,735
13200	FPWWTF Maintenance Facilities	A	-	-	6,743	-	6,743
20000	WWTF Improvements	B	-	-	2,000	500	2,500
20200	FY 2019 WWTF Improvements	A	421	1,368	1,801	-	3,590
40100	NBC Facility Electrical Improvements	B	19	111	-	-	130
40101	FPWWTF Facility Electrical Improvements	A	63	112	2,364	-	2,539
81000	BPWWTF UV Disinfection Improvements	A	259	440	5,553	-	6,252
81600	BPWWTF Improvements	A	42	297	5,042	-	5,381
81700	BPWWTF Operations Building	A	10	630	12,526	-	13,166
90900	COB Facilities Improvements	B	12	1,068	-	-	1,080
	Subtotal		9,544	4,069	39,138	4,126	56,877
Infrastructure Management							
1140100	River Model Development	C	351	80	127	-	558
1140300	Greenhouse Gas Study	C	28	65	60	-	153
1140500	NBC Energy Sustainability	C	139	32	77	-	248
1140600	RIPDES Compliance Improvements	A	470	322	759	-	1,551
30700	NBC System-wide Facilities Planning	C	-	173	226	-	399
40200	NBC System-wide Inflow Reduction	B	-	-	455	-	455
40300	Municipal Lateral Sewer Acquisition Impact	C	-	1	295	-	296
40400	FPWWTF Facilities Plan Update	A	342	73	-	-	415
40500	RIPDES Flow Monitoring System	A	109	739	-	-	848
	Subtotal		1,439	1,485	1,999	-	4,923
CSO Phase III Facilities							
30800	CSO Phase III A Facilities	A	26,159	29,133	17,039	-	72,331
30801	CSO Phase III Facilities Pawtucket Tunnel & Pump Station	A	-	-	306,044	1,230	307,274
30802	CSO Phase III Facilities - Tunnel Pump Station Fit-out	A	-	-	53,781	17,559	71,340
30803	CSO Phase III Facilities-OF 205	A	-	-	5,535	-	5,535
30804	CSO Phase III Facilities - OF 210, 213, 214	A	-	-	10,618	-	10,618
30805	CSO Phase III Facilities - OF 217	A	-	-	17,305	-	17,305
30806	CSO Phase III Facilities - OF 218	A	-	-	6,648	618	7,266
30807	CSO Phase III Facilities-Regulator Modifications	A	-	82	1,792	-	1,874
30808	CSO Phase III Facilities - GSI Demonstration	A	-	1,502	1,243	-	2,745
30809	CSO Phase III - GSI Projects	A	-	1,719	4,824	-	6,543
30810	CSO Phase III Facilities - BPWWTF Clarifiers and Flow Splitters	A	-	-	18,097	-	18,097
30811	CSO Phase III High Street Demo	A	282	22	-	-	304
30812	CSO Phase III Facilities - Dexter Street Stormwater Infrastructure	A	-	1,396	-	-	1,396
30813	CSO Phase III Facilities - Site Demolition	A	-	1,127	3,378	-	4,505
30830	CSO Phase III B Facilities	A	-	-	-	28,484	28,484
30850	CSO Phase III C Facilities	A	-	-	-	164,660	164,660
30870	CSO Phase III D Facilities	A	-	-	-	83,500	83,500
	Subtotal		26,441	34,981	446,303	296,052	803,778
Sewer System Improvements							
30500	NBC Interceptor Easements Restoration, Various Locations	B	22	309	547	-	878
30503	NBC Interceptor Easements Restoration, BVI Wetlands	A	106	501	-	-	607
70900	Omega Pump Station Upgrade	B	16	165	1,877	-	2,058
71000	Lincoln Septage Station Replacement	B	8	204	2,550	-	2,762
	Subtotal		152	1,179	4,974	-	6,305
Interceptor Cleaning/Restoration							
30400M	Interceptor Inspection and Cleaning	B	-	304	2,500	500	3,304
30477	Cleaning & Inspection of Selected Siphons, Various Locations	B	79	196	-	-	275
	Subtotal		79	500	2,500	500	3,579
Interceptor Restoration & Construction							
30400C	Interceptor Restoration and Construction	B	-	-	4,950	1,500	6,450
30315	CSO Phase II - WCSOI OF 046	A	336	919	2,660	-	3,915
30421	Louisquisset Pike Interceptor Improvements	C	-	-	4,594	-	4,594
30444	Moshassuck Valley Interceptor	A	7,958	2,040	-	-	9,998
30457	Providence River Siphon	A	6,502	1,460	-	-	7,962
30467	Improvements to Interceptors FY 2019	A	40	5,773	-	-	5,813
	Subtotal		14,836	10,192	12,204	1,500	38,732
	Total		**$ 52,491**	**$ 52,406**	**$ 507,118**	**$ 302,178**	**$ 914,194**

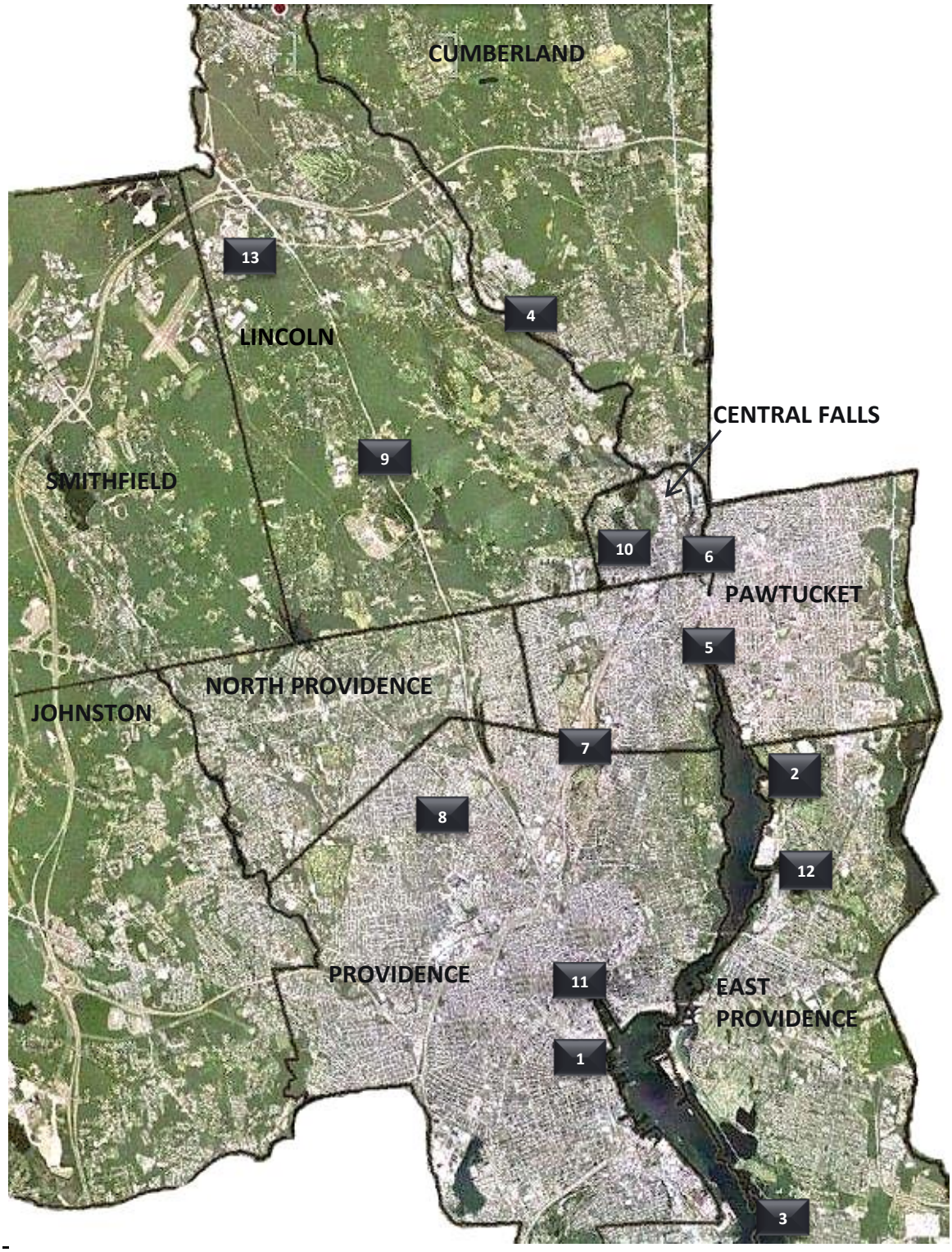
Priority	Description
A	Mandated, emergency, critical need or under construction.
B	Required to maintain system reliability and ongoing operation of facilities.
C	Project scope and requirements are dependent on futures system needs or regulatory requirements.
D	Project not critical but achieves efficiencies and/or reduces carbon footprint.

Capital Improvement Program Project Locations

The capital projects identified in this year's CIP are shown on the map on the following page. The map highlights 13 project locations as identified below. Some projects are System-Wide and noted as SW.

Legend Key	Project Number	Project Name
Wastewater Treatment Facility Improvements		
1	10908	FPWWTF Blower Improvements Phase II
1	12400	IM Facilities
1	13200	FPWWTF Maintenance Facilities
1	20200	FY 2019 WWTF Improvements
1, 2	40100	NBC Facility Electrical Improvements
1	40101	FPWWTF Facility Electrical Improvements
2	81000	BPWWTF UV Disinfection Improvements
2	81600	BPWWTF Improvements
2	81700	BPWWTF Operations Building
1	90900	COB Facilities Improvements
Infrastructure Management		
3	1140100	River Model Development
1,2	1140300	Greenhouse Gas Study
SW	1140500	NBC Energy Sustainability
SW	1140600	RIPDES Compliance Improvements
SW	30700	NBC System-wide Facilities Planning
SW	40200	NBC System-wide Inflow Reduction
SW	40300	Municipal Lateral Sewer Acquisition Impact
1	40400	FPWWTF Facilities Plan Update
SW	40500	RIPDES Flow Monitoring System
CSO Phase III Facilities		
5	30800	CSO Phase III A Facilities
5	30801	CSO Phase III Facilities Pawtucket Tunnel & Pump Station
5	30802	CSO Phase III Facilities - Tunnel Pump Station Fit-out
5	30803	CSO Phase III Facilities-OF 205
5	30804	CSO Phase III Facilities - OF 210, 213, 214
5	30805	CSO Phase III Facilities - OF 217
5	30806	CSO Phase III Facilities - OF 218
5	30807	CSO Phase III Facilities-Regulator Modifications
5	30808	CSO Phase III Facilities - GSI Demonstration
5	30809	CSO Phase III - GSI Projects
5	30810	CSO Phase III Facilities - BPWWTF Clarifiers and Flow Splitters
5	30811	CSO Phase III High Street Demo
5	30812	CSO Phase III Facilities - Dexter Street Stormwater Infrastructure
5	30813	CSO Phase III Facilities - Site Demolition
6	30830	CSO Phase III B Facilities
7	30850	CSO Phase III C Facilities
8	30870	CSO Phase III D Facilities
Sewer System Improvements		
SW	30500	NBC Interceptor Easements Restoration, Various Locations
4	30503	NBC Interceptor Easements Restoration, BVI Wetlands
12	70900	Omega Pump Station Upgrade
13	71000	Lincoln Septage Station Replacement
Interceptor Cleaning / Restoration and Construction		
SW	30477	Cleaning & Inspection of Selected Siphons, Various Locations
9	30421	Louisquisset Pike Interceptor Improvements
10	30444	Moshassuck Valley Interceptor
11	30457	Providence River Siphon
SW	30467	Improvements to Interceptors FY 2019

Capital Improvement Program Project Locations



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10908

FPWWTF Blower Improvements Phase II

Project Manager: Rich Bernier, P.E.
Contractor(s): Hart Engineering, Corp.

