

WATER

STATE OF NEW JERSEY

Board of Public Utilities
44 South Clinton Avenue, 3rd Floor, Suite 314
Post Office Box 350
Trenton, New Jersey 08625-0350
www.nj.gov/bpu/

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IN THE MATTER OF SUEZ WATER NEW JERSEY, INC. and SUEZ WATER TOMS RIVER, INC. DISTRIBUTION SYSTEM IMPROVEMENT CHARGE FOUNDATIONAL FILING PURSUANT TO N.J.A.C. 14:9-10.4)))	DECISION AND ORDER APPROVING STIPULATION OF SETTLEMENT
)	DOCKET NO. WR18101158

Parties of Record:

Bryant Gonzalez, Esq., Suez Water New Jersey, Inc. & Suez Water Toms River, Inc., Petitioner Stefanie A. Brand, Esq., Director, New Jersey Division of Rate Counsel

BY THE BOARD:

On October 22, 2018, Suez Water New Jersey, Inc. and Suez Water Toms River, Inc. ("Company" or "Petitioner"), a public utility corporation of the State of New Jersey, filed a petition pursuant to N.J.A.C. 14:9-10.1 <u>et seq.</u> for approval to file and implement an automatic adjustment clause that would establish a Distribution System Improvement Charge ("DSIC") for the renewal of water distribution system assets for the period of 2018 through 2022 ("DSIC Foundational Filing").

BACKGROUND/PROCEDURAL HISTORY

The Company's initial DSIC Foundational Filing was approved by the New Jersey Board of Public Utilities ("Board") on October 23, 2012 in BPU Docket No. WR12080724. The Company filed its base rate filing on March 11, 2013, which requested a base rate increase that incorporated the entirety of the Company's first DSIC recovery period (November 1, 2012 through April 30, 2013) and second DSIC recovery period (May 1, 2013 through October 31, 2013). The base rate case was approved on November 22, 2013, and also incorporated the entirety of the DSIC-eligible projects in a test-year ending May 31, 2013 in BPU Docket No. WR13030210.

The Petitioner filed its second DSIC Foundational Filing, which was approved by the Board on November 22, 2013 in BPU Docket No. WR13030210. In the same petition, the Company filed its base rate filing on March 11, 2013, which requested a base rate increase that incorporated the entirety of the Company's first DSIC recovery period (December 1, 2013 through May 31, 2014), second DSIC recovery period (June 1, 2014 through November 30, 2014), third DSIC recovery period (December 1, 2014 through May 31, 2014) and fourth DSIC recovery period (June 1, 2015 through November 30, 2015). This base rate case was approved on November 22, 2013, and included the entirety of the DSIC-eligible projects in a test-year ending May 31, 2013.

The Petitioner filed its third DSIC Foundational Filing, which was approved by the Board on July 29, 2016, in BPU Docket No. WR16040303. The Company filed its most recent base rate filing, BPU Docket No. WR18050593, on May 31, 2018, which base rate increase requested the incorporation of the Company's first DSIC recovery period (August 1, 2016 through January 31, 2017), second DSIC recovery period (February 1, 2017 through July 31, 2017), third DSIC recovery period (August 1, 2017 through January 31, 2018) and fourth DSIC recovery period (February 1, 2018 through July 31, 2018). This base rate case was approved on November 19, 2018.

The Petitioner ultimately filed its fourth DSIC Foundational Filing on October 22, 2018 as a separately docketed matter from the base rate case. The Company, the New Jersey Division of Rate Counsel ("Rate Counsel"), and the Staff of the Board ("Staff") (collectively, "Parties") worked to issue and respond to discovery in a timely manner, which would permit this matter to be acted upon by the Board within the 120-day period specified in N.J.A.C. 14:9-10.4(c). However, due to the timing of the January and February Board agenda meetings, the Company filed a letter on January 17, 2019 indicating it consented to extending the 120-day review period to the Board's February 27, 2019 agenda meeting.

A teleconference was held on January 16, 2019, with representatives from all Parties in attendance. On that conference call, representatives of the Company responded to additional questions from Board Staff and Rate Counsel. The Company submitted revised Exhibits P-3 and P-4 for the project schedules on February 11, 2019, as requested by both Staff and Rate Counsel at the teleconference. In addition, a supplemental Exhibit which included all projects previously approved, but not initiated, under the third Foundational Filing, was submitted. Since these projects were approved and eligible for inclusion in a future DSIC recovery period filing, the Company represented that it intends to utilize these projects listed in the supplemental Exhibit in the future, as either substitute projects or as DSIC-eligible projects initiated under any future gap period, as set forth in, inter alia, N.J.A.C. 14:9–10.4.

After proper notice, two public hearings were held in the Petitioners' service territory on February 13, 2019 at 1:00 p.m. in Toms River, New Jersey and at 5:30 p.m. in Hackensack, New Jersey. No members of the public appeared at the hearings and no written comments were received.

¹ The January agenda meeting only afforded 87 days for the Board to review the filing, while the February agenda meeting is eight days past the expiration of the 120-day review period.

DISCUSSION AND FINDINGS

Following further review and discussion, the Parties reached an agreement and executed the Stipulation of Settlement ("Stipulation") on February 19, 2019. Based upon and subject to the terms and conditions set forth in the Stipulation, the Parties stipulate and agree to the following:²

- 1. The Parties stipulate that the projects contained in Exhibits P-4 and P-5 to the DSIC Foundational Filing, which are attached to the Stipulation in redacted form as Attachment A, have been reviewed. The Parties further stipulate that the projects in Exhibits P-4 and P-5 that begin construction after the test year in the Company's last base rate case (September 30, 2018) are DSIC-eligible projects as defined at N.J.A.C. 14:9-10.2 and are eligible to be included in the Company's DSIC filings pursuant to N.J.A.C. 14:9-10.7. Furthermore, the Parties acknowledge that the replacement project lists and the cleaning and lining project lists in Exhibits P-4 and P-5 contain projects that have not been specifically scheduled but may be undertaken as replacement projects or may be accelerated to address changed conditions. In such instances, the Company will advise Board Staff and Rate Counsel that these projects will be advanced. To the extent that additional projects not on these lists are identified through continuing condition assessments, the Company will advise Board Staff and Rate Counsel that these projects may be added to the list of projects to be undertaken using the procedures defined in N.J.A.C.14:9-10.4(b)5.
- 2. The Parties agreed that this DSIC Foundational Filing is made pursuant to the Board's DSIC rules generally found at N.J.A.C. 14:9-10.4 et seq., and was filed subsequent to, but in the context of, the Company's previous base rate case to establish a new, updated DSIC Foundational Filing. The Board approved new rates in the Company's prior base rate case effective November 29, 2018, which pursuant to the DSIC regulations, incorporated (by resetting the DSIC surcharges to zero) the Company's previous DSIC surcharges pursuant to the Company's previous DSIC Foundational Filing.
- 3. The Parties agreed that the Attachment A to this Stipulation accurately reflects the P-3 DSIC Assessment Schedule. Pursuant to that corrected schedule, the maximum amount of Annual DSIC revenues is \$13,797,646 should the Company invest the maximum pursuant to the DSIC regulations and the Parties agree that the Board should so find.
- 4. The Parties agreed that the Company's base spending requirement is \$9,685,066 as calculated in Exhibit P-2 of the DSIC Foundational Filing.
- 5. The Parties recommend that the Board authorize the recovery in the DSIC of the revenue requirement, calculated in accordance with N.J.A.C. 14:9-10.9, of the actual costs associated with the projects contained in Exhibits P-4 and P-5. The Parties acknowledge that the Company has commenced construction of some of the projects listed on Exhibits P-4 and P-5 under a prior DSIC Foundational Filing and these projects incurred previously unrecovered restoration costs, the recovery of which will be sought in

 $^{^{2}}$ Although summarized in this Order, the detailed terms of the Stipulation are controlling, subject to the findings and conclusions of this Order.

DSIC rate filings under this DSIC Foundational Filing in accordance with N.J.A.C. 14:9-10.3(c).

Based upon the information presented in the DSIC Foundational Filing and agreed to by the Parties in the Stipulation, the Board <u>HEREBY FINDS</u> that the Company's 2018 overall revenue for DSIC purposes is \$275,952,916. The Board <u>FURTHER FINDS</u> that the Petitioner's maximum amount of annual DSIC revenues that may be collected is \$13,797,646, or no more than five percent of the Company's total water revenues established in the Company's most recent base rate case. The Company will implement the DSIC surcharge if, and when, it achieves specific levels of infrastructure investment and completes and places the facilities into service as required by N.J.A.C. 14:9-10.1 et seq. As an example, an average residential customer with a 5/8-inch meter may be subjected to a maximum monthly DSIC surcharge of \$3.36. These proposed rates are estimates and may change, however the maximum annual DSIC revenue requirement, \$13,797,646, cannot be exceeded.

The Board <u>HEREBY ORDERS</u> that, in accordance with N.J.A.C. 14:9-10.5(b), the Petitioner shall make DSIC filings on a semi-annual basis, commencing approximately six months after the effective date of the Foundational Filing. Petitioner must submit its semi-annual DSIC filing within 15 days of the end of the DSIC recovery period. DSIC filings shall be reviewed by Board Staff and Rate Counsel. Petitioner may recover the interim surcharge associated with the DSIC-eligible projects closed during the DSIC recovery period not objected to by Board Staff or Rate Counsel beginning 60 days after the end of the DSIC recovery period, subject to refund at the Board's discretion. It is <u>FURTHER ORDERED</u> that Petitioner must comply with the base spending requirements set forth in this Order. Failure to comply with the base spending requirements will result in a reduction and refund, where appropriate, of the DSIC surcharge. Thus, Petitioner's DSIC surcharge is interim, subject to refund, and shall not exceed the annual maximum revenue requirement of \$13,797,646, as set forth in this Order.

The Board <u>FURTHER ORDERS</u>, that in accordance with N.J.A.C. 14:9-10.4(e), if within three years after the effective date of this Order, Petitioner has not filed a petition in accordance with the Board's rules for the setting of its base rates, all interim charges collected under the DSIC shall be deemed an over-recovery, and shall be credited to customers in accordance with the Board's rules.

The Board <u>FURTHER</u> <u>ORDERS</u>, that as of the effective date of the Order entered in the Company's base rate filing on May 31, 2018 in Docket Number WR18050593, the third Foundational Filing (effective August 8, 2016, Docket No. WR16040303) was concluded, the DSIC rate was reset to zero and no additional DSIC filings or DSIC rates may be collected, made or implemented pursuant thereto.

Having reviewed the DSIC Foundational Filing and the Stipulation, the Board <u>FINDS</u> that the Parties have voluntarily agreed to the Stipulation, and that the Stipulation fully disposes of all issues in this proceeding. The Board <u>FURTHER FINDS</u> the DSIC Foundational Filing and Stipulation to be reasonable, in the public interest, and in accordance with the law. Therefore, the Board <u>HEREBY ADOPTS</u> the Stipulation, attached hereto, including all attachments and schedules, as its own, incorporating by reference the terms and conditions of the Stipulation, as if they were fully set forth at length herein, subject to the requirements set forth in N.J.A.C. 14:9-10.1 et seq., and the conditions set forth in this Order.

Based upon the foregoing, the Board <u>HEREBY APPROVES</u> the Company's DSIC Foundational Filing and <u>ORDERS</u> that the Company may implement a DSIC, subject to this Order and Petitioner's ongoing compliance with the DSIC regulations, as well as conformity of the base spending requirements and semi-annual true-up submissions.

The effective date of this Order is March 9, 2019.

DATED: 2/27/19

BOARD OF PUBLIC UTILITIES

BY:

JOSEPH L. FIORDALISC

PRESIDENT

MARY-ANNA HOLDEN

COMMISSIONER

DIANNE SOLOMON COMMISSIONER

UPENDRA J. CHIVUKULA

COMMISSIONER

ROBERT M. GORDON

COMMISSIONER

ATTEST:

AIDA CAMACHO-WELCH

SECRETARY

i HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities.

IN THE MATTER OF SUEZ WATER NEW JERSEY, INC. and SUEZ WATER TOMS RIVER, INC. DISTRIBUTION SYSTEM IMPROVEMENT CHARGE FOUNDATIONAL FILING PURSUANT TO N.J.A.C. 14:9-10.4

DOCKET NO. WR18101158

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STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF SUEZ WATER NEW JERSEY, INC. AND SUEZ WATER TOMS RIVER, INC DISTRIBUTION SYSTEM IMPROVEMENT CHARGE FOUNDATIONAL FILING PURSUANT TO N.J.A.C. 14:9-10.4 **BPU DOCKET NO. WR18101158**

STIPULATION OF SETTLEMENT

APPEARANCES:

Bryant Gonzalez, Esq., on behalf of SUEZ Water New Jersey Inc. and SUEZ Water Toms River, Petitioner

Renee Greenberg, Deputy Attorney General (Gurbir S. Grewal, Attorney General of New Jersey), on behalf of the Staff of the Board of Public Utilities

Christine M. Juarez, Esq., Assistant Deputy Rate Counsel, on behalf of the Division of Rate Counsel (Stefanie A. Brand, Director)

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

The Parties in this proceeding are SUEZ Water New Jersey, Inc. and SUEZ Water Toms River, Inc. (the "Company", "SWNJ" or "Petitioner"), the Division of Rate Counsel ("Rate Counsel"), and the Staff of the Board of Public Utilities ("Board Staff" or "Staff"). As a result of an analysis of Petitioner's Distribution System Improvement Charge ("DSIC") Foundational Filing made on October 22, 2018, as well as discovery propounded upon Petitioner, and two (2) public hearings held in the service territory on February 13, 2019, the Company, Board Staff, and Rate Counsel (collectively, the "Parties") have come to an agreement and execute this stipulation of settlement ("Stipulation") in this matter. The Parties hereto agree and stipulate as follows:

- 1. Petitioner is a public utility corporation of the State of New Jersey subject to the jurisdiction of the New Jersey Board of Public Utilities ("Board"). Petitioner's principal business office is located at 461 From Road, Paramus, NJ 07652.
- 2. Petitioner is engaged in the business of collecting, treating and distributing water for retail service to approximately 250,000 customers. The Company's customers are located in Bergen, Hudson, Passaic, Sussex, Morris, Hunterdon, Ocean and Monmouth Counties, New Jersey.
- 3. The Parties agree that the Company has satisfied the Foundational Filing requirement specified in N.J.A.C. 14:9-10.4(b). The Parties agree that as required at N.J.A.C. 14:9-10.4(c), the Company recently concluded a base rate proceeding and implemented base rates pursuant to an Order of the Board dated November 19, 2018 in BPU Docket No. WR18050593.
- 4. The Parties agree that this DSIC Foundational Filing is made pursuant to the Board's DSIC rules generally found at N.J.A.C._14:9-10.4 et. seq., and was filed subsequent to, but in the context of, the Company's previous base rate case to establish a new, updated DSIC Foundational Filing. The Board approved new rates in the Company's prior base rate case effective November 29, 2018, which pursuant to the DSIC regulations, incorporated (by resetting the DSIC surcharges to zero) the Company's previous DSIC surcharges pursuant to the Company's previous DSIC Foundational Filing.
- 5. The Parties stipulate the projects contained in Exhibits P-4 and P-5 to the DSIC Foundational Filing, which are attached hereto in redacted form as Attachment A, have been reviewed. The Parties further stipulate that the projects in Exhibits P-4 and P-5 that begin construction after the test year in the Company's last base rate case (September 30, 2018) are

DSIC-eligible projects as defined at N.J.A.C. 14:9-10.2 and are eligible to be included in the Company's DSIC filings pursuant to N.J.A.C. 14:9-10.7. Furthermore, the Parties acknowledge that the replacement project lists and the cleaning and lining project lists in Exhibits P-4 and P-5 contain projects that have not been specifically scheduled but may be undertaken as replacement projects or may be accelerated to address changed conditions. In such instances, the Company will advise Board Staff and Rate Counsel that these projects will be advanced. To the extent that additional projects not on these lists are identified through continuing condition assessments, the Company will advise Board Staff and Rate Counsel that these projects may be added to the list of projects to be undertaken using the procedures defined in N.J.A.C.14:9-10.4(b)5.

