



SANITARY SEWER MASTER PLAN

June 2018

Prepared by:

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ASSOCIATES**

CONSULTING ENGINEERS AND PLANNERS

Borough of Wildwood Crest
Cape May County, New Jersey



Sanitary Sewer Master Plan

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Table of Contents

Introduction	1
Analysis Methodology & Evaluation Criteria	1
Recommendations	2

Section A – Sanitary Sewer System

Introduction	7
Evaluation Criteria & Analysis	7
Other Considerations	7

Section B – Roadway Inventory & Rating

Introduction	11
Analysis Methodology & Evaluation Criteria	11

Appendices

Appendix A – Roadway & Sanitary Sewer Data Sheet	17
Appendix B – Prioritized List of Recommended Improvements	35
Appendix C – Model Ordinance & Sample Rules & Regulations.....	54
Appendix D – List of Emergency Repairs Since August 1, 2017	134

Exhibits

Exhibit I – Map of Sanitary Sewer by Pipe Types	138
Exhibit II –Map of Road Surface	140
Exhibit III – Map of Recommended Improvements by Priority.....	142
Exhibit IV - Map of Street Moratoriums.....	144

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Introduction

This Borough of Wildwood Crest's Sanitary Sewer Master Plan has been developed to provide a guidance document for both the short and long-term maintenance and improvement of the Borough's existing sanitary sewer system. Additionally, a Roadway Inventory/Evaluation element has been added to this document to provide a more comprehensive view of the Borough's infrastructure and to aid in the planning and prioritization of future capital maintenance and improvement projects.

The Borough's Master Plan, prepared in 2005, as well as the subsequent Master Plan Re-examination Report, completed in 2011, establishes a vision for the Borough of preserving the existing single-family neighborhoods by reducing over development on residential lots and preventing the one- and two-family neighborhoods from turning into multi-family development. As a result, the Borough eliminated the R-3 zoning district, thereby effectively capping the future residential density throughout the residential areas of the Borough. The last re-examination report did recommend that the Borough explore the possibility of increasing the density of hotels located along the oceanfront. However, no specific changes to permitted density were recommended or put in place. These changes have resulted in a net zero change in the permitted density within the Borough. Without any significant changes to the established zoning districts or the densities already permitted by the Borough's Land Development Ordinance, there was no reason to conduct an analysis of the capacity of the existing sanitary system. The decision to forego the capacity analysis is further supported by the lack of reported back-ups by the Borough's Public Works Department.

This Sanitary Sewer Master Plan does not include an Inflow & Infiltration (I&I) Study. Inflow & infiltration is defined as the excess flow of clean water into the Borough's sanitary sewer system. In particular, inflow results from the illegal connection of sump pumps, downspouts, and foundation drains into the system. Infiltration is the flow of groundwater into the system through broken pipe and faulty joints. Excessive amounts of inflow and infiltration can overburden wastewater treatment facilities. Additionally, with excessive amounts of inflow and infiltration, the efficiency of the treatment facility can be adversely affected, creating environmental issues and public safety concerns. From an economic standpoint, excessive inflow and infiltration volumes can significantly increase treatment costs. An in-depth Inflow & Infiltration study may become necessary should the Borough's treatment costs exceed the expected costs.

The Roadway Inventory/Evaluation element provides a comprehensive overview of the condition of the paved roads in the Borough. This analysis was completed to help prioritize the necessary improvements to the Borough's roadway. Poor maintenance of the roadway system can lead to increased costs to both the municipality and the driving public. Poor roadways decrease driver performance and acuity, increased cost of vehicle maintenance, and can lead to a greater increase in motor vehicle accidents.

Finally, the intent of this Sanitary Sewer Master Plan for the Borough of Wildwood Crest is to provide a document to prioritize future improvement projects, including the replacement of sanitary sewers and roadway reconstruction. Due to the ever-increasing costs of construction, the Borough must continue to make prudent decisions with regards to spending. The aim of this document is to aid in that endeavor.

Analysis Methodology & Evaluation Criteria

To conduct the analysis of the existing roadways and sanitary sewer mains, each length of roadway and/or sewer main was divided into segments. Each segment spanned the length between adjacent cross streets.

For example, every roadway that runs from the west to the east in the Borough was divided into segments where they intersected the cross-streets that run from north to south. A breakdown of each segment can be found in Appendix A. The analysis of each segment of roadway included separate evaluations of the sanitary sewer and the roadway surface.

The evaluation of the existing roadways and sanitary sewer mains was based on the following:

1. Age / Structural Condition of the Existing Pipe – Approximately 50% of the total lineal length of the Borough's existing sanitary system is comprised of either Asbestos Concrete Pipe (ACP) or Vitrified Clay Pipe (VCP). Pipe made from these materials was commonly used prior to the adaptation of plastic Poly-vinyl Chloride (PVC) pipe. Both ACP and VCP are subject to higher incidents of structural failure and degradation, resulting in increased volumes of infiltration. Therefore, existing ACP and VCP lines were given a higher priority for replacement than existing PVC lines. An expanded explanation of the analysis of the sanitary sewer system is contained in Section A.
2. Overall Roadway Condition – Each segment of roadway was evaluated using a hybrid of a system commonly utilized by the New Jersey Department of Transportation (NJDOT). This evaluation system is based on an assessment of the surface defects noted during a visual inspection of the roadway. The evaluation criteria and process is further explained in Section B.

Each segment of roadway was given separate evaluation ratings for the condition of the sanitary sewer and the roadway based on the above criteria. The separate ratings were then combined into a composite overall rating. The recommendations contained within this report are based on the composite rating. Therefore, it is possible for a segment of roadway that visually appears to be in good condition to be placed on the priority repair list because of a poor sanitary sewer rating.

Recommendations

After completing our evaluation, we offer the following recommendations:

1. The Borough should undertake a maintenance / replacement program in which certain prioritized portions of the sanitary sewer system and roadway are replaced and updated. The priority for these projects should be based on the recommendation of this plan and are shown in Appendix B.
2. The Borough should complete a comprehensive as-built survey of the existing sanitary sewer system. An accurate as-built survey will allow for a more thorough engineering analysis of the existing sanitary system. The analysis completed in the report was limited to a determination of the potential for structural failure of the pipe based on the material composition of the pipe. Additional information obtained from the as-built survey would allow for a more thorough evaluation of the sanitary sewer system, including an analysis of minimum pipe slope and capacity. An as-built survey would also allow for an analysis of the sanitary system's compliance with certain NJDEP standards, including the presence/absence of water-tight manhole covers.
3. The Borough should adopt a set of Rules and Regulations for improvements and repairs to the existing sanitary sewer system. The newly adopted rules should include a set of construction

details to ensure uniformity in the constructed improvements. A model set of Rules & Regulations, along with a Model Sewer Use Ordinance is included in Appendix C.

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Section A

Sanitary Sewer System

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Introduction

As discussed previously, approximately 50% of the Borough's total lineal length of sanitary sewer main is comprised of either Asbestos Concrete Pipe (ACP) or Vitrified Clay Pipe (VCP). The use of asbestos pipe, and to a lesser extent vitrified clay pipe, was widespread from the 1940s through the 1970s. By 1980, polyvinyl chloride pipe became the standard for sanitary mains and laterals.

The typical life expectancy of ACP is between 40 and 60 years. Therefore, the beginning of the end of the useful life cycle of pipe installed prior to 1980 is quickly approaching. Additionally, due to their mechanical properties, both ACP and VCP are inferior in hydraulic performance and durability to the more modern polyvinyl chloride (PVC) pipe. Sanitary mains constructed of ACP and VCP are more likely to exhibit structural damage or failure, degradation, and are more likely to allow excessive infiltration through faulty joints.

The Borough is considered fully developed.

Evaluation Criteria & Analysis

The following criteria were used in our evaluation of the Borough's existing sanitary sewer mains:

1. **Pipe Material** - Based on the information above, the age and composition of the sewer main was the biggest consideration in the overall rating of the sanitary main. Due to the inherently inferior quality of sewer mains constructed of ACP or VCP, mains constructed of either of these materials were rated lower than those constructed of PVC.
2. **Known Issues** – The Borough's Public Works Department provided information regarding areas of the existing sanitary system with known issues and where problems have occurred in the past. These areas were given a priority rating to address the known issues.
3. **Emergency Repairs** – The Borough has experienced a higher than average occurrence of emergency repairs to the existing sanitary sewer system since August 1, 2017. The majority of these emergency repairs have been due to structural failure and collapse of the pipe. The locations of the emergency repairs were reviewed to determine if any particular areas should be given a higher priority.

Other Considerations

In addition to the evaluation of the existing sanitary sewer system performed under this document, we completed an examination of other considerations pertaining the sanitary infrastructure. We offer the following comments:

1. This Master Plan document was completed without the benefit of a comprehensive as-built plan of the existing sanitary sewer infrastructure. We recommend that the Borough undertake such an as-built to assist with future planning efforts.

2. Without the comprehensive as-built survey noted above, it was impossible to verify that all components of the existing infrastructure comply with the minimum governing design standards of the New Jersey Department of Environmental Protection (NJDEP). For example, we could not verify that all existing mains meet the minimum slope requirements without knowing the invert elevations of the mains at each manhole.
3. Additionally, the NJDEP regulations require that any manhole rim below elevation 10 be fitted with a waterproof cover. It is unknown which, if any, of the existing manholes meet this requirement.
4. The Borough does not currently have an adopted set of Rules and Regulations governing the installation and repair of sanitary sewer infrastructure. We recommend that the Borough adopt such rules and regulations as soon as possible. We have provided a model ordinance with sample rules and regulation in Appendix B at the end of this document.
5. The Borough has experienced 8 emergency repairs to the sanitary sewer system since August 1, 2017. The majority of these emergencies have been the result of structural failure of the sanitary pipe. All of the structural failures during this time have been to mains constructed of either ACP or VCP.

Section B

Roadway Inventory Element

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Introduction

There are approximately 169,000 linear feet of paved roadways in the Borough. Each segment of paved roadway was evaluated using a system based, in part, on the New Jersey Department of Transportation's Pavement Management System. The NJDOT system measures numerous criteria, including skid resistance, surface profile, and surface conditions. Unfortunately, many of these criteria are measured using expensive specialized vehicle-mounted equipment, making it difficult to reproduce as part of our effort. However, the NJDOT's evaluation system also relies on visual evaluations of the roadway surface. This portion of the evaluation was duplicated in our inspection of the Borough's roadways.

Analysis Methodology & Evaluation Criteria

Each segment of roadway was visually inspected and assigned a rating from 1 to 5, based on the following criteria:

Rating	Description of Condition
5	Overall excellent condition. Few or no noticeable defects in the pavement. The roadway may have been recently repaved or repaired.
4	Overall good condition. Few defects found in the pavement. Lowest priority for repairs and maintenance. The roadway exhibits satisfactory ride quality.
3	Overall satisfactory condition. Some defects noted in the pavement. The defects are limited to longitudinal cracking or separation of the asphalt joint. These roads exhibit minimally acceptable ride quality that is noticeably inferior to new pavements.
2	Overall poor condition. Many defects noted in the pavement. The defects include potholes and spider cracking, indicative of failing subbase materials. Higher priority for repairs and/or replacement. Drivers on these roads are likely to notice that they are driving on a rough surface, which puts stress on their vehicles.
1	The roadway is considered in a deficient condition. The roadway exhibits significant defects in the pavement, including large potholes, longitudinal cracking and spider cracking. Highest priority for repairs and/or replacement.

The visual inspection considered defects throughout the roadway surface – both in and outside the wheel paths. These defects include transverse and longitudinal cracking, multiple cracking, potholes, patched areas, and areas of poor/improper drainage. These typical defects are further illustrated below:

Transverse cracking – Transverse cracks extend across the width of the roadway. Transverse cracks can be indicative of poor subgrade materials or subgrade failure. They can also be the result of improper joints and poor construction techniques.



Photo 1 – Typical transverse crack

Longitudinal cracking – Longitudinal cracks extend along the length of the roadway. This type of cracking is usually indicative of failure or improper sealing of the asphalt joints during construction.



Photo 2 – Typical longitudinal crack

Multiple Cracking – Multiple cracking typically occurs in areas where the underlying subbase material has failed. Multiple cracking typically occurs in patches with an appearance that can best be described as looking like alligator skin.



Photo 3 – Multiple cracking



Photo 4 – Multiple cracking

Patching – Patched areas are typically the result of utility repairs or installations. Patched areas are more likely to exhibit differential settlement and separation along the edges of the patched area. These defects are typically the result of poor construction techniques.



Photo 5 – Patched area exhibits differential settlement and cracking / separation along the edges of the patched area.



Photo 6 – Patched area

Poor Drainage – Areas with poor drainage are prone to premature deterioration of the roadway surface. Standing water can also present other issues including icing during winter months.



Photo 7- Poor drainage along the shoulder has contributed to premature deterioration of the asphalt surface.



Photo 8 – Deteriorated asphalt in an area exhibiting poor drainage

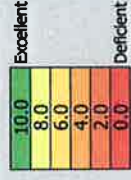
Each segment of roadway was visually evaluated for the presence of defects. A rating was assigned to each segment based on the type of defects noted, as well as the severity of the defects. For example, significant areas of multiple cracking, along with drainage issues lowered the condition rating of the segment more than similar areas of transverse cracking.

Appendix A

Roadway & Sanitary Sewer Data Sheet

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Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Cresse Avenue	Bay	Lake Road	150	40	670	Both	Both	N/A	4.8	5.0	9.8
	Lake Road	Park Boulevard	825	40	3,670	Both	Both	N/A	2.5	5.0	7.5
	Park Boulevard	New Jersey Avenue	900	35	3,500	Both	Both	N/A	2.5	5.0	7.5
	New Jersey Avenue	Pacific Avenue	675	35	2,630	Both	None	N/A	2.7	5.0	7.7
	Pacific Avenue	Seaview Avenue	400	35	1,560	Both	Both	N/A	4.6	5.0	9.6
	Seaview Avenue	Atlantic Avenue	300	35	1,170	Both	Both	N/A	4.6	5.0	9.6
	Atlantic Avenue	Ocean Avenue	400	35	1,560	Both	Both	N/A	3.2	5.0	8.2
Morning Glory Road	Ocean Avenue	Beach Avenue	250	35	970	Both	None	N/A	3.8	5.0	8.8
	Bay	Lake Road	125	30	420	Both	Both	PVC	4.8	5.0	9.8
	Lake Road	Park Boulevard	750	30	2,500	Both	Both	PVC	3.2	5.0	8.2
	Park Boulevard	New Jersey Avenue	900	30	3,000	Both	None	PVC	3.2	5.0	8.2
	New Jersey Avenue	Pacific Avenue	675	30	2,250	Both	Both	PVC	3.5	5.0	8.5
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	Both	PVC	4.6	5.0	9.6
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	Both	VCP	4.6	2.0	6.6
Buttercup Road	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	VCP	3.7	2.0	5.7
	Ocean Avenue	Beach Avenue	250	30	830	Both	None	ACP	2.8	2.0	4.8
	Bay	Lake Road	125	30	420	Both	Both	PVC	4.8	5.0	9.8
	Lake Road	Park Boulevard	650	30	2,170	Both	Both	PVC	3.1	5.0	8.1
	Park Boulevard	New Jersey Avenue	900	30	3,000	Both	None	PVC	3.2	5.0	8.2
	New Jersey Avenue	Pacific Avenue	675	30	2,250	Both	Both	PVC	2.6	5.0	7.6
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	Both	PVC	4.2	5.0	9.2
Lavender Road	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	Both	VCP	4.2	2.0	6.2
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	VCP	2.7	2.0	4.7
	Ocean Avenue	Beach Avenue	250	30	830	Both	None	ACP	2.8	2.0	4.8
	Bay	Lake Road	125	30	420	Both	Both	PVC	4.8	5.0	9.8
	Lake Road	Park Boulevard	450	30	1,500	Both	Both	PVC	3.5	5.0	8.5
	Park Boulevard	New Jersey Avenue	900	30	3,000	Both	None	PVC	2.9	5.0	7.9
	New Jersey Avenue	Pacific Avenue	675	30	2,250	Both	Both	PVC	3.1	5.0	8.1
Legend	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	None	PVC	2.2	5.0	7.2
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	None	PVC	2.6	5.0	7.6
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	VCP	2.4	2.0	4.4
	Ocean Avenue	Beach Avenue	250	30	830	Both	None	ACP	2.6	2.0	4.6



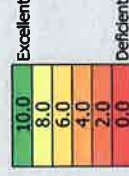
PVC - Polyvinyl Chloride Pipe
ACP - Asbestos Concrete Pipe
VCP - Vitrified Clay Pipe
N/A - No Pipe Installed

Both - Curb/Gutter on Both Sides of Roadway
None - No Curb/Gutter on Either Side of Roadway
N - Curb/Gutter on North Side of Roadway
S - Curb/Gutter on South Side of Roadway
E - Curb/Gutter on East Side of Roadway
W - Curb/Gutter on West Side of Roadway

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes	
	from	to							Roadway	Sanitary		Total
Heather Road	Bay	Lake Road	125	30	420	Both	Both	N/A	4.8	5.0	9.8	
	Lake Road	Park Boulevard	250	30	830	Both	Both	PVC	3.6	5.0	8.6	
	Park Boulevard	New Jersey Avenue	900	30	3,000	Both	Both	PVC	3.4	5.0	8.4	
	New Jersey Avenue	Pacific Avenue	675	30	2,250	Both	Both	PVC	3.7	5.0	8.7	
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	Both	PVC	3.7	5.0	8.7	
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	Both	ACP	3.6	2.0	5.6	
Crocus Road	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	Both	N/A	3.4	5.0	8.4	
	Ocean Avenue	Beach Avenue	250	30	830	Both	None	ACP	3.8	2.0	5.8	
	Bay	Lake Road	125	30	420	Both	Both	N/A	3.3	5.0	8.3	
	Park Boulevard	New Jersey Avenue	850	30	2,830	Both	Both	PVC	3.5	5.0	8.5	
	New Jersey Avenue	Pacific Avenue	675	30	2,250	Both	Both	PVC	3.6	5.0	8.6	
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	None	ACP	2.8	2.0	4.8	
Aster	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	None	ACP	3.4	2.0	5.4	
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	ACP	2.9	2.0	4.9	
	Ocean Avenue	Beach Avenue	250	30	830	Both	None	ACP	3.3	2.0	5.3	
	Bay	Park Boulevard	175	40	780	Both	Both	N/A	4.8	5.0	9.8	
	Park Boulevard	New Jersey Avenue	850	40	3,780	Both	Both	PVC	3.4	5.0	8.4	
	New Jersey Avenue	Pacific Avenue	650	40	2,890	Both	Both	PVC	3.2	5.0	8.2	
Cardinal Road	Pacific Avenue	Seaview Avenue	400	40	1,780	Both	None	ACP	4.8	2.0	6.8	
	Seaview Avenue	Atlantic Avenue	300	40	1,330	Both	Both	ACP	2.7	2.0	4.7	
	Atlantic Avenue	Ocean Avenue	400	40	1,780	Both	None	ACP	4.7	2.0	6.7	
	Ocean Avenue	Beach Avenue	250	40	1,110	Both	None	ACP	2.7	2.0	4.7	
	Bay	Park Boulevard	175	50	970	Both	Both	N/A	2.4	5.0	7.4	
	Park Boulevard	New Jersey Avenue	825	50	4,580	Both	Both	PVC	2.4	5.0	7.4	
Legend	New Jersey Avenue	Pacific Avenue	650	50	3,610	Both	Both	PVC	2.3	5.0	7.3	
	Pacific Avenue	Seaview Avenue	400	50	2,220	Both	Both	ACP	2.3	2.0	4.3	
	Seaview Avenue	Atlantic Avenue	300	50	1,670	Both	Both	ACP	2.8	2.0	4.8	
	Atlantic Avenue	Ocean Avenue	400	50	2,220	Both	None	ACP	2.4	2.0	4.4	
	Ocean Avenue	Beach Avenue	250	50	1,390	Both	None	ACP	2.4	2.0	4.4	
Legend	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed										Condition Rating	Excellent 8.0 6.0 4.0 2.0 0.0 Deficient

