October 30, 2019

Director, Bureau of Water Compliance Attention: Edward Hampston New York State Department of Environmental Conservation 625 Broadway, 4th Floor Albany, NY 12233-3506

Agreement DEC Index No: CO 1-20170626-244

Bay Park Sewage Treatment Plant 2019 Q3 Quarterly Report

Dear Mr. Hampston:

We are submitting herewith our Quarterly Report for the period of July 1, 2019 through September 30, 2019.

Very truly yours,

Vincent Falkowski, P.E. Deputy Commissioner for Environmental Programs

c: NCDPW

Kenneth Arnold Edward Visone John Domenica Jane Houdek Karen Fay Hazen and Sawyer Mark Hanson Paul Saurer Eric Mills Tom Zakrzewski ARCADIS DEC Peter Glus Cat Greg Bazydola Kat Maryanne Dioquino Pau Bria

DEC Cathy Haas Katie French Paul Harding Brian Lee Josh Lin

DEC Agreement Q3 2019 Report



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Background

On October 29th, 2012 Hurricane Sandy (a.k.a. Superstorm Sandy) pushed into the NY-NJ Metro area and caused widespread and unprecedented damage to coastal communities, low-lying residential neighborhoods, and public infrastructure. The Bay Park Sewage Treatment Plant (the "Bay Park STP"), owned by the Nassau County Department of Public Works (DPW), which serves close to half a million Nassau County residents, was damaged by flooding, power loss, and high winds. The Bay Park STP was partially submerged and the major electrical systems, pumping facilities, and processes were inundated with salt water from the nearby bay area. To correct the damage to the plant, improve the effluent quality and make the plant less vulnerable to future storms the County committed to construct improvements.

The construction of the improvements is catalogued in the Agreement with the New York State Department of Environmental Conservation CO 1-20170626-244 ("Agreement") in January 2018. In accordance with Section VI, Paragraphs A-C of the Agreement the DPW hereby submits to the New York State Department of Environmental Conservation (DEC) the Quarterly Report for the period of July 1, 2019 through September 30, 2019.

Quarterly reports are posted to the County website and can be found via this link: <u>https://www.nassaucountyny.gov/1882/Wastewater-Management-Program</u>

Executive Summary

The Bay Park Sewage Treatment Facility Agreement ("Agreement") Index No. CO 1-20170626-244, was entered into by the County of Nassau ("County") and the New York State Department of Environmental Conservation ("DEC") and became effective on January 11, 2018.

Pursuant to Section VI, Paragraph A of the Agreement, "The County (for work not performed by the State or its contractor) shall submit quarterly construction reports ("Quarterly Reports") to the DEC. The Quarterly Reports shall describe the actions which have been taken toward achieving compliance with this Agreement during the previous three-month period". The Agreement requires that this report provide:

- 1. A list of the County's or construction contracts necessary to fulfill the requirements of compliance milestones of this Agreement as such milestones are set forth in the Appendices. This list shall identify, by percentage, the amount of the contract that has been completed;
- 2. A detailed description of: (a) the work performed pursuant to this Agreement during the reporting period, including the status of all milestones; (b) all anticipated activities for the next three-month period; and (c) the status and cost report for all EBPs required by this Agreement;
- 3. Information regarding unresolved delays encountered or anticipated that may affect the future schedule for implementation of the County s obligations under this Agreement, and efforts made to mitigate and/or cure those delays or anticipated delays;
- 4. A description of community relations activities during the reporting period and the activities anticipated for the next three months;
- 5. Any changes in key personnel; and
- 6. Any other issues with the potential to materially affect the projects set forth in this Agreement.

Additional information is included to provide a comprehensive representation of the County's efforts towards achieving compliance with the Agreement. This Quarterly Report updates the status and progress of DPW's compliance with the milestones set forth in the Agreement during the period from July 1, 2019 through September 30, 2019 ("Reporting Quarter").

Key staff change of this reporting quarter is the addition of Karen Fay as DPW Project Manager.

Modification Request and Force Majeure Status

Table 1 – Modification Requests and Force Majeure Notifications					
Milestone	Agreement Date	Mod request letter date	Revised date requested	DEC Response Date	Modified Milestone Date ¹
Raw Sewage Pumping NTP	12/3/2018	8/24/2018	5/15/2019	9/12/2018	5/15/2019
Raw Sewage Pumping NTP	5/15/2019	5/3/2019	11/23/2019	7/1/2019	11/23/2019
Raw Sewage Pumping CC	12/1/2020	8/24/2018	2/27/2022	9/12/2018	2/27/2022
Effluent Screening NTP	8/21/2018	8/24/2018	2/21/2019	9/12/2018	2/21/2019
Effluent Screening NTP	2/21/2019	5/3/2019	10/5/2019	7/1/2019	10/5/2019
Effluent Screening CC	7/29/2020	8/24/2018	10/14/2021	9/12/2018	10/14/2021
Secondary Flood NTP	6/5/2018	8/24/2018	2/15/2019	9/12/2018	2/15/2019
Secondary Flood NTP	2/15/2019	5/3/2019	7/20/2019	7/1/2019	7/20/2019
Secondary Flood CC	7/26/2020	8/24/2018	8/15/2021	9/12/2018	8/15/2021
Stormwater Pump Stations CC	3/31/2018	8/24/2018	3/31/2019	9/12/2018	3/31/2019
3 Generator Operation	11/30/2018	8/24/2018	3/31/2019	9/12/2018	3/31/2019
3 Generator Operation	3/31/2019	1/10/2019 ²	5/19/2019	2/22/2019	5/19/2019
3 Generator Operation		5/6/20192		7/1/2019	
East Avenue Station NTP	8/19/2018	8/24/2018	4/15/2019	9/12/2018	4/15/2019
East Avenue Station NTP	4/15/2019	5/3/2019	11/23/2019	7/1/2019	11/23/2019
East Avenue Station CC	12/28/2019	8/24/2018	2/13/2021	9/12/2018	2/13/2021
Sidestream Deammonifica- tion NTP	6/12/2018	8/24/2018	3/25/2019	9/12/2018	3/25/2019
Sidestream Deammonifica- tion NTP	3/25/2019	5/3/2019	7/20/2019	7/1/2019	7/20/2019
Sidestream Deammonifica- tion CC	12/28/2019	8/24/2018	9/25/2021	9/12/2018	7/8/2021
Effluent Tide Pumping Fa- cilities CC	5/28/2020	10/19/2018 ²	1/15/2021	12/20/2018	1/15/2021
Level 1 BNR CC		5/3/2019 ²		7/1/2019	
Level 1 BNR CC		8/5/2019 ²	5/14/2020		

The following table lists modification requests made by the County and DEC responses to date.

^{1.} Bold denotes current date, italic superseded

^{2.} Force Majeure

Design Milestone Status

The following table lists the design milestones and statuses for Appendix A of the Agreement.

Agreement	
Date	Actual/Forecast
4/8/2018	1/5/2018 *
2/8/2018	3/2/2018 *
	4/8/2018

Table 2 – Design	Completion	Milestones
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*The table in Section VIII.0 of this report indicates certification of completed activities.

Project Notes:

All agreement design milestones have been completed and certifications accepted.

Construction Milestone Status

The following tables list the construction milestones and statuses for Appendices A and C of the Agreement. The milestone dates which are established in the Bay Park Agreement may be modified in the future if the County formally proposes an extension of the milestone, based upon its facility planning, and DEC formally accepts a projected delay.

Milestone	Agreement Date	Actual/ Forecast	
Raw Sewage Pumping Facility	11/23/2019	12/9/2019	
Effluent Screening and Disinfection	10/5/2019	12/9/2019	
Secondary Flood Protection	7/20/2019	11/9/2019	
East Avenue Ejector Station	11/23/2019	TBD	
Sidestream Deammonification	7/20/2019	11/9/2019	

Table 3 – Construction NTP Milestones

Table 4 – Construction Completion Milestones			
Milestone	Agreement Date	Actual/ Forecast	% Complete
1 Barnes Avenue – Baldwin	12/31/2019	11/15/2019	99%
2 Raw Sewage Pumping Facility	2/27/2022	6/5/2022	0%
3 Sludge Dewatering Facilities	12/15/2018	5/21/2018 A	100%
4 Effluent Screening and Disinfection	10/14/2021	1/31/2022	0%
5 Effluent Tide Pumping Facilities	1/15/2021	5/15/2020	40%
6 Electrical Distribution Phase E1-E3	9/21/2019	6/12/2020	97%
7 Secondary Flood Protection	8/15/2021	11/9/2021	0%
8 Stormwater Pump Stations	3/31/2019	3/28/2019 A	100%
9 Upgrade To 3 Generator Operation	5/19/2019	8/30/2019 A	100%
10 Cedar Dr, Roosevelt et al PS	5/8/2018	1/12/2018 A	100%
11 Wantagh, Newbridge et al PS	4/25/2018	2/12/2018 A	100%
12 Ocean Ave, Mill Rd et al PS	12/5/2018	8/17/2018 A	100%
13 Inwood, Doughty et al PS	7/4/2019	5/13/2019 A	100%
14 Lawrence & Sage Lake PS	8/30/2018	8/13/2018 A	100%
15 East Avenue Ejector Station	2/13/2021	5/15/2021	0%
16 Level 1 BNR	4/8/2020	4/7/2020	70%
17 Sidestream Deammonification	7/8/2021	<i>11/9/2021</i>	0%

Table 4 – Construction Completion Milestones

* The table in Section VIII.0 of this report indicates certification of completed activities.

Project Notes:

<u>1. Barnes Avenue – Baldwin</u>

This project is nearing completion is anticipated to be at substantial completion in November 2019, ahead of the milestone date.

Progress This Quarter:

Contract #S3P311-09S Hempstead Wastewater Force Main:

• Granted substantial completion May 19, 2019.

Contract #S3P311-09G Hempstead Wastewater Pumping Station:

- Completion of 12" sanitary line installation into Weekes PS wet well
- Partial Demolition of the Weekes PS dry chamber
- Emergency connection installed at the Weekes PS dry chamber

Expected Progress Next Quarter:

S3P311-09S

• Contract close out.

S3P311-09G

- Complete installation of 12" Sanitary line at the HPS site from Weeks Park PS & restore site
- Demobilization from Site

2. Raw Sewage Pumping Facility

This project did not meet the original NTP milestone date of May 15, 2019. A milestone modification request was submitted by the County to extend the NTP date to 11/23/19 which was accepted by DEC.

Progress This Quarter:

The County held the pre-award meeting with the low bid contractor and continued with the award process. The NTP is projected to be beyond of the modified milestone date of November 23, 2019.

Expected Progress Next Quarter:

The County will be continuing with the award process with goal of a Q4 2019 NTP.

3. Sludge Dewatering Facilities

This project is nearing final completion and received substantial completion in May 2019.

Progress This Quarter:

- Continued de-mobilization
- Continue sealing shafts per Fire Marshal directive
- Continued general punch list work.

Expected Progress Next Quarter:

- Conveying system repairs.
- Door hardware installation.
- Continue FM-200, Fire Suppression, and Fire Alarm System installations
- General punch list work items

4. Effluent Screening and Disinfection

Progress This Quarter:

Continuing the award process for the construction and construction management contracts.