- 6. Pursuant to N.J.A.C. 14:9-10.4(b)(l), the Company provided as Exhibits P-4 and P-5 an engineering evaluation report which identifies the rationale for the work to be performed; demonstrates that the proposed plan is cost-effective; identifies elements of the distribution system that require investment including assets which might be susceptible to failure; and identifies efforts to extend the life of the distribution system assets. Pursuant to N.J.A.C. 14:9-10.4(b)(2), also included with Exhibits P-4 and P-5 are DSIC project information which included the following elements:
 - a. a list of DSIC-eligible projects by asset class;
 - b. project descriptions, including the nature, location, estimated in-service dates, as well as the vintage and condition of the facilities being replaced or rehabilitated, estimated project costs, and descriptions and reasons for the projects; and

- c. aggregate information capturing blanket-type, DSIC-eligible infrastructure projects and the estimated annual cost of such blanket-type replacement programs.
- 7. The Parties agree that the Attachment B to this Stipulation accurately reflects the P-3 DSIC Assessment Schedule. Pursuant to that corrected schedule, the maximum amount of Annual DSIC revenues is \$13,797,646 should the Company invest the maximum pursuant to the DSIC regulations and the Parties agree that the Board should so FIND.
- 8. The Parties agree that the Company filed certain portions of this DSIC Foundational Filing as Confidential.
- 9. Subject to the DSIC rules, the Parties recommend that the Board authorize the recovery in the DSIC of the revenue requirement, calculated in accordance with N.J.A.C. 14:9-10.9, of the actual costs associated with the projects contained in Exhibits P-4 and P-5. The Parties acknowledge that the Company has commenced construction of some of the projects listed on Exhibits P-4 and P-5 under a prior DSIC Foundational Filing and these projects incurred previously unrecovered restoration costs, the recovery of which will be sought in DSIC rate filings under this DSIC Foundational Filing in accordance with N.J.A.C. 14:9-10.3(c).
- 10. The Parties agree that the Company's base spending requirement is \$9,685,066 as calculated in Exhibit P-2 of the DSIC Foundational Filing.
 - 11. A copy of the public notice is attached as Attachment C to this stipulation.
- 12. The Parties recognize that the Company is continuing with a cleaning and lining program for larger diameter, unlined cast iron mains that prove to be appropriate candidates for structural or non-structural cleaning and lining. The Company agrees to review the project weighting and selection criteria used in its InfoMaster program, or any successor program, to

ensure that these projects are given adequate priority in funding and further, the Company agrees to report on this in its next DSIC Foundational Filing.

- 13. The Company's Engineering Analyses provided in Exhibits P-4 and P-5 recognize the unique nature of larger diameter mains with regard to the risk and consequences of failure of these mains. In its next DSIC Foundational Filing, the Company will report on the results of its expanded transmission main assessment program.
- 14. The Parties recognize that the Company is continuing to perform acoustical surveys of asbestos cement pipe in Toms River to prioritize the replacement of pipe segments that have reduced wall thickness. The Company will continue this program and supplement it by beginning to track and record main breaks on segments that have undergone acoustical surveys. The Parties agree that this effort will allow the Company to refine the main replacement recommendations derived from the acoustical surveys by better correlating reduced pipe wall thickness to the potential for failure.
- 15. This Stipulation is the product of extensive negotiations by the Parties, and it is an express condition of the settlement embodied by this Stipulation that it be presented to the Board in its entirety without modification or condition. It is also the intent of the Parties to this Stipulation that this settlement, once accepted and approved by the Board, shall govern all issues specified and agreed to herein. The Parties to this Stipulation specifically agree that if adopted in its entirety by the Board, no appeal shall be taken by them from the order adopting same as to those issues upon which the Parties have stipulated herein. The Parties agree that the within Stipulation reflects mutual balancing of various issues and positions and is intended to be accepted and approved in its entirety. Each term is vital to this Stipulation as a whole, since the Parties hereto expressly and jointly state that they would not have signed this Stipulation had any

terms been modified in any way. In the event any particular aspect of this Stipulation is not accepted and approved by the Board, then any Party hereto materially affected thereby shall not be bound to proceed under this Stipulation. The Parties further agree that the purpose of this Stipulation is to reach fair and reasonable rates, with any compromises being made in the spirit of reaching an agreement. None of the Parties shall be prohibited from or prejudiced in arguing a different policy or position before the Board in any other proceeding, as such agreements pertain only to this matter and to no other matter.

one and the same instrument. SUEZ WATER NEW JERSEY, INC. SUEZ WATER TOMS RIVER, INC. Digitally signed by Bryant Gonzalez DN: cn=Bryant Gonzalez, o=SUEZ M&S, ou=305, email=Bryant.Gonzalez@suez.com, c=US By: Date Bryant Gonzalez, Esq, Attorney for Petitioner **GURBIR S. GREWAL** ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities By: Renee Greenberg Date Deputy Attorney General STEFANIE A. BRAND, ESQ. **DIRECTOR - RATE COUNSEL** By: Christine M. Juarez, Esq. Date Assistant Deputy Rate Counsel

This Stipulation may be executed in as many counterparts as there are Parties of

this Stipulation, each of which counterparts shall be an original, but all of which shall constitute

16.

16. This Stipulation may be executed in as many counterparts as there are Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument.

	SUEZ WATER NE	W JERSEY, INC.
	SUEZ WATER TO	MS RIVER, INC.
· 	By:Blan	Digitally signed by Bryant Gonzalez DN, con-Bryant Gonzalez, on SUE7, MAS, com-DSS emails Bryant Gonzalezes wez.com, c.e.65 Date: 2019.02.15 10:27:03-0500°
Date	Bryant Gonz Attorney for	

GURBIR S. GREWAL
ATTORNEY GENERAL OF NEW JERSEY
Attorney for the Staff of the Board of Public Utilities

Date

By: Rence Greenberg

Deputy Attorney General

By:

STEFANIE A. BRAND, ESQ. DIRECTOR - RATE COUNSEL

 $\frac{\lambda - |q - |q|}{\text{Date}}$

Christine M. Juarez, Esq.
Assistant Deputy Rate Counsel

one and the same instrument. SUEZ WATER NEW JERSEY, INC. SUEZ WATER TOMS RIVER, INC. Digitally signed by Bryant Gonzalez
DN: cn=Bryant Gonzalez o=SUEZ M&S, By: Bryant Gonzalez, Esq, Date Attorney for Petitioner **GURBIR S. GREWAL** ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities Rence Greenberg Deputy Attorney General STEFANIE A. BRAND, ESQ. **DIRECTOR - RATE COUNSEL** By: Date Christine M. Juarez, Esq. Assistant Deputy Rate Counsel

This Stipulation may be executed in as many counterparts as there are Parties of

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16.

ATTACHMENT A

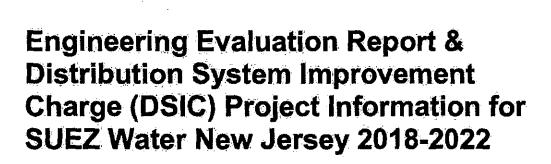
SUEZ Water New Jersey SUEZ Water
Toms River

In the Matter of Distribution System Improvement Charge (DSIC) Foundational Filing Pursuant to N.J.A.C. 14:9-10.4 BPU Docket No. WR18101158

October 19, 2018

REDACTED





October 2018





SUEZ Water New Jersey's distribution network serves approximately 800,000 people within Bergen, Hudson, Sussex, Morris, Hunterdon and Passaic County in New Jersey across over 60 different municipalities. The distribution network contains mains installed between 1869 to present with the oldest mains focused in the southern portion of the system in Bergen and Hudson County.

The network approximately consists of the following:

- 2,200 miles of pipeline
- 49 pumping and booster stations
- 25 active tanks with a total storage capacity of 57.2 million gallons
- 15.700 hydrant
- 47,400 valves (system and hydrant)
- 206,500 service lines

As part of SUEZ Water New Jersey's 2016 Master Planning process, a detailed analysis was completed on the physical characteristics of the water mains within the Company's system. Approximately 20% of the system has reached its industry accepted useful life of 100 years. By 2025, this percentage will increase to approximately 40%. SUEZ's analysis was not limited to pipe age, but also investigated material and vintage failure patterns along with a criticality/risk model to prioritize the necessary replacement and rehabilitation. SUEZ predominately utilized Cast Iron and Ductile Iron in the construction and maintenance of its system. Prior to 1940, Unlined Cast Iron was typically installed. This Unlined Cast Iron pipe shows evidence of high levels of tuberculation. Mains identified with reduced hydraulic capacity are targeted first for main rehabilitation programs. Figure 1.1 shows the distribution of mains installed in the SUEZ system by material type for both raw and finished water applications. Approximately 75% of SUEZ network consist of Lined and Unlined Cast Iron main. In respect to pipe vintage, it has been determined that certain mains installed between 1962 and 1966 exhibit a high failure rate in comparison to other mains as seen in Figure 1.2. Over the last 10 years the Company has had an average of 409.3 breaks per year, including joint leaks, which translates to about 18.6 breaks per year per 100 miles of pipe. This can be seen in Table 1.1:

Table 1-1: Main Break Analysis

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total	Average
Breaks:	460	489	439	321	310	452	450	504	374	294	4093	409.3
Per 100 Mi:	20.9	22.2	19.9	14.6	14.1	:	20.4	22.9	17	13.4		18.6

In 2017, SUEZ began analyzing its main break and asset management data to perform a risk-based rehabilitation and replacement planning study on its distribution system. SWNJ utilized an ArcGIS-based asset management and capital planning tool called InfoMaster to prioritize projects based on consequence of failure (COF) and likelihood of failure (LOF) with a subsequent plan of action for each segment of main (replacement, rehabilitation, investigation). This analysis is described in further detail in Appendix 1. Projects identified in both the 2016 Master Plan and previous Foundational Filing are scheduled to be completed in 2018 and 2019 are still included in this new Foundational Filing for 2018-2022 while SUEZ transitions to InfoMaster as its primary asset management planning tool. The complete list of pipe segments listed as "High Risk" and "Very High Risk" can be found in Appendix 2.

To date, SUEZ's InfoMaster analysis has been limited to its Hackensack/Franklin Lakes Water Systems and the analysis of the other water systems (Lambertville, Vernon, etc) will be completed in the near future.



Figure 1.1 SUEZ Pipeline Material Distribution

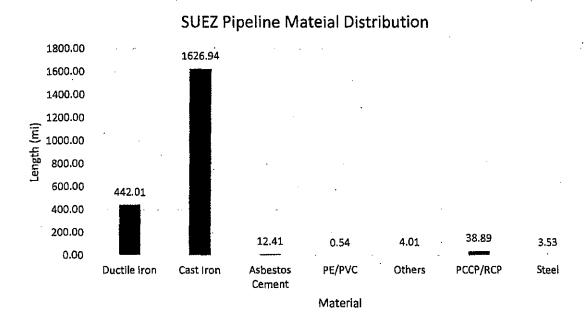
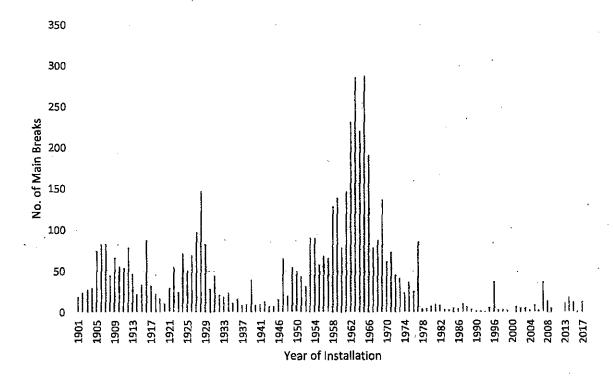


Figure 1.2 Pipe Installation Year vs Total Breaks (2003-2015)





SUEZ maintains a hydrant and valve testing program to identify where regular maintenance work may be required to prevent valve or hydrant failure. SUEZ operates more than 31,000 system valves and approximately 16,400 hydrant valves. On a continuous basis, the Company replaces leaking, damaged, and un-repairable valves to improve customer service and maintain system integrity. SUEZ follows the NJ BPU service standard to exercise all system valves 12" or larger every two years and all other smaller valves every four years. SUEZ works closely with the towns it serves to resolve any concerns that may arise during the use of its hydrants during firefighting efforts and training or during authorized hydrant usage. Additionally, SUEZ has a flow testing program that it conducts on an annual basis. SUEZ personnel conduct flow tests for both internal needs as well as external requests (Developers, ISO, etc.).

SUEZ manages "blanket projects" for hydrant, short main and valve, domestic service, and fire service replacement projects and unreimbursed utility relocation. Over the last 5 years SUEZ has averaged just above 400 main breaks a year. SUEZ maintains this formatting for controlling and tracking capital costs as it is near impossible to pre-determine the quantity of such replacements or where these replacements will be needed.

In addition to main replacement and rehabilitation SUEZ actively conducts leak testing on small and large diameter mains to locate and repair invisible (non-surfacing) leaks before they result in breaks and unplanned service interruptions. This practice helps extend the useful life of the Company's underground assets, as well as help maintain system integrity, allowing the minimization of service interruptions SUEZ customers may experience.





SUEZ Water New Jersey Projected Annual Spending

Revised 1/31/19

			Stranger general see a		

DSIC Classification	2018	2019	2020	2021	2022
Main Replacement Projects - D600	\$2,229,000	\$18,611,900	\$34,219,200	\$36,972,600	\$39,017,600
twant neprocentent tojeca bood	72,223,000	210,011,300	33-,213,200	_430,372,000	\$55,027,000
Dead End Looping		\$217,300	\$229,900		· · · · · · · · · · · · · · · · · · ·
Cleaning and Lining	\$134,000	\$1,957,500	\$894,000	\$4,260,186	\$1,733,407
otenning after chining.	2234,000	04000000	703-7,000	24,200,200	91,733,407
Blanket Structured Projects					
Hydrant Replacement - D501	\$716,000	\$2,765,000	\$2,848,000	\$2,933,000	\$3,021,000
Valve Replacement - D503	\$448,000	\$1,760,000	\$1,813,000	\$1,867,000	\$1,923,000
		,			
Domestic & Fire Service Replacement - F501	\$2,624,000	\$9,995,000	\$10,295,000	\$10,603,000	\$10,922,000
Unrelmbursed Utility Relocation	\$115,000				
TOTAL	\$6,266,000	\$35,306,700	\$50,299,100	\$56,635,786	\$56,617,007

Note: The list of main replacement projects includes \$114,537,900 of Alternate projects.

. Any difference between the planned expenditures and the total projected expenditures reflect additional funds available without specific projects determined at this time.