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Sweetbriar Road	Bay	Park Boulevard	175	40	780	Both	Both	N/A	2.3	5.0	7.3
	Park Boulevard	New Jersey Avenue	775	40	3,440	Both	Both	PVC	2.5	5.0	7.5
	New Jersey Avenue	Pacific Avenue	650	40	2,890	Both	Both	PVC	4.6	5.0	9.6
	Pacific Avenue	Seaview Avenue	400	40	1,780	Both	None	ACP	4.6	2.0	6.6
	Seaview Avenue	Atlantic Avenue	300	40	1,330	Both	S	ACP	2.6	2.0	4.6
	Atlantic Avenue	Ocean Avenue	400	40	1,780	Both	None	ACP	2.5	2.0	4.5
Wisteria Road	Ocean Avenue	Boardwalk	250	40	1,110	Both	None	ACP	2.3	2.0	4.3
	Bay	Park Boulevard	150	30	500	Both	Both	ACP	2.8	5.0	7.8
	Park Boulevard	New Jersey Avenue	750	30	2,500	Both	Both	ACP	2.6	5.0	7.6
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	ACP	2.7	5.0	7.7
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	None	ACP	4.6	5.0	9.6
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	None	ACP	4.6	5.0	9.6
Columbine	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	ACP	2.5	5.0	7.5
	Ocean Avenue	Boardwalk	250	30	830	Both	None	ACP	2.4	5.0	7.4
	Bay	Park Boulevard	175	30	580	Both	Both	N/A	2.5	5.0	7.5
	Park Boulevard	New Jersey Avenue	700	30	2,330	Both	Both	PVC	2.3	5.0	7.3
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	ACP	4.6	2.0	6.6
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	Both	ACP	4.6	2.0	6.6
Rosemary Road	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	Both	ACP	2.8	2.0	4.8
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	ACP	3.1	2.0	5.1
	Ocean Avenue	Boardwalk	250	30	830	Both	None	ACP	2.8	2.0	4.8
	Bay	Park Boulevard	150	30	500	Both	None	N/A	2.5	5.0	7.5
	Park Boulevard	New Jersey Avenue	650	30	2,170	Both	None	ACP	2.7	2.0	4.7
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	None	ACP	2.7	2.0	4.7
Rosemary Road	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	Both	ACP	2.6	2.0	4.6
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	None	ACP	2.3	2.0	4.3
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	ACP	2.5	2.0	4.5
	Ocean Avenue	Boardwalk	250	30	830	Both	None	ACP	2.5	2.0	4.5
Legend	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway		PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed		Condition Rating		10.0 8.0 6.0 4.0 2.0 0.0 Excellent Deficient				

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes											
	from	to							Roadway	Sanitary		Total										
Forget-Me-Not Road	Bay	Park Boulevard	150	30	500	Both	Both	N/A	2.5	5.0	7.5											
	Park Boulevard	New Jersey Avenue	550	30	1,830	Both	Both	ACP	2.1	2.0	4.1											
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	PVC	2.4	5.0	7.4											
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	Both	PVC	2.5	5.0	7.5											
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	Both	ACP	2.4	2.0	4.4											
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	ACP	2.8	2.0	4.8											
	Ocean Avenue	Boardwalk	250	30	830	Both	None	ACP	2.7	2.0	4.7											
Fern Road	Bay	Park Boulevard	150	30	500	Both	Both	N/A	2.2	5.0	7.2											
	Park Boulevard	New Jersey Avenue	500	30	1,670	Both	Both	PVC	2.6	5.0	7.6											
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	PVC	2.6	5.0	7.6											
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	Both	PVC	3.2	5.0	8.2											
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	None	ACP	2.8	2.0	4.8											
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	None	ACP	2.4	2.0	4.4											
Palm Road	Bay	Park Boulevard	200	30	670	Both	BS	N/A	2.4	5.0	7.4											
	Park Boulevard	New Jersey Avenue	450	30	1,500	Both	BS	ACP	3.2	2.0	5.2											
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	BS	PVC	4.6	5.0	9.6											
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	BS	PVC	4.6	5.0	9.6											
	Seaview Avenue	Atlantic Avenue	300	30	1,000	Both	BS	ACP	4.6	2.0	6.6											
	Atlantic Avenue	Ocean Avenue	400	30	1,330	Both	BS	ACP	2.4	2.0	4.4											
	Ocean Avenue	Beach Avenue	250	30	830	Both	BS	ACP	2.2	2.0	4.2											
Lotus Road	Bay	Park Boulevard	150	40	670	Both	S	N/A	2.4	5.0	7.4											
	Park Boulevard	New Jersey Avenue	350	40	1,560	Both	S	ACP	2.4	2.0	4.4											
	New Jersey Avenue	Pacific Avenue	350	40	1,560	Both	Both	PVC	2.7	5.0	7.7											
	Pacific Avenue	Seaview Avenue	400	40	1,780	Both	Both	PVC	2.7	5.0	7.7											
	Seaview Avenue	Atlantic Avenue	300	40	1,330	Both	Both	ACP	2.8	2.0	4.8											
	Atlantic Avenue	Ocean Avenue	400	40	1,780	Both	Both	ACP	2.6	2.0	4.6											
	Ocean Avenue	Beach Avenue	250	40	1,110	Both	Both	ACP	2.4	2.0	4.4											
Legend	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway		PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed			Condition Rating		<table><tr><td>10.0</td><td>Excellent</td></tr><tr><td>8.0</td><td></td></tr><tr><td>6.0</td><td></td></tr><tr><td>4.0</td><td></td></tr><tr><td>2.0</td><td></td></tr><tr><td>0.0</td><td>Deficient</td></tr></table>			10.0	Excellent	8.0		6.0		4.0		2.0		0.0	Deficient
10.0	Excellent																					
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10.0	Excellent
8.0	
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0.0	Deficient

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Stockton Road	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	None	ACP	2.5	2.0	4.5
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	None	ACP	0.5	1.0	1.5
	Seaview Avenue	Atlantic Avenue	400	30	1,330	Both	None	ACP	2.5	2.0	4.5
	Atlantic Avenue	Ocean Avenue	300	30	1,000	Both	N	ACP	2.4	2.0	4.4
	Ocean Avenue	Beach	425	30	1,420	Both	Both	ACP	2.5	2.0	4.5
Stanton Road	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	None	ACP	0.5	1.0	1.5
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	None	ACP	0.5	1.0	1.5
	Seaview Avenue	Atlantic Avenue	450	30	1,500	Both	None	ACP	0.5	1.0	1.5
	Atlantic Avenue	Ocean Avenue	300	30	1,000	Both	None	ACP	0.5	1.0	1.5
	Ocean Avenue	Beach	400	30	1,330	Both	Both	ACP	0.5	1.0	1.5
Fairragut Road	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	None	ACP	2.3	2.0	4.3
	Pacific Avenue	Seaview Avenue	400	30	1,330	Both	None	ACP	2.4	2.0	4.4
	Seaview Avenue	Atlantic Avenue	450	30	1,500	Both	None	ACP	2.3	2.0	4.3
	Atlantic Avenue	Beach	700	30	2,330	Both	Both	ACP	2.4	2.0	4.4
	New Jersey Avenue	Pacific Avenue	650	36	2,600	Both	None	PVC	2.5	5.0	7.5
Atlanta Avenue	Pacific Avenue	Seaview Avenue	400	36	1,600	Both	Both	PVC	2.8	5.0	7.8
	Seaview Avenue	Atlantic Avenue	500	36	2,000	Both	None	ACP	2.6	2.0	4.6
	Atlantic Avenue	Beach	650	36	2,600	Both	Both	ACP	2.7	2.0	4.7
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	PVC	2.9	5.0	7.9
Nashville Avenue	Pacific Avenue	Seaview Avenue	450	30	1,500	Both	None	PVC	2.5	5.0	7.5
	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	None	ACP	2.7	2.0	4.7
	Atlantic Avenue	Beach	600	30	2,000	Both	None	ACP	2.6	2.0	4.6
Legend	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed										Condition Rating

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Louisville Avenue	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	PVC	2.7	5.0	7.7
	Pacific Avenue	Seaview Avenue	500	30	1,670	Both	Both	PVC	2.7	5.0	7.7
	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	Both	PVC	2.8	5.0	7.8
	Atlantic Avenue	Beach	575	30	1,920	Both	Both	ACP	2.6	2.0	4.6
Miami Avenue	Bayview Avenue	New Jersey Avenue	150	30	500	Both	Both	N/A	2.8	5.0	7.8
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	PVC	2.8	5.0	7.8
	Pacific Avenue	Seaview Avenue	550	30	1,830	Both	Both	PVC	2.8	5.0	7.8
	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	Both	PVC	2.7	5.0	7.7
Monterey Avenue	Atlantic Avenue	Beach	550	30	1,830	Both	Both	ACP	2.5	2.0	4.5
	Bayview Avenue	New Jersey Avenue	250	30	830	Both	None	ACP	2.6	2.0	4.6
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	PVC	2.8	5.0	7.8
	Pacific Avenue	Seaview Avenue	575	30	1,920	Both	Both	PVC	2.8	5.0	7.8
St Paul Avenue	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	None	ACP	2.4	2.0	4.4
	Atlantic Avenue	Beach	500	30	1,670	Both	Both	ACP	2.5	2.0	4.5
	Bayview Avenue	New Jersey Avenue	400	30	1,330	Both	Both	PVC	2.5	5.0	7.5
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	ACP	2.5	2.0	4.5
Toledo Avenue	Pacific Avenue	Seaview Avenue	600	30	2,000	Both	None	ACP	2.5	2.0	4.5
	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	None	ACP	0.5	1.0	1.5
	Atlantic Avenue	Beach	450	30	1,500	Both	Both	ACP	2.6	2.0	4.6
	Bayview Avenue	New Jersey Avenue	550	30	1,830	Both	Both	ACP	2.5	2.0	4.5
Toledo Avenue	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	ACP	2.4	2.0	4.4
	Pacific Avenue	Seaview Avenue	650	30	2,170	Both	None	ACP	2.5	2.0	4.5
	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	None	ACP	2.5	2.0	4.5
	Atlantic Avenue	Beach	450	30	1,500	Both	Both	ACP	2.6	2.0	4.6
Legend	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed										Condition Rating 10.0 Excellent 8.0 6.0 4.0 2.0 0.0 Deficient

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Denver Avenue	Bay	Bayview Avenue	100	30	330	Both	None	N/A	2.4	5.0	7.4
	Bayview Avenue	New Jersey Avenue	650	30	2,170	Both	Both	ACP	2.4	2.0	4.4
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	None	ACP	2.3	2.0	4.3
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	ACP	0.5	1.0	1.5
	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	None	ACP	2.3	2.0	4.3
Syracuse Avenue	Atlantic Avenue	Beach	400	30	1,330	Both	Both	ACP	2.3	2.0	4.3
	Bay	Bayview Avenue	150	30	500	Both	Both	ACP	0.5	1.0	1.5
	Bayview Avenue	New Jersey Avenue	650	30	2,170	Both	None	ACP	0.5	1.0	1.5
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	ACP	0.5	1.0	1.5
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	ACP	0.5	1.0	1.5
Preston Avenue	Seaview Avenue	Atlantic Avenue	500	30	1,670	Both	Both	ACP	0.5	1.0	1.5
	Atlantic Avenue	Beach	350	30	1,170	Both	Both	ACP	0.5	1.0	1.5
	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both	None	ACP	2.4	2.0	4.4
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	ACP	2.6	2.0	4.6
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	ACP	2.3	2.0	4.3
Hollywood Avenue	Seaview Avenue	Atlantic Avenue	550	30	1,830	Both	Both	ACP	2.6	2.0	4.6
	Atlantic Avenue	Beach	300	30	1,000	Both	Both	N/A	2.5	5.0	7.5
	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both	None	ACP	2.5	2.0	4.5
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	PVC	2.4	5.0	7.4
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	ACP	2.5	2.0	4.5
Topeka Avenue	Seaview Avenue	Atlantic Avenue	600	30	2,000	Both	N	ACP	2.5	2.0	4.5
	Atlantic Avenue	Beach	300	30	1,000	Both	Both	ACP	2.6	2.0	4.6
	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both	None	PVC	2.1	5.0	7.1
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both	Both	ACP	2.5	2.0	4.5
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	None	ACP	2.4	2.0	4.4
Legend	Seaview Avenue	Atlantic Avenue	650	30	2,170	Both	Both	ACP	2.3	2.0	4.3
	Atlantic Avenue	Beach	300	30	1,000	Both	Both	ACP	2.6	2.0	4.6

Condition Rating

10.0 Excellent
8.0
6.0
4.0
2.0
0.0 Deficient

PVC - Polyvinyl Chloride Pipe
ACP - Asbestos Concrete Pipe
VCP - Vitrified Clay Pipe
N/A - No Pipe Installed

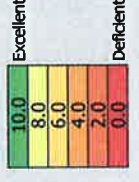
Both - Curb/Gutter on Both Sides of Roadway
None - No Curb/Gutter on Either Side of Roadway
N - Curb/Gutter on North Side of Roadway
S - Curb/Gutter on South Side of Roadway
E - Curb/Gutter on East Side of Roadway
W - Curb/Gutter on West Side of Roadway

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Pittsburgh Avenue	Bayview Avenue	New Jersey Avenue	800	35	3,110	Both	None	ACP	2.4	2.0	4.4
	New Jersey Avenue	Pacific Avenue	650	35	2,530	Both	Both	PVC	2.7	5.0	7.7
	Pacific Avenue	Seaview Avenue	700	35	2,720	Both	Both	PVC	2.7	5.0	7.7
	Seaview Avenue	Atlantic Avenue	650	35	2,530	Both	None	ACP	2.4	2.0	4.4
	Atlantic Avenue	Beach	300	35	1,170	Both	Both	ACP	2.5	2.0	4.5
Charleston Avenue	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both		ACP	2.6	2.0	4.6
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both		PVC	2.6	5.0	7.6
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	PVC	2.6	5.0	7.6
	Seaview Avenue	Atlantic Avenue	650	30	2,170	Both		ACP	2.3	2.0	4.3
	Atlantic Avenue	Beach	300	30	1,000	Both		ACP	2.5	2.0	4.5
St. Louis Avenue	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both		PVC	3.2	5.0	8.2
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both		PVC	2.3	5.0	7.3
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	PVC	2.4	5.0	7.4
	Seaview Avenue	Atlantic Avenue	650	30	2,170	Both		ACP	2.4	2.0	4.4
	Atlantic Avenue	Beach	300	30	1,000	Both		ACP	2.4	2.0	4.4
Trenton Avenue	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both		ACP	2.3	2.0	4.3
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	ACP	2.3	2.0	4.3
	Seaview Avenue	Atlantic Avenue	650	30	2,170	Both		ACP	2.4	2.0	4.4
	Atlantic Avenue	Beach	300	30	1,000	Both		ACP	2.4	2.0	4.4
	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both		PVC	2.5	5.0	7.5
Newark Avenue	Pacific Avenue	Seaview Avenue	700	30	2,330	Both	Both	ACP	2.2	2.0	4.2
	Seaview Avenue	Atlantic Avenue	650	30	2,170	Both		ACP	2.1	2.0	4.1
	Atlantic Avenue	Beach	300	30	1,000	Both		ACP	2.2	2.0	4.2
	Legend										
	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway										
PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed											
Condition Rating											
10.0 Excellent 8.0 6.0 4.0 2.0 0.0 Deficient											

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings			Notes
	from	to							Roadway	Sanitary	Total	
Washington Avenue	Bayview Avenue	New Jersey Avenue	800	30	2,670	Both		N/A	3.2	5.0	8.2	
	New Jersey Avenue	Pacific Avenue	650	30	2,170	Both		ACP	2.6	2.0	4.6	
	Pacific Avenue	Seaview Avenue	700	30	2,330	Both		ACP	2.5	2.0	4.5	
	Seaview Avenue	Atlantic Avenue	650	30	2,170	Both		PVC	3.1	5.0	8.1	
	Atlantic Avenue	Beach	350	30	1,170	Both		PVC	2.9	5.0	7.9	
Jefferson Avenue	Bayview Avenue	New Jersey Avenue	800	36	3,200	Both		ACP	2.6	2.0	4.6	
	New Jersey Avenue	Pacific Avenue	650	36	2,600	Both		PVC	2.9	5.0	7.9	
	Pacific Avenue	Seaview Avenue	700	36	2,800	Both		ACP	2.6	2.0	4.6	
	Seaview Avenue	Atlantic Avenue	650	36	2,600	Both		ACP	2.5	2.0	4.5	
	Atlantic Avenue	Beach	400	36	1,600	Both		ACP	2.4	2.0	4.4	
Lake Road	Cresse Avenue	Morning Glory Road	250	20	560	Both	Both	PVC	2.7	5.0	7.7	
	Morning Glory Road	Buttercup Road	250	20	560	Both	Both	PVC	2.8	5.0	7.8	
	Buttercup Road	Lavender Road	250	20	560	Both	Both	PVC	4.6	5.0	9.6	
	Lavender Road	Heather Road	250	20	560	Both	Both	PVC	4.6	5.0	9.6	
	Heather Road	Crocus Road	250	20	560	Both	Both	PVC	2.2	5.0	7.2	
Legend	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway		PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed			Condition Rating			10.0 8.0 6.0 4.0 2.0 0.0 Excellent Deficient			