Expected Progress Next Quarter

The County will continue with the award process for the construction and construction management contracts. The construction NTP date will be beyond the modified milestone date of October 5, 2019 and an updated forecast will be provided in the next quarterly report.

5. Effluent Tide Pumping Facilities

The project is proceeding and is projected to be complete before the milestone date.

Progress This Quarter:

- Installed Dewatering Suction Piping and Valve by Wet Well 1
- Installed Effluent Pump No. 2 Motor & Discharge Piping
- Progressed the Installation of Fire Alarm Devices within New Electrical Annex Building
- Pulled & Terminated Wires & Cables from New Electrical Annex Building VFDs to EPF Building
- Pulled lighting wires in New Electrical Annex Building Communication Room
- Installed Exit Signs and Emergency Lighting in New Electrical Annex Building
- Installed receptacles and switches in New Electrical Annex Building
- Started New Electrical Annex Building Roof penetration for New Radio & New Antenna
- Continued to Pull & Terminate Wires and Cables to HVAC Equipment
- Performed pressure tests for HVAC piping
- Performed Roof Penetration for the Installation of HVAC Suction Liquid Pipe
- Installed Battery Racks and Battery System
- Started to install platform over switchgear in Effluent Pump Facility Building to allow for Existing Mezzanine Top Slab Demolition
- Installed Local Control Station Split Air Conditioning Units
- Installed Aluminum Leaders on the East and West Sides of the New Electrical Annex Building

Expected Progress Next Quarter

• Start the Demolition of Existing Mezzanine Within EFP Building El. +25.00 - Phase 2

- Complete the installation of Effluent Pump No. 2 & Piping
- Energize Switchgear & Connect Conduits to Wet Well
- Install Radar & Pump Instruments
- Continue to remove Existing Platform & Stairs Within EPF Building +3.41 To Elevation +10.00
- Install Exterior Door & Hardware EPF Building
- Install Effluent Pump Control Panel Mezzanine Level
- Pull & Terminate Power Wire and Signal Wire to Effluent Water Pump No. 2
- Perform Yellow and blue Tag Testing of Effluent Water Pump No. 2
- Continue to perform Linear Metal Ceilings work in the New Electrical Annex Building
- Continue to install Electrical Conduit Within Communication Room
- Install Lighting Fixtures in Communication Room
- Commence Replacement of Effluent Pump No. 1

6. Electrical Distribution System Phases E1-E3

Phases E1 and E2 were completed 10/19/2016 and 9/29/2017, respectively. The transition from the old main substation to the new has taken more time than anticipated due to complexity of the task and criticality of the system to maintain plant operations, issues related to the functionality of existing breakers, and a lack of contractor performance. The project has continued beyond the milestone date of September 21, 2019. The County's consultants continue to work with the contractor in an effort to improve upon the plan and reduce activity duration.

Progress This Quarter:

- Continued Installation of Curtain Wall Systems, MSS
- Started Installation of Flood Doors and Hardware, MSS
- Continued HVAC Control Work and Testing
- Continuing Curbing and Sidewalk Restoration following Site Lighting
- Continued Installation of Communications Conduits in the Tunnel and Operations Building
- Began insulation on Emergency Generator set exhaust piping
- Began working on punch list (painting touch up, door adjustment)
- Miscellaneous cleanup on the roof and inside MSS Bldg.
- Completed occupancy sensors installations, MSS
- Completed and passed final retest of Generator Fire Suppression system by Fire Marshal
- Siemens continued resolving issues with breakers prior to generator functionality test
- Continued MOPO migration Primary Generator #2 to New S1: functionality testing under load
- Preparing for MOPO steps for Migration and Testing of Primary Generator 1 to New S1
- Completed OSHA 1910 walk through, punch list issued

Expected Progress Next Quarter:

- Continue MOPO migration of Primary Source Power Generators to new S1 Switchgear
- Complete insulation on Emergency Generator set exhaust piping
- Continue installation of Communications conduits in the tunnel, Operation Building
- Continue to work on punch list
- Perform Fire Alarm system training for operators.

7. Secondary Flood Protection

The County is continuing with the award process for the construction and construction management contracts.

Progress This Quarter:

The County is progressing the award and NTP. The modified NTP date of 7/20/19 was predicated on receiving Nassau County Legislature approval of the contracts on May 20, 2019. Immediately prior to the May 20th session, this contract was selected for additional review by the Nassau County Inspector General ("IG"). Upon completion of the IG review process, the contract was advanced to the Legislature, and this construction contract was approved on September 9, 2019.

Expected Progress Next Quarter:

The County will continue with the award process for the construction and construction management contracts. The forecast construction NTP date is dependent on receiving Nassau County Interim Financial Authority approval.

8. Stormwater Pump Stations

The contract was granted substantial completion June 24, 2019 and milestone certification was granted in Q2 2019.

Progress This Quarter:

- Placed Hydro-Seed for All Grass Restoration Areas
- Relocated Building Steel Beam for Sunshade Support
- Tested the North MCC Sump Pumps
- Installed Signage for the North and South Pump Stations
- Installed Valve Tag at North and South Pump Stations
- Provided Training for the Electric Unit Heaters Completed Training for the Gas Detection Systems
- Completed Start-up and Testing of Air Conditioner Systems in the North and South MCC Buildings.

Expected Progress Next Quarter:

- Install Stem for North Gate Chamber Slide Gate
- Install Pressure Gauges for Discharge Piping
- Test Flood Doors
- Install Aluminum Jacketing for Refrigerant Piping

9. Upgrade to 3 Simultaneous Generator Operation

The project achieved substantial completion on August 30, 2019, beyond the milestone date of July 20, 2019. Milestone certification has been submitted.

Progress This Quarter:

- Started and ran Natural Gas Compressor No. 2 for 2-weeks.
- Start-up ECL heat exchanger.
- Installed new Natural Gas Compressor No. 1.
- Start-up and Tested Natural Gas Compressor No. 1.
- Demolished Existing Natural Gas Compressor No. 5.
- Installed new Natural Gas Compressor No. 5.
- Completed installation of all Starting Air Compressors.
- Installed Service Air Compressor No. 1
- Troubleshoot Service Air Compressor Control Panel.

Expected Progress Next Quarter:

- Install light and horn for low air pressure alarm
- Test three generator operation.

10. Cedar Dr., Roosevelt Ave, Whitewood, Biltmore and Alhambra Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted and accepted.

11. Wantagh, Newbridge, Merrick & Ray St Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted.

12. Ocean Ave, Mill Rd, Woodmere Blvd & Longacre Ave Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted.

13. Inwood, Doughty Blvd, Bayview Ave & Roslyn Rd Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted.

14. Lawrence and Sage Lake Pump Stations

Construction is complete, milestone has been met, certification of completion has been submitted and accepted.

<u>15. East Avenue Ejector Station</u>

The construction and construction management services contracts were advertised on March 8, 2019. Bids and proposals were received in April, 2019, and the County was proceeding with the award process to the low bidder. On September 20, 2019, the low bidder withdrew from consideration as they had made a gross error in their bid having omitted the bypass

pumping required to execute the work. The County is now proceeding with the award process to the second low bidder. The NTP milestone date of November 23, 2019 will not be met and a revised projecting will be provided in the next quarterly report.

16. Level 1 BNR

The previous quarter projected to finish two weeks behind the milestone date, however, time have been recovered and the project is currently projected to finish on the milestone date.

Progress This Quarter:

- Completed the concrete crack repair in Aeration Tank No.2
- Completed the installation of the SWAS Piping
- Continued the installation of mixers and mixer supports in Aeration Tank No.2
- Continued the installation of the baffle walls and diffuser piping in Aeration Tank No.2
- Continued the installation of the MCC and all other panels in Aeration Building No. 2
- Continued the installation of the instrumentation in all five aeration tanks
- Completed the concrete repair work in RAS Box No.9 and No.10

Expected Progress Next Quarter:

- Continue Installation of the MCC and Sub-Panels in Aeration Building No. 2
- Continue the installation of mixer and mixer supports in AT2
- Continue the installation of the baffle walls and diffuser piping in AT2

<u>17. Sidestream Deammonification</u>

The County is continuing with the award process for the construction and construction management contracts.

Progress This Quarter:

The County is progressing the award and NTP. The modified NTP date of 7/20/19 was predicated on receiving Nassau County Legislature approval of the contracts on May 20, 2019. Immediately prior to the May 20th session, this contract was selected for additional review by the Nassau County Inspector General ("IG"). Upon completion of the IG review process, the contract was advanced to the Legislature, and this construction contract was approved on September 9, 2019.

Expected Progress Next Quarter:

The County will continue with the award process for the construction and construction management contracts. The forecast construction NTP date is dependent on receiving Nassau County Interim Financial Authority approval.

Inter Municipal Agreement

Paragraph V.G of an administrative Consent Order (#C01- 20151020-142) between DEC and the City of Long Beach (City) requires the City to enter into an Inter-municipal Agreement (IMA) with the County. The County was to enter into a fully executed IMA with the City within 180 days of the effective date of this Agreement. The IMA is to address the diversion of wastewater from the WWTP currently owned and operated by the City to the Bay Park WWTP.

The IMA was executed by both parties on July 26, 2019.

The County has initiated the design phase for the Long Beach WPCP Consolidation. The design of the influent pump station conversion is at the 30% stage and the force main routing is in the process of obtaining permit approvals for the geotechnical investigation from State and Federal agencies.

The County has also initiated the procurement of a consultant to provide a feasibility study for integrating Point Lookout, NY, currently on septic systems, into the Long Beach sewer system.

As per discussion with the State, the County anticipates connecting the City collection system to Bay Park in advance of the Long Beach administrative consent order date of June, 2024. As to interim milestones, the County will be in a better position to determine such dates after the force main route has been determined. The preferred alternative is in the process of being evaluated by federal and state permitting agencies. Accordingly, additional milestones regarding the connection of Long Beach to Bay Park will be proposed after the connection route has been approved.

Nitrogen Interim Limit Schedule of Compliance

The milestones for the Interim Nitrogen Limits are listed in the following table.

Description of Work for Nitrogen Removal Project	Completion Date
Submit an approvable BNR Operation and Maintenance (O&M) Plan	1/8/2020
Begin operation of the 6-month start-up period	6/1/2020
Begin the 12-month performance period	1/1/2021
End 12-month performance period	1/1/2022
Submit performance data	4/1/2022

These milestones will be reviewed as the Sidestream Deammonification and Level 1 BNR projects progress through the construction phase. The milestones in Table 5 reflect those for the Level 1 BNR Improvements and a separate program will be developed for the Sidestream Project upon commencement of construction for that project.

The BNR O&M Plan is currently in development in preparation for the January, 2020 milestone.

Diversion Project

The milestones for the Diversion Project are listed in the following table:

Table 0 – Diversion Troject Winestones		
Description of Work	Completion Date	
Slip lining of aqueduct along Sunrise Highway	November 2019	
Diversion Project Report	January 2018	
Design Start	TBD	
DesignCompletion	TBD	
Impact Report	TBD	
Notice to Proceed to Construction	TBD	
Construction Completion and Commence Diversion of Influent Wastewater from Bay Park WWTP to Cedar Creek WWTP	June 2024	

Table 6 – Diversion	Project Milestones
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Progress This Quarter:

The preliminary designer has started work and submitted the Draft Design Criteria Package on June 7, 2019. This is the second milestone of their contract. It was reviewed and comments returned to the designer.