Location: Field's Point (Providence, RI)
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	February-15	April-16	14 Months	$682
Construction	October-16	February-20	40 Months	8,761
Total Project	**February-15**	**February-20**	**60 Months**	**$9,443**

Photo: Blower Building under construction

This project involves the construction of a new blower building equipped with four new 500 HP single stage centrifugal blowers to provide a reliable air source for the aeration treatment process.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 8,718	**$ 43**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 8,761**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 81	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 81
Land	-	-	-	-	-	-	-	-	-
A/E Professional	582	-	-	-	-	-	-	-	582
Other	19	-	-	-	-	-	-	-	19
Total	**$ 682**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 682**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 208	$ 5	$ -	$ -	$ -	$ -	$ -	$ -	$ 213
A/E Professional	366	-	-	-	-	-	-	-	366
Construction	7,606	38	-	-	-	-	-	-	7,644
Contingency	500	-	-	-	-	-	-	-	500
Other	38	-	-	-	-	-	-	-	38
Total	**$ 8,718**	**$ 43**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 8,761**

Note: Cash Flow Basis in Thousands

12400

IM Facilities

Project Manager: David Bowen, P.E.
Contractor(s): N/A

Location: Field's Point (Providence, RI)
Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	July-22	May-24	22 Months	$608
Construction	April-24	May-26	25 Months	6,127
Total Project	**July-22**	**May-26**	**46 Months**	**$6,735**

Photo: IM Building

This project involves the design and construction of a new building that would be needed if NBC is required by legislation to assume ownership of lateral sewers currently owned by local communities within its district. The building will include an administrative area as well as a garage and storage yard.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ -**	**$ -**	**$ 215**	**$ 413**	**$ 2,481**	**$ 3,626**	**$ 6,735**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ 40	$ 48	$ -	$ -	$ 88
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	175	325	-	-	500
Other	-	-	-	-	-	20	-	-	20
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ 215**	**$ 393**	**$ -**	**$ -**	**$ 608**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ 17	$ 180	$ 165	$ 362
A/E Professional	-	-	-	-	-	3	36	26	65
Construction	-	-	-	-	-	-	2,200	2,800	5,000
Contingency	-	-	-	-	-	-	-	600	600
Other	-	-	-	-	-	-	65	35	100
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 20**	**$ 2,481**	**$ 3,626**	**$ 6,127**

Note: Cash Flow Basis in Thousands

13200

FPWWTF Maintenance Facilities

Project Manager: David Bowen, P.E.
Contractor(s): N/A

Location: 2 Ernest Street, Providence, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	August-20	June-22	22 Months	$746
Construction	June-22	May-24	22 Months	5,997
Total Project	**August-20**	**May-24**	**44 Months**	**$6,743**

Photo: Field's Point Maintenance Building

This project involves the design and construction of a new maintenance building and support facilities at the FPWWTF. While not critical to plant operations, it will improve efficiency in maintenance support since the existing maintenance building was originally built in 1900 and is insufficient to meet the needs of operations.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ 208**	**$ 555**	**$ 2,863**	**$ 3,117**	**$ -**	**$ -**	**$ 6,743**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 52	$ 50	$ -	$ -	$ -	$ -	$ 102
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	156	468	-	-	-	-	624
Other	-	-	-	20	-	-	-	-	20
Total	**$ -**	**$ -**	**$ 208**	**$ 538**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 746**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ 17	$ 180	$ 160	$ -	$ -	$ 357
A/E Professional	-	-	-	-	48	22	-	-	70
Construction	-	-	-	-	2,600	2,400	-	-	5,000
Contingency	-	-	-	-	-	500	-	-	500
Other	-	-	-	-	35	35	-	-	70
Total	**$ -**	**$ -**	**$ -**	**$ 17**	**$ 2,863**	**$ 3,117**	**$ -**	**$ -**	**$ 5,997**

Note: Cash Flow Basis in Thousands

20000
WWTF Improvements

Project Manager: David Bowen, P.E.
Contractor(s): N/A

Location: Field's Point & Bucklin Point WWTF's
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	March-18	Ongoing	Ongoing	2,500
Total Project	**March-18**	**Ongoing**	**Ongoing**	**$2,500**

Photo: Aeration Tank Pumps

This project is a placeholder for facility improvements at NBC's WWTF's to comply with current and future regulatory requirements and ensure uninterrupted wastewater treatment processing, 24 hours per day and 365 days per year. NBC programs $500 thousand annually for improvements to ensure resources are available in years that do not have specific projects identified. As new projects are identified, they will be given a unique project number.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ -**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 2,500**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ 58	$ 58	$ 58	$ 58	$ 58	$ 290
A/E Professional	-	-	-	-	$ -	-	-	-	-
Construction	-	-	-	422	$ 422	422	422	422	2,110
Contingency	-	-	-	-	$ -	-	-	-	-
Other	-	-	-	20	$ 20	20	20	20	100
Total	**$ -**	**$ -**	**$ -**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 2,500**

Note: Cash Flow Basis in Thousands

20200

FY 2019 WWTF Improvements

Project Manager: David Bowen, P.E.
Contractor(s): Wright Pierce

Location: Field's Point (Providence, RI)
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	July-18	April-20	21 Months	$557
Construction	May-19	May-21	24 Months	$3,033
Total Project	**July-18**	**May-21**	**34 Months**	**$3,590**

Photo: CSO Tunnel Odor Control Facility

This project involves improvements and upgrades to the Field's Point WWTF and the tunnel pump station including the rehabilitation of various isolation gates and actuators, biological nutrient removal switchgear and froth spray line. Other improvements include modifications to the aeration tank, screw lift pumping station, blower building. This project also addresses enhancements to the CSO tunnel odor control facility at he tunnel pump station adjacent to the WWTF.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 421	**$ 1,368**	**$ 1,801**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,590**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 69	$ 56	$ -	$ -	$ -	$ -	$ -	$ -	$ 125
Land	-	-	-	-	-	-	-	-	-
A/E Professional	337	75	-	-	-	-	-	-	412
Other	10	10	-	-	-	-	-	-	20
Total	**$ 416**	**$ 141**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 557**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 5	$ 54	$ 56	$ -	$ -	$ -	$ -	$ -	$ 115
A/E Professional	-	63	75	-	-	-	-	-	138
Construction	-	1,090	1,410	-	-	-	-	-	2,500
Contingency	-	-	250	-	-	-	-	-	250
Other	-	20	10	-	-	-	-	-	30
Total	**$ 5**	**$ 1,227**	**$ 1,801**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,033**

Note: Cash Flow Basis in Thousands

40100

NBC Facility Electrical Improvements

Project Manager: David Bowen, P.E.
Contractor(s): N/A

Location: NBC Service Area
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	May-19	May-20	12 Months	$130
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	**May-19**	**May-20**	**12 Months**	**$130**

Photo: Field's Point Electrical Facility

This project involves the evaluation of NBC's existing electrical equipment and facilities. Upon completion of the evaluation, improvements will be performed as necessary to ensure reliable and continuous operation of facilities throughout the NBC's service area.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 19	**$ 111**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 130**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 3	$ 17	$ -	$ -	$ -	$ -	$ -	$ -	$ 20
A/E Professional	16	84	-	-	-	-	-	-	100
Other	-	10	-	-	-	-	-	-	10
Total	**$ 19**	**$ 111**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 130**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

40101

FPWWTF Facility Electrical Improvements

Project Manager: David Bowen, P.E.
Contractor(s): SED Associates Corp.

Location: Providence, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	January-16	May-20	52 Months	$170
Design	May-20	June-21	14 Months	$217
Construction	June-21	November-22	17 Months	2,152
Total Project	**January-16**	**November-22**	**83 Months**	**$2,539**

Photo: Field's Point Electrical Facility

This project involves the evaluation and installation of standby power capabilities for critical facilities at the FPWWTF in order to maintain uninterrupted operation of treatment processes.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 63	**$ 112**	**$ 217**	**$ 1,177**	**$ 970**	**$ -**	**$ -**	**$ -**	**$ 2,539**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 27	$ 23	$ -	$ -	$ -	$ -	$ -	$ -	$ 50
A/E Professional	35	84	-	-	-	-	-	-	119
Other	1	-	-	-	-	-	-	-	1
Total	**$ 63**	**$ 107**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 170**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 5	$ 27	$ -	$ -	$ -	$ -	$ -	$ 32
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	175	-	-	-	-	-	175
Other	-	-	10	-	-	-	-	-	10
Total	**$ -**	**$ 5**	**$ 212**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 217**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 5	$ 53	$ 23	$ -	$ -	$ -	$ 81
A/E Professional	-	-	-	63	33	-	-	-	96
Construction	-	-	-	1,021	729	-	-	-	1,750
Contingency	-	-	-	-	175	-	-	-	175
Other	-	-	-	40	10	-	-	-	50
Total	**$ -**	**$ -**	**$ 5**	**$ 1,177**	**$ 970**	**$ -**	**$ -**	**$ -**	**$ 2,152**

Note: Cash Flow Basis in Thousands

81000

BPWWTF UV Disinfection Improvements

Project Manager: David Bowen, P.E.
Contractor(s): N/A
Location: Bucklin Point WWTF (East Providence, RI)
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-18	January-20	24 Months	$610
Construction	February-20	July-22	29 Months	5,642
Total Project	**January-18**	**July-22**	**54 Months**	**$6,252**