DSIC Classification	2018	2019	2020	2021	2022
Main Replacement Projects, Dead End Looping and Cleaning and Lining	\$2,363,000	\$25,255,000	\$41,935,000	\$41,935,000	\$41,935,000
Biankets	\$3,903,000	\$14,520,000	\$14,956,000	\$15,403,000	\$15,866,000
Total DSIC Projected Spending	\$6,266,000	\$39,775,000	\$56,891,000	\$57,338,000	\$57,801,000

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		Police costs, as built decumentation and restoration costs remaining.	Pelice casts, as-boilt documentation and restaination costs remaining.	Police costs, as built documentation and restretion costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as built ent documentation and restoration costs remaining.	Police tosts, as-built documentation and resemblon costs remaining.	Police costs, as built documentation and restoration costs remaining.	Police costs, as built ent documentation and restoration costs remaining.	Phase II & II Construction, police costs, as-built documentation and restoration costs remaining.	Police costs, as-built decumentation and restoration costs remaining.	Police costs, as built documentation and restoration costs remaining.	Police casts, as-built documentation and restoration costs remaining.	Police costs, as-bulk documentation and restoration costs remaining.
		Replacement	Replacement	Перівсемеnt	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Repizcement
Performence	CARecia	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Transmission	Distribution	Distribution	Distribution	Distribution
	Total Vandarian	(i)/inz	(1) (10)	(t) Zroz	9 (3)	01100	Zar7(1)	2017[15	(1) Take	ii) comes	2017.03	111/2022 (11)/2022		Winds.
Est. Cost	Coet of Project	\$251.160	\$214,500	\$229,000	\$202,800	27,466,400	\$487,500	000/2185	\$292,500	\$2,159,600	00070+95	\$1,359,700	\$1,165,600	\$285,000
Proposed Main	Materiol	ō	5	5	ā	5	_	8	<u> </u>	5	8	5	. б	Б
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		720,4	86	89	íi.	430	1,180	g	S\$	1,348	1,440	23.84	2,354	8
4	Year Inst.	1964	8283	1908	1957	1900	1933	2900	1911	1900	. 28E	1963	1907	1909
Original Malin	Metarial	5	5	0	J	o o	Ū	D	٥	D	Ģ	D	0	ō
	S)		<u> </u>	-	۰			٠	90	16	••	u	•	•
	Tems	Hawerth	Closter	Closter	Crestall	Carktadt	North Bergen	Cuffside Park	Cliffside Park	Uniton City	Alpine	Wathington Township	Hackensack	Edgewater
Project information	Project Scape													
	Project Tkie	Beacon St	Faintew Ave	Welington Ave.	Ales & (Permons)	Broad St.	75th St/Broadway	Gorge Rd	West End Ave	Bergenline Ave-17th to Joth	Buckingham Drive (UPPER PHASE)	Edgewood Dr, Andrea Dr and Parkway CT	Union St	Russell Avenue
	Asset ID	. 10-18172-24	47.26165.01	47-26279-01	39-1887-35	6-4928-03 .	7-63-01	10-624-01	10-4077-06	3-ONG-121	\$6-27311-06	40-26195-03	24-1875-01	13-409-01
	reject Rumber	1	2	· · ·	*	*5	•	-	••		9	#	α	n

	•	Comments	Police costs, as-built documentation and restoration costs remaining.	Police costs, se-built documentation and restoration costs remaining.	Police costs, as built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documen tation and restoration costs remaining.	Polker costs, resbuilt documentation and restantion costs remelaing.	Police costs, as-bulk documentation and restoration costs remaining.	Police cests, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and resturation costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration tosts remaining,
		KEDEWEI BACKDON	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement .	Replacement
	Performance	Critaria	Okstribution	Distribution	Distribution	Ostribution	Distribution	Olstribution	Distribution	Ostrbuton	Distribution	Distribution	Distribution	Distribution	Distribution
	,		(1) ChOS	(1),1007	2017 (1)	(1) £102	2017(3)	2017 (1)	(1) 2102	2007 (1)	ी।)दाव्ये	(1) / 100	2007(1)	101.03	(in) rot
	Est. Cost	Cort of Project	\$545,000	\$787,000	51,400,000	\$869,400	\$921,600	\$1,651,400	\$142,900	\$220,500	\$660,600	\$149,800	\$245,000	\$634,500	\$1,346,700
	Prepoted Main	· Material	ă	DI	25	6	ō	5	ō	5	5	õ	ā	8	5
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	1		959	1,375	1,460	1,350	1,650	2,880	300	330	1,170	DZE	5 7	191	3,298
		Year Inst.	1890	1963	1922	1959	1962	1964	0161	1927	1964	1960	Vaknawn	6961	2161
ļ	Original Main	Material	D	a	5	0	0	i	0	0	Ö	. .	o	. 0	0
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	!	Tevm	Cliffside Park	fartlee	Fortlee	Montvale	Monkete	Paramus	North Bergen	North Bergen	Montyale	Monyale	Lambertville	Alpine	Weehawken
	Project Information	Project Scope													
		Project Tible	Edgewater In	Edsəll Biv G	E. Cental Bird	Railroad Ave/Kinderkamack	N. Middetown Rd	Ridgewood Ave	71.815	Cottage Avenue	Raven Road, Cardinal CT and Alpine CIR	Challotte CT	S. Franklin Street from Swan Street to Brunswick Ave	Buckingham Drive	Grand/18th/J9th/Chestmut
		Asset 1D	10-197-20	23-25554-03	13-6241-02	59-23200-94	59-25495-01	32-26189-07	1-3397-01	2-36870-03	\$9-76197-65	59-27130-01	NIA	56-27311-06/07	4-4025-01
		Praject Nombar	×	15	16	a	18	22	2	. 🏗	æ	EQ.	2	n	95

	Comments	Police costs, as-built decumentation and restoration costs remaining.	Police tosts, as-butt documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-bullt documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built doctimentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining	Police costs, as-huit documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as bulk documentation and restoration costs remaining.
	Renewal Method	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement 6	Replacement	Replacement	Replacement de	Replacement de	Replacement de	Replacement do
	Criteria	Distribution	Olstribution	Ostribution	Distribution	Ostoburbon	Distribution	Distribution	Distribution	Oktribution	Distribution	Oistribution	Olstribution	Distribution
	Construction Year	2017(13)	t) ciar	(1) <i>C</i> (0X	10 tja	(i) <i>c</i> iox	i) (roa	(i) Lion	May (1)	tri stoci	3008(1)	201 8 [13]	(n) moz	(1) stor
ER Cost	Represents Total Cost of Project	\$351,200	\$148,300	\$198,700	001,721\$	2450,000	\$461,500	6937,800	\$913,900	\$915,000	\$175,000	\$357,500	\$1,018,700	\$497,300
Proposed Main	Material	10	۵	۵	8	ă	5	8	ō	25	ā	ō	5	<u> </u>
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	gue,	B62	293	384	310	806'T	1,969	28E.1	器	1,950	25	8	M2.1	780
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Original Main	Material	5	D	5	ij	5	5	מ	ט	מ	U	5	0	В
	4	•	*	-	•	7	~	4	*	•	•	•	<u>.</u>	۵
	S	Lambertville	Lambertville	Bogota	Bogota	Vernan Township	Vernan Township	Lamberville	Lambertville	Dematest	Pallsades Park	Palisades Park	Pallsades Park	North Bergen
Project Information	Prejett Stage							المواقية الاقاور والحواج والمواقية						
	Project TRJe	LV Clinton St Main Replace DSIC	York from George to N. Main	West Main Street	West Park Place	'/O UMPITE	Timbervew (Sussex Hills)	Bridge St from Canal to N Franklin	S Main from Ferry to Mt Hope	Central Ave	12th Street	E. Harnestead Ava	Princeton Flace, Morthwood Way	72nd St
	Assit 10	388-P1958-124	388-P1958-001	15-75601-01	15-25601-02	Baldwin Dr.	Sussex	N/A	N/A	43-3376-03		12-75377-01	22-20180-04	2-646-01
	Project Number	27	. 92	52	30	31	35	33	Ħ.	SE .	<u> </u>	Æ	· m	39

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	Folke costs, as-built documentation and restoration costs remaining.	Police costs, as built decumentation, and restoration costs remaining.	Police costs, as-bulle documentablen and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs remaining.	Police costs, as-built documentation and restoration costs ternalning.	Phase II plus Police costs, as- built documentation and restoration costs remaining.		, '	:			
	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement
Criteria	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distributien	Distribution	Distribution	Oktribution
	2010(1)	(1) 11002	(1) 8102	(1) 8502	(1) 87072	(I) 800 8	2018 [1]	GIG.	(M)	Œ	(9 <u>0</u>)	Sin	- Afri
Cost of Project	\$420,800	000'0125	\$660,000	\$849,000	\$726,300	\$770,000	\$1,440,800	\$1,344,500	\$779,000	\$160,000	\$850,000	\$250,000	\$325,000
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Year Inst.	1916	1966	1963	1962	1966	1962	1900	1957	1908	1927	1930		1980's
Material		5	D	٥	5	σ	ū	0		, 0	ŭ	ם	8
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Town	North Bergen	Harrington Park	Norwood	Norwead	Washington Tuwnship	Еметоп	Weehawken	Ridgefield	RidgeFeld	Englewood	fortiee	East Rutherford	Vernen Township
Project Scope													
Project Tale	Meadowriew Ave	Parkhil Poad	Fairway Terr	Knott Way	Gabriel Way	Azkerman Ave	KING AVE & BOAN PL WEEHAWEN	STUDIO RD, RIGGERELD	EDGEWATER AVE, RIDGEFIELD	Glenawood Avenue	Linwood Ave	Patterson Ave	Great Gorge Drive
Asset 10	2-5190-01	46-27113-03	50-26084-01	SD-25041-09	. 40-27066-03	41-25285-01	4-485-17 & 4-485-13	16-27021-01	16-559-10	30-9008-42	23-11778-01	B-221-05	N/A
Project Mumber	. 04	#	24	87	**	\$	46	47	. 87	69	58	, g	G
	Assistip Project filth Project Scope Town Star Marketal Year Inst. Sier Makeckal Cont of Project	Austib Project tith Project Scape Town Star Metetal Year Inst. Stee Malecal Code of Project Scape Code of Sc	Austility Froject Stape Town State of National Year Inst. State of National Collection Collection Collection Collection Collection Collection Collection Analysis Collection Collection Analysis Collection C	Austild Froject Nih Project Scope Town State Weeting Year Inst. State Material Year Inst. State Material Year Inst. State State </th <th>Autotób Franctób Franctób Town State (no. 1.55) State (no. 1.55)<th>Auctio reject tith reject tith</th><th>2-5.319-01 Medicinative From Sale of the control of th</th><th>Assistation Assistation Profit of the contraction Type State in the contraction State in t</th><th>Andrigo regiestible regiestible production and regiestible registible regiestible registible r</th><th>5.519-61 Model of the bill Project TRA Type Sep 1.50 Sep Sep 1.50 Sep Sep</th><th> 2512542 Medicative May Medicative</th><th>1358243 Profit This <</th><th>15.558-54 Columnia (Marchelle) Professor Professor</th></th>	Autotób Franctób Franctób Town State (no. 1.55) State (no. 1.55) <th>Auctio reject tith reject tith</th> <th>2-5.319-01 Medicinative From Sale of the control of th</th> <th>Assistation Assistation Profit of the contraction Type State in the contraction State in t</th> <th>Andrigo regiestible regiestible production and regiestible registible regiestible registible r</th> <th>5.519-61 Model of the bill Project TRA Type Sep 1.50 Sep Sep 1.50 Sep Sep</th> <th> 2512542 Medicative May Medicative</th> <th>1358243 Profit This <</th> <th>15.558-54 Columnia (Marchelle) Professor Professor</th>	Auctio reject tith	2-5.319-01 Medicinative From Sale of the control of th	Assistation Assistation Profit of the contraction Type State in the contraction State in t	Andrigo regiestible regiestible production and regiestible registible regiestible registible r	5.519-61 Model of the bill Project TRA Type Sep 1.50 Sep Sep 1.50 Sep Sep	2512542 Medicative May Medicative	1358243 Profit This <	15.558-54 Columnia (Marchelle) Professor Professor

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		Committee	!						. 1	: -	',				
	-	Renewal Methon	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement
	Performance	Coherte	Distribution	Distribution	Userbuton	Distribution	Distribution	D)stribudon	Olstribution	Distribution	Distribution	Olstribution	Distribution	Distribution	* Distribution
		Constances 1 car	(1E2) ()	(17)	OED .	: GID?	GIQ.	(3E)	<u>am</u>	(316)	JIS.	űe:	亚亚	155	100
	Err. Cost	Cast of Project	\$528,800	\$756,300	\$835,100	\$369,800	\$488,300	000'195\$	\$1,170,300	\$210,000	\$615,000	\$397,800	\$774,000	\$713,200	00*7895
	Proposed Main	Material	6	Į.	IQ	ō	ja l	10	ъ	Ю	5	<u> </u>	8	8	8
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	1		006	1100	1310	280	992	980	2340	08*	07.8	04.6	1,935	1,783	1121
	=	Year in rt.	1962	1891	1924	1906	1905	2161	1962	1964	1965	1934	1956	1953	1954
	Original Meln	Material	5	ū	g l	, o	b	5		ם	5	0	D	0	5
		Size	90		9		9	9	B	9	8	9	9	9	9
		Teven	Palszóss Park	Ridgefleld Park	North Bergen	Union City	Union City	West New York	Northwale	Washington Township	East Rucherford	Hasbrouck Beights	Harrington Park	Harrington Park	Harrington Park
	Preject Information	Project Stape													
		Project Title	J2th St	Main St.	69th St	19th st.	46th st	Broadway	Industrial Plaway (Union St)	Robinwood Road	Manor Rd	Passaic Ave	MARYANH LM, HARRINGTON PARK	BROOK ST, HARBINGTON PARK	Hazel st & peat st, Harringston park
		Asset ID	22-25540-01	21-201-08	2-6899-01	3-2000-02	3-1849-01	5-4100-01	\$4.25088-02	40-26160-03	7.2694-04	16-13186-01	46-22058-05	46-22741-02	46-20224-02
		Project Ruenber	55	35	SS	95	15	. 85	65	8	6	ß	23	3	8

	Command								-	Project moved to 2020 from 2019			-	,
	Renewal Method	Keplecement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement
Performance	Criteria	Distribution	Distribution	uejnqutila	Dktributon	Oktribution	Distribution	Distribution	Distribution	Oktribuden	Distribution	Oistribution	Distribution	Distribution .
	Cox of Project	CESD.	G162	GIR3 -	ഞ	- 200	රැය	ODZZ.	053	GEGG?	0.03	<i>6009</i>	5553	6557
Est. Cost	Cast of Project.	\$312,400	\$536,000	\$206,800	\$521,800	\$672,500	\$3,036,400	\$1,031,500	\$480,000	\$950,000	\$675,000	\$470,000	\$976,300	\$263,500
Prepared Male	Materiel	8	ō	8	ם .	۵	80	5		10	8	ñ	ă	Б
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1	C C C	781	1340	522	ETT.	1,345	4,763	1,919	1,200	1,500	1,665	1,165	1562	522
£	Yaşı İnşt.	1964	1969	1966	1962	1964	1927	2161	Unknown	1957	Unknown	Unknown	1962	1563
Original Main	Metarial	5	ō	٥	D .	5	מ	٥	ū	D	ō	Unknown	ō	ä
	Slee	ųs.	9	٠	, 2	پ	•	٠	5 0	JS .	4	74	us .	٠
	Town	Hilsdale	Hillsdafe	Hilkdəle	Alpine	Епдежаод	Fortlee	Leonia	Vernon	Lambertville	Vernon	Vernari	Hackensack	Uttile festy
Project Information	Project Scope													
	Project Titke	WIERWAUS ROAD, HILISDALE	MOUNTAIN VIEW TER, HILLSDALE	BLUEFIELD COURT, HILLSDALE	CAMBRIDGE WAY, ALPINE	ALLISON CT & BROAD AVE, ENGLEWDOD	SLOCUM WAY & CENTER AVE, FORT LEE	PAULIN BLVD, LEONIA	Grandvlew Avenue	N. Main Street	Andrea Drive	Matt Drive	WINCHESTER PL& BUCKINGHAM DR, HACKENSACK	BIRCH ST, UITLE FERRY
!	Asset (D	44-26215-01	44.28252.08	44-271.73-03	\$6-25661-01	30-26451-01	23-8649-01	26-7001-01					24-25181-01	15-25632-01
	Project Kumber	32	ß	89	8	02	72	и	72	æ	ĸ	35	Ħ	82.