Expected Progress Next Quarter:

Design workshops will be held and the designer will proceed towards the production of the Final Design Criteria Package to be submitted in October, 2019.

Project Milestones:

NYSDEC is considering adjusting the milestones to better align with the current project delivery methodology which is utilizing Design-Build project delivery.

Environmental Benefit Projects

A design scope has been proposed to NYSDEC and is pending approval. The Cedar Creek Program Managers and their subconsultant will be executing the design and overseeing the construction.

Certification of Completed Activities

The following table lists the activities for which certification of compliance were submitted.

Milestone	Date	Certification	Certification
	Completed	Submitted	Accepted
Effluent Screening and Disinfection - De-	1/5/2018	7/5/2018	9/13/2018
sign Completion			
East Avenue Ejector Station - Design	3/2/2018	7/5/2018	9/13/2018
Completion			
Cedar Dr, Roosevelt et al PS - Construc-	1/12/2018	7/5/2018	11/27/2018
tion Completion			
Wantagh, Newbridge et al PS – Construc-	2/12/2018	7/5/2018	11/27/2018
tion Completion	_,,		
Sage Lake and Lawrence PS – Construc-	8/13/2018	8/24/2018	11/27/2018
tion Completion			
Ocean Ave, Mill Road et al PS – Construc-	8/17/2018	9/19/2018	11/27/2018
tion Completion			
Sludge Dewatering Facilities – Construc-	10/12/2018	10/24/2018	1/4/2019
tion Completion			
Inwood, Doughty et al PS – Construction	2/19/2019	2/28/2019	5/1/2019
Completion		_,,	0, 1, 2019
Stormwater Pump Stations – Construction	3/28/2019	4/3/2019	4/19/2019
Completion	5,20,2019	1.0.2017	1/ 1// 201/
Upgrade to 3 Generator Operation – Con-	8/30/2019	9/12/2019	
struction Completion	0,20,2019	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Table 7 _	Complete	ed Activities
	Complete	cu Acuvines

Community Relations

No community meetings were held this quarter. A community outreach plan for the Bay Park Conveyance Project (aka Diversion) is currently in development.

x.0 Attachments

1. Program Master Schedule

Project Glossary

Agreement Project Name	County Project Name	County Project Number
Barnes Avenue – Baldwin	Village of Hempstead Wastewater Pump Station	S3P311-09G
	Village of Hempstead Force Main	S3P311-09S
Raw sewage pumping facility	Raw Sewage Pumping Facility Improve- ments	S35121-03G
Sludge dewatering facilities	Sludge Dewatering Facilities Improvements	S35121-09G
Effluent Screening and disinfec- tion	Effluent Screening and Disinfection Facility Improvements	\$35121-11G
Effluent tide pumping facilities	Effluent Pumping Facility Improvements	S35121-12G
Electrical Distribution Phase E1- E3	Phase E3 Main Substation and Electrical Distribution	\$35121-14F
Secondary Flood Protection	Secondary Flood Protection and Hardening of Critical Facilities	\$35121-16G
Stormwater Pump Stations	Flood Protection Phase I – Stormwater Pumping Stations	\$35121-18G
Upgrade to 3 Generator Opera- tion	Engine Generator Facility Auxiliary Im- provements	S35121-16A
Hot water piping system	Permanent HW/CW Piping System	S35121-16P
Cedar Dr, Roosevelt et al PS	Cedar Drive, Roosevelt, Whitewood, Bilt- more and Alhambra Pump Station Repairs	S3P311-02G
Wantagh, Newbridge et al PS	Wantagh, Newbridge Road, Merrick Road and Ray Street Pump Station Repairs	S3P311-03G
Ocean Ave, Mill Rd et al PS	Ocean Avenue, Mill Road, Woodmere Boulevard and Longacre Pump Station Re- pairs	S3P311-06G
Inwood, Doughty et al PS	Inwood, Bayview Avenue and Doughty Boulevard Pump Station Repairs	S3P311-07G
Lawrence & Sage Lake PS	Sage Lake and Lawrence Pump Stations Mitigation and Repair	S3P311-10G
East Avenue Ejector Station	East Avenue Pump Station Repairs	S3P311-08G
Level 1 BNR	Level 1 BNR Improvements	S35123-L39G
Sidestream Deammonification	Sidestream Centrate Treatment	S35123-L38G

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Vincent Falkowski, PE, PMP, CCM	Deputy Commissioner
Permittee (Per CRF 122.22)	Title
Vincent falloursh.	10/30/2019
Signature	Date Signed