Photo: UV Disinfection System

This project involves the evaluation of the current Ultraviolet (UV) Disinfection system at the Bucklin Point WWTF and implementation of a system replacement/upgrade. The current UV equipment is nearing the end of its useful life and the medium pressure, high intensity lamps are expensive and less efficient than newer technologies.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 259	**$ 440**	**$ 2,310**	**$ 3,140**	**$ 103**	**$ -**	**$ -**	**$ -**	**$ 6,252**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 61	$ 35	$ -	$ -	$ -	$ -	$ -	$ -	$ 96
Land	-	-	-	-	-	-	-	-	-
A/E Professional	153	296	-	-	-	-	-	-	449
Other	45	20	-	-	-	-	-	-	65
Total	**$ 259**	**$ 351**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 610**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 19	$ 60	$ 60	$ 3	$ -	$ -	$ -	$ 142
A/E Professional	-	60	180	120	-	-	-	-	360
Construction	-	-	2,050	2,350	100	-	-	-	4,500
Contingency	-	-	-	600	-	-	-	-	600
Other	-	10	20	10	-	-	-	-	40
Total	**$ -**	**$ 89**	**$ 2,310**	**$ 3,140**	**$ 103**	**$ -**	**$ -**	**$ -**	**$ 5,642**

Note: Cash Flow Basis in Thousands

81600

BPWWTF Improvements

Project Manager: David Bowen, P.E.
Contractor(s): TBD

Location: BPWWTF
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-19	December-20	21 Months	$476
Construction	December-20	October-22	22 Months	4,905
Total Project	**March-19**	**October-22**	**43 Months**	**$5,381**

Photo: Screening and Grit Boilers

This project involves improvements and upgrades to the Bucklin Point WWTF including the repair or replacement of boilers, hydronic piping systems, and isolation gates. Other improvements include modifications to HVAC systems and installation of redundant power and electrical sump pump systems.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 42	**$ 297**	**$ 951**	**$ 3,399**	**$ 693**	**$ -**	**$ -**	**$ -**	**$ 5,381**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 27	$ 72	$ 29	$ -	$ -	$ -	$ -	$ -	$ 128
Land	-	-	-	-	-	-	-	-	-
A/E Professional	15	215	103	-	-	-	-	-	333
Other	-	10	5	-	-	-	-	-	15
Total	**$ 42**	**$ 297**	**$ 137**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 476**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 44	$ 63	$ 20	$ -	$ -	$ -	$ 127
A/E Professional	-	-	60	264	73	-	-	-	397
Construction	-	-	700	2,665	600	-	-	-	3,965
Contingency	-	-	-	397	-	-	-	-	397
Other	-	-	10	10	-	-	-	-	20
Total	**$ -**	**$ -**	**$ 814**	**$ 3,399**	**$ 693**	**$ -**	**$ -**	**$ -**	**$ 4,905**

Note: Cash Flow Basis in Thousands

81700

BPWWTF Operations Building

Project Manager: David Bowen, P.E.
Contractor(s): TBD

Location: Bucklin Point WWTF
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-19	October-20	18 Months	$954
Construction	November-20	October-22	23 Months	12,212
Total Project	**May-19**	**October-22**	**41 Months**	**$13,166**

Photo: Current Operations Building

Due to aging infrastructure, climate resiliency concerns and the need for more efficient facilities there is an urgent need to design and construct a new Operations Building at the Bucklin Point campus. This building will contain additional office space, training and locker rooms, and the WWTF's SCADA Control Room which are necessary to maintain system reliability and efficient operations. This project was previously included as part of the CSO Phase III Facilities.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 10	**$ 630**	**$ 1,433**	**$ 8,763**	**$ 2,330**	**$ -**	**$ -**	**$ -**	**$ 13,166**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 8	$ 33	$ 11	$ -	$ -	$ -	$ -	$ -	$ 52
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	567	283	-	-	-	-	-	850
Other	2	30	20	-	-	-	-	-	52
Total	**$ 10**	**$ 630**	**$ 314**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 954**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 36	$ 100	$ 16	$ -	$ -	$ -	$ 152
A/E Professional	-	-	273	545	182	-	-	-	1,000
Construction	-	-	800	7,578	1,622	-	-	-	10,000
Contingency	-	-	-	500	500	-	-	-	1,000
Other	-	-	10	40	10	-	-	-	60
Total	**$ -**	**$ -**	**$ 1,119**	**$ 8,763**	**$ 2,330**	**$ -**	**$ -**	**$ -**	**$ 12,212**

Note: Cash Flow Basis in Thousands

90900

COB Facilities Improvements

Project Manager: Rich Bernier, P.E.
Contractor(s): TBD

Location: COB and Lab
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-19	April-19	3 Months	$70
Construction	March-19	June-20	15 Months	1,080
Total Project	**January-19**	**June-20**	**17 Months**	**$1,150**

Photo: COB Office Space

Replacement of carpeting, office furniture, painting and office reconfigurations for the 1st, 2nd and 3rd floors of the corporate office building which has not been updated since 2002. Reconfiguration of the office space at the Water Quiality Science building to accommodate reorganization of NBC's staff. The need to replace HVAC units and sections of roof will also be assessed and completed as part of this project.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 12	**$ 1,068**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,080**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 20	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 20
Land	-	-	-	-	-	-	-	-	-
A/E Professional	50	-	-	-	-	-	-	-	50
Other	-	-	-	-	-	-	-	-	-
Total	**$ 70**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 70**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 12	$ 40	$ -	$ -	$ -	$ -	$ -	$ -	$ 52
A/E Professional	-	10	-	-	-	-	-	-	10
Construction	-	900	-	-	-	-	-	-	900
Contingency	-	108	-	-	-	-	-	-	108
Other	-	10	-	-	-	-	-	-	10
Total	**$ 12**	**$ 1,068**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,080**

Note: Cash Flow Basis in Thousands

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1140100
River Model Development

Project Manager: Thomas Uva
Contractor(s): Kincaid Consulting

Location: NBC Receiving Waters
Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-05	February-24	228 Months	$558
Construction	N/A	N/A	N/A	N/A
Total Project	**March-05**	**February-24**	**228 Months**	**$558**

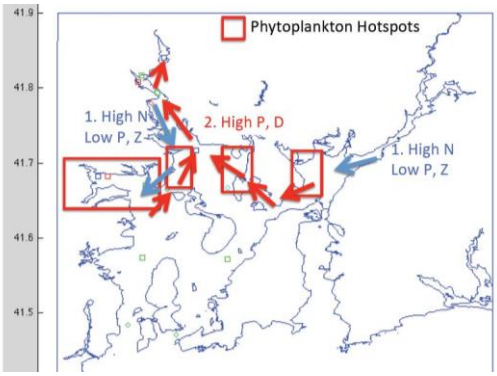

Photo: Map of phytoplankton flow dynamics seen in the ROMS biological model.

The Regional Ocean Modeling System (ROMS) for the Providence and Seekonk Rivers and Narragansett Bay tracks the circulation and transport of nutrients and determines how changing nitrogen loads affect the biology and water quality of the receiving waters. This project is for continued work on the model to improve predictions and validate accuracy.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 351	**$ 80**	**$ 10**	**$ 60**	**$ -**	**$ 57**	**$ -**	**$ -**	**$ 558**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 56	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 56
Land	-	-	-	-	-	-	-	-	-
A/E Professional	229	80	10	60	-	57	-	-	436
Other	66	-	-	-	-	-	-	-	66
Total	**$ 351**	**$ 80**	**$ 10**	**$ 60**	**$ -**	**$ 57**	**$ -**	**$ -**	**$ 558**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

1140300

Green House Gas Study

Project Manager: James Kelly
Contractor(s): University of Rhode Island
Location: Field's Point (Providence, RI)
Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	October-14	February-21	77 Months	$153
Construction	N/A	N/A	N/A	N/A
Total Project	**October-14**	**February-21**	**77 Months**	**$153**

Photo: Greenhouse Gas Collection

The Greenhouse Gas Study is designed to quantify NBC's overall carbon footprint by measuring greenhouse gas emissions from wastewater collection and treatment operations. The study will ensure NBC can quickly address future regulatory requirements related to greenhouse gas emissions.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 28	**$ 65**	**$ 60**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 153**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 9	$ 6	$ 2	$ -	$ -	$ -	$ -	$ -	$ 17
Land	-	-	-	-	-	-	-	-	-
A/E Professional	19	59	58	-	-	-	-	-	136
Other	-	-	-	-	-	-	-	-	-
Total	**$ 28**	**$ 65**	**$ 60**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 153**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

1140500

NBC Energy Sustainability

Project Manager: James Kelly
Contractor(s): Various

Location: Various Locations
Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-16	February-21	61 Months	$248
Construction	N/A	N/A	N/A	N/A
Total Project	**January-16**	**February-21**	**61 Months**	**$248**

Photo: Solar Panels

The Energy Sustainability Program is designed to identify, measure, and implement ways of obtaining and using energy so that energy needs are met while minimizing environmental impacts and assuring sufficient energy sources are available to meet future needs. The Energy Sustainability Program maximizes conservation, efficiencies and employment of sustainable renewable energy resources in an economically viable and reliable manner.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 139	**$ 32**	**$ 77**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 248**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 115	$ 22	$ -	$ -	$ -	$ -	$ -	$ -	$ 137
Land	-	-	-	-	-	-	-	-	-
A/E Professional	7	10	-	-	-	-	-	-	17
Other	17	-	77	-	-	-	-	-	94
Total	**$ 139**	**$ 32**	**$ 77**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 248**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

1140600

RIPDES Compliance Improvements

Project Manager: David Bowen, P.E.
Contractor(s): TBD

Location: NBC District
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-18	February-23	59 Months	$1,551
Construction	N/A	N/A	N/A	N/A
Total Project	**March-18**	**February-23**	**59 Months**	**$1,551**

Photo: Aerial view of the NBC's Providence Campus

This project includes improvements to the wastewater treatment and collections system that may be required to comply with new permit limits and mandates. Specific improvements shall be identified through a metals translator study, a site specific study, an upper bay dissolved oxygen evaluation, and the development of a climate resiliency plan.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 470	**$ 322**	**$ 198**	**$ 238**	**$ 323**	**$ -**	**$ -**	**$ -**	**$ 1,551**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 306	$ 170	$ 131	$ 170	$ 292	$ -	$ -	$ -	$ 1,069
Land	-	-	-	-	-	-	-	-	-
A/E Professional	154	140	49	48	14	-	-	-	405
Other	10	12	18	20	17	-	-	-	77
Total	**$ 470**	**$ 322**	**$ 198**	**$ 238**	**$ 323**	**$ -**	**$ -**	**$ -**	**$ 1,551**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