	Comments				. <u>-</u>									
	Responsible the stand	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Raplacement	Replacement	Replacement
Perfermence	Ciltera	Distribution	Oktribuilen	Distribution	Distribution	Distribution	Distribution	Disiribution	Oistribution	Distribution	Distribution	Distribution	Distribution	Distribution
	Construction Vasar	C:ID		EDITO.	ැනුම	6223	CZZ?	ಯಾ	200	0.003	900	600	0.532	0223
St. (ex	Represents Yatal Cost of Project	\$581,500	\$728,000	\$404,800	5299,200	\$1,185,200	\$756,700	\$580,800	\$1,108,600	\$508,100	\$919,600	\$882,300	005,797,800	\$858,800
Proposed Main	Materiel	ū	10	ā	ā	Ð	6	5	۵	ត	ō	, δ	õ	8
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	E.	1163	1456	1012	748	2963	7851	116	1739	797	1568	1384	1,595	2,147
£	Year Inct.	1963	1954	1965	1958	1949	1931	1910	1928	1909	1906	1910	1955	1954
Original Main	Material	a	٥	0	r.	5	ם	а	σ	5	5	ם	8	D
L	15 N	19		9	y y	و	9	vo	15	us .	w	9	••	40
	Tewn	New Milford	New Milford	Paramus	Paramus	Paramus	Cliffside Park	Cliffside Park	CHffskle Park	Fairview	North Bergen	North Bergen.	Old Tappen	ОМ Таррап
Preject Information														
	Project Tills	COLUMBIA ST, NEW MILFORO	HOFFMAN AVE, NEW MILFORD	MCHENRY DR, PARAMUS	KOMAN DR, PARAMUS	EDSTAN WAY, PARAMUS	WAYNE AVE, CLIFFSIDE PARK	MORNINGSIDE AVE, CLIFFSIDE PARK	HIGHRIDGE RD & LONGWEW AVE, CLIFSIDE PARK	HAMITON AVE, FAIRVIEW	SOTH ST, MORTH BERGEM	NEWKIRK AVE & MEADOWVIEW AVE. NORTH BERGEN	CAIPPLEBUSH RD, OLD TAPPAN	KRISTEN PLACE, OLD TAPPAN
	Asset ID	34-25754-01	34-20311-04	32-16898-03	32-22769-01	32-17326-01	10-6136-01	10-3437-01	10-9391-01	9-3410-04	1-2085-01	2-3531-01	53-21086-01	53-25248-01
	Project Number	79	99	ಚ	28	£	3	58	98	18	80	68	8	16

	Comments									i ,				
-	Renewal Mathed	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement
	Collectis	Distribution	Ostribution	Oistribution	Destribution	Okstrilauben	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Diserburkon
	Construction Year			622	opez "	caro.	(EE)	0.23	9903	(EE)	0300	5330	0207	0ලට
EST. COST	Represents Total Cost of Project	005,8782	\$1,246,900	\$1,239,500	\$717,200	\$873,600	\$632,100	\$1,963,000	\$1,031,000	544,500	\$1,416,300	\$752,400	5988,800	\$1,126,500
Proposed Main	Material	8	ō	5	Б	ā	6	5	5	10	а	ß	10	25
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	t t	2,008	7,850	2,479	1,793	2,184	1,176	3926	3062	S	2635	1368	1551	1367
4	Year Inst.	2561	1970	1965	0161	1961	6261	1945	1893	1261	2161	1905	1904	1904
Original Main	Material	5	0	ō	5	.	់ ច	o	0	5	D	0	0	. 8
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	Town	River Vale	River Vale	Westwood	Noward	Расман	Tenally	Moonachie 6. Uttle Ferry	River Edge	Wood Hidge	Hasbrauck Heights	Ridgefield Park	West New Yark	West New York
broject information	Project Scope													
	Project Title	PROSPECT AVE & SUMMYHILL TER, RIVER Vale	BAILEY HO, RIVER VALE	TILLMAN ST, WESTWOOD	BROADWAY, NORWOOD	RIDGE RD & DWARS KILL IN, HORWOOD	HOWARD PARK DRIVE, TENASLY	REDNECK AVE, ROBBY RD & ELIZABETH CT, MOONACHIE & LITTLE FERRY	PARK AVE, RIVER EDGE	10TH ST, WOOD RIDGE	HILLSIDE AVE, HASØROUCK HEIGHTS	OAK ST & ELM ST, RIDGEFIELD PARK	SOTH ST, WEST NEW YORK	S 771H ST, WEST NEW YORK
	Asset ID	49.21122.08	49-26796-01	45-26766-02	56-3597-01	\$0-24612-03	36-10927-05	14-15934-01	33-391-08	13-8560-07	18-3951-01	21-1965-01	5-1976-01	5-186-01
	Project Number	76	. 86	36	56	96	76	80 Ci	56	89	ğ	e e	EQ.	104

Γ		T	Γ	- -	Т		f _			·	,	,		 		
	Comments						Project moved to 2021 from 2020								-	
	Renewal Method	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Amplacement	Replacement	Replacement	Replacement	Replacement	Replacement
Parfermente	Criteria	Distribution	Distribution	Distribution	Distribut lon	Distribution	Distribution	Distribution	Distribution	pstribution	Distribution	Oistributien	Transmission	Distribution	Oktribution	Distribution
	Construction Year	0702	P.	file	- G	, gag	2025	2021	2021	1022	. 2023	2021	2021	. 12021	2011	2021
Est. Cost	Cont of Project	\$650,000 .	\$943,500	\$2,024,400	\$1,601,600	\$1,913,500	\$1,998,500	5998,000	\$795,100	\$1,692,300	\$1,924,300	\$1,543,700	\$2,205,500	\$1,743,100	\$2,432,700	\$1,763,00
Proposed Main	Nuterial	5	ŭ	5	ā	۵	۵	ā)O	Ю	ī	5	Ю	ā	ю	5
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	5	1300	1,480	3,175	12.12	3,002	3,135	595*1	1,817	2,256	3,019	2,421	2,306	2,734	3,053	3,359
ş	Year Inst.	1962	9061	506T	1911	1908	1923	1900	1963	1964	1927	1905	1900	1906	1900	1906
Original Main	Material	8	נו	ם	Đ	ä	. 0	Б	D	D	6	В	0	b	, 5	0
	Ste	*	•	9	•	us .	u	٠	ما	10	٠	4	71		•	9
	Town	Bogota	Union City	Cliffside Park	West Hew York	Cholon City	Ridgefield	Union City	Montrale	Bergenfield	Caffside Park	CIHSide Park	West New York	Fortlee	CIMSside Park	Haworth
Project information	Freign Scope					1	20 10 10 10 10 10 10 10								مند و هده المحالة و البراه و الرابع	
	Preject Tible	Ein Avenue	28th St, Union Oity	Gorge Road & Palisade Ave, Chfliside Park	60th St, 61st, Harrbon PI, Bergenilte & Tyler Pl, Wett New York	Sth St, Union City	Bergen Blvd & Victory Ave B. Victory In. Ridgefield	IF Kennedy Blvd West & 32nd St, Union City	Hottingham Ct, Montvale	Woodkine St. Bergenfleid	Neamey Ave & Lindberg Ave & Edgewater Road, Ciffside Park	Palsade Ave, Ciffside Park	Bergenline Ave & 64th St. West New York	Abbott Blvd, Bluff fal, Edgewood Lane, Fort	Grant Awe, Cliffside Park	Park St & Haworth Ave, Haworth
	Asset 10	52-72957-28	PM-3-51-01	PM-10-3156-03	PM-5-3612-01	P.M-3-1938-01	PM-16-6754-03	PM-3-ORIG-155	PM-59-25595-01	PM-35-26256-01	PM-10-8641-01	PM-10-1863-01	80-62-5-Md	PM-23-2015-03	10-4411-01-W4	PM-42-2205-41
	Project Humbur	žŠ	106	101	108	109	110	ш	711	113	114	115	116	1,17	811	113

SUEZ Water New Jersey 2018-2022 DSIC Foundational Filing

_	Nancwel Mathed Comments	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement Project moved to 2022 from 2021	Replacement Project moved to 2022 from 203.1	Replacement	
1	# 80	Oistribution	Transmission	Distribution	Osiribution	Transmission	Distribution	Olstribution	Transmission	Distribution	Distribution	Transmission	Transmission	Transmission	
	Construction Year	2021	7207	2021	2021	7031	1202	17007	7021	2021	1001				
Fr. Cont	Cost of Project	\$1,676,700	\$3,235,800	\$2,420,500	\$4,156,400	\$1,502,500	000′2885	\$651,500	\$2,611,200	\$926,200	\$1,613,700	\$4,009,900	\$2,503,400	\$4,725,700	
Proposeed Male	Motertal	ā	5	5	Б	5	8	5	8		Б	В	8	8	
	å	•	31	•	#	•	20	ec .	#	-		16	91	21	
	•	2,630	2,829	3,797	4,361	2357	1,383	1,336	1,731	1.453	2,582	3,564	2,670	3,150	
4	Yaur Jest.	1924	0061	1900	1900	1900	1900	1915	1900	1914	1912	1900	1961	1361	
Original Mark	Metaclei	0	D	5	ō	ō	Ū	Ð	ō	0	Ū	D	D	D	
	*	•	ä		eo	•	vs.		23	مد	u	12	ZI	12	
	Town	North Beryen	West Hew York	Unian City	Unlan City	Nidge Reid	North Bergen	West New York	West New York	West New York	Hackensack	Hychemath	Harbensack	Parameter	
Project information	Praject Soape														
	Project Tiba	4th Ave & BOth St, North Bergen	Bergenilae Ave West New York	2nd St & 3rd St, Unlen Lity	Swannit Ave & 23rd St. & 22nd St. Usion City	Broad Ave, Ridgelle id	76th St, North Bengen	S4th St. & Broadway, West New York	Bergealine, West New York	JF Kennedy Blud East, Wast New York	James St & Berry St, Markensack	Essex St & Polify Rd, Hackensack	Summik Ave and W. Pless ant View Ave. Hacterisach	At 4, Paramus	
-	Asset 10	PM-2-7262-01	FM-3-DRIG-222	PM-3-ONIG-09	PN-3-870-01	PM-16-1110-04	PM-2-581-03	PM-5-7628-01	PM-5-23-24	PM-5-4735-01	PM-24-4107-50	PM-24-200-15	PM-24-2499-01	PM-32-26393-01	
	Project Number	120	121	112	173	124	571	921	23	ä	ស្ដ	130	161	251	

		E	Project infermitation			Original Main	<u> </u>		Prepoted Main		1 2		-		
					-	-	T	\$	+	-11	Represents Total Con-	Construction Year	Performance	Paneural Method	Comments
Project Number	Asset 10	Project Tible	Project Scope	Town	å	Mehriel	Venc lent.		*	Natural S	est of Project				
134	PM-14-9627-01	Moanachie Rd & E. Park St. Moonachie		Menachie	9	0 !	1928	1,673	8	ī	\$836,400	-	Olgribution	Replacement	
551	PM-26-3801-01	Bread Ave & Fort Lee Rd, Leonia		Legnia	•	0	1161	1,928	-	8	51,573,700		Distribution	Replacement	
136	PM-40-26273-01	Cleveland Ave, Cross St. & Valley Ct. Washington Township		Washington Township	9	5	1964	2,028	85	5	987,200		Distribution	Replaciment	
61	10-111-6-Md	6th St & Paterson Plank Rd, Uniorf City		UnionCity	9	8	1900	1,731	#	5	\$1,107,500		Daribution	Reptacement	
靇	PM-12-1546-01	69th St, Gurcenberg		Guttenberg	•	5	1903	1,862	80	8	005'661'1\$		Distribution	Replacement	
139	FM-12-9299-01	Hudson Ave & 59th St, Guttenberg		Gutterberg	4	5	1928	2,039	•		\$1,300,000		Oistribution	Replacement	
Q.	PM-23-4893-01	Cumbermeade Rd, Fort Lee		Fortize	ua	0	1915	2,516		۵	\$1,603,900	1	Ottribution	Replacement	
#	PM-10-1473-03	Knos Ave & Anderson Ave, Cliftide Park		Ciffside Park	•	0	1903	5,353	•	Z -	53,412,700		Distribution	Replacement	
SA.	PIM-10-5483-02	Anderson Ave, Fulton Ter, Commercial Ave, Wilfred Ter, Cliffside Park		Ciffside Pack	9	0	1917	1,772		5	\$1,129,600		Dktribution	Replacement	
143	PM-27-12199-01	Berdan St, W Passalc St. Ceder Dr, Rochelle Park		Rochelle Park		ם	1831	2,318	-	5	51,158,900	_	Diskribuskon	Replacement	
3	PM-2-5272-01	Brosdway, Horth Bergen		North Bergen	v	5	1922	1.377	= .		\$477,900		Distribution	Replacement	,
145	PM-13-19695-01	Route 46, Central Ave, Teterboro	1	Teterbora		-	1953	3,389	π	5	\$2,630,600		Distribution	Replacement	
146	PM-5-5512-01	Murphy Place, 51st St. Kennedy Blod W, 49th St, Wast New York		West Hew York		D	1817	3	•		51,241,900		Distribution	Replacement	
737	PM-12-54-06	10th St. 72nd St & Madkon St, Guttenberg		Guttenberg	10 I	. o	0061	1,003		5	\$1,206,600		Distribution	Replacement	
148	PM-42-26191-01	Massachusetts Ave/New St. Pine St. Heworth		Kaworzh	ъ.	5	1964	3,230		5	000,292,18		Distribution	Replacement	

SUEZ Water New Jersey 2018-2022 DSIC Foundational Filling

				,		Project moved to Alternate from 2022	Project moved to Alternate(rom 2012	Project moved to Alternate from 2022	Project moved to Alternate from 2022	Project moved to Alternate from 2022				
		Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Ruplecement	Replacement	Replacement	Replacement
<u> </u>	Charte	Oktobution	Oksellauton	Distribution	Distribution	Distribution	Distribution	Transmission	Transmission	Transmission	Obstrikution	Distribution	Distribution	Distribution
1						Atemate	Attemate	Alternate	Alternate	Abernake	Altemate	Alernate	Alternate	Akemake
Est.Cont	Cost of Project	\$1,181,900	\$1,395,000	\$1,184,200	51,488,300	00972551\$	\$1,633,400	\$1,100,700	\$2,605,200	\$1,663,900	\$3,080,500	\$1,451,200	\$1,130,300	\$1,144,300
Propessed Main	Material	ō	<u></u>	5	6	Ď	2	٥	8	10	8	55	5	2
Ī	# 55 155	=		•	40	Ħ	80	16	•	316	ä	60	••	-
1		1,364	2,595	7,632	2,335	2,436	2,562	1,468	4,067	965'2	4107	2,276	2,055	88272
eję	Year Inst.	1960	1900	1966	1926	1961	1905	1963	1901	1961	7961	1900	1910	1364
Original Male	Material	ō	0	0	0		ם	5	. 5	8	0	8	D	8
	8 12 B	40	9	٠		•	٠	я	, u	ξŢ.	**		9	•
	Taves	Emerson	Carktadt	Aphe	North Bergen	Westwood	Fortlee	ромајва	Offside Park	Rockfeigh	- Mayne sod	Fortlee	Ridgefield Park	Norwcod
Project information	edes gradut													
	Project Title	Broad St & Glanwood Ave, Emerson	Hoboken Rd & Enach St, Calstadt & East Rutherford	Closter Dock #d, Haring Lane & Church St. Alpine	F Kennedy Blvd & 85th 5t, Horth Bergen	Charles St & Old Hook Rd, Westwood	Exabeth St, Fort Lee	5 Dean St & E Sheffleld Ave, Englewood	Paltsde Ave & Lincoln Ave & Qaldene Ave, CHESGE Park	Volvo Drive, Sockielyh	W. Central Ave, Hergesell Ave & Ramapo Ave, Maywood	Bridge Plaza S& Sprice St, Fort Lee	Main St.B. ParkSt, RidgeReid Park	Valley Place & Bunth Ave & Broad St & Belden PI, Romwood
	Asset 10	P.M. 41-23984-01	PM-8-235-02	PM-56-27313-01	PM-2-7722-03	PM-45-26239-02	P.M.23-1999-01	PM-30-25806-02	PM-10-1314-03	PM-55-24631-01	PM-28-25515-01	PM-13-ORIG-01	PM-21-3346-01	PM-50-26145-01
. !	Project Humber	£ .	· 85	5	Œ	9	ā	R	. 951	751	8	159	5	161

	Constitution												_			
	Renewal Method	Replacement	Replacement	Replatement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replatement	Replacement	Replacement	Replacement	Replacement
Parformence	Criteria	Distribution	Distribution	Distribution	Distribution	Distribution	Transmission	Distribution	Ostribution	Oktribulion	Distribution	Olstribution	Distribution	Distribution	Transmission	Distribution
	Construction Year	Altemate	Alternate	Atternate	Alternate	Alternate	Alternate	Alternate	Atemate	Alternate	Alternate	Atternate	Akemate	Akernate	Alternate	Alternake
ES. Cart	Ropersents Tatal	\$2,285,900	\$2,391,300	\$1,351,800	\$2,260,800	\$1,138,400	\$1,306,300	\$830,700	\$1,578,800	\$2,504,300	\$2,468,900	\$1,569,200	\$1,196,900	\$1,007,700	\$1,783,200	\$1,967,400
Proposed Main	Material	10	ā	ō	5	5	5	E	5	8	5	8	2	ō	5	8
e e	3	œ	12	-	80	*0	2	•	10	₩.	60	80°	-	**	29	-
1	5	4,253	3,061	2,575	3,617	uz't	2,377	1,781	n, m	3,928	3,950	\$197	2,394	2,417	2172	3,148
- i	Year Inst.	8761	1912	1965	1911	5261	1904	1974	0+61	1900	1900	1905	1961	9961	1900	9061
Original Mah	Material	5	מ		5	5	6	<u>a</u>	ρ	5	0	Б	0	0	5.	0
	3	· ·	-	4		9	n	₽,	и	μ.	•	۰	US .	us.	ığ.	۰
	Ē	Hasbrouck Heights	Hackensack	Cresskill	Niver Edge	Westwood	Oradeii	Emerson	Union City	Union City	Hackensack	римонд	: Naver Edge	Abine	Kasbrouck Heights	Heckensack
Traject Information Traject Life Median	Project Stage											1	1			
	Project Title	Boulevard & Central Ave & Madison Ave, Hasbrouck Heights	Passalc St & Clarendon Pt, Hackensack	Dogwood Ln, Cressfell	Acterson St & Grand Ave, River Edge	Fillman St, Westwood	Kinderkamack Road, Oradell	Kinderkamack Rd & Demarest Ave, Ernesson	38th St. Unien City	35th St. & 36th St. Union City	1st St. & Essex St. & Atlantic St. Hackensack.	Washington Ave & Congress 5t & New Millord Ave, Dumont	Henley Ave, River Edge	Shewood Ct & Canterbury Ct & Anderson Ave, Alphu	Terrace Ave & Lasalle Ave, Hasbrouck Heights	Plospect Ave & Thumpton St & Summit Ave,
	Asiet ID	PM-18-9148-01	PM-24-4107-59	FM-39-26846-01	PM-33-3932-01	PM-45-10979-01	PM:37-1609-04	PM-41-29530-01	P.M-3-15065-06	PM3-36344-01	PN#24-422-01	PM-38-1954-05	P.M-33-2438-02	PM-56-27311-05	PM-18-200-11	PM-24-2340-01
	Project Number	162	163	89 1	163	156	167	35	169	07.1	Ę	£13	ELT	174	511	176