Bay Park Master Schedule 190930				Master Scheo	ule													As	of 30-	Sep-19
ctivity Name	Orig Dur	Rem Dur	Start	Finish	% Comp 2	013 QQQQ	2014	2015 00000	2016	201 Q Q Q		2018	2019	_	020 200	2021	_	022	2023	2024 2 Q Q Q Q
Bay Park Master Schedule 190930	فحصم								1 4 4 4									~~~		
Existing Capital Projects		<u></u>						_			,									
S3B119-05G - Generator Controls	<u> </u>																			
Design						-														
Design - Generator Controls	74	0	21-Oct-13 A	22-Apr-14 A	100															
Procurement																	·····			
Procurement - Generator Controls	121	0	28-Oct-13 A	25-Feb-14 A	100															
Construction						-			•											
Temp Generators Off-line / Plant Power on House Generators	0	0		18-Nov-14 A	100		•													
Construction - Generator Controls	533	0	15-Nov-13 A	24-Jun-16 A	100															
S3B120-01G - Influent Screening Facility Improvements																				
CM Contract			00.4 10.4	0414 404	100															
RFP / Advertise CM Services - Influent Screening Award / NTP CMServices - Influent Screening	30 40	0	20-Apr-13 A 25-May-13 A	24-May-13 A 06-Jan-14 A	100 100															
Construction Contract	40	0	25-IVIAy-15 A	00-Jan-14 A	100															
Bid / Advertise - Influent Screening	40	0	14-Oct-13 A	26-Nov-13 A	100				+									<u>+-</u> +-+		
Award / NTP - Influent Screening	90	0	27-Nov-13 A	27-May-14 A	100															
Construction - Influent Screening	913	0	27-May-14 A	09-Jun-17 A	100			1 1 1												
S3B120-02G - Grit Removal Facility Improvements	den serie		-																	
CM Contract							-													
RFP / Advertise CM Services - Grit Removal	30	0	07-Oct-13 A	25-Oct-13 A	100	1														
Award / NTP CMServices - Grit Removal	40	0	26-Oct-13 A	26-May-14 A	100															
Construction Contract																				
75% to 100% Design / Bid Documents - Grit Removal	236	0	06-May-13 A	12-Feb-14 A	100															
County Prepare Bid for Advertisement - Grit Removal	7	0	13-Feb-14 A	23-Feb-14 A	100	1														
Bid / Advertise - Grit Removal	56	0	24-Feb-14 A	21-Mar-14 A	100															
Bid Opening - Grit Removal	1	0	25-Mar-14 A	25-Mar-14 A	100															
Award / NTP - Grit Removal	63	0	26-Mar-14 A	20-Apr-15 A	100															
Construction - Grit Removal	821	0	20-Apr-15 A	18-Jul-17 A	100				1.1											
S35100-01G - Cleaning & Repair of Digesters & Storage Tanks								.				l						ļ.,	4.4.4.	
Construction					100			7												
Construction - Digester Cleaning	720	0	20-May-13 A	16-Apr-15 A	100		: : :													
S35114-03G - Sludge Thickening Facility Improvements																				
CM Contract	20	0	01 Ave 10 A	00.0-= 42.4	100															
RFP / Advertise CM Services - Sludge Thickening Award / NTP CM Services - Sludge Thickening	30	0	21-Aug-13 A 10-Sep-13 A	09-Sep-13 A 25-Mar-14 A	100 100															
Construction Contract	30	0	10-3ep-13 A	23-Wai-14 A	100															
Award / NTP - Sludge Thickening	64	0	21-Aug-13 A	24-Oct-13 A	100															
Construction - Sludge Thickening	730	0		30-Aug-16 A	100															
S35116-01G - Odor Control at Bay Park & Cedar Creek		-		Jeen ag ver		-														
CM Contract																				
RFP / Advertise CM Services - Odor Control BP & CC WPCPs	20	0	21-Aug-13 A	09-Sep-13 A	100															
Award / NTP CMServices - Odor Control BP & CC WPCPs	30	0	10-Sep-13 A	10-Mar-14 A	100	÷ 📥														
Construction Contract						-														
Award / NTP - Odor Control BP & CC WPCPs	64	0	21-Aug-13 A	23-Oct-13 A	100															
Construction - Odor Control BP & CC WPCPs	730	0	28-Oct-13 A	07-Nov-15 A	100															
Hurricane Sandy Projects						•														
FEMA Approval Process																				
FEMA 404 Grants	60	0	12-Aug-13 A	31-Oct-13 A	100															
FEMA Finalize Damage Scope and Cost	45	0	12-Aug-13 A	19-Dec-13 A	100	-														
Submit 406 HMP	45	0	12-Aug-13 A	19-Dec-13 A	100							111					T	TT		
FEMA 406 HMP Negotiation	90	0	06-Jan-14 A	15-Jan-14 A	100						-									
Remaining Level of Effort Actual Work				Page 1 of 1	1						T	Τ-		_		-	- -			
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Actual Level of Effort Remaining Wo	лĸ															NTURE				
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tivity Name	Orig Dur	Rem Dur	Start	Finish	% Comp		2014 QQQ	20	2016 Q Q Q	2017 Q Q Q	_	2018 Q Q Q	_	2019 QQQ	20 2 Q Q		2021 QQQ		2022 Q Q		023 2 Q Q (2024 Q Q Q
FEMA Scope and Cost Negotiation	90	0	20-Dec-13 A	15-Jan-14 A	100																	
S35121-01G/E - Final Settling Tank Rehabilitation						-			•													
Construction Contract						-			•													
Award / NTP - Final Tank Rehabilitation	64	0	21-Aug-13 A	23-Oct-13 A	100							TIT			TT						1	
Construction - Final Tank Rehabilitation	730	0	28-Oct-13 A	13-May-16 A	100																	
CM Contract						-	7															
RFP / Advertise CM Services - Final Tank Rehabilitation	30	0	21-Aug-13 A	09-Sep-13 A	100																	
Award / NTP CMServices - Final Tank Rehabilitation	30	0	10-Sep-13 A	10-Feb-14 A	100																	
S35121-03G - Raw Sewage Pumping Facility							-		 	ii ! !	·• • - •						1 1		-		TT	
CM Contract													T.	-								
RFP / Advertise CM Services - Raw Sewage Pumping Facility	29	0	01-Feb-19 A	01-Mar-19A	100																	
Award / NTP CMServices - Raw Sewage Pumping Facility	180	71	02-Mar-19 A	09-Dec-19	61									-								
Design Process							-															
Finalize Technical Memorandum - Influent Screens & RPS	45	0	21-Apr-14 A	30-Jun-14 A	100				 						1		111				111	
Preliminary Design - Raw Sewage Pumping Facility	88	0	01-Jul-14 A	23-Feb-15 A	100																	
RFP / Advertise Final Design - Raw Sewage Pumping Facility	29	0	27-Feb-15 A	27-Mar-15 A	100																	
Award / NTP Final Design - Raw Sewage Pumping Facility	90	0	30-Mar-15 A	01-Mar-16 A	100																	
Final Design - Raw Sewage Pumping Facility	210	0	01-Mar-16 A	26-Sep-16 A	100																	
Bid / Construction									 		1								-		111	
County Prepare Bid for Advertisement - Raw Sewage Pumping Facility	1	0	01-Feb-19 A	01-Feb-19 A	100						1	111	11									
Bid / Advertise - Raw Sewage Pumping Facility	29	0	01-Feb-19 A	08-Mar-19 A	100																	
Bid Opening - Raw Sewage Pumping Facility	1	0	12-Mar-19 A	12-Mar-19 A	100								- E									
Award / NTP - Raw Sewage Pumping Facility	180	71	13-Mar-19 A	09-Dec-19	61								- i 🖕									
Construction - Raw Sewage Pumping Facility	910	910	09-Dec-19	05-Jun-22*	0				 			1		1							11	
S35121-09G - Sludge Dewatering						-					1	+ + +		V								
CM Contract							-	7														
RFP / Advertise CM Services - Dewatering Demo & Improvement	22	0	04-Apr-14 A	25-Apr-14 A	100																	
Award / NTP CMServices - Dewatering Dem o & Improvement	90	0		22-Sep-14 A	100																	
Design Process				·		-			 		+	+			1						++	
Finalize Technical Memoran dum - De watering	45	0	12-Aug-13 A	22-Nov-13 A	100	-																
Preliminary Design - Dewatering	85	0	26-Sep-13 A	31-Dec-13 A	100																	
RFP / Advertise Final Design - Dewatering	16	0	10-Jan-14 A	07-Feb-14 A	100																	
Award / NTP Final Design - Dewatering	80	0	08-Feb-14 A	07-Jul-14 A	100																	
Final Design - Dewatering	200	0	07-Jul-14 A	03-Apr-15 A	100				 		+				1			******				
Centrifuge Pilot Testing							-															
Alfa Laval Centrifuge Pilot	5	0	02-Jun-14 A	11-Jun-14 A	100		1															
GEA Westfalia Centrifuge Pilot	5	0	23-Jun-14 A	27-Jun-14 A	100		11															
Andritz Centrifuge Pilot	5	0	07-Jul-14 A	11-Jul-14 A	100																	
Flottweg Centrifuge Pilot	5	0	14-Jul-14 A	18-Jul-14 A	100				 		·	1			1	+					111	
Centrisys Centrifuge Pilot	5	0	21-Jul-14 A	25-Jul-14 A	100		1				1	111										
Bid / Construction								-			1	+ + +		•								
County Prepare Bid for Advertisement - Dewatering	7	0	03-Apr-15 A	09-Apr-15 A	100																	
Bid / Advertise - Dewatering	29	0	10-Apr-15 A	15-May-15 A	100																	
Bid Opening - Dewatering	1	0	19-May-15 A	19-May-15 A	100				 			·			1	+					÷	
Award / NTP - Dewatering	90	0	20-May-15 A	07-Dec-15 A	100																	
Construction - Dewatering	913	0	07-Dec-15 A	21-May-19 A	100				: :		1	1 1 1	1									
S35121-09R - Sludge Dewatering Demolition				,							-											
Design Process																						
100% Design - Dewatering Demolition	89	0	02-Jan-14 A	31-Mar-14 A	100		-		 		÷											
Bid / Construction	55	5																				
County Prepare Bid for Advertisement - Dewatering Demolition	7	0	01-Apr-14 A	03-Apr-14 A	100																	
Bid / Advertise - Dewatering Demolition	29		01-Apr-14 A	09-May-14 A	100																	
Bid / Adventse - Dewatering Demolition	29	0	13-May-14 A	13-May-14 A	100		5															
Award / NTP - Dewatering Demolition	90		14-May-14 A	22-Sep-14 A	100				 							+		+			+++++	
	30	5	I + May-14 A	22 0op-14A	100	: :			: :		;	: : :				: :					: :	
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Construction - Dewatering Demolition	180	0	22-Sep-14 A	20-Mar-15 A	100																			
S35121-11G - Effluent Screening & Disinfection						▼								-				-		▼				
CM Contract																-								
RFP / Advertise CM Services - Effluent Screening & Disinfection	29	0	01-Feb-19 A	01-Mar-19A	100																			
Award / NTP CM Services - Effluent Screening & Disinfection	180	71	02-Mar-19 A	09-Dec-19	61							1			. <u>.</u>	Lat-			11					
Design Process					-																			
Finalize Technical Memorandum - Effluent Screening & Disinfection	45	0	15-Nov-13 A	13-Feb-14 A	100																			
Prepare Design RFP - Effluent Screening & Disinfection	85	0	30-Dec-13 A	29-Jan-16 A	100												. 1 1							
RFP / Advertise Final Design - Effluent Screening & Disinfection	29	0	29-Jan-16 A	26-Feb-16 A	100																			
Award / NTP Final Design - Effluent Screening & Disinfection	90	0	06-May-16 A	09-Jan-17 A	100										·•			·	· • - • • • •				- <u>-</u>	
Final Design - Effluent Screening & Disinfection	300	0	09-Jan-17 A	05-Jan-18 A	100							: :												
Bid / Construction	000	0	oo dan mm	00 0011 1071	100								1											
County Prepare Bid for Advertisement - Effluent Screening & Disinfection	7	0	01-Jul-18 A	07-Jul-18 A	100																			
Bid / Advertise - Effluent Screening & Disinfection	29	0	13-Jul-18 A	10-Aug-18 A	100												. 1 1							
	29			-				+							+-+-				·					
Bid Opening - Effluent Screening & Disinfection Award / NTP - Effluent Screening & Disinfection	180	0 71	14-Aug-18 A	14-Aug-18 A 09-Dec-19	100 61									1	11									
			15-Aug-18 A		10											T L				L i i				
Construction - Effluent Screening & Disinfection	785	785	09-Dec-19	31-Jan-22*	0														1 1	7				
S35121-12G - Effluent Pumping Facility Improvements																	-							
CM Contract															.i		;							
RFP / Advertise CM Services - Effluent Tide PB	29	0	,	29-May-15 A	100																			
Award / NTP CMServices - Effluent Tide PB	90	0	30-May-15 A	24-Aug-17 A	100				:	: : :							.							
Design Process						V																		
Finalize Technical Memoran dum - Effluent Tide PB	45	0	12-Aug-13 A	22-Nov-13 A	100	📫																		
Preliminary Design - Effluent Tide PB	85	0	26-Sep-13 A	27-Feb-14 A	100																			
RFP / Advertise Final Design - Effluent Tide PB	30	0	28-Feb-14 A	28-Mar-14 A	100							1												
Award / NTP Final Design - Effluent Tide PB	90	0	31-Mar-14 A	08-Dec-14 A	100												. 1 1							
Final Design - Effluent Tide PB	210	0	08-Dec-14 A	07-Jul-15 A	100																			
Bid / Construction									1					1	1		₹							
County Prepare Bid for Advertisement - Effluent Tide PB	7	0	08-Jul-15 A	14-Jul-15 A	100																			
Bid / Advertise - Effluent Tide PB	29	0	31-Jul-15 A	11-Sep-15 A	100							1		T	TT			1	T				1	-
Bid Opening - Effluent Tide PB	1	0	15-Sep-15 A	15-Sep-15 A	100				É .								.							
Award / NTP - Effluent Tide PB	90	0	16-Sep-15 A	24-Aug-17 A	100																			
Construction - Effluent Pumping Facility Improvements	820	229	24-Aug-17 A	15-May-20*	72												.							
S35121-13E - Phase E1 Electrical Distribution Systems Improvement	ts								-		7													
CM Contract																		·						
RFP / Advertise CM Services - Phase E1 EDS	30	0	02-Jan-14 A	24-Jan-14 A	100																			
Award / NTP CMServices - Phase E1 EDS	90	0	25-Jan-14 A	07-Jul-14 A	100												. 1 1							
Design Process						-	•																	
Phase E1 Design	119	0	15-Aug-13 A	11-Dec-13 A	100												. 1 1							
Finalize Technical Memorandum - Phase 1 EDS	45	0	12-Aug-13 A	03-Jan-14 A	100										++-			• • • • • • •						
Bid / Construction	40	5	.2, ag 10/1	00 00111471	100						,													
County Prepare Bid for Advertisement - Phase E1 EDS	7	0	12-Dec-13 A	19-Dec-13 A	100																			
Bid / Advertise - Phase E1 EDS	30	0	20-Dec-13 A	31-Jan-14 A	100																			
Bid Opening - Phase E1 EDS	30	0	20-Dec-13 A 06-Feb-14 A	06-Feb-14 A	100		L.																	
Award / NTP - Phase E1 EDS	76	0	06-Feb-14 A 07-Feb-14 A	27-May-14 A	100										+				· - 				- <u>+</u> +-	
Construction - Phase E1 EDS	670	0		19-Oct-16 A	100				1															
		U	27-May-14 A	13-00-10 A	100			1 1 1 1	1															
S35121-14E - Phase E2 Unit Substation No. 2 & Electrical Distribution												Ţ												
Design Process																								
Phase E2 Design - EDS - USS No. 2	155	0	04-Apr-14 A	18-Aug-14 A	100							<u></u>	· · · · · ·				;						- .	
Bid / Construction							۷																	
County Prepare Bid for Advertisement - EDS Phase E2 - USS No. 2	7	0	-	27-Aug-14 A	100		I																	
Bid / Advertise - EDS Phase E2 - USS No. 2	29	0	29-Aug-14 A	10-Oct-14 A	100																			
Bid Opening - EDS Phase E2 - USS No. 2	1	0	14-Oct-14 A	14-Oct-14 A	100			1																
Award / NTP - EDS Phase E2 - USS No. 2	90	0	15-Oct-14 A	11-May-15 A	100																			
Remaining Level of Effort Actual Work Actual Level of Effort Common Remaining W	(ad)			Page 3 of 2	11								Ha	az	e	n	9	٩F	RC	40	SIC	5		