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
New Jersey Avenue	Cresse Avenue	Morning Glory Road	250	50	1,390	Both	Both	ACP	2.8	2.0	4.8
	Morning Glory Road	Buttercup Road	250	50	1,390	Both	Both	ACP	2.7	2.0	4.7
	Buttercup Road	Lavender Road	250	50	1,390	Both	Both	ACP	2.7	2.0	4.7
	Lavender Road	Heather Road	250	50	1,390	Both	Both	ACP	2.6	2.0	4.6
	Heather Road	Crocus Road	250	50	1,390	Both	Both	ACP	2.5	2.0	4.5
	Crocus Road	Aster Road	250	50	1,390	Both	Both	ACP	2.5	2.0	4.5
	Aster Road	Cardinal Road	250	50	1,390	Both	None	ACP	2.5	2.0	4.5
	Cardinal Road	Sweetbriar Road	250	50	1,390	Both	Both	ACP	2.5	2.0	4.5
	Sweetbriar Road	Wisteria Road	250	50	1,390	Both	Both	ACP	2.5	2.0	4.5
	Wisteria Road	Columbine Road	250	50	1,390	Both	Both	ACP	2.6	2.0	4.6
	Columbine Road	Rosemary Road	250	50	1,390	Both	Both	ACP	2.4	2.0	4.4
	Rosemary Road	Forget-Me-Not Road	250	50	1,390	Both	Both	ACP	2.8	2.0	4.8
	Forget-Me-Not Road	Fern Road	250	50	1,390	Both	Both	ACP	2.8	2.0	4.8
	Fern Road	Palm Road	250	50	1,390	Both	Both	ACP	2.7	2.0	4.7
	Palm Road	Lotus Road	250	50	1,390	Both	Both	ACP	2.3	2.0	4.3
	Lotus Road	Myrtle Road	250	50	1,390	Both	Both	ACP	2.4	2.0	4.4
	Myrtle Road	Primrose Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Primrose Road	Rambler Road	250	50	1,390	Both	Both	N/A	4.6	5.0	9.6
	Rambler Road	Orchid Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Orchid Road	Stockton Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Stockton Road	Stanton Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Stanton Road	Farragut Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Farragut Road	Atlanta Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Atlanta Road	Nashville Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Nashville Road	Louisville Road	250	50	1,390	Both	Both	ACP	4.6	2.0	6.6
	Louisville Road	Miami Avenue	225	50	1,250	Both	Both	ACP	4.6	2.0	6.6
	Miami Avenue	Monterey Avenue	225	50	1,250	Both	BS	ACP	4.6	2.0	6.6
	Monterey Avenue	St. Paul Avenue	225	50	1,250	Both	BS	ACP	4.6	2.0	6.6
	St. Paul Avenue	Toledo Avenue	225	50	1,250	Both	BS	ACP	4.6	2.0	6.6
	Toledo Avenue	Denver Avenue	225	50	1,250	Both	BS	ACP	4.6	2.0	6.6
	Denver Avenue	Syracuse Avenue	200	50	1,110	Both	BS	ACP	4.6	2.0	6.6
	Syracuse Avenue	Preston Avenue	200	50	1,110	Both	BS	ACP	4.6	2.0	6.6
	Preston Avenue	Hollywood Avenue	200	50	1,110	Both	BS	ACP	4.6	2.0	6.6
	Hollywood Avenue	Topeka Avenue	200	50	1,110	Both	BS	PVC	4.6	5.0	9.6
	Topeka Avenue	Pittsburgh Avenue	200	50	1,110	Both	BS	PVC	4.6	5.0	9.6
	Pittsburgh Avenue	Charleston Avenue	200	50	1,110	Both	BS	PVC	4.6	5.0	9.6
	Charleston Avenue	St. Louis Avenue	200	50	1,110	Both	BS	PVC	3.4	5.0	8.4
	St. Louis Avenue	Washington Avenue	200	50	1,110	Both	BS	PVC	3.4	5.0	8.4
	Trenton Avenue	Newark Avenue	200	50	1,110	Both	BS	PVC	3.4	5.0	8.4
	Newark Avenue	Washington Avenue	200	50	1,110	Both	BS	PVC	3.4	5.0	8.4
	Washington Avenue	Jefferson Avenue	200	50	1,110	Both	BS	PVC	3.4	5.0	8.4
Legend	Both - Curb/Gutter on Both Sides of Roadway		PVC - Polyvinyl Chloride Pipe		Condition Rating		10.0		Excellent		
	None - No Curb/Gutter on Either Side of Roadway		ACP - Asbestos Concrete Pipe				8.0				
	N - Curb/Gutter on North Side of Roadway		VCP - Vitrified Clay Pipe				6.0				
	S - Curb/Gutter on South Side of Roadway		N/A - No Pipe Installed				4.0				
	E - Curb/Gutter on East Side of Roadway						2.0				
	W - Curb/Gutter on West Side of Roadway						0.0		Deficient		

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	Total
Pacific Avenue	Cresse Avenue	Morning Glory Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Morning Glory Road	Buttercup Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Buttercup Road	Lavender Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Lavender Road	Heather Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Heather Road	Crocus Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Crocus Road	Aster Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Aster Road	Cardinal Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Cardinal Road	Sweetbriar Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Sweetbriar Road	Wisteria Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Wisteria Road	Columbine Road	250	30	830	Both	Both	PVC	4.6	5.0	9.6
	Columbine Road	Rosemary Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Rosemary Road	Forget-Me-Not Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Forget-Me-Not Road	Fern Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Fern Road	Palm Road	250	30	830	Both	Both	PVC	4.6	5.0	9.6
	Palm Road	Lotus Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Lotus Road	Myrtle Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Myrtle Road	Primrose Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Primrose Road	Rambler Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Rambler Road	Orchid Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Orchid Road	Stockton Road	250	30	830	Both	Both	ACP	4.6	2.0	6.6
	Stockton Road	Stanton Road	250	30	830	Both	Both	ACP	2.6	2.0	4.6
	Stanton Road	Farragut Road	250	30	830	Both	Both	ACP	2.6	2.0	4.6
	Farragut Road	Atlanta Road	250	30	830	Both	Both	ACP	2.5	2.0	4.5
	Atlanta Road	Nashville Road	250	30	830	Both	Both	ACP	2.4	2.0	4.4
	Nashville Road	Louisville Road	250	30	830	Both	Both	ACP	2.5	2.0	4.5
	Louisville Road	Miami Avenue	225	30	750	Both	Both	ACP	2.6	2.0	4.6
	Miami Avenue	Monterey Avenue	225	30	750	Both	Both	PVC	2.6	5.0	7.6
	Monterey Avenue	St. Paul Avenue	225	30	750	Both	Both	ACP	2.5	2.0	4.5
	St. Paul Avenue	Toledo Avenue	225	30	750	Both	Both	ACP	2.5	2.0	4.5
	Toledo Avenue	Denver Avenue	225	30	750	Both	None	ACP	2.4	2.0	4.4
	Denver Avenue	Syracuse Avenue	200	30	670	Both	None	ACP	2.3	2.0	4.3
	Syracuse Avenue	Preston Avenue	200	30	670	Both	Both	ACP	2.5	2.0	4.5
	Preston Avenue	Hollywood Avenue	200	30	670	Both	Both	ACP	2.5	2.0	4.5
	Hollywood Avenue	Topeka Avenue	200	30	670	Both	Both	ACP	2.5	2.0	4.5
	Topeka Avenue	Pittsburgh Avenue	200	30	670	Both	Both	N/A	2.6	5.0	7.6
	Pittsburgh Avenue	Charleston Avenue	200	30	670	Both	Both	N/A	2.4	5.0	7.4
	Charleston Avenue	St. Louis Avenue	200	30	670	Both	Both	N/A	2.4	5.0	7.4
	St. Louis Avenue	Trenton Avenue	200	30	670	Both	Both	N/A	2.4	5.0	7.4
	Trenton Avenue	Newark Avenue	200	30	670	Both	Both	N/A	2.4	5.0	7.4
	Newark Avenue	Washington Avenue	200	30	670	Both	Both	ACP	2.4	2.0	4.4
	Washington Avenue	Jefferson Avenue	200	30	670	Both	Both	ACP	2.4	2.0	4.4
Legend	Both - Curb/Gutter on Both Sides of Roadway		PVC - Polyvinyl Chloride Pipe								
	None - No Curb/Gutter on Either Side of Roadway		ACP - Asbestos Concrete Pipe								
	N - Curb/Gutter on North Side of Roadway		VCP - Vitrified Clay Pipe								
	S - Curb/Gutter on South Side of Roadway		N/A - No Pipe Installed								
	E - Curb/Gutter on East Side of Roadway										
	W - Curb/Gutter on West Side of Roadway										



Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Seaview Avenue	Cresse Avenue	Morning Glory Road	250	36	1,000	Both	Both	N/A	4.6	5.0	9.6
	Morning Glory Road	Buttercup Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Buttercup Road	Lavender Road	250	36	1,000	Both	Both	PVC	2.7	5.0	7.7
	Lavender Road	Heather Road	250	36	1,000	Both	Both	PVC	2.7	5.0	7.7
	Heather Road	Crocus Road	250	36	1,000	Both	Both	PVC	2.7	5.0	7.7
	Crocus Road	Aster Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Aster Road	Cardinal Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Cardinal Road	Sweetbriar Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Sweetbriar Road	Wisteria Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Wisteria Road	Columbine Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Columbine Road	Rosemary Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Rosemary Road	Forget-Me-Not Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Forget-Me-Not Road	Fern Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Fern Road	Palm Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Palm Road	Lotus Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Lotus Road	Myrtle Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Myrtle Road	Primrose Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Primrose Road	Rambler Road	250	36	1,000	Both	Both	PVC	4.6	5.0	9.6
	Rambler Road	Orchid Road	250	36	1,000	Both	Both	PVC	3.8	5.0	8.8
	Orchid Road	Stockton Road	250	36	1,000	Both	Both	PVC	3.8	5.0	8.8
	Stockton Road	Stanton Road	250	36	1,000	Both	Both	PVC	3.8	5.0	8.8
	Stanton Road	Farragut Road	250	36	1,000	Both	Both	PVC	3.8	5.0	8.8
	Farragut Road	Atlanta Road	250	36	1,000	Both	Both	PVC	3.8	5.0	8.8
	Atlanta Road	Nashville Road	250	36	1,000	Both	Both	PVC	3.7	5.0	8.7
	Nashville Road	Louisville Road	250	36	1,000	Both	Both	PVC	3.7	5.0	8.7
	Louisville Road	Miami Avenue	225	36	900	Both	Both	PVC	3.7	5.0	8.7
	Miami Avenue	Monterey Avenue	225	36	900	Both	Both	PVC	3.7	5.0	8.7
	Monterey Avenue	St. Paul Avenue	225	36	900	Both	Both	PVC	3.7	5.0	8.7
	St. Paul Avenue	Toledo Avenue	225	36	900	Both	Both	PVC	3.6	5.0	8.6
	Toledo Avenue	Denver Avenue	225	36	900	Both	Both	PVC	3.6	5.0	8.6
	Denver Avenue	Syracuse Avenue	200	36	800	Both	Both	PVC	3.6	5.0	8.6
	Syracuse Avenue	Preston Avenue	200	36	800	Both	Both	PVC	3.5	5.0	8.5
	Preston Avenue	Hollywood Avenue	200	36	800	Both	Both	PVC	3.5	5.0	8.5
	Hollywood Avenue	Topeka Avenue	200	36	800	Both	Both	PVC	3.5	5.0	8.5
	Topeka Avenue	Pittsburgh Avenue	200	36	800	Both	Both	PVC	3.4	5.0	8.4
	Pittsburgh Avenue	Charleston Avenue	200	36	800	Both	Both	PVC	3.4	5.0	8.4
	Charleston Avenue	St. Louis Avenue	200	36	800	Both	Both	PVC	3.3	5.0	8.3
	St. Louis Avenue	Trenton Avenue	200	36	800	Both	Both	PVC	3.2	5.0	8.2
	Trenton Avenue	Newark Avenue	200	36	800	Both	Both	PVC	3.2	5.0	8.2
	Newark Avenue	Washington Avenue	200	36	800	Both	Both	PVC	3.2	5.0	8.2
	Washington Avenue	Jefferson Avenue	200	36	800	Both	Both	PVC	3.2	5.0	8.2
Legend	Both - Curb/Gutter on Both Sides of Roadway		PVC - Polyvinyl Chloride Pipe		Condition Rating		10.0		Excellent		
	None - No Curb/Gutter on Either Side of Roadway		ACP - Asbestos Concrete Pipe				8.0				
	N - Curb/Gutter on North Side of Roadway		VCP - Vitrified Clay Pipe				6.0				
	S - Curb/Gutter on South Side of Roadway		N/A - No Pipe Installed				4.0				
	E - Curb/Gutter on East Side of Roadway						2.0		Deficient		
W - Curb/Gutter on West Side of Roadway						0.0					

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes	
	from	to							Roadway	Sanitary		Total
Atlantic Avenue	Cresse Avenue	Morning Glory Road	250	50	1,390	Both	Both	N/A	2.5	5.0	7.5	
	Morning Glory Road	Buttercup Road	250	50	1,390	Both	Both	PVC	2.7	5.0	7.7	
	Buttercup Road	Lavender Road	250	50	1,390	Both	Both	PVC	2.6	5.0	7.6	
	Lavender Road	Heather Road	250	50	1,390	Both	Both	PVC	2.7	5.0	7.7	
	Heather Road	Crocus Road	250	50	1,390	Both	Both	N/A	2.8	5.0	7.8	
	Crocus Road	Aster Road	250	50	1,390	Both	Both	N/A	4.6	5.0	9.6	
	Aster Road	Cardinal Road	250	50	1,390	Both	Both	N/A	4.6	5.0	9.6	
	Cardinal Road	Sweetbriar Road	250	50	1,390	Both	Both	N/A	4.6	5.0	9.6	
	Sweetbriar Road	Wisteria Road	250	50	1,390	Both	Both	N/A	4.6	5.0	9.6	
	Wisteria Road	Columbine Road	250	50	1,390	Both	Both	N/A	4.6	5.0	9.6	
	Columbine Road	Rosemary Road	250	50	1,390	Both	Both	N/A	4.6	5.0	9.6	
	Rosemary Road	Forget-Me-Not Road	250	50	1,390	Both	Both	N/A	2.7	5.0	7.7	
	Forget-Me-Not Road	Fern Road	250	50	1,390	Both	Both	N/A	2.6	5.0	7.6	
	Fern Road	Palm Road	250	50	1,390	Both	Both	N/A	2.7	5.0	7.7	
	Palm Road	Lotus Road	250	50	1,390	Both	Both	N/A	2.6	5.0	7.6	
	Lotus Road	Myrtle Road	250	50	1,390	Both	Both	N/A	2.7	5.0	7.7	
	Myrtle Road	Primrose Road	250	50	1,390	Both	Both	N/A	2.6	5.0	7.6	
	Primrose Road	Rambler Road	250	50	1,390	Both	Both	N/A	2.7	5.0	7.7	
	Rambler Road	Orchid Road	250	50	1,390	Both	Both	N/A	2.4	5.0	7.4	
	Orchid Road	Stockton Road	250	50	1,390	Both	Both	N/A	2.4	5.0	7.4	
	Stockton Road	Stanton Road	250	50	1,390	Both	E	N/A	2.3	5.0	7.3	
	Stanton Road	Farragut Road	250	50	1,390	Both	None	ACP	2.5	2.0	4.5	
	Farragut Road	Atlanta Road	250	50	1,390	Both	E	ACP	2.5	2.0	4.5	
	Atlanta Road	Nashville Road	250	50	1,390	Both	None	N/A	2.4	5.0	7.4	
	Nashville Road	Louisville Road	250	50	1,390	Both	E	ACP	2.5	2.0	4.5	
	Louisville Road	Miami Avenue	225	50	1,250	Both	Both	N/A	2.5	5.0	7.5	
	Miami Avenue	Monterey Avenue	225	50	1,250	Both	E	ACP	2.5	2.0	4.5	
	Monterey Avenue	St. Paul Avenue	225	50	1,250	Both	None	ACP	2.5	2.0	4.5	
	St. Paul Avenue	Toledo Avenue	225	50	1,250	Both	None	ACP	2.5	2.0	4.5	
	Toledo Avenue	Denver Avenue	225	50	1,250	Both	None	ACP	2.4	2.0	4.4	
	Denver Avenue	Syracuse Avenue	200	50	1,110	Both	None	ACP	2.4	2.0	4.4	
	Syracuse Avenue	Preston Avenue	200	50	1,110	Both	None	ACP	2.3	2.0	4.3	
	Preston Avenue	Hollywood Avenue	200	50	1,110	Both	None	ACP	2.3	2.0	4.3	
	Hollywood Avenue	Topeka Avenue	200	50	1,110	Both	E	ACP	2.3	2.0	4.3	
	Topeka Avenue	Pittsburgh Avenue	200	50	1,110	Both	None	N/A	3.2	5.0	8.2	
	Pittsburgh Avenue	Charleston Avenue	200	50	1,110	Both	None	N/A	2.5	5.0	7.5	
	Charleston Avenue	St. Louis Avenue	200	50	1,110	Both	None	N/A	2.7	5.0	7.7	
	St. Louis Avenue	Trenton Avenue	200	50	1,110	Both	None	N/A	2.6	5.0	7.6	
	Trenton Avenue	Newark Avenue	200	50	1,110	Both	None	N/A	2.7	5.0	7.7	
	Newark Avenue	Washington Avenue	200	50	1,110	Both	None	N/A	2.5	5.0	7.5	
	Washington Avenue	Jefferson Avenue	200	50	1,110	Both	None	N/A	2.5	5.0	7.5	
Legend	Both - Curb/Gutter on Both Sides of Roadway		PVC - Polyvinyl Chloride Pipe		Condition Rating		Excellent		10.0			
	None - No Curb/Gutter on Either Side of Roadway		ACP - Asbestos Concrete Pipe						8.0			
	N - Curb/Gutter on North Side of Roadway		VCP - Vitrified Clay Pipe						6.0			
	S - Curb/Gutter on South Side of Roadway		N/A - No Pipe Installed						4.0			
	E - Curb/Gutter on East Side of Roadway								2.0			
	W - Curb/Gutter on West Side of Roadway								0.0		Deficient	

Road Name	Cross-Streets		Length (feet)	Width (feet)	Area (sq. yd.)	Curb?	Gutter?	Pipe Material	Condition Ratings		Notes
	from	to							Roadway	Sanitary	
Ocean Avenue	Cresse Avenue	Morning Glory Road	250	36	1,000	Both	Both	ACP	3.2	2.0	5.2
	Morning Glory Road	Buttercup Road	250	36	1,000	Both	Both	ACP	3.0	2.0	5.0
	Buttercup Road	Lavender Road	250	36	1,000	Both	Both	ACP	2.8	2.0	4.8
	Lavender Road	Heather Road	250	36	1,000	Both	Both	ACP	2.6	2.0	4.6
	Heather Road	Crocus Road	250	36	1,000	Both	Both	N/A	2.7	5.0	7.7
	Crocus Road	Aster Road	250	36	1,000	Both	Both	N/A	2.8	5.0	7.8
	Aster Road	Cardinal Road	250	36	1,000	Both	Both	N/A	2.7	5.0	7.7
	Cardinal Road	Sweetbriar Road	250	36	1,000	Both	Both	N/A	2.7	5.0	7.7
	Sweetbriar Road	Wisteria Road	250	36	1,000	Both	None	N/A	2.8	5.0	7.8
	Wisteria Road	Columbine Road	250	36	1,000	Both	None	N/A	2.7	5.0	7.7
	Columbine Road	Rosemary Road	250	36	1,000	Both	None	N/A	4.5	5.0	9.5
	Rosemary Road	Forget-Me-Not Road	250	36	1,000	Both	None	N/A	4.5	5.0	9.5
	Forget-Me-Not Road	Fern Road	250	36	1,000	Both	None	N/A	2.5	5.0	7.5
	Fern Road	Palm Road	250	36	1,000	Both	None	N/A	2.6	5.0	7.6
	Palm Road	Lotus Road	250	36	1,000	Both	None	N/A	2.5	5.0	7.5
	Lotus Road	Myrtle Road	250	36	1,000	Both	None	N/A	2.5	5.0	7.5
	Myrtle Road	Primrose Road	250	36	1,000	Both	None	N/A	2.6	5.0	7.6
	Primrose Road	Rambler Road	250	36	1,000	Both	None	N/A	2.6	5.0	7.6
	Rambler Road	Orchid Road	250	36	1,000	Both	Both	N/A	2.8	5.0	7.8
	Orchid Road	Stockton Road	250	36	1,000	Both	Both	N/A	2.6	5.0	7.6
	Stockton Road	Stanton Road	250	36	1,000	Both	Both	N/A	2.7	5.0	7.7
	Stanton Road	Farragut Road	250	36	1,000	Both	Both	N/A	2.6	5.0	7.6
Legend	Both - Curb/Gutter on Both Sides of Roadway None - No Curb/Gutter on Either Side of Roadway N - Curb/Gutter on North Side of Roadway S - Curb/Gutter on South Side of Roadway E - Curb/Gutter on East Side of Roadway W - Curb/Gutter on West Side of Roadway		PVC - Polyvinyl Chloride Pipe ACP - Asbestos Concrete Pipe VCP - Vitrified Clay Pipe N/A - No Pipe Installed		Condition Rating						