30700

NBC System-wide Facilities Planning

Project Manager: David Bowen, P.E.
Contractor(s): N/A

Location: NBC Service Area
Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	July-19	May-21	23 Months	$399
Construction	N/A	N/A	N/A	N/A
Total Project	**July-19**	**May-21**	**23 Months**	**$399**

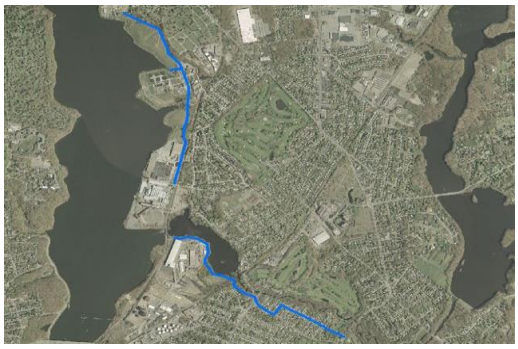

Photo: Proposed area for the East Providence capacity analysis

Project 30700 consists of planning activities that will determine if there is adequate system capacity for the next twenty years and will also determine if there is any excess infiltration/inflow in NBC's interceptors. As the evaluations begin for specific cities and towns, each will be given a unique project number.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ -	**$ 173**	**$ 226**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 399**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 57	$ 38	$ -	$ -	$ -	$ -	$ -	$ 95
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	116	158	-	-	-	-	-	274
Other	-	-	30	-	-	-	-	-	30
Total	**$ -**	**$ 173**	**$ 226**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 399**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

40200

NBC System-wide Inflow Reduction

Project Manager: David Bowen, P.E.
Contractor(s): N/A

Location: NBC Service Area
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	September-20	January-22	16 Months	$137
Construction	March-22	June-23	16 Months	318
Total Project	**September-20**	**June-23**	**34 Months**	**$455**

Photo: Downspouts at NBC's Corporate Office Building

This project involves the development and implementation of an inflow reduction program to remove stormwater from sanitary sewers in the NBC's service area. This project is imperative to prevent surcharging of sewers that could cause illegal sanitary sewer overflows during wet weather events.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ 88**	**$ 97**	**$ 270**	**$ -**	**$ -**	**$ -**	**$ 455**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 18	$ 14	$ -	$ -	$ -	$ -	$ 32
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	65	35	-	-	-	-	100
Other	-	-	5	-	-	-	-	-	5
Total	**$ -**	**$ -**	**$ 88**	**$ 49**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 137**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ 14	$ 42	$ -	$ -	$ -	$ 56
A/E Professional	-	-	-	12	30	-	-	-	42
Construction	-	-	-	17	183	-	-	-	200
Contingency	-	-	-	-	10	-	-	-	10
Other	-	-	-	5	5	-	-	-	10
Total	**$ -**	**$ -**	**$ -**	**$ 48**	**$ 270**	**$ -**	**$ -**	**$ -**	**$ 318**

Note: Cash Flow Basis in Thousands

40300

Municipal Lateral Sewer Acquisition Impact

Project Manager: David Bowen, P.E.
Contractor(s): N/A

Location: NBC Service Area
Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	June-20	June-22	24 Months	$296
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	**June-20**	**June-22**	**24 Months**	**$296**

Photo: Municipal Sewer Manhole Cover

This project involves the evaluation of the impact of NBC assuming ownership of lateral sewers that are currently owned by municipalities within the NBC service area. This project will be required should legislation be passed by the General Assembly requiring NBC to take over ownership and maintenance of local sewers within the NBC district.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ 1**	**$ 151**	**$ 144**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 296**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 1	$ 11	$ 24	$ -	$ -	$ -	$ -	$ 36
A/E Professional	-	-	130	120	-	-	-	-	250
Other	-	-	10	-	-	-	-	-	10
Total	**$ -**	**$ 1**	**$ 151**	**$ 144**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 296**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

40400

FPWWTF Facilities Plan Update

Project Manager: David Bowen, P.E.
Contractor(s): CH2M Hill

Location: Providence, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	January-17	December-19	35 Months	$415
Design	N/A	N/A	N/A	N/A
Construction	N/A	N/A	N/A	N/A
Total Project	**January-17**	**December-19**	**35 Months**	**$415**

Photo: Aeration Tanks at Field's Point WWTF

This project involves the update of the FPWWTF Facilities Plan and determining the maximum nitrogen and biochemical oxygen demand loads that can be accepted at the facility while meeting RIPDES permit limits as well as resources required to review and ensure compliance with the RIPDES permit recently issued by RIDEM.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 342	**$ 73**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 415**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 302	$ 73	$ -	$ -	$ -	$ -	$ -	$ -	$ 375
A/E Professional	20	-	-	-	-	-	-	-	20
Other	20	-	-	-	-	-	-	-	20
Total	**$ 342**	**$ 73**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 415**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

40500

RIPDES Flow Monitoring System

Project Manager: Margaret Goulet, P.E.
Contractor(s): ADS Environmental Services

Location: NBC Service Area
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	December-17	December-19	25 Months	$848
Construction	N/A	N/A	N/A	N/A
Total Project	**December-17**	**December-19**	**25 Months**	**$848**

Photo: Floatables Control Facility

This project involves the replacement of existing flow monitoring equipment located throughout NBC's collection system. An evaluation will be conducted to determine whether the equipment should be upgraded or replaced with an alternate advanced technology in order to provide consistent and accurate monitoring of flow conditions and measurements in accordance with the RIPDES permit. In addition, field services and data analysis will be conducted throughout the collection system.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 109	**$ 739**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 848**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 29	$ 24	$ -	$ -	$ -	$ -	$ -	$ -	$ 53
Land	-	-	-	-	-	-	-	-	-
A/E Professional	80	715	-	-	-	-	-	-	795
Other	-	-	-	-	-	-	-	-	-
Total	**$ 109**	**$ 739**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 848**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

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30800
CSO Phase III A Facilities

Project Manager: Kathryn Kelly, P.E.
Contractor(s): Stantec Consulting Services

Location: Pawtucket, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	April-13	December-22	117 Months	$72
Construction	N/A	N/A	N/A	N/A
Total Project	**April-13**	**December-22**	**117 Months**	**$72,331**

Photo: Proposed alignment for the Pawtucket CSO Tunnel

Phase III A is to design and construct a deep rock tunnel in Pawtucket approximately 13,000 feet in length along the Seekonk and Blackstone Rivers, a pump station to convey flow to the Bucklin Point WWTF in East Providence, drop shafts and consolidation conduits. In addition, GSI facilities will be constructed to reduce storm water inflow by infiltration of storm water into the ground.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 26,159	**$ 29,133**	**$ 12,389**	**$ 3,797**	**$ 852**	**$ -**	**$ -**	**$ -**	**$ 72,331**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 1,999	$ 918	$ 607	$ 600	$ 300	$ -	$ -	$ -	$ 4,425
Land	14	9,486	-	-	-	-	-	-	9,500
A/E Professional	23,936	18,504	11,644	3,197	552	-	-	-	57,833
Other	210	225	138	-	-	-	-	-	574
Total	**26,159**	**29,133**	**12,389**	**3,797**	**852**	**-**	**-**	**-**	**72,331**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Note: Cash Flow Basis in Thousands

30801

CSO Phase III Facilities Pawtucket Tunnel & Pump Station

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	January-21	December-25	59 Months	$307,274
Total Project	**January-21**	**December-25**	**59 Months**	**$307,274**

Photo: Phase I Tunnel in Providence

This project includes the construction of a deep rock storage tunnel, launch and drop shafts, drop shafts, and adits. After construction of the tunnel, tunnel pump station, and associated near surface facilities, CSO flow which currently discharges to the Seekonk and Blackstone Rivers shall be diverted to the tunnel during storms smaller than or equal to a three-month design storm. The diverted CSO flow will be stored in the tunnel and will be pumped to the plant for full treatment when capacity becomes available.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ 13,147**	**$ 72,172**	**$ 124,869**	**$ 79,331**	**$ 16,525**	**$ 1,230**	**$ 307,274**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 1,260	$ 1,857	$ 1,593	$ 1,593	$ 697	$ -	$ 7,000
A/E Professional	-	-	1,100	6,050	10,500	6,960	2,640	1,230	28,480
Construction	-	-	8,700	60,090	108,601	66,603	11,100	-	255,094
Contingency	-	-	2,087	4,175	4,175	4,175	2,088	-	16,700
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ 13,147**	**$ 72,172**	**$ 124,869**	**$ 79,331**	**$ 16,525**	**$ 1,230**	**$ 307,274**

Note: Cash Flow Basis in Thousands

30802

CSO Phase III Facilities - Tunnel Pump Station Fit-out

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	January-23	December-26	47 Months	$71,340
Total Project	**January-23**	**December-26**	**47 Months**	**$71,340**

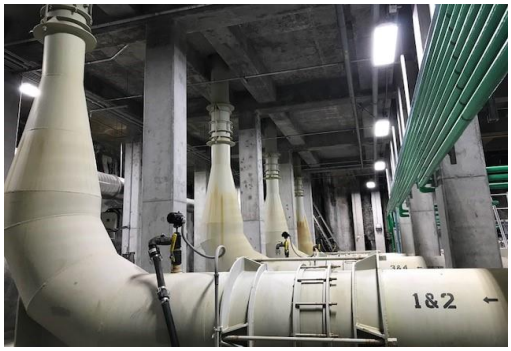

Photo: Inside Ernest St. Tunnel Pump Station

This project includes construction of the CSO Tunnel Pump Station (TPS). The TPS will be constructed on a site in Pawtucket near the Bucklin Point Wastewater Treatment Facility and includes 3 variable frequency drive pumps, a stand-by generator, masonry building, electrical gear and conduit, valves, piping, elevator shaft, staircase, odor control facilities and screenings facility.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	$ -	$ -	$ -	$ 1,605	$ 19,292	$ 32,884	$ 17,559	$ 71,340

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ 270	$ 540	$ 540	$ 590	$ 1,940
A/E Professional	-	-	-	-	235	1,667	2,682	1,670	6,254
Construction	-	-	-	-	1,053	16,012	27,802	14,341	59,208
Contingency	-	-	-	-	47	1,073	1,860	958	3,938
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,605**	**$ 19,292**	**$ 32,884**	**$ 17,559**	**$ 71,340**