SUEZ Water New Jersey 2018-2022 DSIC Foundational Filing

	- - 	£	Project infernation			Original Main			Preposed Main		#Cork		1	 - - -	
Project Number	Asset to	Project Title	Polici Soaye	age (35	Materiol	Year Met.	<u> </u>	3	Material	Neprosents Total Con- Cent of Project	Construction Year	Chert	Ronavial Mathed	Comments
111	PM-24-1188-03	Prospect Ave & Summit Ave. Hackensack	A 1 TO 1 T	Hackensack	40	0	0061	s.m.s	==	ES .	53,608,000	Alternate	Distribution	Replacement	
178	PM-23-29285-01	Central Blud, Fort Lee		Fortlee	t .	5	1973	1,791	\$F	15	\$1,713,000	Altemate	Transmission	Replacement	
67.1	PM-34-21000-01	Haniey Ave, Arbor P., Sirch Ave, Cypress St. New Milkord		New Millord	9	5	1955	1,818		55	\$906,900	Alternabe	Distribution	Replacement	
95	PM-34-368-06	Main St. E. Prospect Ave. New Halford		New Millord	9	o .	1900	1,958	60	- × - □	5978,800	Akernate	Distribution	Replacement	
181	PM-34-22754-01	Boulevard & Martin PI & Floral Ct. New Milford		New Milkord		a	1958	1,213	77	- S	036,906	Atomate	Distribution	Replacement	
182	PM-6-237-70	Park Awe, Rutherford		Kutherford	25	5	1900	1,200	91		51,814,800	Alternate	Tensmission	Replacement ,	· !
133	PM-6-5659-01	Spring Dell Ave. Rutherford		Rutherford	10	0	1918	2,680	=	DI \$1.	51,474,200	Akemate	Distribusion	Replacement	
22	PM-29-36775-01	Chestnut Ave & American Legion Dr & North St. Teaneck		Teaneth	84	8	1962	3,374	77	DI 52	52,109,000	Alternate	tierdbutton	Replacement	
185	PM-36-3515-01	W. Cinton Ave E. Tenflay Rd, Tenatly		Tenzify		D	1910	3,067	n .	25 10	52,444,100	Alternate	Distribution	Replacement	
186	PM-44-20250-03	Hilsdale Ave & Sadderanch Lane, Hillsdale		Hillsdale	. 10	ō	1954	tu:	<u>. </u>) IG	\$7,095,000	Alemate	Oŝeribution	Replacement	
187	PIM-18-9614-01	Ottawa Ave, Palerson Ave & Boulevand, Hasbrouck Heights		Asbroack Heights	9	ū	1928	3,005	•	D 51	\$1,658,300	Alternate	Distribution	Replacement	
168	FM-24-4921-02	Main St & Coles Ave, Hackensack		Hackensack	•	o	1915	2,133	ъ	51.	51,333,400	Alternake	Distribution	Replacement	
189	PM-24-1047-04	Main St & Jefferson St & Johnson Ave & Davis Ave, Hackensack		Hackensack	15	ō	1900	17.73	100	, \$1,	\$1,700,500	Alternate	Distribution	Replacement	
23	PM-24-1047-23	Summit Ave, Hamilton PJ & Anderson St. Hackensack		Hackensack		ß	1900	390'S	<u>.</u>	- \$3°	\$3,180,000	Akemate	Olstribution	Replacement	
161	PM-15-8996-02	Redneck Ave, Uberty St, Main St & Paraubek St, Little Farry	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Ustle Ferry	νο	Đ	1928	5,050		я. —	006'620'E\$	Nemate	Distribution	Replecement	

SUEZ Water New Jersey 2018-2022 DSIC Foundational Filing

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	Comments	i				! !											
	New Merchan	gueurazejdag,	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Raplacement	Replecement	Replacement	
Performance	Otterte	Uktribution	Distribution	Distribution	Olstribusion	Ostribution	Distribution	Distribution	Distribution	Distribution	Distribution	Distribution	Oktribution	Oktribution	Distribution	Oistribution	
		Alernate	Alternate	Attainate	Alternate	Alemate	Alternale	Alternate	Altemate	Alemate	Altemate	Atternate	Alternate	Akemaie	Alternate	Alternate	
Est Cont	Cost of Project	\$1,413,600	\$1,685,900	\$2,864,300	\$1,537,000	\$1,672,600	\$1,428,600	\$1,015,700	\$1,209,600	\$2,273,300	\$1,521,100	\$2,907,300	\$705,600	002'649\$	\$1,640,000	\$1,705,600	
Proposed Main	Metariol	5	8	₽.	5	5	5		ы	5	8	2	DI	10	5	8	İ
Pre po	 E		•	11	80	8	•	п	•	11	13	PD PD	•		<u> </u>	•	
1		2,570	3,065	\$,238	. 3,074	3197	2,381	1,625	1,668	1,819	1,947	5,815	1,764	1,249	2,733	2,675	
4	Year Inst.	1951	1908	1966	1968	1965	1955	1561	1926	8561	1831	3261	1970	1918	1348	6261	
Original Males	Myteriel	CI	0	ס	5	o	0	6	8	ฮ	0	0	. 10	0	В	Ö	
	3	•		•	ە ا	•	•	•	9	6 5,	•	9	•	•	•	9	
	Town	Rutherford	Rutherland	Weshington Tawnship	Teamedk	Hackensack	Englewood	: Berpenifeld	East Rutherford	Maywood	Ractemanck	Englewood	HBkdefe	Carlatack	Bergerfield	Plaisgui	
Project information	pto)ect Stope																
	Project Title	Jackson Ave, Rutherford'	Park Ave, W. Newell Ave & W. Park P., Rutherford	Washington Ave & Kennedy Or, Washington Township	toraine Ave, Genesea Ave & Frankin Rd, Teanetk	Clay St, Hackensack	Whitewood Rd & E. Hudson Pt. Englewood	Vomel Dr, Korlinten Rd & New Bridge Rd, Bergenfield	Hackensack St & Union Ave, Hackensack	Rt 17, Maywood	River St, Hackentack	Engle St & Chestrut St, Englewood	West St. Hillsdafe	Rt 17, Carlstadt	E.Main St, Bergenfinis	Elm Ave & Bergen 254d, Ridgelield	
	Asset 10	PM-9-18300-01	PM-6-2969-01	PM-40-27062-02	PM-19-27767-01	PM-24-26751-01	PM-30-21174-01	PM-35-36919-05	PM-7-7940-01	PM-28-23095-01	PM-24-12053-25	PM-30-8017-01	PM-44-28726-01	PM-E-5704-01	PM-35-16837-01	PM-16-10508-02	
	Project Number	761	£	191	262	196	197	85 1	199	200	155 150		203	ž.	Si Si	902	ĺ

SUEZ Water New Jersey 2018-2022 DSIC Foundational Filing

		PA PA	Project paternetion		. ,	Orlgand Medin			Proposed Main		Et.Cont		-		
ject Number	Amerio	Project Title		Three	See.	Material	Year inst.			Meterial	Cest of Project	Canadruction Year	4	Reserved Medibad	Criminants
702	PM-23-2018-01	Anderson Ave, Fort Lee		Fortlee	a	Ü	1906	908'T	¥	Б	\$1,726,600	Altemate	Transmikulon	Raplacement	
508	PM-23-1076-11	Myrdie Ave, Fort Late		Fort Les	9	5	1900	1,280	· ·	5	\$816,100	Alternate	Distribution	Replacement	
503	PM-23-1076-21	Main St & Center Ave, Fart Lee		Fortlee	Ħ	₀	1900	2,960	36	<u> </u>	\$2,835,400	Atomate	Transmission	Replacement	
97	PM-2-3193-01	JF Kennedy Bird W, Nach Bergen		North Bergen	ш.	ם	1910	4,939		5	53,148,400	Alternate	Distribution	Replacement	
Ħ	PM-3-0816-105	18th St. 19th St & Palisade Ave, Union City		Union City	10	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	1900	2,974	**	2	\$1,896,000	Alternate	Distribution	Replacement	
222	PM-9-543-05	Sherman Place, Falivlaw	1 (2000) 1 (Falvágue	us .	٥	1900	1,942	■.	8	\$1,237,700	Alternate	Oistraution	Replacement	,
213	PM-6-16175-16	Marginal Road, Rutherford		Rutherford	ä	ъ	1947	762.7	- 16	a	\$1,891,000	Alternate	Transmission	Replacement	
214	PM-29-25601-13	Linden Avr., Teaneck		Turneck	-	a	1900	3,336		8	\$1,667,800	Atemate	Distribution	Replacement	

Note; I) Criginal estimated total cost of project.
*Additional projects have been identified and will be taken from the Master Plan Latin Appendix 2.
*Sadditional projects have been identified and will be taken from the Master Plan Latin Appendix 2.
**SAGIET Water New Jessey regularly conducts additional testing throughout has system to be taken to be products additional testing throughout has system to be additional testing throughout his system.

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Project moved to 2020 from 2019	Replacement	Transmission		\$750,000	2	¥	578	15.	Ω	*	Rutherford		BORQUEH ST, NUTHERFORD	6-25691-OI	217
Police costs, sa hult: documentation and rastoration costs remaining.	Replacement	Transmission	3017	\$961,721	모	걸	ż	1973	PCCP	ž	Enjewood		24" PCCP amon "Singlewood Hospital	30-26536-07	245
Complete	Renewel Marines	C s	Charle		*	ŧ,	į	Year Her.	Sim Hamile	Ť	1000	Project Stock	Project Title	Aust ID	Project Number
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SUEZ Water New Jersey 2016-2022 DSIC Foundational Filing

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		Harrington Park	۰	8	1930	1730			\$405,900	2017(1)	Distribution	Cleaning and Structural	Police, paving and restoration costs remaining
		Emerson	w	B	1936	310	9		\$93,000	2017(1)	Distribution	Cleaning and Structural Uning	Police, paving and restoration costs remaining
3sd Ave/Pine Street		Westwood	ی	Б	7261	1700	9		\$510,000	(t) stor	Distribution	Cleaning and Structural Uning	
PIERMONT RD, NORWOOD		Norwood	1 2	o	1360	2,610	51	5	\$1,957,500	OLA S	Transmission	Cleaning and Structural Uning	Previously Included in Large Main Replacement
		Paramus	9	5	7821	SS.	•		\$165,000	9 Cu3	Distribution	Geaning and Structural Lining	
Westerveit Avenue/George St		Tenally	15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	-	1927	09 02	8 79		\$624,000	. Berg	Distribution	Cleaning and Structural Uning	
		Ridgefield Park	٠	0	1962	\$8.	•		000'5015	62	Olstribution	Cleaning and Structural Links	
Plemont Rd, Rackelgh		Rockleigh	53	D	1961	6,134	ž	5	\$4,260,136	2021	Transmission	Cleaning and Structural Uning	Previously included in Large Main Replacement
S Washington Ave, Barganfield		Bergenfleid	17	5	1906	1,284	7.	δ	\$1,733,407		Transmission	Cleaning and Structural Lining	Previously included in Large Main Replacement
Grand Ave 1, Ridgefield		Ridgefield	*	o	1900	1,749	×	8	\$2,361,129	TBD	Transmission	Cleaning and Senetural Uning	Previously included in Large Main Replacement
Paramits Rd, Paramos		Paramus	91	ם	1964	2,503	91	5	\$1,877,591	TBD	Transmission	Cleaning and Structural Lining	Previously included in Large Main Replacement
E Railtoad Ave, Harkensack		Hackensack	20	0	1900	1,142	8	<u> </u>	\$1,085,031	780	Transmission	Clearing and Structural Lining	Previously included in Large Main Replacement
Main St, Rackensack		Hackensack	74		1916	1,684	24	8	\$1,936,213	TAD	Transmission	Geanting and Structural Uning	Previously included in Large Main Replacement
N. Washington Ave, Bergenfleid		Bergenfield	17	D	1906	2,078	и	- 6	061'508'75	TBD	Transmission	Cleaning and Structural	Previously included in Large Main Replacement
Grand Ave 2, Ridgefield		Ridgefield	×	Б	1900	1,383	75	. a)	\$1,866,572	тво	Transmission	Cleaning and Structural	Previously included in Large Main Replacement
Grand Ave & Pair St, Palisades Park	10-01 (Mary 1998) 10-01	Palisades Park	172	-	1900	2,337	77	ō !	53,155,014	OET	Transmission	Clearing and Structural Uning	Previously included in Large Main Replacement
E. Madison Ave, Dumont		Dumont	O.E	B	1954	1,529	OF.	Б	180***	TBD	Transmission	Clearing and Structural	Previously included in Large Main Replacement, Further research required ^{4 a} **
Broadway, Chestnut St & Maple St, Worwood		Karwood	20	, D	1958	5,195	92	10	\$4,935,440	. OBL	Transmission	Cleaning and Structural Lifeting	Previously included in Large Main Replacement
Washington Ave & E. Madkon Ave, Dumont		Dumont	ĸ	5	1971	1,718	74	ā	\$2,319,039	TBD	Transmission	Cleaning and Structural Uning	Previously Included in Large Main Replacement
Esser St. Hackensack		Hackensack	×	Б	1947	333	*	ă	\$1,806,321	TBD	Transmission	Gearing and Structural Uning	Previously included in Large Main Replacement
River Rd & Henley Ave, River Edge		New Millord	DE _	5	1995	1,637	8	ā	190°**	180	Transmission	Cleaning and Streckus)	Previously Included in Large Main Replacement, Further research required ***
E.B. drewood Ave. Paramsus) In Co.		١.	100	3	ي ا	2	C1477 GM	E	-	Geaning and Structural	Previously included in Large

		£	Project Information			Original Made		ŧ	Proposed Mah	4			Performance		
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683	P.M-14-28665-06	Moonachie Ave & Cressr PI, Moonachie		Moonachie	36	8	1970	4,804	36	ō	S2,773,714	OST	Transmission	Clearing and Structural Links	Previously included in Large Main Replacement
234	PM-24-ORIG-19	Hudson St, Hackensack		Hackensack	20	a	1900	1,549	97	. 8	\$1,704,289	OLL	Transmission	Geaning and Structural Uning	Previously included in Large Main Replacement
235	PM-38-15847-10	Washington Ave, Dument		Dumont	91		1942	3,895	16	۵	125,17,221	TRD	Transmission	Ceaning and Structural	Previously Included in Large Main Repiscement
236	PIA-38-27445-09	Dumont Ave, Dumont		Dumoet	7.	PCCP	1967	1,865	74	5	\$2,168,098	TBD	Transmission	Design Senders	Previously included in Large Main Replacement
757	P.M-26-ORIG-14	Grand Ave, Leonia	- 15 () () () () () () () () () (Leonla	. %	0	1900	2,045	*	<u> </u>	\$2,760,505	190	Transmission	Cleaning and Structural Links	Previously included in Large Main Replacement
238	PM-34-33540-16	Rher Road, New Millord		New Milliord	R	<u> </u>	1996	242	R	- i	TBD***	TBD	Transmission	Cleaning and Structural Links	Prevlously Included in Large Main Replacement, Further research regulard***
239	PM-26-031G-25	Grand Ave, Leonia 2		Leonia	14	B	1900	2,813	24	6	\$3,797,063	TBO	Transmistion	Cleaning and Structural Uning	Previously included in Large Main Replacement
240	FM-18-5371-28	Boulevard & Passalc Ave, Hasbrouck Heights		Hasbrouck Heights	ĸ	Đ	1916	2,485	#2	ıα	\$3,354,924	CBT	Transmission	Chaming and Structural Uning	Previously included in Large Main Replacement
241	PM-1E-50500-20	Edgewater Ave, flidgefleid		Ridgefield	Я	to	1937	1,134	£	10	TBO	ORL	Transmission	Cleaning and Structural Uning	Previously included in Large Main Replacement, Further research requires ***
242	PM-5-28312-09	JF Kennedy Blvd E, West New York		West New York	91	5	1969	1,064	51	<u>-</u>	\$798,142	TBD	Transmission	Cleaning and Structural Uning	Previously included in Large Main Replacement
243	PM-33-0MG-08	Kinderkamack Rd, River Edge		Rivar Edge	24	b	190d	609'*	- 2	_ 	\$9,802,661	081	Transmission	Geaning and Structural Uning	Previously included in Large Main Replacement

Note(1) Onlinal satimated to at low other.