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Construction - Phase E2 - USS No. 2	660	0	11-May-15 A	29-Sep-17 A	100												1-1-1		
S35121-14F - Phase E3 Main Substation & Electrical Distribution																			
Design Process							+++	-											
Phase E3 Design - EDS - Main Substation	285	0	01-Apr-14 A	09-Feb-15 A	100														
Bid / Construction								V											
County Prepare Bid for Advertisement - EDS Phase E3 - MSS	7	0	10-Feb-15 A	12-Feb-15 A	100														
Bid / Advertise - EDS Phase E3 - Main Substation	36	0	13-Feb-15 A	17-Apr-15 A	100														
Bid Opening - EDS Phase E3 - Main Substation	1	0	21-Apr-15 A	21-Apr-15 A	100														
Award / NTP - EDS Phase E3 - Main Substation	90	0	22-Apr-15 A	05-Oct-15 A	100														11
Construction - Phase E3 - Main Substation	1095	257	05-Oct-15 A	12-Jun-20*	77					 			-						
S35121-14M - Phase E2 & E3 Construction Management																			
CM Contract								-											
RFP / Advertise CM Services - Electrical Phase E2 & E3	29	0	25-Jul-14 A	22-Aug-14 A	100														
Award / NTP CM Services - Electrical Phase E2 & E3	90	0	23-Aug-14 A	08-Jun-15 A	100														
S35123-L33E - Phase E4 Electrical Utility Connections						•							1 1 1			-			11
CM Contract														/					
RFP / Advertise CM Services - Phase E4 Electrical Utility Connections	29	29	12-Mar-20	09-Apr-20	0								0						
Award / NTP CM Services - Phase E4 Electrical Utility Connections	180	180	10-Apr-20	06-Oct-20	0									/					11
Design Process						V						:				-			
Preliminary Design - Phase E4 Electrical Utility Connections	90	0	15-Dec-17 A	04-Jun-18 A	100														
RFP / Advertise - Final Design - Phase E4 Electrical Utility Connections	29	0	12-Oct-18 A	09-Nov-18 A	100					1				,					11
Award / NTP Final Design - Phase E4 Electrical Utility Connections	120	33	09-Nov-18 A	01-Nov-19	72														
Final Design - Phase E4 Electrical Utility Connections	180	180	02-Nov-19	29-Apr-20	0														
PSE&G Coordination	5	981	12-Aug-13 A	06-Jun-22	0	-										-			11
Bid / Construction																•			<u>i </u>
County Prepare Bid for Advertisement - Phase E4 Electrical Utility Connections	7		30-Apr-20	06-May-20	0														
Bid / Advertise - Phase E4 Electrical Utility Connections	29	29	08-May-20	05-Jun-20	0														11
Bid Opening - Phase E4 Electrical Utility Connections	1	1	09-Jun-20	09-Jun-20	0														
Award / NTP - Phase E4 Electrical Utility Connections	180	180	10-Jun-20	06-Dec-20	0									-					
Construction - Phase E4 Electrical Utility Connections	548	548	06-Dec-20	06-Jun-22*	0									;		-			(<u> </u>
S35121-16A - Engine Facility Auxiliary Upgrades																			
Design Process																			
Final Design - Engine Facility Auxiliary Upgrades	195	0	01-Nov-15 A	30-Sep-16 A	100														11
Bid / Construction																			
County Prepare Bid for Advertisement - Engine Facility Auxiliary Upgrades	21	0	30-Sep-16 A	20-Oct-16 A	100											ļ., ļ., ļ.,		.i	ļ., ļ., i
Bid / Advertise - Engine Facility Aux liary Upgrades	29	0	21-Oct-16 A	18-Nov-16 A	100														11
Bid Opening - Engine Facility Auxiliary Upgrades	1	0	22-Nov-16 A	22-Nov-16 A	100														
Award / NTP - Engine Facility Auxiliary Upgrades	90	0	23-Nov-16 A	05-Jul-17 A	100														
Construction - Engine Facility Auxiliary Upgrades	365	0	05-Jul-17 A	30-Aug-19 A	100														11
S35121-16G - Secondary Flood Protection & Hardening of Critical Facilit	ties									 									([!]
CM Contract																			
RFP / Advertise CM Services - Secondary Flood Protection	29		28-Jul-17 A	25-Aug-17 A	100														11
Award / NTP CMServices - Secondary Flood Protection	90	43	26-Aug-17 A	11-Nov-19	52						1	:							
Design Process																			
Preliminary Design - Secondary Flood Protection	90		01-Dec-14 A	29-Oct-15 A	100					 				;		<u>↓</u>			(
Finalize Technical Memoran dum - Se condary Flood Protection	45	0	21-Apr-14 A	29-Oct-15 A	100														
RFP / Advertise Final Design - Secondary Flood Protection	29	0	30-Oct-15 A	04-Dec-15 A	100														
Award / NTP Final Design - Secondary Flood Protection	90	0	05-Dec-15 A	08-Nov-16 A	100														
Final Design - Secondary Flood Protection	210	0	09-Nov-16 A	07-Jul-17 A	100														
Bid / Construction	-		40.1.1.7	07.4.4.5						 	· - ·					↓		- <u>+</u>	{ { [!]
County Prepare Bid for Advertisement - Secondary Flood Protection	7		10-Jul-17 A	27-Jul-17 A	100														
Bid / Advertise - Secondary Flood Protection	29		27-Oct-17 A	01-Dec-17 A	100														11
Bid Opening - Secondary Flood Protection	1	0	05-Dec-17 A	05-Dec-17 A	100														
Award / NTP - Secondary Flood Protection	90	43	06-Dec-17 A	11-Nov-19	52						1 :								<u> </u>
Remaining Level of Effort Actual Work																			
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Actual Level of Effort Remaining Wor	k									110									
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Construction - Secondary Flood Protection	730	730	11-Nov-19	09-Nov-21*	0																	
S35121-16P - Heating Hot Water Piping Permanent System								1		V										-		
CM Contract																-						
RFP / Advertise CM Services - Heating Hot Water Piping Perman ent System	29	29	30-Apr-20	28-May-20	0																	
Award / NTP CM Services - Heating Hot Water Piping Permanent System	190	190	29-May-20	04-Dec-20	0											1						
Design Process										-		+ + +			1 1							
Preliminary Design - Heating Hot Water Piping Permanent System	90	0	02-Nov-15 A	09-Sep-16 A	100	++-			+	\	<u></u>	++++						• • • • • • • •				
RFP / Advertise - Final Design - Heating Hot Water Piping Permanent System	29	0	19-Oct-18 A	16-Nov-18 A	100																	
Award / NTP Final Design - Heating Hot Water Piping Permanent System	159	33	16-Nov-18 A	01-Nov-19	79										1 1							
Final Design - Heating Hot Water Piping Permanent System	210	210	01-Nov-19	28-May-20	0																	
Bid / Construction	-			, ,																		
County Prepare Bid for Advertisement - Hot/Chilled Water System Upgrades	7	7	29-May-20	04-Jun-20	0				+		t t t											
Bid / Advertise - Heating Hot Water Piping Permanent System	29	29	07-Jun-20	05-Jul-20	0																	
Bid Opening - Heating Hot Water Piping Permanent System	1	1	09-Jul-20	09-Jul-20	0																	
Award / NTP - Heating Hot Water Piping Permanent System	180	180	10-Jul-20	05-Jan-21	0																	
Construction - Heating Hot Water Piping Permanent System	730	730	05-Jan-21	04-Jan-23*	0													: : :	1 1			
S35121-16TR - Vehicle Fueling & Tanks Reconstruction	100	100	00 001121	04 0011 20	Ū	· - i i ·											ii	·				
							-															
Design Process	52	0	10-Mar-14 A	02 May 14 A	100																	
Design - Vehicle Fueling	53	0	10-IMar-14 A	02-May-14 A	100			1														
Bid / Construction	1 -1			00.14	100							1 1 1										
County Prepare Bid for Advertisement - Vehicle Fueling	7	0	02-May-14 A	08-May-14 A	100																	
Bid / Advertise - Vehide Fueling	29	0	09-May-14 A	06-Jun-14 A	100																	
Bid Opening - Vehicle Fueling	1	0	10-Jun-14 A	10-Jun-14 A	100																	
Re-Bid / Advertise - Vehicle Fueling	29	0	27-Mar-15 A	24-Apr-15 A	100																	
Bid Opening - Vehicle Fueling	1	0	28-Apr-15 A	28-Apr-15 A	100																	
Award / NTP - Vehicle Fueling	90	0	29-Apr-15 A	12-Jun-16 A	100						ļ											
Construction - Vehicle Fueling	274	0	13-Jun-16 A	30-Jan-18 A	100						: :	: : :										
S35121-16V - Dechlorination Vault Storm Mitigation									Y i													
Design Process									++-	7												
Design - Dechlor Sample Vault Hardening	180	0	27-Mar-15 A	22-Oct-15 A	100				(
Bid / Construction								i.			J. J. J. J.							Jale				
County Prepare Bid for Advertisement - Dechlor Sample Vault Hardening	7	0	23-Oct-15 A	29-Oct-15 A	100					1												
Bid / Advertise - Dechlor Sample Vault Hardening	36	0	30-Oct-15 A	04-Dec-15 A	100																	
Bid Opening - Dechlor Sample Vault Hardening	1	0	08-Dec-15 A	08-Dec-15 A	100					1												
Award / NTP - Dechlor Sample Vault Hardening	90	0	12-Dec-15 A	11-May-16 A	100					i 📫												
Construction - Dechlor Sample Vault Hardening	270	0	11-May-16 A	11-Aug-17 A	100																	
S35121-17G - Perimeter Flood Protection						-						-										
CM Contract																						
RFP / Advertise CM Services - Perimeter Flood Protection	30	0	10-Jan-14 A	07-Feb-14 A	100																	
Award / NTP CMServices - Perimeter Flood Protection	90	0	08-Feb-14 A	30-Jun-14 A	100																	
Design Process						-	-															
Geotech Borings - Perimeter Flood Protection	85	0	12-Aug-13 A	17-Dec-13 A	100				·	· · · · · · ·	† † †	· † · † · †						÷++			;-;	
Permitting (EAS) - Perimeter Flood Protection	125	0	12-Aug-13 A	17-Dec-13 A	100																	
Berm Design - Perimeter Flood Protection	83	0	26-Sep-13 A	17-Dec-13 A	100																	
Finalize Technical Memorandum - Perimeter Flood Protection	45	0	12-Aug-13 A	17-Dec-13 A	100																	
Public Review/Comment Period	30	0	17-Dec-13 A	16-Jan-14 A	100																	
Bid / Construction	00	U	IT Dec To A	To built 1477	100				+						+-+-			·				
County Prepare Bid for Advertisement - Perimeter Flood Protection	7	0	17-Jan-14 A	23-Jan-14 A	100		i															
Bid / Advertise - Perimeter Flood Protection	29	0	24-Jan-14 A	14-Mar-14 A	100																	
Bid Opening - Perimeter Flood Protection	1	0	18-Mar-14 A	18-Mar-14 A	100																	
Award / NTP - Perimeter Flood Protection	76	0	19-Mar-14 A	27-May-14 A	100																	
		0	13-IvidI-14 A						+		÷÷÷·	·+-+-+			+-+			÷+++				
Eastern Park Open	0	-	07 Mar 44 4	07-Oct-15 A	100																	
Construction - Perimeter Flood Protection	740	0	27-May-14 A	09-Jun-17 A	100																	
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Remaining Level of Effort Actual Work				Dogo 5 of 1												_						
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Actual Level of Effort Remaining Work	I																					