Note: Cash Flow Basis in Thousands

30803

CSO Phase III Facilities-OF 205

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	April-22	June-24	26 Months	$5,535
Total Project	**April-22**	**June-24**	**26 Months**	**$5,535**

Photo: Outfall 205 Location

This project entails constructing near-surface facilities to direct flow from the existing CSO 205 outfall pipe to a drop shaft during storms smaller than or equal to the three-month design storm. In addition, this project includes the construction of a consolidation conduit and gate and screening structure. The drop shaft and adit connecting the facilities to the tunnel will be constructed as part of another project.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ -	$ -	$ -	$ 1	$ 2,630	$ 2,904	$ -	$ -	$ 5,535

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ 1	$ 60	$ 72	$ -	$ -	$ 133
A/E Professional	-	-	-	-	524	564	-	-	1,088
Construction	-	-	-	-	1,916	2,128	-	-	4,044
Contingency	-	-	-	-	130	140	-	-	270
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ 1**	**$ 2,630**	**$ 2,904**	**$ -**	**$ -**	**$ 5,535**

Note: Cash Flow Basis in Thousands

30804

CSO Phase III Facilities - OF 210, 213, 214

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	September-22	December-24	27 Months	$10,618
Total Project	**September-22**	**December-24**	**27 Months**	**$10,618**

Photo: Outfall Locations

This project includes the construction of consolidation conduits to direct flow to the tunnel via Drop Shaft 213 from CSO outfalls 210, 211, 213, and 214.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ -**	**$ -**	**$ 2,154**	**$ 5,524**	**$ 2,940**	**$ -**	**$ 10,618**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ 59	$ 138	$ 69	$ -	$ 266
A/E Professional	-	-	-	-	164	433	236	-	833
Construction	-	-	-	-	1,804	4,649	2,483	-	8,936
Contingency	-	-	-	-	127	304	152	-	583
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,154**	**$ 5,524**	**$ 2,940**	**$ -**	**$ 10,618**

Note: Cash Flow Basis in Thousands

30805

CSO Phase III Facilities - OF 217

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	September-20	November-22	27 Months	$17,305
Total Project	**September-20**	**November-22**	**27 Months**	**$17,305**

Photo: Outfall 217

This project consists of the construction of a consolidation conduit to direct flow to the tunnel via Drop Shaft 213 from CSO outfall 217.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ -	**$ -**	**$ 4,798**	**$ 8,994**	**$ 3,513**	**$ -**	**$ -**	**$ -**	**$ 17,305**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 115	$ 228	$ 95	$ -	$ -	$ -	$ 438
A/E Professional	-	-	384	696	260	-	-	-	1,340
Construction	-	-	4,062	7,596	2,939	-	-	-	14,597
Contingency	-	-	237	474	219	-	-	-	930
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ 4,798**	**$ 8,994**	**$ 3,513**	**$ -**	**$ -**	**$ -**	**$ 17,305**

Note: Cash Flow Basis in Thousands

30806

CSO Phase III Facilities - OF 218

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	March-23	October-25	31 Months	$7,266
Total Project	**March-23**	**October-25**	**31 Months**	**$7,266**

Photo: Outfall 218 Location

This project involves the construction of a consolidation conduit to direct flow to the tunnel via Drop Shaft 218 from CSO outfall 218.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ -**	**$ -**	**$ 1**	**$ 3,007**	**$ 3,640**	**$ 618**	**$ 7,266**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ 1	$ 75	$ 82	$ 27	$ 184
A/E Professional	-	-	-	-	-	260	296	55	611
Construction	-	-	-	-	-	2,507	3,061	503	6,071
Contingency	-	-	-	-	-	165	202	34	400
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1**	**$ 3,007**	**$ 3,640**	**$ 618**	**$ 7,266**

Note: Cash Flow Basis in Thousands

30807

CSO Phase III Facilities-Regulator Modifications

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	December-19	November-21	24 Months	$1,874
Total Project	**December-19**	**November-21**	**24 Months**	**$1,874**

Photo: Outfall Locations

This project includes modifications to the regulators for CSO outfalls 203, 204, 207, 208, 209, 212, 215, and 216. Modifications are required in order to direct flow to the tunnel through consolidation conduits constructed in other Phase III A & B projects.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ -	**$ 82**	**$ 1,195**	**$ 597**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,874**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 4	$ 30	$ 13	$ -	$ -	$ -	$ -	$ 47
A/E Professional	-	-	74	62	-	-	-	-	136
Construction	-	72	1,014	484	-	-	-	-	1,570
Contingency	-	6	77	38	-	-	-	-	121
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ 82**	**$ 1,195**	**$ 597**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,874**

Note: Cash Flow Basis in Thousands

30808

CSO Phase III Facilities - GSI Demonstration

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Central Falls
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-19	March-21	21 Months	$2,745
Total Project	**July-19**	**March-21**	**21 Months**	**$2,745**

Photo: Dry wells used to promote infiltration of stormwater runoff

Project 30808 will demonstrate the effectiveness of Green Stormwater Infrastructure (GSI) technology and involves the construction of catch basins and storm pipes on High Street in Central Falls.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ 1,502**	**$ 1,243**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,745**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 33	$ 41	$ -	$ -	$ -	$ -	$ -	$ 74
A/E Professional	-	-	16	-	-	-	-	-	16
Construction	-	1,400	1,100	-	-	-	-	-	2,500
Contingency	-	69	86	-	-	-	-	-	155
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ 1,502**	**$ 1,243**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,745**

Note: Cash Flow Basis in Thousands

30809

CSO Phase III - GSI Projects

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Central Falls
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	December-19	May-21	18 Months	$6,543
Total Project	**December-19**	**May-21**	**18 Months**	**$6,543**

Photo: Example of Green Stormwater Infrastructure

This project entails the construction of Green Stormwater Infrastructure (GSI) in the City of Central Falls. GSI will be constructed in the CSO 101 and 103 sewersheds and will include tree box filters, bio-retention basins, infiltration chambers, and other facilities to promote infiltration of stormwater runoff to the groundwater table.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ -	**$ 1,719**	**$ 4,824**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 6,543**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 48	$ 129	$ -	$ -	$ -	$ -	$ -	$ 177
A/E Professional	-	-	100	-	-	-	-	-	100
Construction	-	1,573	4,325	-	-	-	-	-	5,898
Contingency	-	98	270	-	-	-	-	-	368
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ 1,719**	**$ 4,824**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 6,543**

Note: Cash Flow Basis in Thousands

30810

CSO Phase III Facilities - BPWWTF Clarifiers and Flow Splitters

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: East Providence
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	November-20	August-23	34 Months	$18,097
Total Project	**November-20**	**August-23**	**34 Months**	**$18,097**

Photo: Existing Clarifiers at Bucklin Point

This project entails the construction of two new final clarifiers, modifications to the flow splitting operation, construction of a new Return Activiated Sludge (RAS) pump station for the new final clarifiers, and improvements to the RAS piping system and influent pump station.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ 905**	**$ 8,525**	**$ 8,179**	**$ 488**	**$ -**	**$ -**	**$ 18,097**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 46	$ 180	$ 180	$ 30	$ -	$ -	$ 436
A/E Professional	-	-	82	868	962	87	-	-	1,999
Construction	-	-	678	7,079	6,639	305	-	-	14,701
Contingency	-	-	99	398	398	66	-	-	961
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ 905**	**$ 8,525**	**$ 8,179**	**$ 488**	**$ -**	**$ -**	**$ 18,097**

Note: Cash Flow Basis in Thousands

30811

CSO Phase III High Street Demo

Project Manager: Rich Bernier, P.E.
Contractor(s): JR Vinagro Corporation

Location: Central Falls, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	May-18	January-20	21 Months	$304
Total Project	**May-18**	**January-20**	**21 Months**	**$304**

Photo: Existing Structure

This project involves the demolition of a building to ready the site for a GSI project as part of the CSO Phase III program. This work consists of building demolition, backfilling excavation to grade, and removing utilities and drainage structures.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 282	**$ 22**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 304**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 37	$ 1	$ -	$ -	$ -	$ -	$ -	$ -	$ 38
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	221	21	-	-	-	-	-	-	242
Contingency	22	-	-	-	-	-	-	-	22
Other	2	-	-	-	-	-	-	-	2
Total	**$ 282**	**$ 22**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 304**

Note: Cash Flow Basis in Thousands

30812

CSO Phase III Facilities - Dexter Street Stormwater Infrastructure

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-19	June-20	12 Months	$1,396
Total Project	**July-19**	**June-20**	**12 Months**	**$1,396**

Photo: Permeable Pavement in parking lot

This project entails the construction of Green Stormwater Infrastructure on Dexter Street in Pawtucket. Impervious pavement in the existing parking lot will be removed and replaced with porous pavement and catch basins and storm pipes will be installed to convey stormwater to bioretention basins.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ 1,396**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,396**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 38	$ -	$ -	$ -	$ -	$ -	$ -	$ 38
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	1,280	-	-	-	-	-	-	1,280
Contingency	-	78	-	-	-	-	-	-	78
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ 1,396**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,396**

Note: Cash Flow Basis in Thousands

30813

CSO Phase III Facilities - Site Demolition

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Pawtucket
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	February-20	March-21	14 Months	$4,505
Total Project	**February-20**	**March-21**	**14 Months**	**$4,505**

Photo: Demolition Sites

This project entails the demolition of existing buildings to prepare sites for construction of the tunnel launch shaft, pump station shaft and drop shafts.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ 1,127**	**$ 3,378**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,505**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ 22	$ 63	$ -	$ -	$ -	$ -	$ -	$ 85
A/E Professional	-	30	90	-	-	-	-	-	120
Construction	-	1,000	3,000	-	-	-	-	-	4,000
Contingency	-	75	225	-	-	-	-	-	300
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ 1,127**	**$ 3,378**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,505**

Note: Cash Flow Basis in Thousands

30830

CSO Phase III B Facilities

Project Manager: Kathryn Kelly, P.E.
Contractor(s): N/A

Location: Central Falls, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	December-27	December-30	37 Months	28,484
Total Project	**December-27**	**December-30**	**156 Months**	**$28,484**

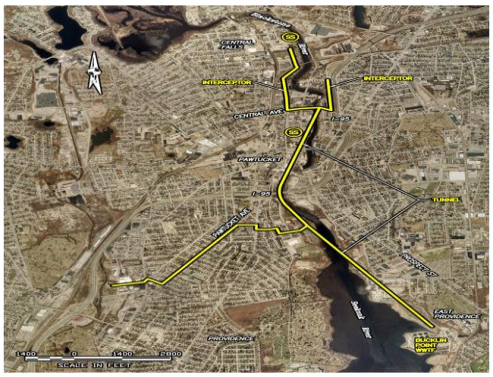

Photo: Proposed Phase III CSO Facilities

Phase III B is to design and construct two interceptors at High and Cross Street which will be approximately 4,200 feet in length and one at Middle Street approximately 2,000 feet in length. These interceptors will convey flow to the tunnel to be built in Phase III A. In addition, GSI facilities will be constructed to reduce storm inflow to the combined sewer system, and one sewer separation project will be included as part of Phase III B.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 28,484	$ 28,484