Appendix B

Priority Repair/Replacement List

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Road & Sanitary Sewer Segments Listed By Priority

Rank	Street	Cross-Street : From - To		Rating	Repair Estimate
1	Denver Avenue	Pacific Avenue	Seaview Avenue	1.5	
2	Syracuse Avenue	Bay	Bayview Avenue	1.5	
3	Syracuse Avenue	Bayview Avenue	New Jersey Avenue	1.5	
4	Syracuse Avenue	New Jersey Avenue	Pacific Avenue	1.5	
5	Syracuse Avenue	Pacific Avenue	Seaview Avenue	1.5	
6	Syracuse Avenue	Seaview Avenue	Atlantic Avenue	1.5	
7	Syracuse Avenue	Atlantic Avenue	Beach	1.5	
8	Stanton Road	New Jersey Avenue	Pacific Avenue	1.5	
9	Stanton Road	Pacific Avenue	Seaview Avenue	1.5	
10	Stanton Road	Seaview Avenue	Atlantic Avenue	1.5	
11	Stanton Road	Atlantic Avenue	Ocean Avenue	1.5	
12	Stanton Road	Ocean Avenue	Beach	1.5	
13	Stockton Road	Seaview Avenue	Seaview Avenue	1.5	
14	St Paul Avenue	Seaview Avenue	Atlantic Avenue	1.5	
15	Forget-Me-Not Road	Park Boulevard	New Jersey Avenue	4.1	
16	Newark Avenue	Seaview Avenue	Atlantic Avenue	4.1	
17	Palm Road	Ocean Avenue	Beach Avenue	4.2	
18	Newark Avenue	Pacific Avenue	Seaview Avenue	4.2	
19	Newark Avenue	Atlantic Avenue	Beach	4.2	
20	Cardinal Road	Pacific Avenue	Seaview Avenue	4.3	
21	Sweetbriar Road	Ocean Avenue	Boardwalk	4.3	
22	Rosemary Road	Seaview Avenue	Atlantic Avenue	4.3	
23	Farragut Road	New Jersey Avenue	Pacific Avenue	4.3	
24	Farragut Road	Seaview Avenue	Atlantic Avenue	4.3	
25	Denver Avenue	New Jersey Avenue	Pacific Avenue	4.3	
26	Denver Avenue	Seaview Avenue	Atlantic Avenue	4.3	
27	Denver Avenue	Atlantic Avenue	Beach	4.3	
28	Preston Avenue	Pacific Avenue	Seaview Avenue	4.3	
29	Topeka Avenue	Seaview Avenue	Atlantic Avenue	4.3	
30	Charleston Avenue	Seaview Avenue	Atlantic Avenue	4.3	
31	Trenton Avenue	Bayview Avenue	New Jersey Avenue	4.3	
32	Trenton Avenue	Pacific Avenue	Seaview Avenue	4.3	
33	New Jersey Avenue	Palm Road	Lotus Road	4.3	
34	Pacific Avenue	Denver Avenue	Syracuse Avenue	4.3	
35	Atlantic Avenue	Syracuse Avenue	Preston Avenue	4.3	
36	Atlantic Avenue	Preston Avenue	Hollywood Avenue	4.3	
37	Atlantic Avenue	Hollywood Avenue	Topeka Avenue	4.3	
38	Lavender Road	Atlantic Avenue	Ocean Avenue	4.4	
39	Cardinal Road	Atlantic Avenue	Ocean Avenue	4.4	
40	Cardinal Road	Ocean Avenue	Beach Avenue	4.4	

Road & Sanitary Sewer Segments Listed By Priority

Rank	Street	Cross-Street : From - To		Rating	Repair Estimate
41	Forget-Me-Not Road	Seaview Avenue	Atlantic Avenue	4.4	
42	Fern Road	Atlantic Avenue	Ocean Avenue	4.4	
43	Palm Road	Atlantic Avenue	Ocean Avenue	4.4	
44	Lotus Road	Park Boulevard	New Jersey Avenue	4.4	
45	Lotus Road	Ocean Avenue	Beach Avenue	4.4	
46	Lotus Road	Seaview Avenue	Atlantic Avenue	4.4	
47	Orchid Road	Pacific Avenue	Seaview Avenue	4.4	
48	Orchid Road	Seaview Avenue	Atlantic Avenue	4.4	
49	Stockton Road	Atlantic Avenue	Ocean Avenue	4.4	
50	Farragut Road	Pacific Avenue	Seaview Avenue	4.4	
51	Farragut Road	Atlantic Avenue	Beach	4.4	
52	Monterey Avenue	Seaview Avenue	Atlantic Avenue	4.4	
53	Toledo Avenue	New Jersey Avenue	Pacific Avenue	4.4	
54	Denver Avenue	Bayview Avenue	New Jersey Avenue	4.4	
55	Preston Avenue	Bayview Avenue	New Jersey Avenue	4.4	
56	Topeka Avenue	Pacific Avenue	Seaview Avenue	4.4	
57	Pittsburgh Avenue	Bayview Avenue	New Jersey Avenue	4.4	
58	Pittsburgh Avenue	Seaview Avenue	Atlantic Avenue	4.4	
59	St. Louis Avenue	Seaview Avenue	Atlantic Avenue	4.4	
60	St. Louis Avenue	Atlantic Avenue	Beach	4.4	
61	Trenton Avenue	Seaview Avenue	Atlantic Avenue	4.4	
62	Trenton Avenue	Atlantic Avenue	Beach	4.4	
63	Jefferson Avenue	Atlantic Avenue	Beach	4.4	
64	Park Boulevard	Aster Road	Cardinal Road	4.4	
65	Park Boulevard	Sweetbriar Road	Wisteria Road	4.4	
66	Bayview Avenue	Trenton Avenue	Newark Avenue	4.4	

Road & Sanitary Sewer Segments Listed By Priority

67	New Jersey Avenue	Columbine Road	Rosemary Road	4.4	
68	New Jersey Avenue	Lotus Road	Myrtle Road	4.4	
69	Pacific Avenue	Atlanta Road	Nashville Road	4.4	
70	Pacific Avenue	Toledo Avenue	Denver Avenue	4.4	
71	Pacific Avenue	Newark Avenue	Washington Avenue	4.4	
72	Pacific Avenue	Washington Avenue	Jefferson Avenue	4.4	
73	Atlantic Avenue	Toledo Avenue	Denver Avenue	4.4	
74	Atlantic Avenue	Denver Avenue	Syracuse Avenue	4.4	
75	Sweetbriar Road	Atlantic Avenue	Ocean Avenue	4.5	
76	Rosemary Road	Atlantic Avenue	Ocean Avenue	4.5	
77	Rosemary Road	Ocean Avenue	Boardwalk	4.5	
78	Lotus Road	Atlantic Avenue	Ocean Avenue	4.5	
79	Primrose Road	Atlantic Avenue	Ocean Avenue	4.5	
80	Rambler Road	Ocean Avenue	Beach	4.5	
81	Stockton Road	New Jersey Avenue	Pacific Avenue	4.5	
82	Stockton Road	Seaview Avenue	Atlantic Avenue	4.5	
83	Stockton Road	Ocean Avenue	Beach	4.5	
84	Miami Avenue	Atlantic Avenue	Beach	4.5	
85	Monterey Avenue	Atlantic Avenue	Beach	4.5	
86	St Paul Avenue	New Jersey Avenue	Pacific Avenue	4.5	
87	St Paul Avenue	Pacific Avenue	Seaview Avenue	4.5	
88	Toledo Avenue	Bayview Avenue	New Jersey Avenue	4.5	
89	Toledo Avenue	Pacific Avenue	Seaview Avenue	4.5	
90	Toledo Avenue	Seaview Avenue	Atlantic Avenue	4.5	
91	Hollywood Avenue	Bayview Avenue	New Jersey Avenue	4.5	

Road & Sanitary Sewer Segments Listed By Priority

92	Hollywood Avenue	Pacific Avenue	Seaview Avenue	4.5	
93	Hollywood Avenue	Seaview Avenue	Atlantic Avenue	4.5	
94	Topeka Avenue	New Jersey Avenue	Pacific Avenue	4.5	
95	Pittsburgh Avenue	Atlantic Avenue	Beach	4.5	
96	Charleston Avenue	Atlantic Avenue	Beach	4.5	
97	Washington Avenue	Pacific Avenue	Seaview Avenue	4.5	
98	Jefferson Avenue	Seaview Avenue	Atlantic Avenue	4.5	
99	Park Boulevard	Morning Glory Road	Buttercup Road	4.5	
100	Park Boulevard	Crocus Road	Aster Road	4.5	
101	Park Boulevard	Cardinal Road	Swettbriar Road	4.5	
102	Park Boulevard	Columbine Road	Rosemary Road	4.5	
103	New Jersey Avenue	Heather Road	Crocus Road	4.5	
104	New Jersey Avenue	Crocus Road	Aster Road	4.5	
105	New Jersey Avenue	Aster Road	Cardinal Road	4.5	
106	New Jersey Avenue	Cardinal Road	Swettbriar Road	4.5	
107	New Jersey Avenue	Sweetbriar Road	Wisteria Road	4.5	
108	Pacific Avenue	Farragut Road	Atlanta Road	4.5	
109	Pacific Avenue	Nashville Road	Louisville Road	4.5	
110	Pacific Avenue	Monterey Avenue	St. Paul Avenue	4.5	
111	Pacific Avenue	St. Paul Avenue	Toledo Avenue	4.5	
112	Pacific Avenue	Syracuse Avenue	Preston Avenue	4.5	
113	Pacific Avenue	Preston Avenue	Hollywood Avenue	4.5	
114	Pacific Avenue	Hollywood Avenue	Topeka Avenue	4.5	
115	Atlantic Avenue	Stanton Road	Farragut Road	4.5	
116	Atlantic Avenue	Farragut Road	Atlanta Road	4.5	
117	Atlantic Avenue	Nashville Road	Louisville Road	4.5	
118	Atlantic Avenue	Miami Avenue	Monterey Avenue	4.5	
119	Atlantic Avenue	Monterey Avenue	St. Paul Avenue	4.5	
120	Atlantic Avenue	St. Paul Avenue	Toledo Avenue	4.5	
121	Lavender Road	Ocean Avenue	Beach Avenue	4.6	

Road & Sanitary Sewer Segments Listed By Priority

122	Sweetbriar Road	Seaview Avenue	Atlantic Avenue	4.6	
123	Rosemary Road	Pacific Avenue	Seaview Avenue	4.6	
124	Lotus Road	Atlantic Avenue	Ocean Avenue	4.6	
125	Rambler Road	Seaview Avenue	Atlantic Avenue	4.6	
126	Rambler Road	Atlantic Avenue	Ocean Avenue	4.6	
127	Orchid Road	Atlantic Avenue	Ocean Avenue	4.6	
128	Orchid Road	Ocean Avenue	Beach	4.6	
129	Atlanta Avenue	Seaview Avenue	Atlantic Avenue	4.6	
130	Nashville Avenue	Atlantic Avenue	Beach	4.6	
131	Louisville Avenue	Atlantic Avenue	Beach	4.6	
132	Monterey Avenue	Bayview Avenue	New Jersey Avenue	4.6	
133	St Paul Avenue	Atlantic Avenue	Beach	4.6	
134	Toledo Avenue	Atlantic Avenue	Beach	4.6	
135	Preston Avenue	New Jersey Avenue	Pacific Avenue	4.6	
136	Preston Avenue	Seaview Avenue	Atlantic Avenue	4.6	
137	Hollywood Avenue	Atlantic Avenue	Beach	4.6	
138	Topeka Avenue	Atlantic Avenue	Beach	4.6	
139	Charleston Avenue	Bayview Avenue	New Jersey Avenue	4.6	
140	Washington Avenue	New Jersey Avenue	Pacific Avenue	4.6	
141	Jefferson Avenue	Bayview Avenue	New Jersey Avenue	4.6	
142	Jefferson Avenue	Pacific Avenue	Seaview Avenue	4.6	
143	Park Boulevard	Lavender Road	Heather Road	4.6	
144	Park Boulevard	Heather Road	Crocus Road	4.6	
145	Park Boulevard	Wisteria Road	Columbine Road	4.6	
146	Bayview Avenue	St. Louis Avenue	Trenton Avenue	4.6	
147	New Jersey Avenue	Lavender Road	Heather Road	4.6	
148	New Jersey Avenue	Wisteria Road	Columbine Road	4.6	
149	Pacific Avenue	Stockton Road	Stanton Road	4.6	
150	Pacific Avenue	Stanton Road	Farragut Road	4.6	

Road & Sanitary Sewer Segments Listed By Priority

151	Pacific Avenue	Louisville Road	Miami Avenue	4.6	
152	Ocean Avenue	Lavender Road	Heather Road	4.6	
153	Buttercup Road	Atlantic Avenue	Ocean Avenue	4.7	
154	Aster	Seaview Avenue	Atlantic Avenue	4.7	
155	Aster	Ocean Avenue	Beach Avenue	4.7	
156	Rosemary Road	Park Boulevard	New Jersey Avenue	4.7	
157	Rosemary Road	New Jersey Avenue	Pacific Avenue	4.7	
158	Forget-Me-Not Road	Ocean Avenue	Boardwalk	4.7	
159	Atlanta Avenue	Atlantic Avenue	Beach	4.7	
160	Nashville Avenue	Seaview Avenue	Atlantic Avenue	4.7	
161	Park Boulevard	Buttercup Road	Lavender Road	4.7	
162	New Jersey Avenue	Morning Glory Road	Buttercup Road	4.7	
163	New Jersey Avenue	Buttercup Road	Lavender Road	4.7	
164	New Jersey Avenue	Fern Road	Palm Road	4.7	
165	Morning Glory Road	Ocean Avenue	Beach Avenue	4.8	
166	Buttercup Road	Ocean Avenue	Beach Avenue	4.8	
167	Crocus Road	Pacific Avenue	Seaview Avenue	4.8	
168	Cardinal Road	Seaview Avenue	Atlantic Avenue	4.8	
169	Columbine	Seaview Avenue	Atlantic Avenue	4.8	
170	Columbine	Ocean Avenue	Boardwalk	4.8	
171	Forget-Me-Not Road	Atlantic Avenue	Ocean Avenue	4.8	
172	Fern Road	Seaview Avenue	Atlantic Avenue	4.8	
173	Lotus Road	Seaview Avenue	Atlantic Avenue	4.8	
174	New Jersey Avenue	Cresse Avenue	Morning Glory Road	4.8	
175	New Jersey Avenue	Rosemary Road	Forget-Me-Not Road	4.8	
176	New Jersey Avenue	Forget-Me-Not Road	Fern Road	4.8	
177	Ocean Avenue	Buttercup Road	Lavender Road	4.8	
178	Crocus Road	Atlantic Avenue	Ocean Avenue	4.9	
179	Ocean Avenue	Morning Glory Road	Buttercup Road	5.0	
180	Columbine	Atlantic Avenue	Ocean Avenue	5.1	

Road & Sanitary Sewer Segments Listed By Priority

181	Palm Road	Park Boulevard	New Jersey Avenue	5.2	
182	Ocean Avenue	Cresse Avenue	Morning Glory Road	5.2	
183	Crocus Road	Ocean Avenue	Beach Avenue	5.3	
184	Crocus Road	Seaview Avenue	Atlantic Avenue	5.4	
185	Primrose Road	Seaview Avenue	Atlantic Avenue	5.4	
186	Heather Road	Seaview Avenue	Atlantic Avenue	5.6	
187	Morning Glory Road	Atlantic Avenue	Ocean Avenue	5.7	
188	Heather Road	Ocean Avenue	Beach Avenue	5.8	
189	Buttercup Road	Seaview Avenue	Atlantic Avenue	6.2	
190	Morning Glory Road	Seaview Avenue	Atlantic Avenue	6.6	
191	Sweetbriar Road	Pacific Avenue	Seaview Avenue	6.6	
192	Columbine	New Jersey Avenue	Pacific Avenue	6.6	
193	Columbine	Pacific Avenue	Seaview Avenue	6.6	
194	Palm Road	Seaview Avenue	Atlantic Avenue	6.6	
195	New Jersey Avenue	Myrtle Road	Primrose Road	6.6	
196	New Jersey Avenue	Rambler Road	Orchid Road	6.6	
197	New Jersey Avenue	Orchid Road	Stockton Road	6.6	
198	New Jersey Avenue	Stockton Road	Stanton Road	6.6	
199	New Jersey Avenue	Stanton Road	Farragut Road	6.6	
200	New Jersey Avenue	Farragut Road	Atlanta Road	6.6	
201	New Jersey Avenue	Atlanta Road	Nashville Road	6.6	
202	New Jersey Avenue	Nashville Road	Louisville Road	6.6	
203	New Jersey Avenue	Louisville Road	Miami Avenue	6.6	
204	New Jersey Avenue	Miami Avenue	Monterey Avenue	6.6	
205	New Jersey Avenue	Monterey Avenue	St. Paul Avenue	6.6	
206	New Jersey Avenue	St. Paul Avenue	Toledo Avenue	6.6	
207	New Jersey Avenue	Toledo Avenue	Denver Avenue	6.6	
208	New Jersey Avenue	Denver Avenue	Syracuse Avenue	6.6	
209	New Jersey Avenue	Syracuse Avenue	Preston Avenue	6.6	
210	New Jersey Avenue	Preston Avenue	Hollywood Avenue	6.6	