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S35121-18G - Flood Protection Phase 1 Stormwater Pumping Stations								1			1			1 1		-								Γ
CM Contract									-															
RFP / Advertise CM Services - Flood Protection Phase 1 Stormwater PS	29	0	31-Jul-15 A	28-Aug-15 A	100																			
Award / NTP CMServices - Flood Protection Phase 1 Stormwater PS	90	0	29-Aug-15 A	17-Jun-16 A	100																			
Design Process																								
Preliminary Design Flood Protection Phase 1 Stormwater PS	97	0	18-Dec-13 A	17-Apr-14 A	100																			
RFP / Advertise Final Design Flood Protection Phase 1 Stormwater PS	29	0	18-Apr-14 A	16-May-14 A	100																			
Award / NTP Final Design Flood Protection Phase 1 Stormwater PS	90	0	17-May-14 A	10-Nov-14 A	100				<u></u>									ļ					Ļ	
Final Design Flood Protection Phase 1 Stormwater PS	210	0	10-Nov-14 A	28-Aug-15 A	100																			
Bid / Construction																								
County Prepare Bid for Advertisement - Flood Protection Phase 1 Stormwater PS	7		28-Aug-15 A	03-Sep-15 A	100				115															
Bid / Advertise - Flood Protection Phase 1 Stormwater PS	29	0	04-Sep-15 A	02-Oct-15 A	100																			
Bid Opening - Flood Protection Phase 1 Stormwater PS	1	0	06-Oct-15 A	06-Oct-15 A	100				444								ļ.,	ļ					Ļ.ļ	
Award / NTP - Flood Protection Phase 1 Stormwater PS	90	0	30-Sep-15 A	31-May-16 A	100																			
Construction - Flood Protection Phase 1 Stormwater PS	760	0	31-May-16 A	24-Jun-19 A	100									1 1										
S35121-18S - Flood Protection Phase 2 Stormwater Green Infrastructure																								
Design Process			01 1 10 1	00.14 40.4	100																			
Preliminary Design - Flood Protection Phase 2 Stormwater GI	96	0	31-Jan-16 A	26-May-16 A	100		· · · · · · · · · · ·														+		÷	
RFP / Advertise - Final Design Flood Protection Phase 2 Stormwater Gl	29	0	27-May-16 A	24-Jun-16 A	100										1	1								
S35123-L37 - Miscellaneous Storm Repairs, Mitigation & Site Restoration																								
CM Contract	00	00	00 1 01	20. Jan 04	0																			
RFP / Advertise CM Services - Misc Storm Repairs, Mitigation & Restoration	29	29	02-Jan-21	30-Jan-21	0																			
Award / NTP CM Services - Misc Storm Repairs, Mitigation & Restoration	180	180	31-Jan-21	29-Jul-21	0																+			·
Design Process	00	22	05 14 10 4	01 Nev 10	63																			
Conceptual Design - Misc Storm Repairs, Mitigation & Site Restoration	90	33	05-Jul-19 A	01-Nov-19	63											Π.								
RFP / Advertise - Final Design - Misc Storm Repairs, Mitigation & Site Restoration	29	29	02-Nov-19	30-Nov-19	0																			
Award / NTP Final Design - Misc Storm Repairs, Mitigation & Site Restoration	180 270	180 270	01-Dec-19	28-May-20 21-Feb-21	0																			
Final Design - Misc Storm Repairs, Mitigation & Site Restoration	270	270	28-May-20	21-FeD-21	0				-+												·		<u> </u>	
Bid / Construction County Prepare Bid for Advertisement - Misc Storm Repairs, Mitigation & Site Re:	7	7	21-Feb-21	27-Feb-21	0																			
Bid / Advertise - Misc Storm Repairs, Mitigation & Site Restoration	29	29	28-Feb-21	28-Mar-21	0																			
Bid Opening - Misc Storm Repairs, Mitigation & Site Restoration	1	1	01-Apr-21	01-Apr-21	0																			
Award / NTP - Misc Storm Repairs, Mitigation & Site Restoration	180	180	01-Apr-21	28-Sep-21	0																			
Construction - Misc Storm Repairs, Mitigation & Site Restoration	731	731	28-Sep-21	28-Sep-23*	0		••••										+				·			
S3B119-06G - Bay Park STP Heating Hot Water Piping Temporary Syster		731	20-36p-21	20-3ep-23	0																			
Design Process	90	0	01-May-15 A	17-Jun-15 A	100																			
Final Design - Heating Hot Water Piping Temporary System Bid / Construction	90	U	01-May-15 A	17-Jun-15 A	100																			
County Prepare Bid for Advertisement - Heating Hot Water Piping Temporary Sys	7	0	12-Jun-15 A	18-Jun-15 A	100												+-+-							
Bid / Advertise - Heating Hot Water Piping Temporary System	8	0	19-Jun-15 A	26-Jun-15 A	100				11															
Bid Opening - Heating Hot Water Piping Temporary System	1	0	30-Jun-15 A	30-Jun-15 A	100																			
Award / NTP - Heating Hot Water Piping Temporary System	13	0	01-Jul-15 A	13-Jul-15 A	100																			
Construction - Heating Hot Water Piping Temporary System	124	0	13-Jul-15 A	04-Aug-16 A	100																			
S35121-06G - Aeration Blower Facility																	+							H
CM Contract																								
RFP / Advertise CM Services - Aeration Blower Facility	29	29	15-Apr-21	13-May-21	0														•					
Award / NTP CMServices - Aeration Blower Facility	180	180	14-May-21	09-Nov-21	0															<u> </u>				
Design Process											-													
Preliminary Design - Aeration Blower Facility	180	0	01-Nov-16 A	15-Dec-16 A	100																+			
Resolve Power Availability Issue for Aeration Blower Building / PSEG	147	161	01-Jul-18 A	08-Mar-20	0											-								
RFP / Advertise - Final Design - Aeration Blower Facility	29	29	09-Mar-20	06-Apr-20	0												0							
Award / NTP Final Design - Aeration Blower Facility	180	180	07-Apr-20	03-Oct-20	0																			
Final Design - Aeration Blower Facility	240	240	04-Oct-20	31-May-21	0																			
Demoising Level of Effort													_	_										
Remaining Level of Effort Actual Work				Page 6 of	11					1			ŀ	-Ia	7	en			Þ	C				
Actual Level of Effort Remaining Work										1			- I	10			L 📂	7/-						

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Bid / Construction																			-				-	1
County Prepare Bid for Advertisement - Aeration Blower Facility	7	7	03-Jun-21	09-Jun-21	0	2								1					1					
Bid / Advertise - Aeration Blower Facility	29	29	11-Jun-21	09-Jul-21	0)													•					
Bid Opening - Aeration Blower Facility	1	1	13-Jul-21	13-Jul-21	0	2																		
Award / NTP - Aeration Blower Facility	180	180	14-Jul-21	09-Jan-22	0)																		
Construction - Aeration Blower Facility	1095	1095	09-Jan-22	07-Jan-25*	0	2																	 	_
S3P311 - Pump Stations																			-7					
S3P311-01G - Dock Place & Southland Drive							-		•															
Construction							-		▼															
Construction - Dock Place & Southland Drive Pump Stations	240	0	28-Oct-13 A	31-Oct-14 A	100)										 		ļļ			<u>.</u>			
S3P311-02G - Cedar, Roosevelt, Whitewood, Biltmore & Alhambra	l .																							
Design Process																								
Finalize Technical Memoran dum - Pump Station 2	140	0	12-Aug-13 A	22-Nov-13 A	100		<u>.</u>																	
Preliminary Design - Pump Station 2	67	0	23-Nov-13 A	28-Jan-14 A	100)	•																	
RFP / Advertise Final Design - Pump Station 2	30	0	31-Jan-14 A	28-Feb-14 A	100			l. l. l								 	11.				u.			
Award / NTP Final Design - Pump Station 2	90	0	01-Mar-14 A	23-Sep-14 A	100	0	1				1			T										
Final Design - Pump Station 2	90	0	23-Sep-14 A	26-Mar-15 A	100)																		
Bid / Construction									•		1 1			+ +										
County Prepare Bid for Advertisement - Pump Station 2	7	0	27-Mar-15 A	09-Apr-15 A	100)			ļ															
Bid / Advertise - Pump Station 2	29	0	10-Apr-15 A	08-May-15 A	100)			1															
Bid Opening - Pump Station 2	1	0	12-May-15 A	12-May-15 A	100)				10							TT							
Award / NTP - Pump Station 2	90	0	13-May-15 A	03-Mar-16 A	100)				i de la compañía de l				1										
Construction - Pump Station 2	548	0	03-Mar-16 A	12-Jan-18 A	100)						-												
S3P311-03G - Wantagh, Newbridge, Merrick & Ray															7									
Design Process										7														
Finalize Technical Memoran dum - Pump Station 3	140	0	12-Aug-13 A	22-Nov-13 A	100											 		1						
Preliminary Design - Pump Station 3	67	0	23-Nov-13 A	28-Jan-14 A	100	0																		
RFP / Advertise Final Design - Pump Station 3	30	0	31-Jan-14 A	28-Feb-14 A	100)																		
Award / NTP Final Design - Pump Station 3	90	0	01-Mar-14 A	23-Sep-14 A	100	- i -																		
Final Design - Pump Station 3	90	0	23-Sep-14 A	13-Apr-15 A	100					1														
Bid / Construction															7	 								
County Prepare Bid for Advertisement - Pump Station 3	7	0	14-Apr-15 A	30-Apr-15 A	100)																		
Bid / Advertise - Pump Station 3	29	0	01-May-15 A	29-May-15 A	100	- i																		
Bid Opening - Pump Station 3	1	0	02-Jun-15 A	02-Jun-15 A	100																			
Award / NTP - Pump Station 3	90	0	03-Jun-15 A	03-Mar-16 A	100	- 1																		
Construction - Pump Station 3	540	0	03-Mar-16 A	12-Feb-18 A	100											 					(******			
S3P311-02M - PS2 & PS3 Construction Management											-													
CM Contract																								
RFP / Advertise CM Services - PS2 & PS3	29	0	03-Oct-14 A	31-Oct-14 A	100																			
Award / NTP CMServices - PS2 & PS3	90	0	03-001-14 A	03-Mar-16 A	100					11				-										
	90	0	01-N0V-14 A	03-Wai-16 A	100											 						+		
S3P311-04G - Felix, Fox, Northern & Grand																								
Design Process		¢.	40.4. 10.1	00 N 40 4	400																			
Finalize Technical Memoran dum - Pump Station 4	140	0	12-Aug-13 A	22-Nov-13 A	100	- :																		
Preliminary Design - Pump Station 4	67	0	23-Dec-13 A	27-Feb-14 A	100																			
RFP / Advertise Final Design - Pump Station 4	30	0	28-Feb-14 A	28-Mar-14 A	100											 		ļļ						
Award / NTP Final Design - Pump Station 4	90	0	30-Mar-14 A	17-Sep-14 A	100																			
Final Design - Pump Station 4	90	0	17-Sep-14 A	13-Mar-15 A	100)																		
Bid / Construction		¢.	40 M 45 1	40.11 45.4	400																			
County Prepare Bid for Advertisement - Pump Station 4	7	0	13-Mar-15 A	19-Mar-15 A	100					.														
Bid / Advertise - Pump Station 4	29	0	20-Mar-15 A	17-Apr-15 A	100											 					÷	++++		
Bid Opening - Pump Station 4	1	0	21-Apr-15 A	21-Apr-15 A	100																			
Award / NTP - Pump Station 4	90	0	22-Apr-15 A	15-Nov-15 A	100	- 1																		
Construction - Pump Station 4	420	0	16-Nov-15 A	29-Aug-17 A	100	2						1		ų.										
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S3P311-05G - Millar, Mott, Long Beach, Royal & Lido	I					-						-											
Design Process						-			•														
Finalize Technical Memoran dum - Pump Station 5	140	0	12-Aug-13 A	22-Nov-13 A	100																1		
Preliminary Design - Pump Station 5	67	0	23-Jan-14 A	27-Mar-14 A	100																		
RFP / Advertise Final Design - Pump Station 5	30	0	28-Mar-14 A	25-Apr-14 A	100																		
Award / NTP Final Design - Pump Station 5	94	0	26-Apr-14 A	01-Dec-14 A	100																		
Final Design - Pump Station 5	90	0	01-Dec-14 A	01-May-15 A	100																		
Bid / Construction				-										1			111		11		11		
County Prepare Bid for Advertisement - Pump Station 5	7	0	02-May-15 A	21-May-15 A	100																		
Bid / Advertise - Pump Station 5	29	0	22-May-15 A	19-Jun-15 A	100																		
Bid Opening - Pump Station 5	1	0	23-Jun-15 A	23-Jun-15 A	100																		
Award / NTP - Pump Station 5	90	0	24-Jun-15 A	15-Nov-15 A	100																		
Construction - Pump Station 5	540	0	16-Nov-15 A	29-Aug-17 A	100				+								1-1-1						
S3P311-04M - PS4 & PS5 Construction Management								-		v													
CM Contract																							
RFP / Advertise CM Services - PS4 & PS5	29	0	07-Nov-14 A	05-Jan-15 A	100					1													
Award / NTP CMServices - PS4 & PS5	90	0	07-140V-14 A 06-Jan-15 A	16-Nov-15 A	100				: : :														
	90	U	UU-Jall-13 A	10-110V-13 A	100				+					<u> </u>		·	<u> </u>				+-+		
S3P311-06G - Ocean, Mill, Woodmere & Longacre																							
Design Process									1 1 1														
Finalize Technical Memorandum - Pump Station 6	140	0	12-Aug-13 A	22-Nov-13 A	100	-																	
Preliminary Design - Pump Station 6	67	0	23-Feb-14 A	25-Apr-14 A	100																		
RFP / Advertise Final Design - Pump Station 6	29	0	09-May-14 A	30-May-14 A	100																		111
Award / NTP Final Design - Pump Station 6	90	0	31-May-14 A	15-Apr-15 A	100			-	-														
Final Design - Pump Station 6	90	0	15-Apr-15 A	17-Sep-15 A	100																		
Bid / Construction														•									
County Prepare Bid for Advertisement - Pump Station 6	7	0	18-Sep-15 A	24-Sep-15 A	100																		
Bid / Advertise - Pump Station 6	29	0	25-Sep-15 A	23-Oct-15 A	100																		L. L.
Bid Opening - Pump Station 6	1	0	27-Oct-15 A	27-Oct-15 A	100																		
Award / NTP - Pump Station 6	90	0	28-Oct-15 A	15-Mar-17 A	100																		
Construction - Pump Station 6	550	0	15-Mar-17 A	17-Aug-18 A	100								!										
S3P311-07G - Inwood, Doughty, Bayview & Roslyn								-					!	: : :									
Design Process										7													
Finalize Technical Memorandum - Pump Station 7	140	0	12-Aug-13 A	22-Nov-13 A	100																		
Preliminary Design - Pump Station 7	67	0	23-Mar-14 A	28-May-14 A	100																		
RFP / Advertise Final Design - Pump Station 7	29	0	30-May-14 A	27-Jun-14 A	100																		
Award / NTP Final Design - Pump Station 7	90	0	28-Jun-14 A	13-May-15 A	100		i 🖡																
Final Design - Pump Station 7	90	0	13-May-15 A	16-Nov-15 A	100																		
Bid / Construction										•						7							
County Prepare Bid for Advertisement - Pump Station 7	7	0	16-Nov-15 A	19-Nov-15 A	100					I I													
Bid / Advertise - Pump Station 7	29	0	20-Nov-15 A	18-Dec-15 A	100																		
Bid Opening - Pump Station 7	1	0	22-Dec-15 A	22-Dec-15 A	100																		
Award / NTP - Pump Station 7	90	0	23-Dec-15 A	15-Mar-17 A	100																		
Construction - Pump Station 7	540	0	15-Mar-17 A	13-May-19 A	100				·				<u></u>	444 			1111						1-1-1-1
S3P311-06M - PS6 & PS7 Construction Management												•											
CM Contract									-			v											
RFP / Advertise CM Services - PS6, PS7 & PS8	29	0	22-May-15 A	19-Jun-15 A	100																		
Award / NTP CMServices - PS6, PS7 & PS8	90	0	20-Jun-15 A	15-Mar-17 A	100																		
S3P311-08G - East Avenue		3							+	V						·	+				+-+		;
CM Contract																	, : :						
	20	0	08-Mor 10 A	05-Apr 10 A	100											T							
RFP / Advertise CM Services - East Avenue Pump Station	29 180	0	08-Mar-19 A	05-Apr-19 A	100 61																		
Award / NTP CMServices - East Avenue Pump Station	100	71	06-Apr-19 A	09-Dec-19	01																		
Design Process	07	0	19 De - 45 4	14 1-140 4	400				4-4-4								<u> </u>				÷		
Prepare Flow Study & Technical Memorandum - Pump Station 8	27	0	18-Dec-15 A	14-Jul-16 A	100																		
RFP / Advertise - Pump Station 8	29	0	15-Jul-16 A	12-Aug-16 A	100							1	1					i.			1 1		
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Actual Level of Effort Remaining	Work									1								7	ITURE	~~!			