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 615	$ 615
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	26,433	26,433
Contingency	-	-	-	-	-	-	-	1,356	1,356
Other	-	-	-	-	-	-	-	80	80
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 28,484**	**$ 28,484**

Note: Cash Flow Basis in Thousands

30850
CSO Phase III C Facilities

Project Manager: Kathryn Kelly, P.E.
Contractor(s): N/A

Location: Pawtucket, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-32	June-34	26 Months	$23,120
Construction	April-34	June-37	39 Months	141,540
Total Project	**May-32**	**June-37**	**62 Months**	**$164,660**

Photo: Proposed Phase III CSO Facilities

Phase III C is to design and construct a stub tunnel that will convey flow from CSO 220 to the tunnel to be constructed in Phase III A. In addition, GSI facilities will be constructed to reduce storm water inflow to the combined sewers.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 164,660**	**$ 164,660**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 968	$ 968
Land	-	-	-	-	-	-	-	2,500	2,500
A/E Professional	-	-	-	-	-	-	-	14,440	14,440
Other	-	-	-	-	-	-	-	5,212	5,212
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 23,120**	**$ 23,120**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,160	$ 2,160
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	135,040	135,040
Contingency	-	-	-	-	-	-	-	3,360	3,360
Other	-	-	-	-	-	-	-	980	980
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 141,540**	**$ 141,540**

Note: Cash Flow Basis in Thousands

30870

CSO Phase III D Facilities

Project Manager: Kathryn Kelly, P.E.
Contractor(s): N/A

Location: Providence, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	April-37	September-39	29 Months	$13,180
Construction	August-39	December-41	28 Months	70,320
Total Project	**April-37**	**December-41**	**57 Months**	**$83,500**

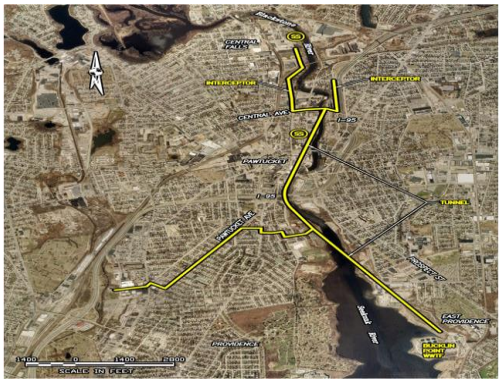

Photo: Proposed Phase III CSO Facilities

Phase III D is to design and construct an interceptor that will store flow during a storm and later release the flow into the system as capacity allows. In addition, GSI facilities will be constructed to reduce storm water inflow to the combined sewer system. Storm sewers will be constructed to separate stormwater flow from the combined sewer.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 83,500**	**$ 83,500**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,110	$ 1,110
Land	-	-	-	-	-	-	-	1,000	1,000
A/E Professional	-	-	-	-	-	-	-	8,000	8,000
Other	-	-	-	-	-	-	-	3,070	3,070
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 13,180**	**$ 13,180**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,010	$ 1,010
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	67,760	67,760
Contingency	-	-	-	-	-	-	-	1,320	1,320
Other	-	-	-	-	-	-	-	230	230
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 70,320**	**$ 70,320**

Note: Cash Flow Basis in Thousands

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30500

NBC Interceptor Easements Restoration, Various Locations

Project Manager: David Bowen, P.E.
Contractor(s): N/A
Location: NBC Service Area
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	June-19	January-21	19 Months	$439
Construction	January-21	November-21	10 Months	439
Total Project	**June-19**	**November-21**	**29 Months**	**$878**

Photo: Easement clearing

This project involves verification of easement locations and clearing the easements in overland areas to ensure sufficient access and enable NBC to maintain the integrity of the collection system.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 22	**$ 309**	**$ 384**	**$ 163**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 878**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 2	$ 54	$ 18	$ -	$ -	$ -	$ -	$ -	$ 74
Land	-	50	-	-	-	-	-	-	50
A/E Professional	20	190	90	-	-	-	-	-	300
Other	-	15	-	-	-	-	-	-	15
Total	**$ 22**	**$ 309**	**$ 108**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 439**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 18	$ 20	$ -	$ -	$ -	$ -	$ 38
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	250	100	-	-	-	-	350
Contingency	-	-	-	35	-	-	-	-	35
Other	-	-	8	8	-	-	-	-	16
Total	**$ -**	**$ -**	**$ 276**	**$ 163**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 439**

Note: Cash Flow Basis in Thousands

30503

NBC Interceptor Easements Restoration, BVI Wetlands

Project Manager: Rich Bernier, P.E.
Contractor(s): N/A
Location: Cumberland, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	December-18	June-20	18 Months	607
Total Project	**December-18**	**June-20**	**18 Months**	**$607**

Photo: Easement clearing in Cumberland

This project involves clearing easements along the Blackstone Valley Interceptor (BVI) in Cumberland that couldn't be completed as originally planned in Project 30501 due to wetlands issues. Wetlands permits will be obtained under Project 30501 and wetlands easements will be cleared under this project.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 106	**$ 501**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 607**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 24	$ 33	$ -	$ -	$ -	$ -	$ -	$ -	$ 57
A/E Professional	30	15	-	-	-	-	-	-	45
Construction	50	400	-	-	-	-	-	-	450
Contingency	-	45	-	-	-	-	-	-	45
Other	2	8	-	-	-	-	-	-	10
Total	**$ 106**	**$ 501**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 607**

Note: Cash Flow Basis in Thousands

70900

Omega Pump Station Upgrade

Project Manager: David Bowen, P.E.
Contractor(s): TBD
Location: Omega Pump Station, East Providence, RI
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	March-19	October-20	19 Months	$232
Construction	October-20	June-22	20 Months	1,826
Total Project	**March-19**	**June-22**	**39 Months**	**$2,058**

Photo: Omega Pump Station

This project involves the evaluation, design and replacement of pumps, piping and valves at the Omega Pump Station, which were originally built in the 1950's and are nearing the end of their useful life. New screening and grit technology will shred and reduce the size of coarse solid materials of the wastewater and facilitate transport to the wastewater treatment facility. Additionally, the new technology will provide for the upgrade of the pump station to improve reliability of the motor control center and streamline operations.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 16	**$ 165**	**$ 546**	**$ 1,331**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,058**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 11	$ 33	$ 8	$ -	$ -	$ -	$ -	$ -	$ 52
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	112	38	-	-	-	-	-	150
Other	5	20	5	-	-	-	-	-	30
Total	**$ 16**	**$ 165**	**$ 51**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 232**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 44	$ 22	$ -	$ -	$ -	$ -	$ 66
A/E Professional	-	-	41	39	-	-	-	-	80
Construction	-	-	400	1,100	-	-	-	-	1,500
Contingency	-	-	-	150	-	-	-	-	150
Other	-	-	10	20	-	-	-	-	30
Total	**$ -**	**$ -**	**$ 495**	**$ 1,331**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,826**

Note: Cash Flow Basis in Thousands

71000

Lincoln Septage Station Replacement

Project Manager: David Bowen, P.E.
Contractor(s): TBD

Location: Lincoln, RI
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-19	October-20	17 Months	$304
Construction	September-20	August-22	23 Months	2,458
Total Project	**May-19**	**August-22**	**39 Months**	**$2,762**

Photo: Septage Receiving Station

The existing Lincoln Septage Receiving Station has reached the end of its useful life and needs to be replaced. This project includes design and construction of a new septage receiving station equipped with a screening mechanism and sample collection capabilities in accordance with NBC's Standard Operating Procedures for monitoring septage.

CIP Window Summary

Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
$ 8	**$ 204**	**$ 604**	**$ 1,528**	**$ 418**	**$ -**	**$ -**	**$ -**	**$ 2,762**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 8	$ 44	$ 12	$ -	$ -	$ -	$ -	$ -	$ 64
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	140	60	-	-	-	-	-	200
Other	-	20	20	-	-	-	-	-	40
Total	**$ 8**	**$ 204**	**$ 92**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 304**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 42	$ 60	$ 10	$ -	$ -	$ -	$ 112
A/E Professional	-	-	50	48	8	-	-	-	106
Construction	-	-	400	1,400	200	-	-	-	2,000
Contingency	-	-	-	-	200	-	-	-	200
Other	-	-	20	20	-	-	-	-	40
Total	**$ -**	**$ -**	**$ 512**	**$ 1,528**	**$ 418**	**$ -**	**$ -**	**$ -**	**$ 2,458**

Note: Cash Flow Basis in Thousands

304 M Summary

Interceptor Inspection and Cleaning

Project Manager: Meg Goulet, P.E.
Contractor(s): Various

Location: NBC Service Area
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Inspection and Cleaning	July-09	Ongoing	Ongoing	3,579
Total Project	**July-09**	**Ongoing**	**Ongoing**	**$3,579**

Photo: Interceptor grit removal

The 304 M project includes the inspection and cleaning of interceptors in order to maintain NBC's infrastructure and collection system. The inspections determine pipe condition and identify infrastructure issues. NBC allocates $500 thousand annually for inspections and cleaning in years that do not have specific projects identified to ensure resources are available. As new inspection and cleaning projects are identified, they will be given a unique project number.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 79	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 3,579**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 13	$ 55	$ 55	$ 55	$ 55	$ 55	$ 55	$ 55	$ 398
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	60	370	370	370	370	370	370	370	2,650
Contingency	-	-	-	-	-	-	-	-	-
Other	6	75	75	75	75	75	75	75	531
Total	**$ 79**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 500**	**$ 3,579**

Note: Cash Flow Basis in Thousands

30400C

Interceptor Restoration and Construction

Project Manager: Rich Bernier, P.E.
Contractor(s): Various

Location: NBC Service Area
Project Priority: B

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	July-01	Ongoing	Ongoing	6,450
Total Project	**July-01**	**Ongoing**	**Ongoing**	**$6,450**