Road & Sanitary Sewer Segments Listed By Priority

211	Pacific Avenue	Cresse Avenue	Morning Glory Road	6.6	
212	Pacific Avenue	Morning Glory Road	Buttercup Road	6.6	
213	Pacific Avenue	Buttercup Road	Lavender Road	6.6	
214	Pacific Avenue	Lavender Road	Heather Road	6.6	
215	Pacific Avenue	Heather Road	Crocus Road	6.6	
216	Pacific Avenue	Crocus Road	Aster Road	6.6	
217	Pacific Avenue	Aster Road	Cardinal Road	6.6	
218	Pacific Avenue	Cardinal Road	Sweetbriar Road	6.6	
219	Pacific Avenue	Sweetbriar Road	Wisteria Road	6.6	
220	Pacific Avenue	Columbine Road	Rosemary Road	6.6	
221	Pacific Avenue	Rosemary Road	Forget-Me-Not Road	6.6	
222	Pacific Avenue	Forget-Me-Not Road	Fern Road	6.6	
223	Pacific Avenue	Palm Road	Lotus Road	6.6	
224	Pacific Avenue	Lotus Road	Myrtle Road	6.6	
225	Pacific Avenue	Myrtle Road	Primrose Road	6.6	
226	Pacific Avenue	Primrose Road	Rambler Road	6.6	
227	Pacific Avenue	Rambler Road	Orchid Road	6.6	
228	Pacific Avenue	Orchid Road	Stockton Road	6.6	
229	Aster	Atlantic Avenue	Ocean Avenue	6.7	
230	Aster	Pacific Avenue	Seaview Avenue	6.8	
231	Topeka Avenue	Bayview Avenue	New Jersey Avenue	7.1	
232	Lavender Road	Pacific Avenue	Seaview Avenue	7.2	
233	Fern Road	Bay	Park Boulevard	7.2	
234	Lake Road	Heather Road	Crocus Road	7.2	
235	Bayview Avenue	Syracuse Avenue	Preston Avenue	7.2	
236	Cardinal Road	New Jersey Avenue	Pacific Avenue	7.3	
237	Sweetbriar Road	Bay	Park Boulevard	7.3	
238	Columbine	Park Boulevard	New Jersey Avenue	7.3	
239	St. Louis Avenue	New Jersey Avenue	Pacific Avenue	7.3	
240	Bayview Avenue	Topeka Avenue	Pittsburgh Avenue	7.3	

Road & Sanitary Sewer Segments Listed By Priority

241	Atlantic Avenue	Stockton Road	Stanton Road	7.3	
242	Cardinal Road	Bay	Park Boulevard	7.4	
243	Cardinal Road	Park Boulevard	New Jersey Avenue	7.4	
244	Wisteria Road	Ocean Avenue	Boardwalk	7.4	
245	Forget-Me-Not Road	New Jersey Avenue	Pacific Avenue	7.4	
246	Palm Road	Bay	Park Boulevard	7.4	
247	Lotus Road	Bay	Park Boulevard	7.4	
248	Denver Avenue	Bay	Bayview Avenue	7.4	
249	Hollywood Avenue	New Jersey Avenue	Pacific Avenue	7.4	
250	St. Louis Avenue	Pacific Avenue	Seaview Avenue	7.4	
251	Park Boulevard	Forget-Me-Not Road	Fern Road	7.4	
252	Park Boulevard	Palm Road	Lotus Road	7.4	
253	Park Boulevard	Primrose Road	Rambler Road	7.4	
254	Bayview Avenue	Toledo Avenue	Denver Avenue	7.4	
255	Bayview Avenue	Denver Avenue	Syracuse Avenue	7.4	
256	Bayview Avenue	Hollywood Avenue	Topeka Avenue	7.4	
257	Bayview Avenue	Pittsburgh Avenue	Charleston Avenue	7.4	
258	Pacific Avenue	Pittsburgh Avenue	Charleston Avenue	7.4	
259	Pacific Avenue	Charleston Avenue	St. Louis Avenue	7.4	
260	Pacific Avenue	St. Louis Avenue	Trenton Avenue	7.4	
261	Pacific Avenue	Trenton Avenue	Newark Avenue	7.4	
262	Atlantic Avenue	Rambler Road	Orchid Road	7.4	
263	Atlantic Avenue	Orchid Road	Stockton Road	7.4	
264	Atlantic Avenue	Atlanta Road	Nashville Road	7.4	
265	Cresse Avenue	Lake Road	Park Boulevard	7.5	
266	Cresse Avenue	Park Boulevard	New Jersey Avenue	7.5	
267	Sweetbriar Road	Park Boulevard	New Jersey Avenue	7.5	
268	Wisteria Road	Atlantic Avenue	Ocean Avenue	7.5	
269	Columbine	Bay	Park Boulevard	7.5	
270	Rosemary Road	Bay	Park Boulevard	7.5	

Road & Sanitary Sewer Segments Listed By Priority

271	Forget-Me-Not Road	Bay	Park Boulevard	7.5	
272	Forget-Me-Not Road	Pacific Avenue	Seaview Avenue	7.5	
273	Lotus Road	Bay	Park Boulevard	7.5	
274	Lotus Road	Park Boulevard	New Jersey Avenue	7.5	
275	Lotus Road	New Jersey Avenue	Pacific Avenue	7.5	
276	Primrose Road	Pacific Avenue	Seaview Avenue	7.5	
277	Rambler Road	New Jersey Avenue	Pacific Avenue	7.5	
278	Atlanta Avenue	New Jersey Avenue	Pacific Avenue	7.5	
279	Nashville Avenue	Pacific Avenue	Seaview Avenue	7.5	
280	St Paul Avenue	Bayview Avenue	New Jersey Avenue	7.5	
281	Preston Avenue	Atlantic Avenue	Beach	7.5	
282	Newark Avenue	Bayview Avenue	New Jersey Avenue	7.5	
283	Park Boulevard	Cresse Avenue	Morning Glory Road	7.5	
284	Park Boulevard	Rosemary Road	Forget-Me-Not Road	7.5	
285	Park Boulevard	Fern Road	Palm Road	7.5	
286	Park Boulevard	Lotus Road	Myrtle Road	7.5	
287	Park Boulevard	Myrtle Road	Primrose Road	7.5	
288	Bayview Avenue	Charleston Avenue	St. Louis Avenue	7.5	
289	Atlantic Avenue	Cresse Avenue	Morning Glory Road	7.5	
290	Atlantic Avenue	Louisville Road	Miami Avenue	7.5	
291	Atlantic Avenue	Pittsburgh Avenue	Charleston Avenue	7.5	
292	Atlantic Avenue	Newark Avenue	Washington Avenue	7.5	
293	Atlantic Avenue	Washington Avenue	Jefferson Avenue	7.5	
294	Ocean Avenue	Forget-Me-Not Road	Fern Road	7.5	
295	Ocean Avenue	Palm Road	Lotus Road	7.5	
296	Ocean Avenue	Lotus Road	Myrtle Road	7.5	
297	Buttercup Road	New Jersey Avenue	Pacific Avenue	7.6	
298	Lavender Road	Seaview Avenue	Atlantic Avenue	7.6	
299	Wisteria Road	Park Boulevard	New Jersey Avenue	7.6	
300	Fern Road	Park Boulevard	New Jersey Avenue	7.6	

Road & Sanitary Sewer Segments Listed By Priority

301	Fern Road	New Jersey Avenue	Pacific Avenue	7.6	
302	Primrose Road	Bay	Park Boulevard	7.6	
303	Primrose Road	Park Boulevard	New Jersey Avenue	7.6	
304	Primrose Road	New Jersey Avenue	Pacific Avenue	7.6	
305	Orchid Road	New Jersey Avenue	Pacific Avenue	7.6	
306	Charleston Avenue	New Jersey Avenue	Pacific Avenue	7.6	
307	Charleston Avenue	Pacific Avenue	Seaview Avenue	7.6	
308	Pacific Avenue	Miami Avenue	Monterey Avenue	7.6	
309	Pacific Avenue	Topeka Avenue	Pittsburgh Avenue	7.6	
310	Atlantic Avenue	Buttercup Road	Lavender Road	7.6	
311	Atlantic Avenue	Forget-Me-Not Road	Fern Road	7.6	
312	Atlantic Avenue	Palm Road	Lotus Road	7.6	
313	Atlantic Avenue	Myrtle Road	Primrose Road	7.6	
314	Atlantic Avenue	St. Louis Avenue	Trenton Avenue	7.6	
315	Ocean Avenue	Fern Road	Palm Road	7.6	
316	Ocean Avenue	Myrtle Road	Primrose Road	7.6	
317	Ocean Avenue	Primrose Road	Rambler Road	7.6	
318	Ocean Avenue	Orchid Road	Stockton Road	7.6	
319	Ocean Avenue	Stanton Road	Farragut Road	7.6	
320	Cresse Avenue	New Jersey Avenue	Pacific Avenue	7.7	
321	Wisteria Road	New Jersey Avenue	Pacific Avenue	7.7	
322	Lotus Road	New Jersey Avenue	Pacific Avenue	7.7	
323	Lotus Road	Pacific Avenue	Seaview Avenue	7.7	
324	Lotus Road	Pacific Avenue	Seaview Avenue	7.7	
325	Rambler Road	Pacific Avenue	Seaview Avenue	7.7	
326	Louisville Avenue	New Jersey Avenue	Pacific Avenue	7.7	
327	Louisville Avenue	Pacific Avenue	Seaview Avenue	7.7	
328	Miami Avenue	Seaview Avenue	Atlantic Avenue	7.7	
329	Pittsburgh Avenue	New Jersey Avenue	Pacific Avenue	7.7	
330	Pittsburgh Avenue	Pacific Avenue	Seaview Avenue	7.7	

Road & Sanitary Sewer Segments Listed By Priority

331	Lake Road	Cresse Avenue	Morning Glory Road	7.7	
332	Seaview Avenue	Buttercup Road	Lavender Road	7.7	
333	Seaview Avenue	Lavender Road	Heather Road	7.7	
334	Seaview Avenue	Heather Road	Crocus Road	7.7	
335	Atlantic Avenue	Morning Glory Road	Buttercup Road	7.7	
336	Atlantic Avenue	Lavender Road	Heather Road	7.7	
337	Atlantic Avenue	Rosemary Road	Forget-Me-Not Road	7.7	
338	Atlantic Avenue	Fern Road	Palm Road	7.7	
339	Atlantic Avenue	Lotus Road	Myrtle Road	7.7	
340	Atlantic Avenue	Primrose Road	Rambler Road	7.7	
341	Atlantic Avenue	Charleston Avenue	St. Louis Avenue	7.7	
342	Atlantic Avenue	Trenton Avenue	Newark Avenue	7.7	
343	Ocean Avenue	Heather Road	Crocus Road	7.7	
344	Ocean Avenue	Aster Road	Cardinal Road	7.7	
345	Ocean Avenue	Cardinal Road	Swettbriar Road	7.7	
346	Ocean Avenue	Wisteria Road	Columbine Road	7.7	
347	Ocean Avenue	Stockton Road	Stanton Road	7.7	
348	Wisteria Road	Bay	Park Boulevard	7.8	
349	Atlanta Avenue	Pacific Avenue	Seaview Avenue	7.8	
350	Louisville Avenue	Seaview Avenue	Atlantic Avenue	7.8	
351	Miami Avenue	Bayview Avenue	New Jersey Avenue	7.8	
352	Miami Avenue	New Jersey Avenue	Pacific Avenue	7.8	
353	Miami Avenue	Pacific Avenue	Seaview Avenue	7.8	
354	Monterey Avenue	New Jersey Avenue	Pacific Avenue	7.8	
355	Monterey Avenue	Pacific Avenue	Seaview Avenue	7.8	
356	Lake Road	Morning Glory Road	Buttercup Road	7.8	
357	Bayview Avenue	Preston Avenue	Hollywood Avenue	7.8	
358	Atlantic Avenue	Heather Road	Crocus Road	7.8	
359	Ocean Avenue	Crocus Road	Aster Road	7.8	
360	Ocean Avenue	Sweetbriar Road	Wisteria Road	7.8	

Road & Sanitary Sewer Segments Listed By Priority

361	Ocean Avenue	Rambler Road	Orchid Road	7.8	
362	Lavender Road	Park Boulevard	New Jersey Avenue	7.9	
363	Nashville Avenue	New Jersey Avenue	Pacific Avenue	7.9	
364	Washington Avenue	Atlantic Avenue	Beach	7.9	
365	Jefferson Avenue	New Jersey Avenue	Pacific Avenue	7.9	
366	Bayview Avenue	St. Paul Avenue	Toledo Avenue	8.0	
367	Buttercup Road	Lake Road	Park Boulevard	8.1	
368	Lavender Road	New Jersey Avenue	Pacific Avenue	8.1	
369	Washington Avenue	Seaview Avenue	Atlantic Avenue	8.1	
370	Cresse Avenue	Atlantic Avenue	Ocean Avenue	8.2	
371	Morning Glory Road	Lake Road	Park Boulevard	8.2	
372	Morning Glory Road	Park Boulevard	New Jersey Avenue	8.2	
373	Buttercup Road	Park Boulevard	New Jersey Avenue	8.2	
374	Aster	New Jersey Avenue	Pacific Avenue	8.2	
375	Fern Road	Pacific Avenue	Seaview Avenue	8.2	
376	St. Louis Avenue	Bayview Avenue	New Jersey Avenue	8.2	
377	Washington Avenue	Bayview Avenue	New Jersey Avenue	8.2	
378	Bayview Avenue	Monterey Avenue	St. Paul Avenue	8.2	
379	Seaview Avenue	St. Louis Avenue	Trenton Avenue	8.2	
380	Seaview Avenue	Trenton Avenue	Newark Avenue	8.2	
381	Seaview Avenue	Newark Avenue	Washington Avenue	8.2	
382	Seaview Avenue	Washington Avenue	Jefferson Avenue	8.2	
383	Atlantic Avenue	Topeka Avenue	Pittsburgh Avenue	8.2	
384	Crocus Road	Bay	Lake Road	8.3	
385	Seaview Avenue	Charleston Avenue	St. Louis Avenue	8.3	
386	Heather Road	Park Boulevard	New Jersey Avenue	8.4	
387	Heather Road	Atlantic Avenue	Ocean Avenue	8.4	
388	Aster	Park Boulevard	New Jersey Avenue	8.4	
389	New Jersey Avenue	Charleston Avenue	St. Louis Avenue	8.4	
390	New Jersey Avenue	St. Louis Avenue	Washington Avenue	8.4	

Road & Sanitary Sewer Segments Listed By Priority

391	New Jersey Avenue	Trenton Avenue	Newark Avenue	8.4	
392	New Jersey Avenue	Newark Avenue	Washington Avenue	8.4	
393	New Jersey Avenue	Washington Avenue	Jefferson Avenue	8.4	
394	Seaview Avenue	Topeka Avenue	Pittsburgh Avenue	8.4	
395	Seaview Avenue	Pittsburgh Avenue	Charleston Avenue	8.4	
396	Morning Glory Road	New Jersey Avenue	Pacific Avenue	8.5	
397	Lavender Road	Lake Road	Park Boulevard	8.5	
398	Crocus Road	Park Boulevard	New Jersey Avenue	8.5	
399	Seaview Avenue	Syracuse Avenue	Preston Avenue	8.5	
400	Seaview Avenue	Preston Avenue	Hollywood Avenue	8.5	
401	Seaview Avenue	Hollywood Avenue	Topeka Avenue	8.5	
402	Heather Road	Lake Road	Park Boulevard	8.6	
403	Crocus Road	New Jersey Avenue	Pacific Avenue	8.6	
404	Seaview Avenue	St. Paul Avenue	Toledo Avenue	8.6	
405	Seaview Avenue	Toledo Avenue	Denver Avenue	8.6	
406	Seaview Avenue	Denver Avenue	Syracuse Avenue	8.6	
407	Heather Road	New Jersey Avenue	Pacific Avenue	8.7	
408	Heather Road	Pacific Avenue	Seaview Avenue	8.7	
409	Seaview Avenue	Atlanta Road	Nashville Road	8.7	
410	Seaview Avenue	Nashville Road	Louisville Road	8.7	
411	Seaview Avenue	Louisville Road	Miami Avenue	8.7	
412	Seaview Avenue	Miami Avenue	Monterey Avenue	8.7	
413	Seaview Avenue	Monterey Avenue	St. Paul Avenue	8.7	
414	Cresse Avenue	Ocean Avenue	Beach Avenue	8.8	
415	Seaview Avenue	Rambler Road	Orchid Road	8.8	
416	Seaview Avenue	Orchid Road	Stockton Road	8.8	
417	Seaview Avenue	Stockton Road	Stanton Road	8.8	
418	Seaview Avenue	Stanton Road	Farragut Road	8.8	
419	Seaview Avenue	Farragut Road	Atlanta Road	8.8	
420	Buttercup Road	Pacific Avenue	Seaview Avenue	9.2	

Road & Sanitary Sewer Segments Listed By Priority

421	Ocean Avenue	Columbine Road	Rosemary Road	9.5	
422	Ocean Avenue	Rosemary Road	Forget-Me-Not Road	9.5	
423	Cresse Avenue	Pacific Avenue	Seaview Avenue	9.6	
424	Cresse Avenue	Seaview Avenue	Atlantic Avenue	9.6	
425	Morning Glory Road	Pacific Avenue	Seaview Avenue	9.6	
426	Sweetbriar Road	New Jersey Avenue	Pacific Avenue	9.6	
427	Wisteria Road	Pacific Avenue	Seaview Avenue	9.6	
428	Wisteria Road	Seaview Avenue	Atlantic Avenue	9.6	
429	Palm Road	New Jersey Avenue	Pacific Avenue	9.6	
430	Palm Road	Pacific Avenue	Seaview Avenue	9.6	
431	Lake Road	Buttercup Road	Lavender Road	9.6	
432	Lake Road	Lavender Road	Heather Road	9.6	
433	Bayview Avenue	Louisville Road	Miami Avenue	9.6	
434	Bayview Avenue	Miami Avenue	Monterey Avenue	9.6	
435	New Jersey Avenue	Primrose Road	Rambler Road	9.6	
436	New Jersey Avenue	Hollywood Avenue	Topeka Avenue	9.6	
437	New Jersey Avenue	Topeka Avenue	Pittsburgh Avenue	9.6	
438	New Jersey Avenue	Pittsburgh Avenue	Charleston Avenue	9.6	
439	Pacific Avenue	Wisteria Road	Columbine Road	9.6	
440	Pacific Avenue	Fern Road	Palm Road	9.6	
441	Seaview Avenue	Cresse Avenue	Morning Glory Road	9.6	
442	Seaview Avenue	Morning Glory Road	Buttercup Road	9.6	
443	Seaview Avenue	Crocus Road	Aster Road	9.6	
444	Seaview Avenue	Aster Road	Cardinal Road	9.6	
445	Seaview Avenue	Cardinal Road	Sweetbriar Road	9.6	
446	Seaview Avenue	Sweetbriar Road	Wisteria Road	9.6	
447	Seaview Avenue	Wisteria Road	Columbine Road	9.6	
448	Seaview Avenue	Columbine Road	Rosemary Road	9.6	
449	Seaview Avenue	Rosemary Road	Forget-Me-Not Road	9.6	
450	Seaview Avenue	Forget-Me-Not Road	Fern Road	9.6	

Road & Sanitary Sewer Segments Listed By Priority

451	Seaview Avenue	Fern Road	Palm Road	9.6	
452	Seaview Avenue	Palm Road	Lotus Road	9.6	
453	Seaview Avenue	Lotus Road	Myrtle Road	9.6	
454	Seaview Avenue	Myrtle Road	Primrose Road	9.6	
455	Seaview Avenue	Primrose Road	Rambler Road	9.6	
456	Atlantic Avenue	Crocus Road	Aster Road	9.6	
457	Atlantic Avenue	Aster Road	Cardinal Road	9.6	
458	Atlantic Avenue	Cardinal Road	Sweetbriar Road	9.6	
459	Atlantic Avenue	Sweetbriar Road	Wisteria Road	9.6	
460	Atlantic Avenue	Wisteria Road	Columbine Road	9.6	
461	Atlantic Avenue	Columbine Road	Rosemary Road	9.6	
462	Cresse Avenue	Bay	Lake Road	9.8	
463	Morning Glory Road	Bay	Lake Road	9.8	
464	Buttercup Road	Bay	Lake Road	9.8	
465	Lavender Road	Bay	Lake Road	9.8	
466	Heather Road	Bay	Lake Road	9.8	
467	Aster	Bay	Park Boulevard	9.8	

Appendix C

Model Rules & Regulations and Sanitary Sewer Ordinance

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BOROUGH OF WILDWOOD CREST SEWER DEPARTMENT

RULES AND REGULATIONS

TABLE OF CONTENTS

Section 1	Definitions/Abbreviations
1.1	Definitions
1.2	Abbreviations
Section 2	General Policies
2.1	Transfer of Service to New Customers for Existing Connections
2.2	Service to New Customers in Newly Constructed Dwellings
2.3	Landlord-Tenant Responsibility
2.4	Mandatory Connection
2.5	Connection Fees and Time of Connection
2.6	Discontinuance of Service by Customers
2.7	Turnoff Without Authority
2.8	Due to Emergency
2.9	Reserve Capacity
2.10	Responsibility for Service
2.11	Complaints
2.12	Reasonable Access
2.13	No Oral Agreements
2.14	Changing of Rules and Regulations
2.15	Sewer Main Connection Maintenance Policy
2.16	Prohibited Actions
Section 3	Non-Domestic Wastes
3.1	General
3.2	Regulations
3.3	Administration
3.4	Enforcement
3.5	Severability
Section 4	Application Procedures
4.1	General Provisions
4.2	Supporting Documentation for Applications
4.3	Escrow Fees and Escrow Accounts
4.4	NJDEP Treatment Works Approval (TWA)
Section 5	Sewer Main Connections
5.1	Installation Costs and Indemnification
5.2	Ownership Responsibilities
5.3	Traps, Vents and Risers
5.4	Size and Kind of Lateral

- 5.5 Location
- 5.6 Elevation of Sanitary Fixtures
- 5.7 Maintenance by Owner
- 5.8 WSU Not Responsible
- 5.9 Replacement of Sewer Main Connections System
- 5.10 Prohibited Connections
- 5.11 Property Served by Single Service Lateral
- 5.12 Policy on Blockages
- 5.13 Lateral Testing

Section 6 Technical Quality of Proposed Work

- 6.1 Sewer System
- 6.2 Related Technical Standards – Sewer
- 6.3 Sewer Materials Standards
- 6.4 Pump Stations – Technical Standards
- 6.5 Plans, Profiles and Specifications of All Proposed Facilities
- 6.6 Property Transfer
- 6.7 Installation Standards

Section 7 Inspection and Testing of Installed Facilities

- 7.1 Inspection of Sewerage Facilities Distribution System During Course of Construction
- 7.2 As-Built Requirements
- 7.3 Testing of Completed System
- 7.4 Sanitary Force Main Inspection and Testing
- 7.5 Manhole Testing

Section 8 Billing, Payments, Delinquencies, Etc.