*Additional groupcts have been identified and will be taken from the Master Plan List in Appendix 2.

*SUEZ Water New Jessay regularly conducts additional testing throughout its system to test the hydrallic capacity of its malth. Should areas of decreased flow and hydrallic capacity be discovered, projects may be adjusted to ensure there areas are addressed in a timely manner.

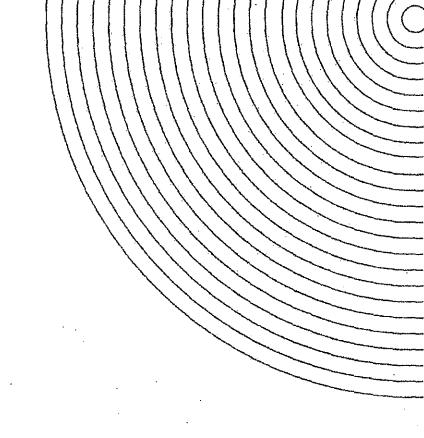
***Further research required to determine it sinutural limbs and larger

SUEZ Water New Jersey 2016-2022 DSIC Foundational Filling

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	uwo].	Weshington Township	Emersen	Bergenfield	North Bergen	Vienatiy	Clifside Park	Closter	Dumosit	
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	Project TRie	Gabilesway	Ackerman Ave	Seminary St	Grand Ava	Greentze Terr	Edgewater In	Westervelt Avenue	Poplar Street	
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: 	Project Humber	248	249	\$	192	SS.	\$	25	šī	

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SUEZ Water New Jersey InfoMaster Project Identification Methodology

*Confidentiality is required for this Appendix due to sensitive information relating to systems operations





SUEZ Water New Jersey InfoMaster Complete Pipe Segment Table

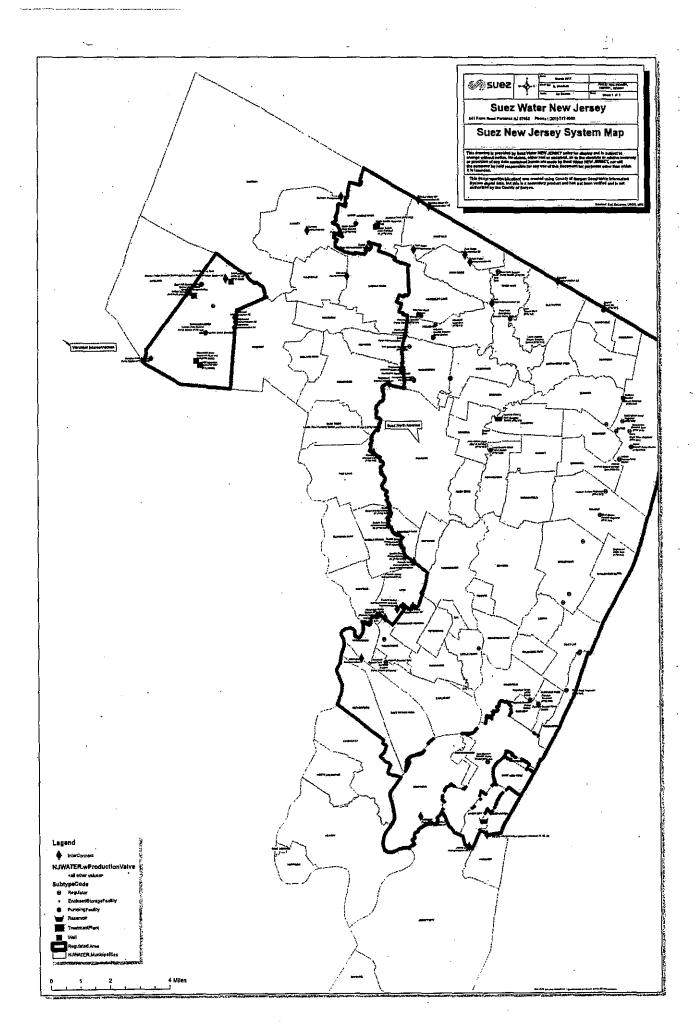
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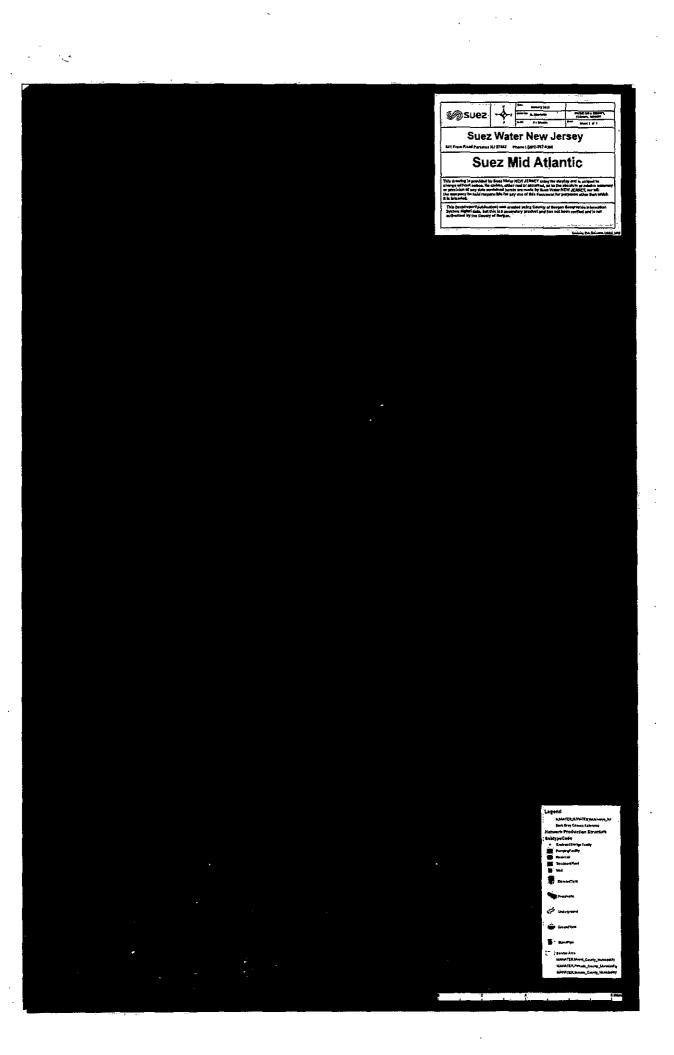


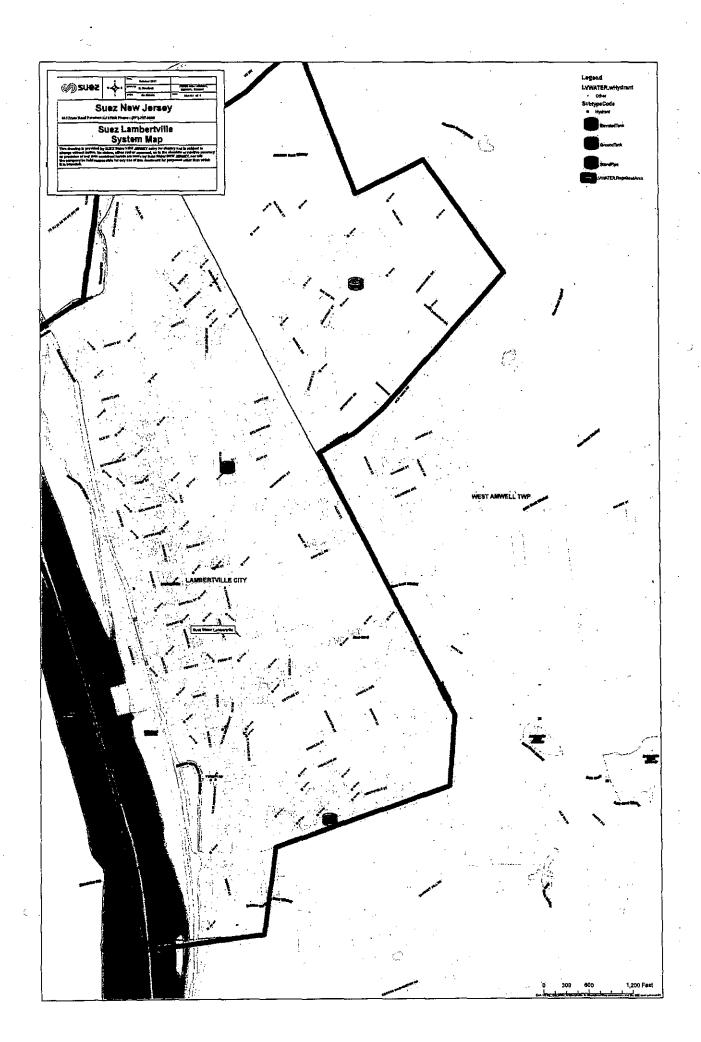


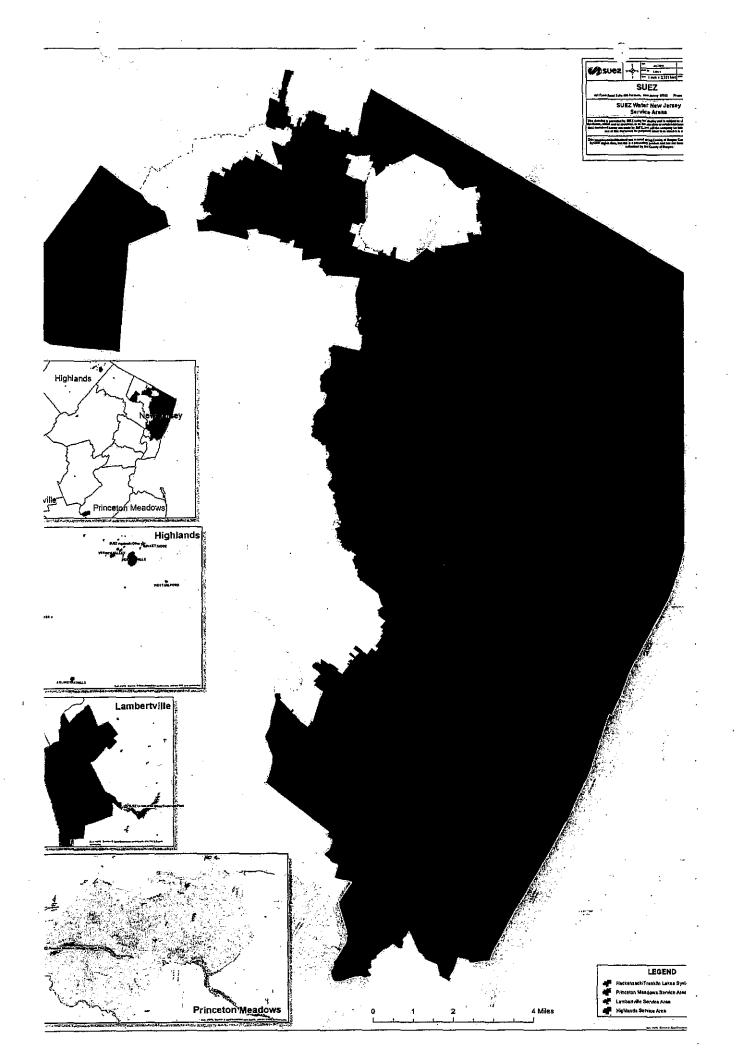
SUEZ Water New Jersey Service Area Map

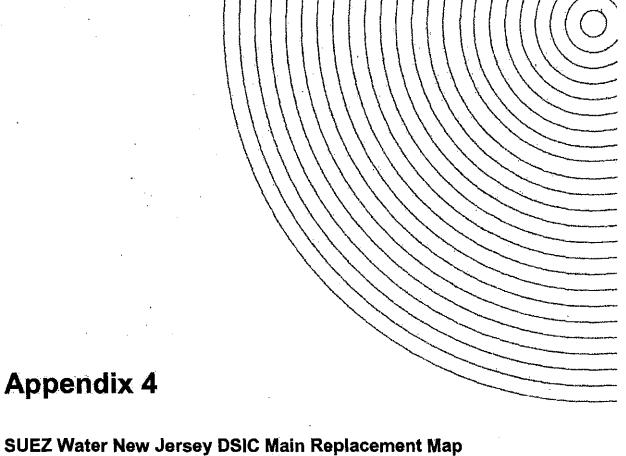








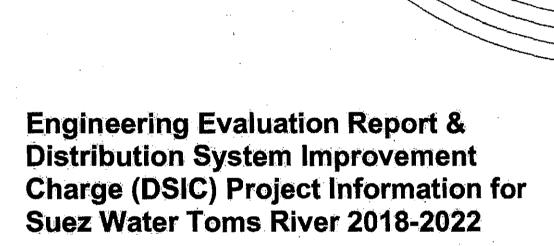




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*Confidentiality is required for this Appendix due to sensitive information relating to systems operations





October 2018

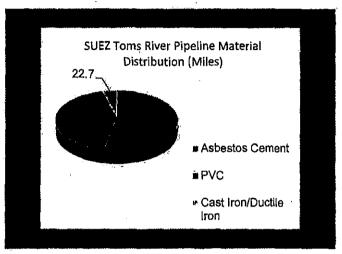




SUEZ Water Toms River supplies potable water for domestic use and fire protection to residents of Toms River Township, the Borough of South Toms River, a portion of Berkeley Township, and a portion of Brick Township all in Ocean County, NJ. The Company also serves a portion of Colts Neck in Monmouth County. The Company has approximately 50,000 residential, commercial and fire protection customers, which serve about 120,000 people.

The network consists of the following:

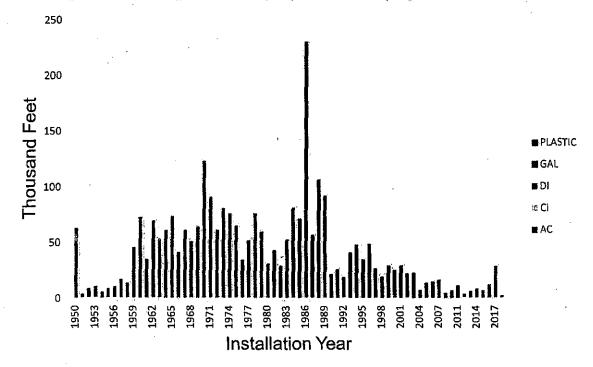
- 536 Miles of Pipeline;
- 3,500 Hydrants;
- 8,500 Valves (system and blow-off);
- 50,000 Service Lines;
- · One Booster Pump Station; and
- Eleven storage tanks with a total capacity of 9.4 million gallons



The SUEZ Water Toms River (SWTR) distribution system mainly consists of asbestos cement. This is due to the fact that it was the material of choice for potable water main construction during a time of significant growth in the region, the 1950's, 1960's and 1970's. PVC pipe was the material of choice in the 1980's and 1990's and makes up the majority of the remaining pipe material with less than 3% of the distribution pipe being cast iron or ductile iron. Figure 1.1 illustrates the material and age of all the pipes within the SWTR distribution system.



Figure 1-1: SUEZ Toms River Pipeline Age and Material



SUEZ Water Toms River conducted a comprehensive analysis of the distribution system as part of the main replacement planning process. This not only included the size, material and age of the pipe, but also took into consideration adequate fire flow, calculated remaining service life, water age, aggressive soils, and pipe failure patterns.

SWTR analyzed main break data from 2008 through 2017 to aid in completing a risk-based replacement planning program. SUEZ has had an average of 4.3 breaks per year per 100 miles of pipe as seen in Table 1.1.