Photo: Proposed portion of Lincoln Interceptor Replacement

Project 30400C consists of funding programmed for potential restoration and construction to correct issues such as structural damage, aging or inaccessible infrastructure, odor control and emergency situations. NBC allocates $1.5 million annually for interceptor restoration and construction, in years that do not have specific projects identified to ensure resources are available. As new projects are identified, they will be given a unique project number.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ 1,466**	**$ -**	**$ 484**	**$ 1,500**	**$ 1,500**	**$ 1,500**	**$ 6,450**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 73	$ -	$ 24	$ 75	$ 75	$ 75	$ 323
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	-	1,222	-	403	1,250	1,250	1,250	5,375
Contingency	-	-	147	-	48	150	150	150	645
Other	-	-	24	-	8	25	25	25	108
Total	**$ -**	**$ -**	**$ 1,466**	**$ -**	**$ 484**	**$ 1,500**	**$ 1,500**	**$ 1,500**	**$ 6,450**

Note: Cash Flow Basis in Thousands

30315

CSO Phase II - WCSOI OF 046

Project Manager: Kathryn Kelly, P.E.
Contractor(s): TBD

Location: Providence
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	April-18	April-21	36 Months	$3,915
Total Project	**April-18**	**April-21**	**36 Months**	**$3,915**

Photo: Surcharge area at Kinsley Ave Providence, RI

This project includes construction of facilities to eliminate surcharging from the Woonasquatucket CSO Interceptor during extreme wet weather events.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 336	**$ 919**	**$ 2,660**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,915**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 35	$ 47	$ 80	$ -	$ -	$ -	$ -	$ -	$ 162
A/E Professional	262	360	200	-	-	-	-	-	822
Construction	15	410	2,050	-	-	-	-	-	2,475
Contingency	-	62	310	-	-	-	-	-	372
Other	24	40	20	-	-	-	-	-	84
Total	**$ 336**	**$ 919**	**$ 2,660**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,915**

Note: Cash Flow Basis in Thousands

30421

Louisquisset Pike Interceptor Improvements

Project Manager: David Bowen, P.E.
Contractor(s): N/A
Location: Lincoln, RI
Project Priority: C

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	May-07	May-09	24 Months	$178
Construction	February-21	June-22	16 Months	4,594
Total Project	**May-07**	**June-22**	**181 Months**	**$4,772**

Photo: Louisquisset Pike in Lincoln

This project involves the construction of a larger diameter interceptor in the northern section of the Town of Lincoln. The larger capacity pipe will accommodate the additional flow resulting from expected development.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ -	**$ -**	**$ 34**	**$ 3,544**	**$ 1,016**	**$ -**	**$ -**	**$ -**	**$ 4,594**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 23	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23
Land	-	-	-	-	-	-	-	-	-
A/E Professional	155	-	-	-	-	-	-	-	155
Other	-	-	-	-	-	-	-	-	-
Total	**$ 178**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 178**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ 22	$ 103	$ 16	$ -	$ -	$ -	$ 141
A/E Professional	-	-	12	41	-	-	-	-	53
Construction	-	-	-	3,400	600	-	-	-	4,000
Contingency	-	-	-	-	400	-	-	-	400
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ 34**	**$ 3,544**	**$ 1,016**	**$ -**	**$ -**	**$ -**	**$ 4,594**

Note: Cash Flow Basis in Thousands

30444

Moshassuck Valley Interceptor

Project Manager: Rich Bernier, P.E.
Contractor(s): N/A
Location: Central Falls, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	January-12	January-18	73 Months	$471
Construction	February-18	June-20	28 Months	9,998
Total Project	**January-12**	**June-20**	**101 Months**	**$10,469**

Photo: Construction on the Moshassuck Valley Interceptor

An inspection of the Moshassuck Valley Interceptor from Higginson Street in Central Falls to Lockbridge Street in Pawtucket revealed that this line has sunk from its original grade at numerous points, by as much as 2.5 feet. This project involves the design and construction of a new sewer to replace the existing sewer.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 7,958	**$ 2,040**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 9,998**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 81	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 81
Land	75	-	-	-	-	-	-	-	75
A/E Professional	308	-	-	-	-	-	-	-	308
Other	7	-	-	-	-	-	-	-	7
Total	**$ 471**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 471**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 92	$ 24	$ -	$ -	$ -	$ -	$ -	$ -	$ 116
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	7,856	1,436	-	-	-	-	-	-	9,292
Contingency	-	580	-	-	-	-	-	-	580
Other	10	-	-	-	-	-	-	-	10
Total	**$ 7,958**	**$ 2,040**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 9,998**

Note: Cash Flow Basis in Thousands

30457

Providence River Siphon

Project Manager: Rich Bernier, P.E.
Contractor(s): Cardi Corporation

Location: Providence, RI
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	March-13	May-15	26 Months	N/A
Design	July-15	June-18	35 Months	$517
Construction	February-18	June-20	28 Months	7,962
Total Project	**March-13**	**June-20**	**87 Months**	**$8,479**

Photo: Siphon Outlet Chamber

During the planning phase of this project, it was determined that the existing Providence River siphon was in good condition but that a section of the 78" interceptor needed to be replaced and that the inlet and outlet siphon chambers needed repair. This project corrects those identified deficiencies.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 6,502	**$ 1,460**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 7,962**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 236	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 236
Land	-	-	-	-	-	-	-	-	-
A/E Professional	275	-	-	-	-	-	-	-	275
Other	6	-	-	-	-	-	-	-	6
Total	**$ 517**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 517**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 91	$ 20	$ -	$ -	$ -	$ -	$ -	$ -	$ 111
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	6,266	754	-	-	-	-	-	-	7,020
Contingency	-	686	-	-	-	-	-	-	686
Other	145	-	-	-	-	-	-	-	145
Total	**$ 6,502**	**$ 1,460**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 7,962**

Note: Cash Flow Basis in Thousands

30467

Improvements to Interceptors FY 2019

Project Manager: Rich Bernier, P.E.
Contractor(s): TBD
Location: Providence, East Providence and Johnston
Project Priority: A

Total Project Duration/Cost

Project Phase	Start Date	Completion Date	Project Duration	Cost (in Thousands)
Planning	N/A	N/A	N/A	N/A
Design	N/A	N/A	N/A	N/A
Construction	January-19	June-20	17 Months	$5,813
Total Project	**January-19**	**June-20**	**17 Months**	**$5,813**

Photo: Rehabilitation of interceptors

This project consists of lining various diameter interceptors ranging from 6" to 66" and the rehabilitation of various manholes throughout the NBC service area.

CIP Window Summary	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
	$ 40	**$ 5,773**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,813**

Projected Expenditures - Planning

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Design

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Land	-	-	-	-	-	-	-	-	-
A/E Professional	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Projected Expenditures - Construction

Cost Category	Pre FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	Post FY 25	Total
Administrative	$ 40	$ 173	$ -	$ -	$ -	$ -	$ -	$ -	$ 213
A/E Professional	-	-	-	-	-	-	-	-	-
Construction	-	5,000	-	-	-	-	-	-	5,000
Contingency	-	600	-	-	-	-	-	-	600
Other	-	-	-	-	-	-	-	-	-
Total	**$ 40**	**$ 5,773**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,813**

Note: Cash Flow Basis in Thousands

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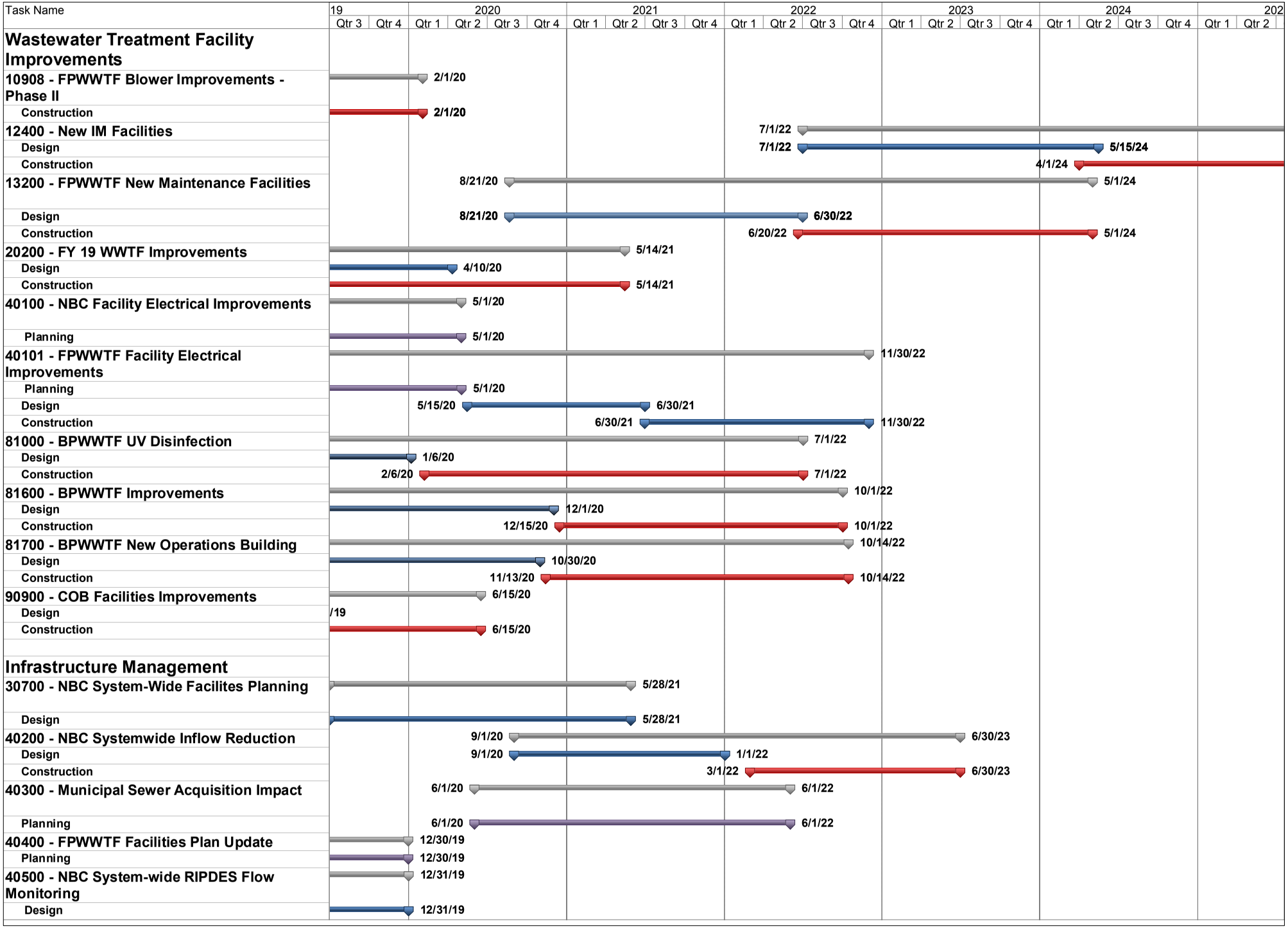
Capital Improvement Program Timeline