- 8.1 Rendering of Bills for Sewer Service
- 8.2 Payment Schedule
- 8.3 Delinquent Accounts
- 8.4 Discontinuance of Service
- 8.5 Renewal Service
- 8.6 Deposits
- 8.7 Abatements

Appendix I Construction Notes and Details

BOROUGH OF WILDWOOD CREST MODEL RULES AND REGULATIONS

SECTION 1 – DEFINITIONS/ABBREVIATIONS

1.1 DEFINITIONS;

Unless the context specifically indicates otherwise, the following terms and phrases as used in these Rules and Regulations shall have the meanings hereinafter designated:

ACT OR "THE ACT" - The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et.seq.

ADMINISTRATIVE ORDER - An official enforcement document which directs a user to undertake or to cease activities and which carries specific legal action for continued noncompliance.

APARTMENT - One of a series of attached rented one family dwelling units each having a common or party wall or walls between it and neighboring units, and which shares its attached neighboring dwelling units such facilities as pedestrian walks, gardens, lawns, utilities, sanitary systems, and recreation areas.

APPLICANT - The individual requesting sewerage service at one residence or business, whether owner or tenant, and who provides a completed application therefore.

APPROVAL AUTHORITY - The New Jersey Department of Environmental Protection.

AUTHORIZED REPRESENTATIVE OF A SIGNIFICANT INDIRECT USER - (1) If the User is a corporation a responsible corporate officer is: (i) a president, secretary, treasurer or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (2) If the User is a partnership or sole proprietorship: a general partner or proprietor, respectively. (3) If the User is a local, state, or federal governmental agency: a director or higher appointed official designated to oversee the operation and performance activities of the facility, or their designee. (4) A duly-authorized representative of the individual designated in (1) through (3) above if: (i) the authorization is made in writing by the individual described in (1) or (2); (ii) the authorization specifies either an individual or a position having overall responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and (iii) the written authorization is submitted to the SEWER DEPARTMENT.

BIOCHEMICAL OXYGEN DEMAND (BOD) - The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures, five (5) days at 20 degrees Celsius, expressed in terms of weight and concentration, [milligrams per liter (mg/l)].

BOROUGH - Means the BOROUGH of WILDWOOD CREST, Cape May County, New Jersey, a Municipal corporation of the State of New Jersey.

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY - The Publicly Owned Treatment Works in which the Borough of Wildwood Crest discharges wastewater for treatment and final disposal; abbreviated as the CMCMUA.

CATEGORICAL PRETREATMENT STANDARD & CATEGORICAL STANDARDS - Any regulation containing pollutant discharge limitations promulgated by the EPA in accordance with Section 307 (b) and (c) of the "Act" and which appear in 40 CFR Chapter I, Subchapter N, or 40 CFR Parts 401-471.

CERTIFICATE OF AUTHORITY - A written notice which authorizes issuance of certificate of occupancy.

COMMERCIAL ESTABLISHMENT - Any structure or any portion thereof intended to be used wholly or in part for the purposes of carrying on a trade, business or profession or for social amusement, religious, educational, charitable or public uses, and which contains plumbing for kitchen, toilet or washing facilities. Hotels, motels and boarding or rooming houses shall be included in this definition.

COMMERCIAL WASTEWATER - The liquid or water borne wastes (not including domestic sewage flow) from premises used partially or entirely for commercial purposes with wastewater varying in composition, quantity, or quality from the characteristics or proportions exhibited by sanitary wastewater generated from typical domestic activities.

COMPATIBLE POLLUTANT - A pollutant for which the Cape May County MUA Wastewater Treatment Plant was specifically designed to treat and remove such as Biochemical Oxygen Demand (BOD₅), Total Suspended Solids (TSS), Ammonia Nitrogen (NH₃-N), Total Phosphorus (P), and to a lesser degree Oil and Grease.

CONDOMINIUM / COOPERATIVE APARTMENT UNIT - An apartment building in which the units are owned individually.

CONNECTION FEE - Charge paid by applicant to the SEWER DEPARTMENT for the right to connect directly or indirectly to the SEWER DEPARTMENT's sewer system, based on the number of EDCU/EDU'S.

CONTRIBUTING MUNICIPALITY - A municipal body which owns and/or operates central collection sewers which discharge into the Borough of Wildwood Crest wastewater collection system.

CONTROL AUTHORITY - The term "Control Authority" shall refer to the New Jersey Department of Environmental Protection (NJDEP) and its duly authorized representatives, until such time that the Cape May County MUA or the Wildwood Sewer Department has an approved pretreatment program under the provisions of 40 CFR 403.11.

COOLING WATER - The water discharged from any use, such as air conditioning, cooling or refrigeration, or to which the only pollutant added is heat.

DIRECT DISCHARGE - The discharge of treated or untreated wastewater directly to the waters of the State of New Jersey.

DOMESTIC CONSUMER UNIT (DCU) - A dwelling or structure normally occupied by a single family. The associated daily flow is based on 3 persons per dwelling X 100 gallons per day or 300 gallons per single family

dwelling, which includes infiltration.

DOMESTIC SEWAGE / WASTEWATER - Normal water borne fluid wastes from residences, commercial establishments, institutions and industrial establishments, limited to the wastes from kitchens, bathrooms, water closets, lavatories and laundries.

ENFORCEMENT REMEDIES - Enforcement of these Rules & Regulations, or the Wildwood Sewer Use Ordinance, by the SEWER DEPARTMENT and CMCMUA which ensures compliance. A description of the remedies can be found in the above mentioned ordinance, these Rules and Regulations, a Categorical Pretreatment Standard, or any other applicable law.

ENVIRONMENTAL PROTECTION AGENCY - The U. S. Environmental Protection Agency, or where appropriate, the term may be also be used as a designation for the Administrator or other duly authorized official of said agency.

EQUIVALENT DWELLING CONSUMER UNIT (EDCU) or EQUIVALENT DOMESTIC UNIT (EDU) - Any source of wastewater into the SEWER DEPARTMENT sewer system which has the following typical wastewater characteristics:

FLOW	300 gpd
AMMONIA NITROGEN	25 mg/L as N
BIOCHEMICAL OXYGEN DEMAND	250 mg/L
PHOSPHORUS	10 mg/L as Total P
TOTAL SUSPENDED SOLIDS	250 mg/L
TOTAL KJELDAHL NITROGEN	40 mg/L as N
OIL AND GREASE	100 mg/L

Which shall be utilized to determine the ratio for Industrial and Commercial wastewater flow /loading in proportion to a Domestic Consumer Unit.

EXISTING SOURCE- Any User of the SEWER DEPARTMENT wastewater collection system which commenced operation prior to the publication by the EPA of proposed Categorical Pretreatment Standards, which will be applicable to that User after final EPA promulgation of such standards, is accordance with Section 307 of the Act.

GRAB SAMPLE - A sample which is taken from a waste stream on a onetime basis over a period of time not to exceed fifteen minutes, with no regard to the flow in the waste stream.

HOLDING TANK WASTE - Any waste from holding tanks, such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum-pump trucks.

IMPROVED PROPERTY - Shall mean any property upon which is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals and from which wastewater shall be or may be discharged.

INDIRECT DISCHARGE - The discharge or the introduction of pollutants from any non domestic source into

the system as outlined in 40CFR 403.3(g) and Section 307(b), (c), and (d) of the Act.

INDUSTRIAL ESTABLISHMENT - Shall mean any structure intended to be used wholly or in part for manufacturing, fabricating, processing, cleaning, laundering or assembly of any product, commodity or article.

INDUSTRIAL WASTEWATER - The liquid or water-borne wastes from industrial or manufacturing processes (not including domestic sewage flow).

INDIRECT USER - Any non-domestic source of discharge to the SEWER DEPARTMENT sewer system including all categorical industrial users and significant dischargers.

INTERFERENCE- A discharge, which alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the wastewater collection and treatment system treatment processes, operations, or its biosolids processes, use or disposal, and therefore is a cause of a violation of any requirement of the Cape May County MUA NJPDES permit, including an increase or duration of the violation. The term includes prevention of biosolids use, biosolids processes, or disposal by the receiving treatment facility in accordance with any of the following statutory/regulatory provisions or permits issued there under (or more stringent state or local permits): Section 405 of the Act, (33 U.S.C. 1345) or any criteria, guidelines, or regulations developed pursuant to the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, Marine Protection Research and Sanctuaries Act or more stringent State criteria, including those contained in any State biosolids management plan prepared pursuant to Title IV of SWDA applicable to the method of disposal or use employed by the receiving treatment facility.

LATERAL- Portion of wastewater conveyance piping system located between the sewer main connection and the building.

MAIN - SEWER DEPARTMENT owned or leased piping and appurtenances, in or along public highways and streets, or along privately owned right-of-way, used for the collection of domestic sewage or industrial wastewater. Does not include building drain, building sewer or any additional lateral fittings or piping.

NATIONAL CATEGORICAL PRETREATMENT STANDARDS - Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act (33 U. S.C. 1317), or CFR Part 403 which applies to a specific category of Industrial Users.

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM OR NPDES PERMIT - A permit issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

NATIONAL PROHIBITIVE DISCHARGE STANDARD, PROHIBITIVE DISCHARGE STANDARD OR PROHIBITED DISCHARGE STANDARD - A regulation developed under the authority of Section 307 (h) of the Act and 40 CFR Section 403.5.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP) - Governing agency of environmental regulations and programs for New Jersey.

NEW JERSEY POLLUTION DISCHARGE ELIMINATION SYSTEM OR NJPDES PERMIT - A permit issued pursuant to the latest New Jersey Department of Environmental Protection regulations.

NEW SOURCE - a. Any User of the SEWER DEPARTMENT's wastewater collection system which commenced operation after the publication by the EPA of proposed Categorical Pretreatment Standards, which will be applicable to that User after final EPA promulgation of such standards in accordance with Section 307 of the Act, provided that:

- (i) The building, structure, facility, or installation from which the discharge originates is constructed at a site at which no other source is located, or
- (ii) The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of the pollutants at an existing source, or
- (iii) The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site.

b. Construction on a site at which an Existing Source is located results in a modification rather than a New Source if the construction does not create a new building, structure, facility, or installation meeting the criteria of this Section (a) above but otherwise alters, replaces, or adds to existing process or production equipment.

c. Construction of a New Source as defined under this section has commenced if the owner or operator has:

- (i) any placement, assembly, or installation of facilities or equipment; or
- (ii) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of New Source facilities or equipment; or
- (iii) entered into a binding contractual obligation for the purchase of facilities or equipment which is intended to be used in its operation within a reasonable period of time. Options to purchase or contracts which can be

pH - A measure of the acidity or alkalinity of a solution expressed in standard units.

POLLUTANT - Any dredged spoil, solid waste, incinerator residue, sewage, garbage, biosolids, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

POLLUTION - The manmade or induced alteration of the chemical, physical, biological and radiological integrity of water

PRETREATMENT OR TREATMENT - The reduction of the amount of pollutants, the elimination of pollutants, the alteration of the nature of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to, or in lieu of, discharging or otherwise introducing such pollutants into the SEWER DEPARTMENT's wastewater collection system. The reduction or alteration can be obtained by physical, chemical or biological processes, or by process changes, by other means, except as prohibited by 40 CFR Section 403.6 (d).

PRETREATMENT REQUIREMENTS OR PRETREATMENT STANDARDS - Any substantive or procedural requirement related to pretreatment imposed on a User by the Control Authority including, but not limited to, prohibited discharge standards, categorical pretreatment standards and local limits.

SANITARY SEWAGE - Same definition as Domestic Sewage / Wastewater listed previously.

SEWER - A pipe or conduit used or usable for wastewater collection services.

SEWER MAIN - All temporary and permanent facilities at any time, and from time to time, owned and operated by the SEWER DEPARTMENT and used or usable for, or in connection with, the collection, treatment and disposal of Sanitary Sewage.

SEWER DEPARTMENT SUPERINTENDENT / SUPERVISOR - The individual(s) responsible for implementing and enforcing the requirements contained herein, and as supplemented by additional regulations regarding the discharge of domestic, industrial, and commercial wastewater into the SEWER DEPARTMENT's sewer system.

SIGNIFICANT INDIRECT USER - 1. Any user including, but not limited to, any significant industrial user as defined in 40 CFR 403.3 but excluding municipal collection systems, who discharges wastewater into the Wildwood collection system where:

- i. The user is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40CFR Chapter I, Subchapter N and does not meet the criteria for being a Non-Significant Categorical Industrial User as set forth in 40 CFR 403;
- ii. The user's average volume of process wastewater exceeds 25,000 gallons per day;
- iii. The amount of BOD, COD or Suspended Solids in the industrial process wastewater discharge exceeds the mass equivalent of 25,000 gallons per day of the domestic waste of the CMCMUA;
- iv. The volume of industrial process wastewater in the discharge exceeds five percent or more of the average daily dry weather flow of the CMCMUA;
- v. The user's discharge of process wastewater contributes, five percent or more of the daily mass loading of any of the pollutants listed in N.J.A.C. 7:14A- 4, Appendix A Tables II through V;
- vi. The user is designated as an SIU by the control authority on the basis that the user has a reasonable potential for adversely affecting the local agency's operation;
- vii. The user is designated as an SIU by the control authority on the basis that the user has been in violation of any Federal, State, or local pretreatment standard or requirement, including, but not limited to, significant noncompliance as defined in 40 CFR 403.8(f)(2)(vii); or
- viii. The control authority determines it would be consistent with the intent of the Pretreatment Act or State Act to require a permit for the indirect user; and

3. Any user in areas of the State in which NJDEP is the control authority where:

i. The user is determined to be a hazardous waste facility that received a permit in accordance with N.J.A.C. 7:26G-12;

ii. The user's discharge consists of landfill leachate, which is either pure, treated, or diluted; or

iii. The user's discharge consists of 25,000 gallons per day or more of process wastewater and/or polluted ground water which is pumped from the ground in order to decontaminate an aquifer; however

ii. Upon finding that any user in the State has no reasonable potential for adversely affecting the local agency's operation or for violating any Federal, State, or local pretreatment standard or requirement, the control authority may at any time, on its own initiative or in response to a petition received from a user or a local agency, and in accordance with 40 CFR 403.8, determine that any user specified in paragraphs 1 or 2 above is not a significant indirect user.

SIGNIFICANT INDIRECT USER PERMIT - A permit issued by the Control Authority to an industrial/commercial user in accordance with these Rules and Regulations.

SINGLE FAMILY DWELLING - A building on a lot designed and occupied exclusively as a residence for one family, considered to be an average of 3 persons.

SLUG DISCHARGE OR SLUG LOAD - Any intentional or accidental discharge at a flow rate or concentration which could cause a violation of any Prohibited Discharge Standard set forth in these Rules and Regulations, or in Section 403.5 of the General Pretreatment Regulations.

SLUG CONTROL PLAN - Significant Indirect Users may be required to submit to the Control Authority a Slug Control Plan which meets the criteria set forth in these Rules and Regulations.

STANDARD INDUSTRIAL CLASSIFICATIONS (SIC) - A classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget 1972.

STATE - State of New Jersey

STORM WATER - Any flow occurring during or following any form of natural precipitation and resulting exclusively there from.

TOTAL SUSPENDED SOLIDS OR SUSPENDED SOLIDS - The total suspended matter that floats on the surface or is suspended in water, wastewater, or other liquids, and which is removable by laboratory filtering.

TOWNHOUSE - One of a series of attached one family dwelling units each having common or party wall or walls between it and neighboring dwelling units and having an individual rear yard contiguous to the dwelling unit designed as an integral part of each one family dwelling unit and from the occupants of the dwelling shall have the right to exclude the public. Each townhouse shall have a separate and individual utilities system.

TOXIC POLLUTANT - Any pollutant or combination of pollutants listed as toxic in regulations promulgated by

the Administrator of the EPA under the Clean Water Act, or other acts promulgated by the federal or state governments.

USER - Any person who contributes, causes, or permits the contribution of wastewater into the SEWER DEPARTMENT's collection system, including those person(s) who distribute drinking water in the SEWER DEPARTMENT's service area.

WASTEWATER - The liquid and water-carried industrial or domestic wastes from dwelling, commercial buildings, industrial facilities, and institutions, together with any groundwater, surface water, and water that may be present, whether treated or untreated which is contributed into or permitted to enter the collection system.

WASTEWATER COLLECTION SYSTEM; Same as SEWER MAIN

WATERS OF THE STATE - All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulation of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the State or any portion thereof.