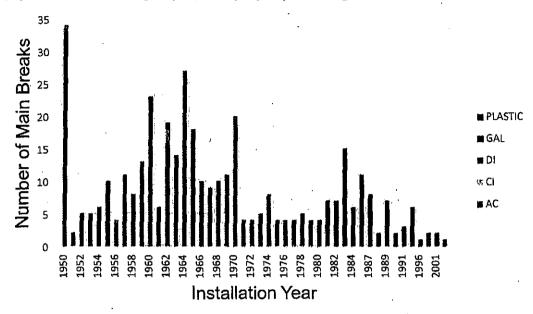
Table 1-1: SUEZ Water Toms River Main Breaks Per Year

Madi	2005			7713. d	2000	9969	191919	Miner	200a	3,30-5	गलना हैं।
Breaks:	25	22	28	26	5	26	23	28	9	13	20:5
Per 100 Miles:	4.7	4.1	5.2	4.9	0.9	4.9	4.3	5.2	1.7	2.4	4.3

Figure 1.2 illustrates the number of main breaks versus year of installation beginning with installation year 1950 to 2004. More than 75% of pipe failures occurred on asbestos cement. Over 50% of the main breaks occurred on pipe installed in 1950-1965. Approximately 43% of all main breaks in the past 20+ years have been on a 6" or smaller asbestos cement pipe that was installed in the 50's and 60's.

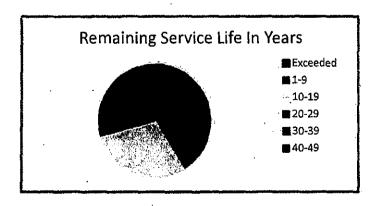


Figure 1-2: Pipe Installation Year vs Total Breaks (1997-2018)



In 2017, SUEZ Water completed a condition assessment on an additional 11,000 feet of asbestos cement water mains within the Company's system using non-destructive acoustical analysis. This technology measures the current structural wall thickness of the pipe and compares it to factory standards in order to determine the percent loss in wall thickness. All pipe within the study was installed in the late 1950's and early 1960's. The results of the analysis were used to make informed decisions regarding rehabilitation or replacement and can be seen in Figure 1.3.

Figure 1-3: Remaining Service Life in Years

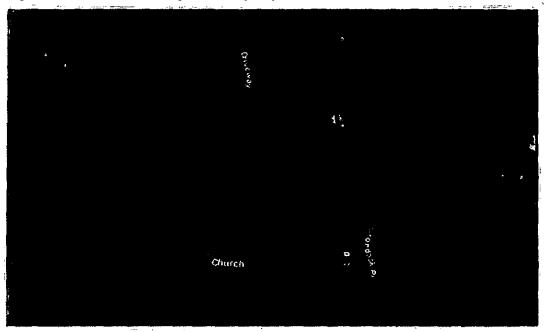


Approximately 35% of the asbestos cement pipe has exceeded its useful life with the majority of the pipe being 6". While the rate of degradation is similar for all asbestos cement pipe, the smaller diameter pipe is manufactured with a thinner wall thus allowing it to reach the end of its useful life much quicker. Many of our main replacement projects concentrate on asbestos cement pipe with a 6" or smaller diameter that was installed in the 50's and 60's.



SUEZ Water Toms River has experienced main breaks due to soft asbestos cement pipe in certain regions of the Company's franchise. A soils map survey was evaluated to determine areas where aggressive soils may have caused pipes to degrade at a faster rate. According to the National Cooperative Soil Survey and SWTR's experience, the areas of concern are near bodies of water where psamments are found. A psamment (PssA) consists of unconsolidated sand deposits that are easily eroded and provide poor structural support. Figure 1.4 highlights this area where we focused on replacing the 4" and 6" asbestos cement water mains as part of the planning process.

Figure 1-4: Soils Map Survey of Holiday City-Silverton



In 2017, SUEZ Water implemented the use of a hydraulic model for operational and capital improvement planning. Areas have been identified and evaluated where dead end looping may increase fire flow and improve overall water quality.

Figure 1.5 exhibits the available fire flow out of each hydrant with current infrastructure in parts of Toms River. The orange hydrant indicates available fire flow less than 1,000 gpm. This is particularly a concern because the hydrants are located in a commercial area where the required fire flow is 3,500 gpm. This is according to the ISO method for NFF, needed fire flow required to fight a fire in an individual, nonsprinklered building based on the formula in Equation 1.1.

Equation 1-1 Needed Fire Flow

$$NFF_i = (C_i)(O_i)[1.0 + (X + P)_i]$$

where

NFF_i= the needed fire flow in gallons per minute (gpm)

C_i = a factor related to the type of construction

O_I = a factor related to the type of occupancy

X = a factor related to the exposure buildings

P = a factor related to the communication between buildings



Using the hydraluic model, 6", 8", and 12" water mains connecting the dead ends were simulated to calculate the increase in available fire flow and asses the benefit of dead end looping at this location. The results can be seen in Figure 1.6, which shows an overall increase in available fire flow throughout the neighborhood. The orange hydrants from Figure 1.5 have now met their required fire flow of above 3,500 gpm.

An increase in capacity can result in an increase in water age which equates to poor water quality. This is why it was very important to evaluate the water age in this area simultaniously. Figure 1.7 illustrates the water age at each junction, with present day infrastructure. After modeling the 6", 8", and 12" pipes the water age at each junction was recalculated and evaluated.

The outcome confirmed that overall water age decreased and greatly improved in the entire surrounding area where the new pipes were simulated. These results can be seen in Figure 1.8 and concluded that the installation of new water main for dead end looping would not only increase fire flow capacity, but greatly improve water quality as well.

All main replacement projects are coordinated with the Townships and County so that to the greatest extent possible, we are assessing the water main condition and the timing of the Township paving and drainage projects to expend capital in the most effective manner and to reduce the impact to customers as much as possible. Over the five year period, there may be some substitutions of main replacements when it is effective and efficient to do so in response to the Township and County paving program. The Township of Toms River has committed to performing the final pavement and has extended relief in temporary pavement conditions as well on the main replacements that are within the Township paving program. The Company will endeavor to coordinate in the same manner with South Toms River and Berkeley Townships.



Figure 1-5: Present Day Available Fire Flow

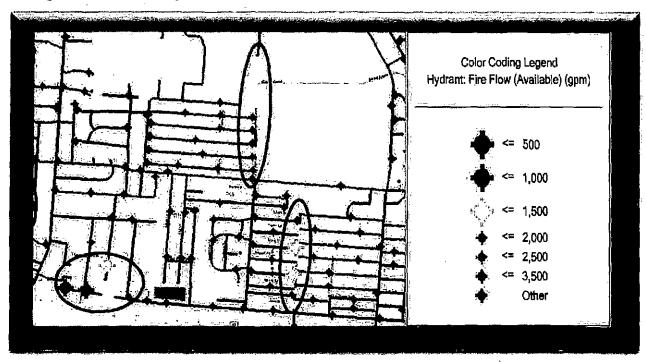


Figure 1-6: Available Fire Flow After Capital Improvements

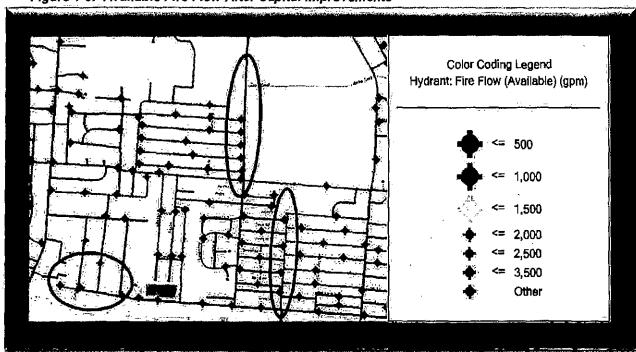




Figure 1-7: Present Day Water Age

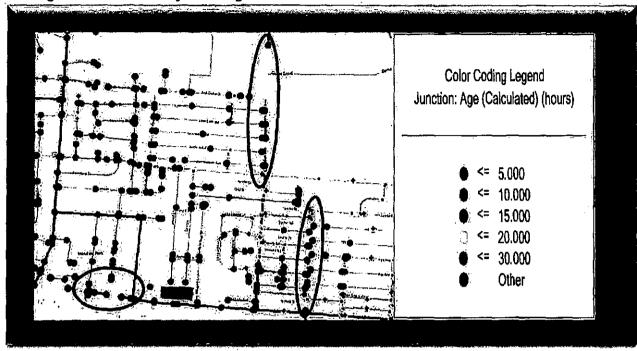
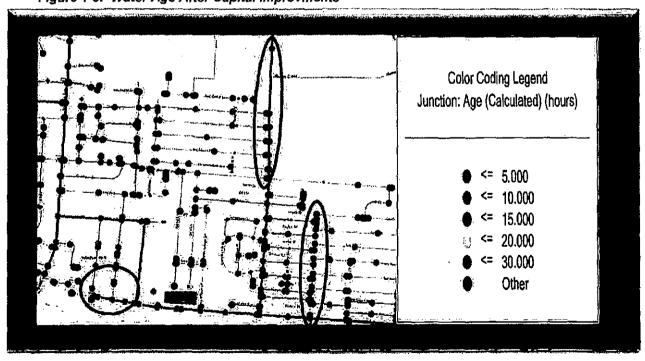


Figure 1-8: Water Age After Capital Improvments





SUEZ Water maintains a hydrant and valve testing program to identify where regular maintenance work may be required to prevent valve or hydrant failure. While, not necessary to operate all valves and hydrants annually, SWTR operates on average 3,000 system valves, and approximately 2,500 hydrants, representing over 35 percent and 72 percent respectively, annually. The Company replaces deteriorated, damaged, and un-repairable valves to improve customer service and maintain system integrity. SWTR exercises all system blow-off valves at least every year. Interconnections are tested every year including operating the valves and visually observing water flow through the system. SWTR works closely with the towns it serves to resolve any concerns that may arise during the use of its hydrants during firefighting efforts and training or during authorized hydrant usage. Additionally, SUEZ Water has a flow testing program that it conducts on an annual basis so that at least fifty hydrants are flow tested each year. These hydrants are selected based upon requests from developers and Insurance Services Office, as well as those selected internally for investigation. SUEZ Water personnel conduct tests and share results with the appropriate departments.

SWTR manages "blanket projects" for hydrant, short main and valve, domestic service, fire service replacement projects and unreimbursed utility relocation. Short main replacement projects are classified as those major main breaks requiring the replacement of existing water pipe. SUEZ Water maintains this formatting for controlling and tracking capital costs as it is not possible to pre-determine the quantity of such replacements or where these replacements will be needed.

In addition to main replacement and rehabilitation SUEZ actively conducts leak testing on small and large diameter mains to locate and repair invisible (non-surfacing) leaks before they result in breaks and unplanned service interruptions. This practice helps extend the useful life of the Company's underground assets, as well as help maintain system integrity, allowing the minimization of service interruptions SUEZ Water customers may experience.





SUEZ Water Toms River Projected Annual Spending

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De Conserva	or the care		60 - 11 12 100 - 1		
DSIC Classification	2018	2019	2020	2021	2022
Main Replacement Projects - D600	\$75,000	\$4,700,000	\$ 4,409,000	\$6,192,000	\$7,621,000
Dead End Looping	· · · · · · · · · · · · · · · · · · ·		\$1,791,000		
Blanket Structured Projects					
Hydrant Replacement - D501	\$10,000	\$75,000	\$75,000	\$75,000	\$75,000
Vaive Replacement - D503	\$15,000	\$100,000	\$100,000	\$100,000	\$100,000
Domestic Service Replacement - F501	\$170,000	\$800,000	\$700,000	\$625,000	\$625,000
Fire Service Replacement - F503	\$10,000	\$50,000	\$50,000	\$50,000	\$50,000
TOTAL	\$280,000	\$5,725,000	\$7,125,000	\$7,042,000	\$8,471,000

Note: 2018 costs represent October to December

Company Funded Main Replacement Projects Planned for 2018-2022



United Water Toms River DSIC Foundational Filing Main Replacement

Table 1 - StiEZ Water Toma River - Mein Replacement Projects - D600

Replace asbestos concrete mains with fifteen years or less remaining service life selected either from mains that have been condition assessed from a list of roads on the Townships road replacement and renewal program, or through an analysis of aged, asbestos cement, small diameter mains in high density zoning. Where possible the schedule prepared to work with Township, County and State praement programs. For subsequent years, the main replacements have been selected based upon main size, age and housing density and analysis completed for Master Plan Amendment. On an annual basis, this list will be reassessed using various tools including the accoustical analysis, operational data, and pavement schedules due to moratoriums. This list represents the type, character and length of mains to be replaced through this program.

					Original Main				Propos	ed Main	1			
Project Limits	Project Number	Project No. Ext	- Тоwп	Size	Material	Year Inst.	Length	Project Scope	Size	Material	Install Year	Est. Cost	Performance Criteria	Renewal Method
Kettle Creek Road	C180602	0.01	Toms River	a	AC	1965	4800		12	DI	2018	\$ 75,000	Age and Material	Replacement
Belmont Orive	C190601	0,01	South Toms River	6	AC	1958	2100		8	DI	2019	\$ 630,000	Age and Material	Replacement
Ardmore Ave	C190601	0.02	South Torns River	6/8	AC	1958	1450		8	DI	2019	\$ 435,000	Age and Material	Replacement
W Water Street	C190602	0.01	Toms River	8	AC	1950	500		12	DI	2019	\$ 1,500,000	Redundancy, Age and Material	Replacement
Flint Road	C190603	0.01	South Toms River	4/6	CI/AC	1950	2975		8	Dì	2019	\$ 893,000	Age, Size and Material	Replacement
5 Main Street	C19D603	0.02	South Toms (6/8	CI/AC	1950	2320		12	C/I	2019	\$ 754,000	Age, Size and Material	Replacement
Dover Road	C190603	0.03	South Toms River	6	CI/AC	1950	1500		. 12	Di	2019	\$ 488,000	Age, Size and Material	Replacement
Bonair Drive	C20D601	0,01	Berkeley	6/B	AC.	1976	3040		В	DI	2020	\$ 912,000	Age, Material, and Aggressive soils	Replacement
Harrington Dr N	C20D601	0.02	Berkeley	В	AC	1975	3850		8	DI	2020	\$ 1,155,000	Age, Material; and Aggressive soils	Replacement
Grenada Street	C200601	0.03	Berkeley	6/8	AC	1970	2770		8	DI	2020	\$ 831,000	Age, Material, and Aggressive soils	Replacement
Tara Ct	C200601	0.04	Tams River	2	PE	1980	220	:	6	Oł	2020	\$ 66,000	Material and Size	Replacement
Kim Lane	C200601	0.05	Toms River	2	PE ·	1980	200		6	DI	2020	\$ 60,000	Material and Size	Replacement
Palisades Drive	C200602	0.01	Torns River	4/6	AC	1966	900		6/8	ы	2020	\$ 270,000	Age, Material, and Aggressive soils	Replacement

United Water Toms River DSIC Foundational Filing Main Replacement

	Main Replacement													
<u> </u>					Original Main		ł	· · · · · · · · · · · · · · · · · · ·	Propos	ed Main	· —		1.	
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Project Scape	Size	Material	Instaîl Year	Est. Cost	Performance Criteria	Renewal Method
Niagara Drive	CZ0D602	0.02	Toms River	6	AC	1966	1225		8	Di	2020	\$ 368,000	Age, Material, and Aggressive soils	Replacement
Catskill Court	C20D602	0.03	Toms River	4	AC	1966	200		6	DI	2020	\$ 60,000	Age, Material, and Aggressive soils	Replacement
Alcapulco Place	C20D602	D.Q4 ·	Toms River	6	AC	1965	475		8	DI	2020	\$ 143,000	Age, Material, and Aggressive soils	Replacement
Caribbean Court	C20D602	0.05	Toms River	4	AC	1965	320		6	Ot	2020	\$ 96,000	Age, Material, and Aggressive soils	Replacement
Catalina Court	C200602	0,06	Toms River	4	AC	1965	180		6	ы	2020	\$ 54,000	Age, Material, and Aggressive soils	Replacement
Key West Court	C200602	0.07	Toms River	4	AC	1966	225		6	DI	2020	\$ 69,000	Age, Material, and Aggressive solls	Replacement
Mount Nebo Lane	C20D602	0.08	Toms River	4	AC	1967	175		6	DI	2020	\$ 53,000	Age, Material, and Aggressive soils	Replacement
Palm Springs Court	C200602	0.09	Toms River	4	AC	1966	200		6	OI	2020	\$ 60,000	Age, Material, and Aggressive soils	Replacement
Bear Mountain Court	C20D602	0.10	Toms River	4	AC	1966	240	·	6	DI .	2020	\$ 72,000	Age, Material, and Aggressive soils	Replacement
Pocono Place	C20D602	0.11	Toms River	4	AC	1965	180	,	· 6	m	2020	\$ 54,000	Age, Material, and Aggressive soils	Replacement
St Moritz Place	CZOD602	0.12	Toms River	4	AC	1965	290		6	DI	2020	\$ 87,000	Age, Material, and Aggressive soils	Replacement
Dayton Ave	C21D602	0.01	Tams River	6	AC/CI	1950	2000		8	01	2021	\$ 600,000	Age, Material and Size	Replacement
N Central Ave	C210602	. 0.02	Toms River	4/6	AC	1950	715		В	DI	2021	\$ 215,000	Age, Material and Size	Replacement
Terrace Ave	C21D602	E0.0	Toms River	4	AC	1950	900		8	DI	2071	\$ 270,000	Age, Material and Size	Replacement
Hedge Street	C21D602	0,04	Toms River	4/6	AC	1950	500		8	Ы	2021	\$ 150,000	Age, Material and Size	Replacement