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lame		Orig Dur	Rem Dur	Start	Finish	% Comp		2014 QQQ			2016 Q Q Q	2017 Q Q		2018 Q Q	_	2019 QQ(20 Q Q Q		2021 QQQ	202 2 Q Q Q		2023 QQ	_	2024 Q (
	Award / NTP Final Design - Pump Station 8	90	0	13-Aug-16 A	29-Mar-17 A	100																		+
	Final Design - East Avenue Pump Station	270	0	29-Mar-17 A	23-Dec-17 A	100																		
E	Bid / Construction												-											
	County Prepare Bid for Advertisement - East Avenue Pump Station	7	0	24-Dec-17 A	07-Mar-19A	100						 												
	Bid / Advertise - East Avenue Pump Station	29	0	08-Mar-19 A	05-Apr-19 A	100									Ó									
	Bid Opening - East Avenue Pump Station	1	0	09-Apr-19 A	09-Apr-19 A	100																		
	Award / NTP - East Avenue Pump Station	180	71	09-Apr-19 A	09-Dec-19	61										-								
	Construction - East Avenue Pump Station	540	540	09-Dec-19	31-May-21*	0																		
S3	P311-09G - Hempstead Wastewater Pumping Station						11					 	L		<u>-</u>									-†-
										,														
	Design Process RFP / Advertise Final Design - Hempstead Wastewater Pumping Station	29	0	22-Nov-13 A	20-Dec-13 A	100																		
_			-																					
_	Award / NTP Final Design - Hempstead Wastewater Pumping Station	90	0	21-Dec-13 A	29-May-14 A	100																		
	Final Design - Hempstead Wastewater Pumping Station	185	0	18-Jun-14 A	24-Jun-15 A	100		····				 												
	Bid / Construction																							
	County Prepare Bid for Advertisement - Hempstead Wastewater Pumping Statio	7		25-Jun-15 A	30-Jun-15 A	100																		Ì
	Bid / Advertise - Hempstead Wastewater Pumping Station	29	0	03-Jul-15 A	14-Aug-15 A	100																		
	Bid Opening - Hempstead Wastewater Pumping Station	1	0	18-Aug-15 A	18-Aug-15 A	100				4														ł
	Award / NTP - Hempstead Wastewater Pumping Station	90	0	19-Aug-15 A	25-Apr-16 A	100																		j
	Construction - Hempstead Wastewater Pumping Station	460	32	25-Apr-16 A	31-Oct-19*	93						 												
S3I	P311-09S - Hempstead Wastewater Force Main													\square		V								
	Design Process									, i i														
	RFP / Advertise Final Design - Hempstead Wastewater Force Main	29	0	22-Nov-13 A	20-Dec-13 A	100																		Ì
	Award / NTP Final Design - Hempstead Wastewater Force Main	90	0	21-Dec-13 A	29-May-14 A	100																		
	Final Design - Hempstead Wastewater Force Main	185	0	18-Jun-14 A	24-Jun-15 A	100						 							-+-+-+		+	-+-+-		-
		105	U	10-3411-14 A	24-5011-15A	100																		
·	Bid / Construction	-		05 1 45 4	00 1 15 1	100																		
	County Prepare Bid for Advertisement - Hempstead Wastewater Force Main	7	0	25-Jun-15 A	30-Jun-15 A	100																		
_	Bid / Advertise - Hempstead Wastewater Force Main	29	0	03-Jul-15 A	14-Aug-15 A	100																		
	Bid Opening - Hempstead Wastewater Force Main	1	0	18-Aug-15 A	18-Aug-15 A	100				<u>. Li</u>		 												
	Award / NTP - Hempstead Wastewater Force Main	90	0	19-Aug-15 A	25-Apr-16 A	100				-														
	Construction - Hempstead Wastewater Force Main	450	0	25-Apr-16 A	01-May-19 A	100																		
S3I	P311-09M - Hempstead Wastewater Pumping Station & Force Main CN	/									7													
(CM Contract								-	-	7													
	RFP / Advertise CM Services - Hempstead Wastewater Pump Sta & FM	29	0	17-Oct-14 A	14-Nov-14 A	100																		-
	Award / NTP CMServices - Hempstead Wastewater Pump Sta & FM	90	0	15-Nov-14 A	01-Feb-16 A	100						 											1	- 1
S3	P311-10G - Lawrence PS (STP) & Sage Lake PS							-																
	CM Contract																							
	RFP / Advertise CM Services - Lawrence STP & Sage Lake PS	28	0	25-Jan-16 A	22-Feb-16 A	100						1												1
	-											111												
	Award / NTP CMServices - Lawrence STP & Sage Lake PS	90	0	23-Feb-16 A	22-Mar-17 A	100						 												
	Design Process				1						•													
	Preliminary Design - Lawrence STP & Sage Lake PS	75		02-Jun-14 A	12-Sep-14 A	100																		
	RFP / Advertise Final Design - Lawrence STP & Sage Lake PS	29	0	12-Sep-14 A	10-Oct-14 A	100																		
	Award / NTP Final Design - Lawrence STP & Sage Lake PS	61	0	11-Oct-14 A	15-Sep-15 A	100			1															
	Final Design - Lawrence STP & Sage Lake PS	180	0	15-Sep-15 A	08-Mar-16 A	100																		
E	Bid / Construction										T			•										
	County Prepare Bid for Advertisement - Lawrence STP & Sage Lake PS	7	0	09-Apr-16 A	14-Apr-16 A	100																		
	Bid / Advertise - Lawrence STP & Sage Lake PS	29	0	15-Apr-16 A	13-May-16 A	100																		
	Bid Opening - Lawrence STP & Sage Lake PS	1	0	17-May-16 A	17-May-16 A	100																		
	Award / NTP - Lawrence STP & Sage Lake PS	90	0	18-May-16 A	22-Mar-17 A	100						(
	Construction - Lawrence STP & Sage Lake PS	550	0	22-Mar-17 A	13-Aug-18 A	100						 	• -											
S3	P311-11G - Roslyn Village, Morgan Park & Shore Road				3 • •						V													
-	CM Contract	47	0	05 Oct 19 4	02-Nov-18 A	100								I		T	·							
	RFP / Advertise CM Services - Roslyn Village, Morgan Park & Shore Rd	47	0	05-Oct-18 A		100											.							
	Award / NTP CMServices - Roslyn Village, Morgan Park & Shore Rd	180	43	03-Nov-18 A	11-Nov-19	76									:	;	'							
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	Remaining Level of Effort Actual Work				Page 9 of	11							L	Ja	7	01								
	Actual Level of Effort Remaining Work	·												10						イレ	CIV			