1.2 ABBREVIATIONS

The following abbreviation shall have the designated meaning:

BOD	Biochemical Oxygen Demand
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEP/NJDEP	New Jersey Department of Environmental Protection
EPA	US Environmental Protection Agency
mg/l	Milligrams per liter
NJPDES	New Jersey Pollutant Discharge Elimination System
NPDES	National Pollutant Discharge Elimination System
O & M	Operation & Maintenance
SIC	Standard Industrial Classification
SWDA	Solid Waste Disposal Act, 42 USC 5901, et. seq.
TSS	Total Suspended Solids
USC	United States Code

SECTION 2 - GENERAL POLICIES

2.1 Transfer of Service to New Owners For Existing Connections

- 2.1.1** No transfer of service will be granted by the SEWER DEPARTMENT until the owner has paid all charges due by the owner at any premises now or heretofore occupied by him.
- 2.1.2** As sewer charges are municipal liens, all charges will be submitted by the SEWER DEPARTMENT prior to the date of settlement and verified in written form to the title company or whatever authorized agent is processing the transfer of the property. The Title Company shall be obligated to clear all sewer charges outstanding on the property. In the event that charges are not paid at settlement, those charges shall remain on the account as a lien against the property.
- 2.1.3** All search requests shall be presented to the SEWER DEPARTMENT in writing at least 14 calendar days before the proposed settlement date.
- 2.1.4** The SEWER DEPARTMENT shall charge a search fee (Appendix I) on each account investigated. Failure on the part of the party requesting the search (title company or the proper authorized agent) to pay the search fees at settlement or within 20 days of presentation of the account information, whichever is shorter, will result in the discontinuance of SEWER DEPARTMENT lien information to the requesting party.
- 2.1.5** No search fees will be charged for information in areas in which there is no existing sewer service.

2.2 Service to New Owners in Newly Constructed Dwellings

- 2.2.1** No Certificate of Authority approval will be given to the Building Inspector for issuance of a Certificate of Occupancy until the SEWER DEPARTMENT has verified that the sewer main connection has been installed in accordance with the SEWER DEPARTMENT procedures, the water meter is operational, and the connection fees have been paid.
- 2.2.2** The initial billing date of a newly constructed home will be according to purchased water meter readings from Wildwood Water Utility.

2.3 Landlord-Tenant Responsibility

All charges for sewer are a lien against the property and therefore the responsibility of the owner. Therefore, all bills will be sent to the property owner and not the tenant.

2.4 Mandatory Connection

2.4.1 Whenever a sewer main either exists or is made available to an improved property a connection shall be made by the property owner within 30 days from the date after notice to such owner is provided by the Borough of Wildwood Crest, or as specified by the Superintendent / Supervisor. Mandatory connection and payment of the fees shall be paid in accordance with the fee schedule within the above specified time.

2.4.2 For the purpose of this section, exists or made available, shall mean the availability of a gravity main in any public road or public easement fronting any of the sides of a building lot or within property line of any point of their property. It is the owner's responsibility to pay for all expenses associated with extending the public sewer main, as necessary, to connect their facility to the sewer up to the property line, in accordance with Wildwood Sewer Department standards.

2.5 Connection Fees and Time of Connection

2.5.1 The fees for the right to connect directly or indirectly to the SEWER DEPARTMENT'S sanitary sewerage system shall include a connection fee as well as fees for application, administrative action, review, and inspection of work in keeping with the SEWER DEPARTMENT'S Rules and Regulations. The owner is responsible for payment of all fees.

2.5.2 No unauthorized persons shall uncover, make any connections with or opening into, use, alter, or disturb the SEWER DEPARTMENT'S wastewater collection system or any appurtenance thereof without first paying a connection fee and complying with SEWER DEPARTMENT connection procedures.

2.5.3 In cases of condominium ownership, each unit, whether residential or other than residential, shall be considered as separate entities for connection fee purposes.

2.5.4 Any connection must be made within twelve (12) months of the date the connection fee is paid unless a special exemption is provided by the Borough of Wildwood Crest. The sewer connection permit will become void at that time, but can be renewed for additional periods of one (1) month each upon payment of any increase in the amount of the connection fee over the fee paid at the time of issuance of the original sewer connection permit and compliance with any change in the regulations governing connections.

2.5.5 The SEWER DEPARTMENT reserves the right to adjust both the number of EDU's estimated and connection fee charged based on the actual consumption figures obtained for a one (1) year period after the initial connection to the SEWER DEPARTMENT'S sewer system. The SEWER DEPARTMENT is under no obligation to refund connection fee monies due to lower than anticipated wastewater flows.

2.6 Discontinuance of Service by Owners

Sewer service will not be considered a service subject to discontinuation. Discontinuation of service can only be authorized by the SEWER DEPARTMENT. Requests for discontinuance of sewer service will be considered only in cases of demolition, fire, flooding, or by order of the Board of Health for abandonment to the building serviced for health reasons. The

property owner will be responsible for the payment of all fees as established by the SEWER DEPARTMENT until a written request for discontinuance is received. The owner will be responsible to hire a plumber to cap the applicable lines.

2.7 Turnoff Without Authority

The owner shall not turn off or disconnect or remove the water/sewage meter, or permit its disconnection or removal without the written consent of the SEWER DEPARTMENT.

2.8 Due to Emergency

As necessity may arise in the event of breakdown, emergency, or for any other unavoidable cause, the SEWER DEPARTMENT shall have the right to cut off the sewer service temporarily in order to make necessary repairs, connections, etc., but the SEWER DEPARTMENT will use reasonable and practicable measures to notify the owner of such discontinuance of service. In such case, the SEWER DEPARTMENT shall not be liable for any damage or inconvenience experienced by the owner; or any claim against it at any time for interruption in service. When the service is to be temporarily interrupted, notice will be given when practicable, to all owners affected by the temporary interruption of service, stating the probable duration of the interruption, and also the purpose of the interruption.

2.9 Reserve Capacity

The SEWER DEPARTMENT shall have the right to reserve sufficient capacity in its facilities to adequately collect sewage from all existing and contracted owners. The SEWER DEPARTMENT may further restrict or regulate the quantity of wastewater discharge by the owner in case of scarcity of capacity, or whenever the public welfare may so require.

2.10 Responsibility for Service

2.10.1 It is agreed by the parties receiving service that the SEWER DEPARTMENT does not assume any liability as insurer of property or person, and that the SEWER DEPARTMENT does not guarantee any special service, capacity, or facility, other than is permitted by the ordinary and changing operating conditions of the SEWER DEPARTMENT, as the same exists from day to day. It is agreed by the parties receiving service that the SEWER DEPARTMENT shall be free and exempt from any and all claims for injury to any persons or property by reason of failure to provide collection or treatment capacity.

2.10.2 In all contracts for general or special sewer service, it is expressly understood and agreed that no claims will be made against the SEWER DEPARTMENT for damage to life or property, by reason of the breaking of any service pipe or appliance within the owner's premises, unless caused by the negligence of the SEWER DEPARTMENT or its employees, nor for any damage done due to the failure of the sewerage capacity for any cause beyond the SEWER DEPARTMENT'S control.

2.10.3 No service will be furnished to any premises where any possibility exists of the mingling of storm water and sanitary waste; nor will the SEWER DEPARTMENT permit its mains or service pipes to be connected in any way to any piping, tank, vat or other apparatus

containing liquids, chemical, or any other matter which may flow back into the SEWER DEPARTMENT'S service pipes or mains, and consequently endanger the treatment process.

2.11 Complaints

Complaints with respect to the character of the service furnished, or the reading of the meters or of the bills rendered, must be made at the SEWER DEPARTMENT'S office either orally, or in writing.

2.12 Reasonable Access

The properly identified authorized agents of the SEWER DEPARTMENT shall have the right of access to the premises served, at all reasonable hours, for the purposes of reading meters, examining fixtures and pipes, observing the manner of use and discharge of water, and for any other purpose which is proper and necessary in the conduct of the SEWER DEPARTMENT'S business.

2.13 No Oral Agreements

No agent or employee of the SEWER DEPARTMENT has authorization to bind it by any promise, agreement or representation not provided for in these rules.

2.14 Changing of Rules and Regulations

The SEWER DEPARTMENT reserves the right to change or amend, from time to time, these rules and regulations, and the rates for sewer service not covered by the bond indenture.

2.15 Sewer Main Connection Maintenance Policy

When the SEWER DEPARTMENT inspection indicates that a trap vent or cleanout riser is missing a cap, is damaged, or is allowing inflow/infiltration into the system the owner will be notified that the deficiency must be repaired or replaced within seven days. After that time period, the SEWER DEPARTMENT reserves the right to replace or repair the deficiency and the owner will be charged for parts and service.

2.16 Prohibited Actions

2.16.1 No person shall place, shall discharge or shall permit to be placed or to be discharged upon public or private property any wastewater.

2.16.2 No person shall discharge or shall permit to be discharged to any natural outlet any wastewater.

2.16.3 No privy vault, cesspool, sinkhole, septic tank or similar receptacle shall be used or shall be maintained upon any improved property that has been connected to the wastewater collection system. Every such privy vault, cesspool, sinkhole, septic tank or similar receptacle in existence shall be abandoned and shall be cleansed and shall be filled, at the expense of the owner of such improved property; and any such privy vault, cesspool,

sinkhole, septic tank or similar receptacle not so abandoned and, not cleansed and filled, shall constitute a nuisance, and such nuisance may be abated, as provided by law, at the expense of the owner of such improved property.

3.1 GENERAL

3.1.1 Purpose and Policy

The objectives of these Rules and Regulations are:

- To prevent the introduction of pollutants into the SEWER DEPARTMENT wastewater collection and treatment system which will interfere with its operation, contaminate the biosolids generated at the wastewater treatment plant, or will otherwise be incompatible with the system;
- To prevent the introduction of pollutants into the SEWER DEPARTMENT wastewater collection and treatment system which will be inadequately treated and thus will pass-through the system into the receiving waters or the atmosphere;
- To protect the environment, the general public and SEWER DEPARTMENT personnel against the hazards associated with discharges of toxic or otherwise incompatible pollutants into the sewer system;
- To improve the opportunity to recycle and reclaim industrial wastewaters and biosolids from the wastewater treatment system;
- To provide for equitable distribution of the cost for the development and implementation of the WILDWOOD SEWER DEPARTMENT'S Rules and Regulations and other improvements to the wastewater collection and treatment system;
- To help assure SEWER DEPARTMENT and CAPE MAY COUNTY MUA joint compliance with the New Jersey Pollutant Discharge Elimination System (NJPDES) permit, biosolids use and disposal requirements, the Clean Water Act, the General Pretreatment Regulations, and any other state or federal laws which with the SEWER DEPARTMENT and CAPE MAY COUNTY MUA must comply.

These Rules and Regulations will be implemented by the SEWER DEPARTMENT by incorporation through the Borough of Wildwood Crest's Sewer Use Ordinance to those Users deemed a Significant Indirect User, through monitoring, reporting, and enforcement of the Rules and Regulations; and through enforcement of general requirements for all other Users. These Rules and Regulations also assume that the capacity of the sewer system allocated to existing customers will not be pre-empted, and provides for the setting of fees for the equitable distribution of costs resulting from these Rules and Regulations established herein.

These Rules and Regulations shall apply to persons located both within and outside the SEWER DEPARTMENT'S political jurisdiction, including those in one of the contributing municipalities, who are Users or Significant Indirect Users of the collection system serviced by the SEWER DEPARTMENT. Except as otherwise provided herein, the provisions of these Rules and Regulations shall be administered and implemented by the SEWER DEPARTMENT.

Nothing contained in these Rules and Regulations shall be construed as preventing any special agreement or arrangement between the SEWER DEPARTMENT and any Significant Indirect Users within the SEWER DEPARTMENT or one of the contributing municipalities, allowing a waste of unusual strength or character to be accepted by the SEWER DEPARTMENT through special agreements in writing, executed prior to such acceptance, containing safeguards, limitations, and conditions acceptable to the SEWER DEPARTMENT or the CMCMUA. Any such agreement or arrangement shall not allow a discharge that exceeds Categorical Standards.

3.2 REGULATIONS

3.2.1 General

No User or Significant Indirect User shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will cause a pass-through or interference in the SEWER DEPARTMENT'S and/or CAPE MAY COUNTY MUA'S wastewater collection and treatment system, will create a hazard to the environment, the general public or SEWER DEPARTMENT personnel, or will cause the SEWER DEPARTMENT and/or CAPE MAY COUNTY MUA to violate any General Pretreatment Regulation, NJPDES permit or biosolids requirement. These general prohibited discharge standards apply to all such Users of a wastewater collection and treatment system, whether or not the User is subject to National Categorical Pretreatment Standards or any other national, State, or local pretreatment standards or requirements.

No user shall introduce or cause to be introduced into the Borough of Wildwood Crest sanitary sewer collection system and CMCMUA the following pollutants, substances, or wastewater:

- (1) Pollutants which create a fire or explosive hazard in the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA, including, but not limited to, waste streams with a closed-cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21;
- (2) Wastewater having a pH less than 5.5, or more than 9.5, or otherwise causing corrosive structural damage to the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA equipment;
- (3) Solid or viscous substances in amounts which will cause obstruction of the flow in the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA resulting in interference;
- (4) Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the CMCMUA;
- (5) Wastewater having a temperature greater than 150°F or 65°C, or which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104°F (40°C);
- (6) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through;
- (7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the Borough of Wildwood Crest sanitary sewer collection or CMCMUA in a quantity that may cause acute worker health and safety problems;

- (8) Trucked or hauled pollutants, except at discharge points designated by CMCMUA in accordance with the sewer use ordinance;
- (9) Noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;
- (10) Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent, thereby violating CMCMUA's NJPDES permit;
- (11) Wastewater containing any radioactive wastes or isotopes except in compliance with applicable State or Federal regulations;
- (12) Storm water, surface water, ground water, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water, and unpolluted wastewater, unless specifically authorized by the Superintendent;
- (13) Sludges, screenings, or other residues from the pretreatment of industrial wastes;
- (14) Medical wastes, except as specifically authorized by CMCMUA in a wastewater discharge permit;
- (15) Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test;
- (16) Detergents, surface-active agents, or other substances which may cause excessive foaming in the CMCMUA;
- (17) Fats, oils, or greases of animal or vegetable origin in concentrations greater than 100 mg/l, containing substances which may solidify or become viscous at temperatures between 32 degrees F and 150 degrees F or
- (18) Wastewater causing readings on an explosion hazard meter at the point of discharge into the Borough of Wildwood Crest sanitary sewer collection system, or at any point in the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA, of more than five percent [5 %] of the Lower Explosive Limit of the meter.
- (19) Wastes containing phenolic compounds over 1.0 ppm, expressed as phenol.
- (20) Any waters or wastes with BOD in excess of 350 mg/L.
- (21) Any waters or wastes with suspended solids content in excess of 300 mg/L, or containing suspended solids of such character or gravity that unusual attention or expense is required to handle or treat such materials.

(22) Unusual volume or concentration of wastes being delivered in a “slug” manner by which it is meant that the normal concentration or loading shall not be exceeded by more than a 4.0 factor for any sixty minute period.

Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA.

Nothing in the section shall be construed to prohibit a special agreement (including, but not limited to NJPDES permits) allowing discharge of wastewaters containing pollutant concentrations in excess of those noted above following review and approval by the Engineer and Control Authority.

When one of the contributing municipalities or the SEWER DEPARTMENT determines that a User or Significant Indirect User is contributing to the wastewater collection and treatment system any of the above enumerated substances in such amounts as to interfere with the operation or cause pass-through of the system, the SEWER DEPARTMENT, in conjunction with the CMCMUA and NJDEP, shall advise the User of the impact of such contribution on the wastewater collection and treatment system, and develop effluent limitations for such User to correct the violation.

The SEWER DEPARTMENT, in conjunction with the CMCMUA and NJDEP, may also enact enforcement remedies against the non-complying User or Significant Indirect User, whether or not the User or Significant Indirect User was given prior notification of the violation by the SEWER DEPARTMENT.

3.2.2 Federal Categorical Pretreatment Standards

Upon the promulgation of the Federal Categorical Pretreatment Standards for a particular industrial sub-category, the Federal Standard, if more stringent than limitations imposed under these Rules and Regulations for sources in the sub-category, shall immediately supersede the limitations imposed under these Rules and Regulations. Each User or Significant Indirect User shall be responsible to notify the WILDWOOD SEWER DEPARTMENT and the Contributing Municipality of changes to his status under the Federal, State, or local regulations. The National Categorical Pretreatment Standards found in 40 CFR Part 405-471 are hereby incorporated into these Rules and Regulations.

- Where a categorical pretreatment standard is expressed only in terms of the mass or the concentration of a pollutant in wastewater, the Control Authority may impose equivalent concentration or mass limits in accordance with 40 CFR Part 403.6(c).
- When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the Control Authority shall impose an alternate limit using the combined waste stream formula in 40 CFR Part 403.6(e).
- A user may obtain a variance from a categorical pretreatment standard if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR Part 403.13, that factors relating to its discharge are fundamentally different from the factors considered by the EPA when developing the categorical pretreatment standard.
- A user may obtain a net gross adjustment to a categorical standard from the EPA in accordance with 40 CFR Part 403.15.

3.2.3 Modification of Federal Categorical Pretreatment Standards

Where the CAPE MAY COUNTY MUA wastewater treatment plant achieves consistent removal of pollutants limited by Federal Pretreatment Standards, the SEWER DEPARTMENT may apply to the Approval Authority for modifications of specific limits in the Federal Pretreatment Standards. "Consistent removal" shall mean the reduction in the amount of a pollutant or alteration of the nature of the pollutant by the wastewater treatment system to a less toxic or harmless state in the effluent which is achieved by the system in 95 percent of the samples taken when measured according to the procedures set forth in Section 403.7(c)(2) of Title 40 of the Code of Federal Regulations, Part 403- "General Pretreatment Regulations for Existing and New Sources of Pollution" promulgated pursuant to the Act. The SEWER DEPARTMENT may then modify pollutant discharge limits in the Federal Pretreatment Standards if the requirements contained in 40 CFR Part 403, Section 403.7 are fulfilled, and prior approval from the Approval Authority is obtained.

3.2.4 Specific Pollutant Limitations

All wastewater entering either the SEWER DEPARTMENT or one of the contributing municipality's collection systems shall be pretreated to typical domestic levels unless otherwise stated in writing by the Control Authority.

Typical domestic levels for compatible pollutants shall be:

<u>Parameter</u>	<u>Maximum Concentration (mg/l)</u>
Biochemical Oxygen Demand (BOD ₅)	350
Total Suspended Solids (TSS)	300
Oil and Grease	100

3.2.5 SEWER DEPARTMENT'S Right of Revision

The SEWER DEPARTMENT reserves the right to require each of the contributing municipalities to establish by ordinance and/or Rules and Regulations, limitations or requirements as least as stringent as the SEWER DEPARTMENT for Users whose wastewater is ultimately treated at the CAPE MAY COUNTY MUA wastewater treatment plant, in order to comply with the objectives presented in these Rules and Regulations.

3.2.6 Dilution

No User or Significant Indirect User shall ever increase the use of processed water or in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the federal Categorical Pretreatment Standards, or with any other pollutant-specific limitation developed by the Control Authority, one of the contributing municipalities, State, or Federal agencies.

3.2.7 Accidental or Slug Discharge

Each Significant Indirect User shall provide protection from accidental or slug discharge of prohibited materials or other substances that have the potential to cause interference or pass through at the wastewater treatment facility and are regulated by these Rules and Regulations. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the User's or Significant Indirect User's own cost and expense. In the case of an "accidental discharge", it is the responsibility of the User to immediately telephone and notify the SEWER DEPARTMENT Superintendent and the CMCMUA. The notification shall include location of discharge, type of waste, concentration and volume, and corrective actions taken to minimize and eliminate the violation.