United Water Toms River DSIC Foundational Filling Main Replacement

	Main Replacement													
					Original Maln				Propos	ed Main	i —	1		1
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Project Scope	Site	Material	install Year	Est, Cost	Performance Criteria	Renewal Method
Lowell Ave	C21D602	0.05	Toms River	4	AC	1950	750		8	Di	2021	\$ 225,000	Age, Material and Size	Replacement
Grant Drive	C21D602	0.06	Toms River	2	GA .	1950	750	·	8	ы	2021	\$ 225,000	Age, Material and Size	Replacement
Metrose Drive	C21D602	0.07	Toms River	6	AC	1968	600		8	DI	2021	\$ 180,000	Age, Material and Size	Replacement
Ray Drive	C21D602	0.08	Toms River	.6	AC	1956	750		8	DI	2021	\$ 225,000	Age, Material and Size	Replacement
Orchard Street	C21D602	0.09	Toms River	6	AC	1950	660		В	DI	2021	\$ 198,000	Age, Material and Size	Replacement
Spruce Street	CZ1D602	0.10	Toms River	4/6	AC	1950	560		8	OI	2021	\$ 168,000	Age, Material and Size	Replacement
Hadley Ave	C210603	0.01	Toms River	2/4/6/8	Galv/CI/AC/PVC	1950	2300		8	D1	2021	\$ 690,000	Age, Material and Size	Replacement
Lafayette Ave	C210603	0.02	Toms River	6	CI/AC	1950	660		8	DI	2021	\$ 198,000	Age, Material and Size	Replacement
Lexington Ave	C21D603	0.03	Torns River	2/6	Galv/AC	1952	890		B	Di	2021	\$ 267,000	Age, Material and Size	Replacement
Franklin Ave	C21D603	0.04	Toms River	6	AC	1955	1340		8	DI	2021	\$ 402,000	Age, Material and Size	Replacement
Grand Ave	C21D603	o.05	Toms River	2/4/6/10/12	Galv/AC	1953	3500		8/12	Di	2021	\$ 1,138,000	Age, Material and Size	Replacement
Faircres Drive	C21D603	0.06	Toms River	4	AC	1952	450		8	Of	2021	\$ 135,000	Age, Material and Size	Replacement
Madison Ave	C21D603	0.07	Torns River	4	AC	1959	1820		8	DI	2021	\$ 546,000	Age, Material and Size	Replacement
Clinton Ave	C210603	0.08	Toms River	2/6	PE/AC	1959	1200		8	DI	2021	\$ 360,000	Age, Material and Size	Replacement
Cardinal Drive	C27D601	0.01	Toms River	6/8	AC	1970	3300		12	DI	2022	\$ 1,073,000	Age, Material and Size	Replacement

				•														
	- -	Renewal	Method	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement
		Darform and Coleans	renomance Chrena	Age, Material and Size	Age, Material and Size	Age, Size and Material	Age, Size and Material	Age and Material	Ags and Material	Age, Size and Material								
	•	Est Cock	10021	\$ 234,000	\$ 407,000	\$ 173,000	\$ 902,000	188,000	204,000	203,000	279,000	663,000	390,000	464,000	218,000	144,000	417,000	1,050,000
		lletall	Year	2022	2022	2022	2022	2022	2022 \$	\$ 2202	2022 \$	2022 \$	2022 \$	\$ 2002	\$ 7707	\$ 2202	2022 - \$	2022 \$
		\vdash	Material	ă		8	<u> </u>	a	<u> </u>	5	8 '	5	5	5	<u> </u>			٠. ۵
	•	<u> </u>	Size	12	12	23	12	w w	BC	80	8	8/12	8/12	21	80	gg gg		<u> </u>
	Unled Witter Tonns River DSC Foundational Filing Main Replacement											0	0	25				
		- Fand		5 720	0 1250	0 530	0 2775	0 625	089	579 0	0 630	2040	0 1200	0 1425	725	480	1390	3500
			Year Inst.	2781	1960	1950	1950	1950	1950	. 1950	1950	1950	1950	1950	1958	1955	1952	1951
		Original Maln	Material	¥	Ų	YC	¥C	A.	γC	AC	GAL/AC	¥C	מ/אכ	yc ,	PE/AC	AC	AC	¥c
	•	l i	Size	۰,	, 100	•	8/9	4/6/8	*	+	2/4	4/6/10	4/6/12	4/6/12	1/ 2	*	vo .	9
			Town	Torns River	Toms River	Toms River	Toms River	Yoms River	Toms River	Toms River	Toms River	Toms River	Toms River	Tams River	Toms River	Toms River	Toms River	Toms River
			Project No. Ext	0.02	0.03	0.01	0.02	0.03	0.04	0.05	90.0	0.07	0.01	0,02	60.0	0.04	0.05	90'06
,		Project	Number	C22D601	C22D601	C22D602	2090222	C22D602	C22D602	. C220602	C22D602	C220602	C22D603	CZZD603	C22D603	CZZDe03	CZ2D603	C22D603
			Project Umits	Sands Point Drive	Oak Ridge Parkway	Hyers Street	Washington Street	Robbins Street	Allen Street	Malden Lane	Brooks Road	Hooper Ave	Dickenson Ave	Batchelor Street	W Woodland Ave	E Woodland Ave	Lafayete Ave	Terrace Ave

United Water Toms River DSIC Foundational Filing Main Bookarament

		Renewal	Replacement	Replacement
		Performance Criteria	Age, Size and Material	117,000 Material, Dead End Replacement Looping
		Est. Cost	495,000	1
		Install	\$ 2202	\$ 7202
	Main	Material	0	ō
	Proposed	Size	&	**
Main Replacement		Project Scope		
	L	Length	1650	330
		Year Inst	1956	1950
	Original Main	Material Year Inst Length	υ¥	Ąeg
		5lze	6	~
		Town	Toms River	Toms River
		Project Number Project No. Ext Town	0.07	80:0
		Project Number	C220603	C22D603
		Project Limits	Marian Street C220603	Russo Place

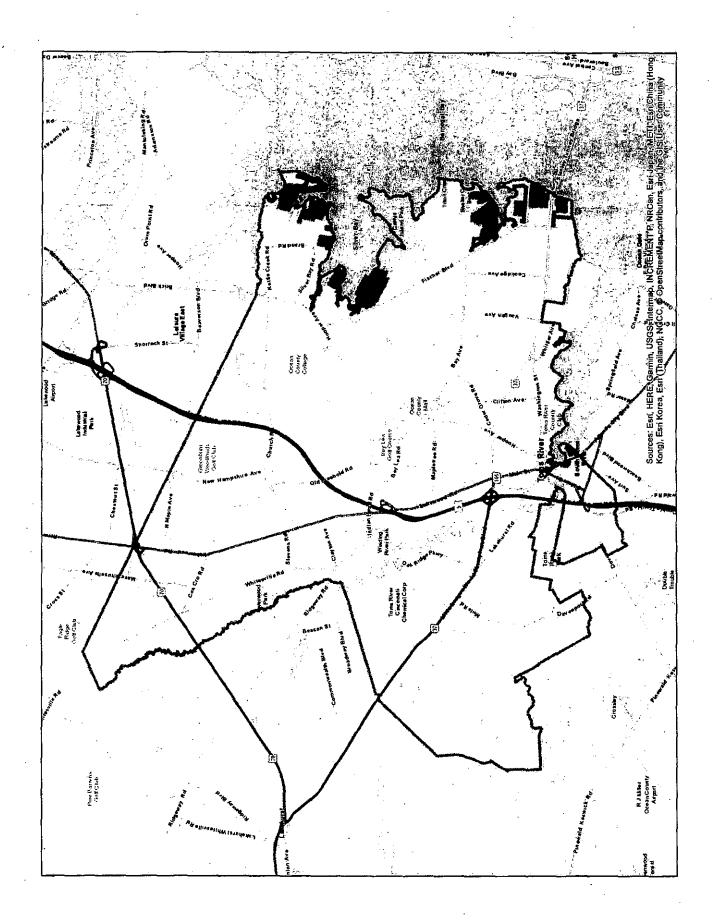
Table 2 - SUEZ Water Toms River - Main Replacement Projects - Dead End Looping D600														
					Original Ma	iîn			Propos	ed Main		1	7	
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Project Scope	Size	Material	Install Year	Est. Cost	Performance Criteria	Renewal Method
Parkwood Ave	C20D603	0.01	- Toms River	N/A	N/A	N/A	300		8	Di	2020	\$ 90,000	Dead End Looping	Replacement
Adams Ave	C20D603	0.02	Toms River	N/A	N/A	N/A	275		12	DI	2020	\$ 90,000	Dead End Looping	Replacement
Roosevelt Ave	C20D603	0.03	Toms River	N/A	N/A	N/A	1600		8	DI	2020	\$ 480,000	Dead End Looping	Replacement
Coolidge Ave	C20D603	0.04	Toms River	N/A	N/A	N/A	1975		12	DI	2020	\$ 642,000	Dead End Looping	Replacement
W Briar Ave	C20D603	0.05	Toms River	N/A	N/A	N/A	675		12	DI	2020	\$ 220,000	Dead End Looping	Replacement
Continental Ave	C20D603	0.06	Toms River	N/A	N/A	N/A	175		12	DI	2020	\$ 57,000	Dead End Looping	Replacement
Massachusettes Ave	C20D603	0.07	Toms River	N/A	N/A	N/A	650		12	DI	2020	\$ 212,000	Dead End Looping	Replacement

*Confidentiality is required for this Appendix due to sensitive information relating to systems operations



SUEZ Water Toms River Service Area Map





SUEZ Water Toms River DSIC Main Replacement Map

*Confidentiality is required for this Appendix due to sensitive information relating to systems operations



ATTACHMENT B

SUEZ Water New Jersey Merged DSIC Foundational Filing DSIC Assessment Schedule

Exhibit P-3 Page 1 of 3 Revised 1/2/19

	Total Number of bills (3)	Meter Equivalent Ratios	Equivalent 5/8" inch Meters	Maximum DSIC Amount by equivalent Meter	Maximum Monthly Charge per Meter
Metered Sales:					
5/8"	2,490,816	1.00	2,490,816	\$8,369,142	\$3.36
· 3/4"	200,151	1.50	300,227	1,004,758	5.02
1"	156,851	2.50	392,128	1,315,980	8.39
1 1/2"	38,053	5.00	190,265	640,051	16.82
2"	34,858	8.00	278,864	936,983	26.88
3"	11,027	15.00	165,405	555,761	50.40
4"	5,964	25.00	149,100	500,976	84.00
6"	2,660	50.00	133,000	446,880	168.00
8"	66	80.00	5,280	17,741	268.80
10"	24	115.00	2,760	9,274	386.40
		165.00			554.40
	2,940,470	•	4,107,844	\$13,797,546	[1]
•		-		\$13,797,646	=
				3.35885	= [2]
[1] Approved revenue effective	ues from Docket	No. WR1805059	3	\$275,952,916	
Five percent "DSIC (Cap" per 44 NJR 1	L723(a)	·	X 5%	<u>.</u>
Maximum amount o	of Annual DSIC Re	venues		\$13,797,646	=
[2] Amount per equ [3] Pro forma at Sep		(\$13,797,646	1	4,107,844)

ATTACHMENT C

REVISED

NOTICE OF PUBLIC HEARING SUEZ WATER NEW JERSEY, INC. and SUEZ WATER TOMS RIVER, INC.

NOTICE OF FILING OF A PETITION FOR APPROVAL OF A DISTRIBUTION SYSTEM IMPROVEMENT CHARGE FOUNDATIONAL FILING PURSUANT TO N.J.A.C. 14:9-10.4 BPU Docket No. WR18101158

PLEASE TAKE NOTICE that on October, 22, 2018, SUEZ Water New Jersey, Inc. (the "Company"), pursuant to N.J.A.C. 14:9-10.1 et seq., filed a petition with the Board of Public Utilities (the "Board" or "BPU") of the State of New Jersey seeking approval of a Foundational Filing to implement a Distribution System Improvement Charge ("DSIC"). A DSIC is a rate recovery mechanism to encourage and support accelerated rehabilitation and replacement of certain non-revenue producing, critical water distribution components. Its purpose is to enhance safety, reliability, water quality, systems flows and pressure, and/or conservation. A DSIC rate is interim, subject to refund, until the subsequent base rate case.

The Company's petition consists of a Foundational Filing. The Foundational Filing lists the proposed projects from 2018 through 2022. If the Foundational Filing is approved, the Company will be required to file a base rate case within three years of the effective date of the Foundational Filing. Please note that the Company proposes to collect a maximum DSIC revenue requirement of \$13,797,646 annually. The Company will implement the DSIC surcharge if, and when, it achieves specific levels of infrastructure, investment and completes and places the facilities into service as required by N.J.A.C. 14:9-10.1 et seq.

The Company has proposed that the monthly DSiC surcharge be assessed to the following services and classes of customers based on the customer's meter size: General Metered Service. The maximum proposed rates shown below are expected to be assessed incrementally over a two-to-three year period, commensurate with the Company's actual DSIC program capital spending.

The maximum proposed monthly DSIC rates are contained in the petition filed with the Board, as set forth below. These proposed rates are estimates and may change. However the maximum annual DSIC revenue requirement, \$13,797,646 cannot be exceeded.

PROPOSED DSIC SURCHARGE RATES BASED ON METER SIZE

General Metered Service Maximum Monthly DSIC Surcharge:

5/8" Equivalent*	Proposed Rates
1.0	\$3.36
1.5	\$5.02
2.5	\$8.39
5.0	\$16.82
8.0	\$26.88
15.0	\$50.40
25.0	\$84.00
50.0	\$168.00
80.0 .	\$268.80
115.0	\$386.40
165.0	\$554.40
	1.0 1.5 2.5 5.0 8.0 15.0 25.0 50.0 80.0 115.0

^{*}Based on American Water Works Association flow rates. A 5/8" meter is equivalent to one unit, whereas a 1-inch meter is equivalent to 2.5 units based on the amount of water that will flow through the meter size.

REVISED

PLEASE TAKE FURTHER NOTICE that a public hearing on the Company's petition has been scheduled for:

Wednesday February 13, 2019 at 1:00 p.m. at the Toms River Board Meeting Room #119, First Floor Administration Building,101 Hooper Avenue, Toms River, NJ 08753

Wednesday February 13, 2019 at 5:30 p.m. at the Hackensack City Clerks Office, 65 Central Avenue, 3rd Floor (Counsel Chambers), Hackensack, NJ 07604.

In the event of inclement weather on Wednesday February 13 and the hearing is cancelled the hearing will be held on Friday February 15, 2019 at the same times and locations noted above.

A hearing officer designated by the Board will preside over the public comment hearing. Members of the public are invited to attend and express their views on the proposed DSIC mechanism. Such comments will be made a part of the final record in the proceeding. Written comments may be submitted to the Hon. Aida Camacho-Welch, Secretary, Board of Public Utilities, 44 S. Clinton Avenue, 3rd Floor, Suite 314, P.O. Box 350, Trenton, New Jersey 08625-0350, Please include Docket Number WR18101158 in your comment letter.

Notice of the Petition was also served on the Clerks of Municipalities, County Executives and the Clerks of the County Boards of Freeholders in the service area of the Company. Further information and copies of the Petition may be obtained at the Board's offices located at 44 S. Clinton Avenue, 3rd Floor, Suite 314, P.O. Box 350, Trenton, New Jersey 08625-0350 or at the Company's offices located at 400 From Road, Paramus, NJ 07652. The filing is available online at: www.mysuezwater.com.

Please submit any requests for special accommodation at least 72 hours prior to this hearing to SUEZ Water New Jersey, contact person: Gary Prettyman 201-784-7083.