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Name	Orig Dur	Rem Dur	Start	Finish	% Comp		2014	201 Q Q Q (_	2017 Q Q Q	_	018 QQQ	2019 Q Q Q	2020 Q Q Q Q		2021 2000	2022 Q Q Q (2023 2 Q Q Q		202 Q
Design Process																					
Preliminary Design - Roslyn Village, Morgan Park & Shore Rd	75	0	01-Mar-16 A	16-Jun-16 A	100																
RFP / Advertise Final Design - Roslyn Village, Morgan Park & Shore Rd	29	0	17-Jun-16 A	15-Jul-16 A	100																
Award / NTP Final Design - Roslyn Village, Morgan Park & Shore Rd	60	0	16-Jul-16 A	02-Feb-17 A	100																
Final Design - Roslyn Village, Morgan Park & Shore Rd	154	0	02-Feb-17 A	02-Aug-17 A	100						÷.										í I
Bid / Construction					1						111		· · · · · · · · ·			•	111			;	m
County Prepare Bid for Advertisement - Roslyn Village, Morgan Park & Shore Rd	7	0	13-Oct-17 A	09-Nov-17 A	100																1
Bid / Advertise - Roslyn Village, Morgan Park & Shore Rd	29	0	10-Nov-17 A	08-Dec-17 A	100																i.
Bid Opening - Roslyn Village, Morgan Park & Shore Rd	1	0	12-Dec-17 A	12-Dec-17 A	100																1
Award / NTP - Roslyn Village, Morgan Park & Shore Rd	90	43	13-Dec-17 A	11-Nov-19	52								; ;	1 1							i.
Construction - Roslyn Village, Morgan Park & Shore Rd	365	365	12-Nov-19	10-Nov-20*	0				· • • • • • • • •				· † †			- <u>+</u>	+++++				÷-
	000	000	12110110	101107 20	Ū				-							1					í.
S80019-03GR - Cedar Point Lake (Doxey Brook) Pump Station																					į.
CM Contract																					i.
RFP / Advertise CM Services - Cedar Point Lake PS	29	0	01-Dec-16 A	23-Dec-16 A	100					•											1
Award / NTP CM Services - Cedar Point Lake PS	90	0	24-Dec-16 A	03-Jan-18 A	100																Į
Design Process																					i i
Final Design - Cedar Point Lake PS	180	0	10-Feb-16 A	28-Oct-16 A	100					-											i.
Bid / Construction										-					-						l
County Prepare Bid for Advertisement - Cedar Point Lake PS	7	0	29-Oct-16 A	01-Dec-16 A	100																í.
Bid / Advertise - Cedar Point Lake PS	29	0	02-Dec-16 A	06-Jan-17 A	100																i.
Bid Opening - Cedar Point Lake PS	1	0	10-Jan-17 A	10-Jan-17 A	100																
Award / NTP - Cedar Point Lake PS	90	0	11-Jan-17 A	03-Jan-18 A	100																í.
Construction - Cedar Point Lake PS	540	117	03-Jan-18 A	24-Jan-20*	78								11								£.
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Nitrogen Reduction Projects																					į.
S35123-L38G - Sidestream Deammonification																					į.,
CM Contract													1 1		▼						í.
RFP / Advertise CM Services - Sidestream Centrate Treatment	29	0	28-Jul-17 A	25-Aug-17 A	100																1
Award / NTP CMServices - Sidestream Centrate Treatment	90	43	26-Aug-17 A	11-Nov-19	52																í.
RFP Process									+ + +	-											1
Develop / Issue RFI - Sidestream Centrate Treatment	60	0	30-Sep-14 A	26-May-15 A	100																Í.
RFI Response Period - Sidestream Centrate Treatment	41	0	26-May-15 A	07-Aug-15 A	100						1 1		· • • - •								1
RFI Evaluation Period - Sidestream Centrate Treatment	88	0	08-Aug-15 A	29-Feb-16 A	100																í.
NCDPW Review & Award Sidestream Centrate Treatment	120	0	01-Mar-16 A	26-Sep-16 A	100																
Design Process		1		•						+											1
Complete Technical Design Report	60	0	27-Sep-16 A	26-Nov-16 A	100																í.
Detailed Design - Sidestream Centrate Treatment	275	0	27-Sep-16 A	31-Oct-17 A	100				·				·†			- -	+++++				÷
	210	0	21 000 1077	01 000 1177	100																£.
Bid / Construction	17	0	01 Nev 17 A	16 Nov 17 A	100																į.
County Prepare Bid for Advertisement - Sidestream Centrate Treatment			01-Nov-17 A	16-Nov-17 A	100				1 1 1							1					1
Bid / Advertise - Sidestream Centrate Treatment	29	0	17-Nov-17 A	05-Jan-18 A	100																i.
Bid Opening - Sidestream Centrate Treatment	1	0	09-Jan-18 A	09-Jan-18 A	100								<u></u>								į.,
Award / NTP - Sidestream Centrate Treatment - Canceled - Re-bid	90	0	10-Jan-18 A	23-Aug-18 A	100																1
Re-Bid / Advertise - Sidestream Centrate Treatment	29	0	24-Aug-18 A	21-Sep-18 A	100																í.
Re-Bid Opening - Sidestream Centrate Treatment	1	0	25-Sep-18 A	25-Sep-18 A	100								11								1
Award / NTP - Sidestream Centrate Treatment	180	43	26-Sep-18 A	11-Nov-19	76								💻								ĺ.
Construction - Sidestream Centrate Treatment	730	730	11-Nov-19	09-Nov-21*	0																ĺ.
S35123-L39G - Level 1 BNR Improvements											-projec										[
CM Contract											-										1
RFP / Advertise CM Services - Level 1 BNR Improvements	31	0	29-Jul-16 A	26-Aug-16 A	100																i.
Award / NTP CMServices - Level 1 BNR Improvements	90	0	27-Aug-16 A	05-Jul-17 A	100						-										1
Design Process	50	5	217 Mg-10 A	00 OUP IT A	100																í.
	100	0	20 Nov 15 A	22 Sep 16 4	100					.			·+								
Design - Level 1 BNR Improvements	120	0	30-Nov-15 A	23-Sep-16 A	100																ĺ.
Bid / Construction		. 1													7						í.
County Prepare Bid for Advertisement - Level 1 BNR Improvements	7		24-Sep-16 A	29-Sep-16 A	100																1
Bid / Advertise - Level 1 BNR Improvements	29	0	30-Sep-16 A	11-Nov-16 A	100											:					1
Remaining Level of Effort Actual Work Actual Level of Effort Remaining Wo	ork			Page 10 of	11							H	la					ADI	S		

Bay Park Master Schedule 190930			Master Schedule							As of 30-Sep-19												
Activity N	lame	Orig Dur	Rem Dur	Start	Finish	% Comp 2013	201			2016	201		2018	2019		020	2021		022	2023	2024	
								QQQQ	QQ		QQQ	QQQ	QQQ	QQQ	QQC		QQQ	QQQ	QQQ	JOOC		
	Bid Opening - Level 1 BNR Improvements	1	0	15-Nov-16 A	15-Nov-16 A	100																
	Award / NTP - Level 1 BNR Improvements	90	0	16-Nov-16 A	05-Jul-17 A	100																
	Construction - Level 1 BNR Improvements	913	191	05-Jul-17 A	07-Apr-20*	79						: :	: :	: :								
	Long Beach WPCP Consolidation																					
	S35109-01G - Long Beach Pump Station													-					+++			
	Design Process													-	+							
	Pump Station Design - Long Beach Pump Station (PMJV)	186	93	06-May-19 A	31-Dec-19	50																
	Bid / Construction														╈┿	+ +			÷÷			
	County Prepare Bid for Advertisement - Long Beach Pump Station	7	7	03-Jan-20	09-Jan-20	0																
	Bid / Advertise - Long Beach Pump Station	29	29	10-Jan-20	07-Feb-20	0																
	Bid Opening - Long Beach Pump Station	1	1	11-Feb-20	11-Feb-20	0																
	Award / NTP - Long Beach Pump Station	145	145	12-Feb-20	05-Jul-20	0														TTT		
	Construction - Long Beach Pump Station	909	909	06-Jul-20	31-Dec-22*	0																
	S35109-01S - Long Beach HDD Force Main													-								
	Design Process													-								
	HDD Design - Long Beach HDD Force Main (PMJV)	186	143	06-May-19 A	19-Feb-20	23																
	Bid / Construction														-							
	County Prepare Bid for Advertisement - Long Beach HDD Force Main	7	7	20-Feb-20	26-Feb-20	0																
	Bid / Advertise - Long Beach HDD Force Main	29	29	28-Feb-20	27-Mar-20	0									, d							
	Bid Opening - Long Beach HDD Force Main	1	1	31-Mar-20	31-Mar-20	0									ļļ							
	Award / NTP - Long Beach HDD Force Main	174	174	01-Apr-20	21-Sep-20	0																
	Construction - Long Beach HDD Force Main	831	831	22-Sep-20	31-Dec-22*	0																
	S35109-01M - Long Beach Consolidation CM Contract														┿┿							
	RFP / Advertise CM Services - Long Beach Consolidation	29	29	13-Dec-19	10-Jan-20	0									0							
	Award / NTP CM Services - Long Beach Consolidation	96	96	11-Jan-20	15-Apr-20	0																
	S35109-02G - Austin Boulevard Force Main									-												
	Design Process									V												
	Prepare RFP - Austin Boulevard Force Main Design	7	0	05-Feb-16 A	10-Feb-16 A	100																
	Issue RFP for On-Call Final Design - Austin Boulevard Force Main	15	0	11-Feb-16 A	26-Feb-16 A	100				0												
	Award / NTP Final Design - Austin Boulevard Fore Main Design	14	0	27-Feb-16 A	01-Jun-16 A	100																
	Final Design - Austin Boulevard Force Main	310	0	01-Jun-16 A	07-Sep-18 A	100				-												
	Bid / Construction																					
	County Prepare Bid for Advertisement - Austin Boulevard Force Main	7	0	08-Sep-18 A	13-Sep-18 A	100							1									
	Bid / Advertise - Austin Boulevard Force Main	29	0	14-Sep-18 A	09-Nov-18 A	100																
	Bid Opening - Austin Boulevard Force Main	1	0	13-Nov-18 A	13-Nov-18 A	100							1									
	Milestones																			+++	++++	
	Program Management Award	0	0	12-Aug-13 A		100 ♦																
	Program Management Complete	0	0	5	07-Jan-25	0																

Remaining Level of Effort

Actual Work

Remaining Work



Actual Level of Effort