Fiscal Year 2021-2025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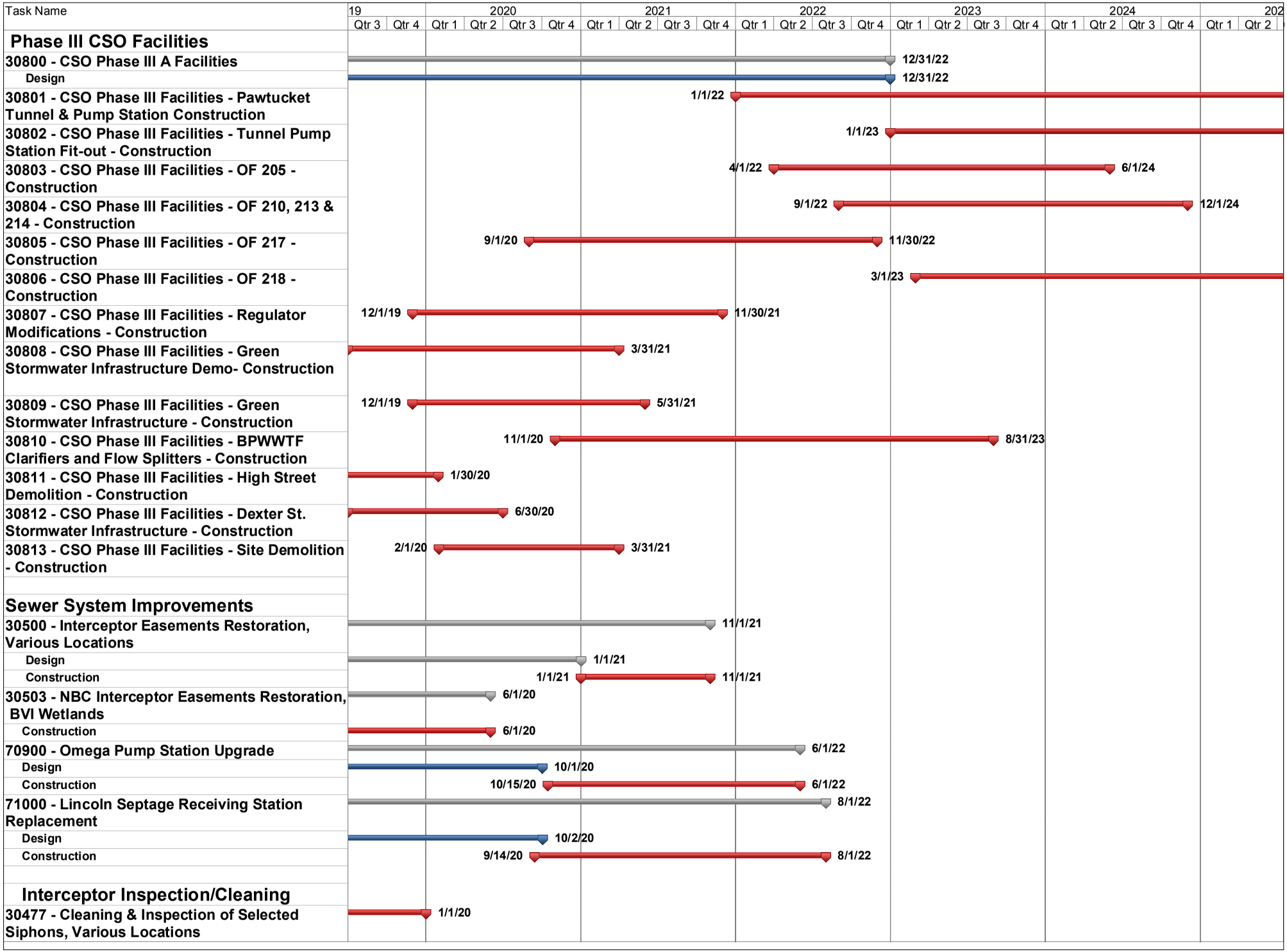
2020
2021
2022
2023
2024
202
Qtr 3 Qtr 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr 1 Qtr 2
Wastewater Treatment Facility Improvements
10908 - FPWWTF Blower Improvements - Phase II
2/1/20
Construction
2/1/20
12400 - New IM Facilities
7/1/22
Design
7/1/22
5/15/24
Construction
4/1/24
13200 - FPWWTF New Maintenance Facilities
8/21/20
5/1/24
Design
8/21/20
6/30/22
Construction
6/20/22
5/1/24
20200 - FY 19 WWTF Improvements
5/14/21
Design
4/10/20
Construction
5/14/21
40100 - NBC Facility Electrical Improvements
5/1/20
Planning
5/1/20
40101 - FPWWTF Facility Electrical Improvements
11/30/22
Planning
5/1/20
Design
5/15/20
6/30/21
Construction
6/30/21
11/30/22
81000 - BPWWTF UV Disinfection
7/1/22
Design
1/6/20
Construction
2/6/20
7/1/22
81600 - BPWWTF Improvements
10/1/22
Design
12/1/20
Construction
12/15/20
10/1/22
81700 - BPWWTF New Operations Building
10/14/22
Design
10/30/20
Construction
11/13/20
10/14/22
90900 - COB Facilities Improvements
6/15/20
Design
/19
Construction
6/15/20
Infrastructure Management
30700 - NBC System-Wide Facilites Planning
5/28/21
Design
5/28/21
40200 - NBC Systemwide Inflow Reduction
9/1/20
6/30/23
Design
9/1/20
1/1/22
Construction
3/1/22
6/30/23
40300 - Municipal Sewer Acquisition Impact
6/1/20
6/1/22
Planning
6/1/20
6/1/22
40400 - FPWWTF Facilities Plan Update
12/30/19
Planning
12/30/19
40500 - NBC System-wide RIPDES Flow Monitoring
12/31/19
Design
12/31/19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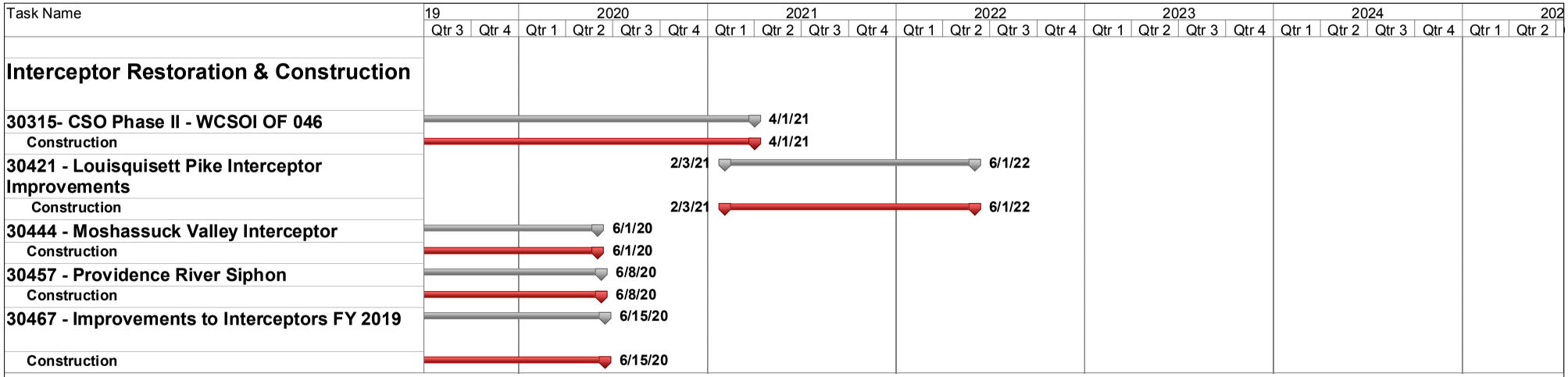
Phase III CSO Facilities
30800 - CSO Phase III A Facilities
12/31/22
Design
12/31/22
30801 - CSO Phase III Facilities - Pawtucket Tunnel & Pump Station Construction
1/1/22
30802 - CSO Phase III Facilities - Tunnel Pump Station Fit-out - Construction
1/1/23
30803 - CSO Phase III Facilities - OF 205 - Construction
4/1/22
6/1/24
30804 - CSO Phase III Facilities - OF 210, 213 & 214 - Construction
9/1/22
12/1/24
30805 - CSO Phase III Facilities - OF 217 - Construction
9/1/20
11/30/22
30806 - CSO Phase III Facilities - OF 218 - Construction
3/1/23
30807 - CSO Phase III Facilities - Regulator Modifications - Construction
12/1/19
11/30/21
30808 - CSO Phase III Facilities - Green Stormwater Infrastructure Demo- Construction
3/31/21
30809 - CSO Phase III Facilities - Green Stormwater Infrastructure - Construction
12/1/19
5/31/21
30810 - CSO Phase III Facilities - BPWWTF Clarifiers and Flow Splitters - Construction
11/1/20
8/31/23
30811 - CSO Phase III Facilities - High Street Demolition - Construction
1/30/20
30812 - CSO Phase III Facilities - Dexter St. Stormwater Infrastructure - Construction
6/30/20
30813 - CSO Phase III Facilities - Site Demolition - Construction
2/1/20
3/31/21
Sewer System Improvements
30500 - Interceptor Easements Restoration, Various Locations
11/1/21
Design
1/1/21
Construction
1/1/21
11/1/21
30503 - NBC Interceptor Easements Restoration, BVI Wetlands
6/1/20
Construction
6/1/20
70900 - Omega Pump Station Upgrade
6/1/22
Design
10/1/20
Construction
10/15/20
6/1/22
71000 - Lincoln Septage Receiving Station Replacement
8/1/22
Design
10/2/20
Construction
9/14/20
8/1/22
Interceptor Inspection/Cleaning
30477 - Cleaning & Inspection of Selected Siphons, Various Locations
1/1/20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2024
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Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Interceptor Restoration & Construction
30315- CSO Phase II - WCSOI OF 046
4/1/21
Construction
4/1/21
30421 - Louisquisett Pike Interceptor Improvements
2/3/21
6/1/22
Construction
2/3/21
6/1/22
30444 - Moshassuck Valley Interceptor
6/1/20
Construction
6/1/20
30457 - Providence River Siphon
6/8/20
Construction
6/8/20
30467 - Improvements to Interceptors FY 2019
6/15/20
Construction
6/15/20