In addition, the SEWER DEPARTMENT and CMCMUA may evaluate whether a Significant Indirect User needs to develop or update a Slug Control Plan. Detailed Slug Control Plans showing facilities and operating procedures to provide slug control protection shall be submitted to the SEWER DEPARTMENT and CMCMUA for review prior to implementation. A Slug Control Plan shall contain, at a minimum, the follow information:

- (1) a description of discharge practices, including routine or non-routine batch discharges;
- (2) a description of new and spent chemical storage procedures;
- (3) procedures for immediately notifying the SEWER DEPARTMENT and the CMCMUA Treatment Plant Manager of any accidental or slug discharge, including personnel responsible for such notifications;
- (4) procedures to prevent adverse impact from an accidental or slug discharge. Such procedures shall include, but are not limited to, inspection and maintenance of chemical storage areas, handling and transferring of raw and finished products and chemicals, control of site runoff, worker training, building of containment structures, available containment equipment, and contacted environmental services which assist the User fulfill these plans.

3.2.8 Written Report

Within five (5) days following an accidental discharge, the Significant Indirect User shall submit to the SEWER DEPARTMENT and CMCMUA, a detailed written report which shall contain the following information:

- (1) the cause of the accidental discharge;
- (2) the anticipated time that this condition had occurred and when it has been corrected;
- (3) the steps taken by the User to reduce and minimize the impact of the accidental discharge;
- (4) the steps taken by the User to prevent a re-occurrence of the conditions which caused or led to the accidental or slug loading, to mitigate any expense, loss, damage or other liability which may have incurred as a result of damage to the SEWER DEPARTMENT and CMCMUA facilities or aquatic life or any other damage to person or property.

Such report shall not relieve the Significant Indirect User of any fines, civil penalties, or other liability which may be imposed as described in this article, or any other applicable law/regulation.

3.2.9 Notice to Employees

A notice shall be permanently posted on the Significant Indirect User's bulletin board or other prominent place advising employees who to call in the event of an accidental or slug discharge. Employers shall ensure that all employees who may be involved with hazardous materials or may cause such a discharge are aware of such emergency notification procedures.

3.3 ADMINISTRATION

3.3.1 Wastewater Discharges

It shall be unlawful to discharge any wastewater to any sanitary sewer in any area under the jurisdiction of, or within the service area of, the SEWER DEPARTMENT or one of the contributing municipalities, except as authorized in writing by the SEWER DEPARTMENT in accordance with the provisions of these Rules and Regulations. The SEWER DEPARTMENT may require any users of the sewer system to provide any information needed to determine compliance with these Rules and Regulations or other applicable local, state, or federal laws, rules, or regulations. These requirements include, but are not limited to:

- a. wastewater discharge peak rate and volume records over a specified time period;
- b. information on raw materials, processes, and products affecting wastewater volume and quality;
- c. quantity and disposition of specific liquid, biosolids, oil solvent, or other materials which may impact the operations of the SEWER DEPARTMENT or CMCMUA system;
- d. a plot plan of all sewer facilities on the User's property including the number and location of all sewer lateral connections to the SEWER DEPARTMENT sewer system;
- e. details of control measures taken by the User to prevent and control storm water, drainage, roof runoff, from entering the SEWER DEPARTMENT sewer system.
- f. details of any significant changes to the nature or quantity of their discharge, including increased flows of 25 percent or more, or the promulgation of a categorical pretreatment standard which applies to their discharge;

All users must notify the SEWER DEPARTMENT, CMCMUA, and the NJDEP of discharges to the sewer system which, if disposed of in any other manner, would be considered a hazardous waste under Federal regulations 40 CFR Part 261.

Costs incurred for developing the information described above shall be paid by the User, and are in addition to all other sewer use fees charged by the SEWER DEPARTMENT or one of the contributing municipalities.

The User shall be responsible for obtaining and submitting all applicable BOROUGH, SEWER DEPARTMENT, CMCMUA, County, Regional, State, or Federal permits or planning documents required for approval of a sewer connection.

3.3.2 Signatory Requirement

All reports, applications, or other information required to be submitted under these Rules and Regulations shall be signed by an authorized representative of the user.

3.3.3 Sampling Requirements

All measurements, tests, and analyses required for determining the characteristics of waters and wastewaters to which reference is made in these Rules and Regulations shall be performed in accordance with 40 CFR Part 136.

3.3.4 Inspection and Sampling

The SEWER DEPARTMENT, CMCMUA, or Control Authority may inspect the facilities of any User to ascertain whether the purpose of these Rules and Regulations is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the SEWER DEPARTMENT representative ready access during all working hours to all parts of the premises for the purpose of inspection, sampling, records examination and/or copying, or in the performance of any of his duties.

3.3.5 Pretreatment

Users and Significant Indirect Users shall provide necessary wastewater treatment as required to comply with both these Rules and Regulations and any applicable Federal Categorical Pretreatment Standards within the time limitations as specified by the Control Authority or in the Federal Pretreatment Regulations. Any equipment or facilities required to pretreat wastewater to a level acceptable to the Control Authority shall be provided, operated, and maintained at the User's expense. The Control Authority may require that detailed plans showing the pretreatment facilities and operating procedures be submitted for review and shall be deemed acceptable to the SEWER DEPARTMENT and CMCMUA before construction of the facility. The review of such plans and operating procedures will in no way relieve a User from the responsibility of modifying his facility as necessary to produce an effluent acceptable to the SEWER DEPARTMENT and CMCMUA under the provisions of these Rules and Regulations. Any subsequent changes in the pretreatment facilities or method of operation, or any change which may result in a new or increased discharge of pollutants, shall be reported to and be accepted by the SEWER DEPARTMENT, CMCMUA, and Control Authority prior to the User's or Significant Indirect User's initiation of the changes.

Users with the potential to discharge oils and grease in amounts greater than those specified in these Rules and Regulations, must have installed, at the owner's expense, grease traps to prevent such a discharge from occurring. Grease traps must be cleaned and maintained on a regular basis by the owner.

3.3.6 Recordkeeping Requirements

Users subject to the recordkeeping requirements of this section shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring or reporting requirements required in these Rules and Regulations, including any monitoring activities undertaken by the User independent of these requirements. Records shall include the exact date and time of sampling, the date and time of analysis, the name of the person(s) collecting and analyzing all samples, the

methodology used in analyzing the samples, and the results of these analyses. These records should be made available for a minimum of five years. In the matters of litigation between the User and the SEWER DEPARTMENT, CMCMUA, or Control Authority, or where specifically requested by the EPA, the retention period is extended.

3.3.7 Confidential Information

Information and data on a User or Significant Indirect User obtained from reports, monitoring programs, and from inspections shall be available to the public or governmental agencies without restriction unless the User or Significant Indirect User specifically requests and is able to demonstrate to the satisfaction of the SEWER DEPARTMENT, CMCMUA, and Control Authority that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets of the User or Significant Indirect User.

When requested by the person furnishing a report, those portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available, upon written request, to governmental agencies for uses related to these Rules and Regulations, the NJPDES Permit, biosolids disposal/re-use forms and/or the General Pretreatment regulations. Any such portions of a report shall also be available for use by any State agency in judicial review or enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics will not be recognized as confidential information.

3.3.8 Falsifying Information

Any person who knowingly makes any false statements, representations, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to these Rules and Regulations, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under these Rules and Regulations may be punished as provided by law and shall be subject to the fines set forth in the General Pretreatment Regulations.

3.4 ENFORCEMENT

3.4.1 Notification of Violation

Whenever the Control Authority finds that any User has violated or is violating these Rules and Regulations or the General Pretreatment Regulations, the Control Authority shall serve upon the User a written Notice of Violation (NOV). Within 10 days of the certified receipt of the NOV, the User must submit to the Control Authority, a written response which contains the following information:

- cause of non-compliance;
- anticipated duration of the non-compliance and the time by which the violation will be corrected;
- steps taken by the User to reduce and eliminate the non-complying discharge;
- steps taken by the User to prevent re-occurrence of the condition(s) leading to the non-compliance;

- the signature of an authorized representative of the user that certifies to the validity of the report.

3.4.2 Administrative Order

Whenever the Control Authority finds that any user has violated or continues to violate these Rules and Regulations; the Control Authority may issue an order to the user responsible for the discharge containing specific requirements to which the user must comply. The order may contain the following requirements:

- a. Following a specified time period sewer service shall be discontinued unless adequate treatment facilities, devices, or other related appurtenances have been installed and are properly operating;
- b. Conditions as might be reasonably necessary and appropriate to address the non-compliance, including the installation of pretreatment technology, additional self-monitoring and/or management practices;
- c. Compliance schedule.

3.5 SEVERABILITY

If any provision, paragraph, word, section, or article of these Rules and Regulations is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections and chapters shall not be affected and shall continue in full force and effect.

SECTION 4 - APPLICATION PROCEDURES

4.1 GENERAL PROVISIONS

Persons proposing any one of the following:

- a. Sewer main extensions for subdivisions and/or site development.
- b. An individual dwelling sewer main connection extension.
- c. A use change in an existing facility.
- d. Any modification to the existing SEWER DEPARTMENT sewer main system.
- e. Ownership change of property;

Shall prepare applications described in this section with the necessary supporting documents.

4.1.1 Applications for Service in General

- A. An application for service will not be approved by the SEWER DEPARTMENT until the applicant has paid all fees and charges, which were due by the applicant for any prior services.

- B. An approved application constitutes a contract between the SEWER DEPARTMENT and the applicant, obligating the applicant to pay to the SEWER DEPARTMENT its rates as established from time to time and to abide by and comply with its Rules and Regulations.
- C. Prior to the submission of an application for service, it is the responsibility of the owner to inspect and examine all laterals, pipes, fixtures and treatment works on the owner's property to determine whether they are in good condition. An application for service constitutes a representation by the owner that the inspection has been made and that all such items have been found to be in good condition. The SEWER DEPARTMENT is not liable for any accident, breaks, leakage or damage to the property, which may result from sewerage services supplied to the premises.
- D. All nonresidential owners that apply for service must provide the following information to the SEWER DEPARTMENT, in addition to other information required by the various applications:
 - 1. Detailed description of the type and size of buildings.
 - 2. The nature of the business to be conducted in each building.
 - 3. The number and type of fixtures in each building.
 - 4. The type, volume and chemical characteristics of the wastewater to be discharged.
 - 5. Three (3) copies of plans showing:
 - a. The boundaries of the property,
 - b. The location within the property of the building to be served,
 - c. The location and profile, with respect to finished grade, of the service, and
 - d. Details of the proposed connection to the sewerage system.
 - 6. Other information as may be required by the SEWER DEPARTMENT'S Rules & Regulations.
- E. Completed applications for sewer service will be approved on a first-come, first-served basis. The obligation of the SEWER DEPARTMENT to approve completed applications for sewer permits is contingent upon the availability of capacity, both at the treatment plant and in the mains.
- F. The SEWER DEPARTMENT will not approve S-4 sewer permit applications until the SEWER DEPARTMENT is in receipt of all necessary approvals from the NJDEP or any other municipal, State, or Federal agency which may be required (except for a municipal building permit).

4.1.2 Applications for New Service

- A. All applicants for new service must submit a complete application for service to the SEWER DEPARTMENT. As used in these Rules and Regulations, "a complete application" includes and is defined as the following:
 - 1. S-1 Application. Preliminary Planning Board or Zoning Board approval is required prior to submission of the S-1 application to the SEWER DEPARTMENT. The fully completed S-1 "Application for Sewerage

Service” must be submitted in triplicate, and have attached three (3) copies of all conceptual engineering plans and reports, including projected flow, and be accompanied by an application fee and a conceptual review fee in the amounts stated in the Rate Schedule for each equivalent dwelling unit receiving sewer service. The conceptual engineering plans and reports which are required to be submitted with the S-1 application are to be in accordance with the Rules & Regulations of any State or Federal agency asserting jurisdiction over sewer services. The plans are to be in a minimum scale of one-inch (1”) equals forty feet (40’). Upon submission to the SEWER DEPARTMENT of a completed S-1 application, the SEWER DEPARTMENT will approve or disapprove the application within forty-five (45) days of the date that the application is certified as completed. The application will not be considered as complete until all applicable fees and escrow deposits are made. The S-1 application must be approved by the SEWER DEPARTMENT as a condition precedent to the submission of an S-2 “Service Agreement” to the SEWER DEPARTMENT.

2. S-2 Agreement. The fully completed and executed S-2 “Service Agreement” must be submitted in triplicate. Compliance with each term, condition and stipulation contained in the executed S-2 “Service Agreement” including, but not limited to compliance with SEWER DEPARTMENT Rules & Regulations and payment of all fees are conditions precedent to the submission or approval of an S-3 “Application for Approval of Sewer Construction Plans.” The SEWER DEPARTMENT will endorse the S-2 Service Agreement within thirty (30) days after the applicant has submitted all the required information. Final Planning or Zoning Board Approval must be obtained prior to the submission of an S-3 application.
 3. S-3 Application. The application for construction of treatment works must be submitted on an S-3 “Application for Approval of Sewer Construction Plans.” The engineering plans which are required to be submitted with the S-3 application must be in accordance with the Rules & Regulations of any State or Federal agency asserting jurisdiction over sanitary sewer services. All submitted plans are to be in a minimum scale of one inch (1”) equals forty feet (40’). All submitted profiles are to be in a minimum scale of one inch (1”) equals four feet (4’) feet in the vertical direction and one inch (1”) equals forty feet (40’) in the horizontal direction. The S-3 application must be accompanied by sufficient additional escrow fees, as well as three (3) copies of the sewer construction plans and profiles, prior to being determined complete. The plans and profiles must also include all underground utilities and appurtenances such as water and sewer mains, storm sewers, gas and electric as may be applicable. Additional escrow fees must be posted according to the Rate Schedule.
- B. Upon submission to the SEWER DEPARTMENT of a completed S-3 application, the SEWER DEPARTMENT will approve or disapprove the application within ninety (90) days of the date that the application is certified as completed. The

application will not be considered as complete until all applicable fees and escrow deposits are made.

- C. The SEWER DEPARTMENT reserves the right to extend the time for approval or disapproval for a period not to exceed thirty (30) days. This extension shall only be granted by written notification from the SEWER DEPARTMENT.
- D. Failure of the SEWER DEPARTMENT to approve or disapprove the application for construction within such time constitutes approval of the application and consent of the SEWER DEPARTMENT to the construction of the treatment works. In the event that the SEWER DEPARTMENT fails to approve or disapprove the application within time, the application will be marked "Approved Because of Failure to Act Within the Time Limitation Imposed by Law." This approval is not binding upon any State or Federal agencies which may assert jurisdiction over the review and approval of plans. In the event that the application is rejected by any State or Federal agency, the applicant must submit an amended application to the SEWER DEPARTMENT for review and approval containing the changes, modification or corrections requested by the Federal or State agency. If this occurs, the time limitations for approval by the SEWER DEPARTMENT of the amended application begin again, after the application is certified as complete by the SEWER DEPARTMENT.
- E. An application for TWA will not be sent to NJDEP for approval until both the S-3 and TWA application have first been approved by the SEWER DEPARTMENT.
- F. The applicant must obtain all S-1, S-2, and S-3 approvals, all TWA from NJDEP, and all other necessary approvals from NJDEP or any other municipal, State or Federal agency which may be required (except for a municipal building permit) before the applicant can submit an application for S-4 connection permits to the SEWER DEPARTMENT.
- G. Notwithstanding anything contained in this Rule, in the event that an application for new service is made for sewer service for property which abuts existing sewer mains, and TWA from NJDEP is not necessary, the SEWER DEPARTMENT reserves the right to waive the requirements of the S-1, S-2, or S-3 procedures. In such case, the applicant may proceed with the submission of S-4 applications for permits with payment of appropriate fees.

4.1.3 Applications for Additional Capacity

- A. An application for additional capacity must be made by an existing nonresidential owner whenever there is any physical or operational change associated with an increase in estimated, projected flow of either water to, or sewer from, any building, facility or structure for which a building permit, site plan, subdivision or other municipal approval is required.
- B. If an application for additional capacity does not require that TWA be issued by NJDEP, then the SEWER DEPARTMENT may, in its discretion, waive the S-1 and S-2 procedures and allow the applicant to submit S-3 applications with engineering plans, reports, and required fees as a condition precedent to submission of S-4 applications.

- C. An additional connection fee will be charged to the applicant based upon the increase in estimated flow associated with the physical or operational change.

4.1.4 Notification of Change in Ownership

- A. Whenever a change in ownership occurs, the new owner must notify the SEWER DEPARTMENT of this change. At the discretion of the SEWER DEPARTMENT, the new owner may be required to follow S-1, S-2, S-3, and S-4 application procedures.

4.1.5 Notification of Reinstatement of Service

- A. A notification for reinstatement of service must be made whenever a customer is renewing a previous service that had been abandoned or terminated or when replacing a structure which has been demolished or substantially totally destroyed.
- B. In the event that sewer service was terminated by the SEWER DEPARTMENT because of improper construction, maintenance or use of any connection to the SEWER DEPARTMENT'S sewer system, the customer must correct the deficiency before service can be reinstated.
- C. In the event that a notification is made to reinstate a service for a structure that was previously terminated, or abandoned when the prior structure was demolished or substantially totally destroyed, no connection fee will be due provided that the owner has previously paid all applicable fees demonstrating that the flow from this property has been accounted in the overall capacity of SEWER DEPARTMENT'S sewer system. If there will be an increase in the estimated water or sewer usage of the building, then the notification will also be considered as an application for additional capacity and an additional connection fee will be due on the amount of the increase in the estimated water or sewer usage.

4.1.6 S-4 Sewer Connection Permits

- A. An application for an S-4 sewer connection permit must be made whenever there is an application for a new service or for additional capacity or for reinstatement of a service for which a connection fee is due.
- B. An S-4 sewer permit which is issued for any residential unit will be valid for a period of twelve (12) months from the date of issue, and an S-4 sewer permit which is issued for any industrial or commercial unit will be valid for a period of twelve (12) months from the date of issue, unless physical connection is made within the appropriate period. Physical connection means that the sewer facilities within the building for which service is requested are capable of being used and that a sewer use permit has been issued.
- C. In the event that physical connection is not made within the appropriate period, the permit will automatically expire and is void and of no force and effect. The SEWER DEPARTMENT will retain the full amount of the connection fee paid for each expired permit as a charge for administrative

expenses and loss of service revenue. By the submission of an application, the applicant agrees that this charge is reasonable in amount and is to be considered as liquidated damages, and not as a penalty, since actual damages would be difficult to calculate and this amount is reasonable as liquidated damages. In the event, however, that the applicant submits a written request for withdrawal of the sewer connection within sixty (60) days after the sewer permit is issued, the full amount of the connection fee paid for the sewer permit will be refunded, less 25% of the connection fee for administrative reimbursement for each permit withdrawn.

- D. Upon the date of physical connection, the SEWER DEPARTMENT will charge, and the applicant agrees to pay, sewer service charges for the unit connected.

4.2 SUPPORTING DOCUMENTATION FOR APPLICATIONS

4.2.1 S-1 Application

- A. An S-1 application for conceptual approval of proposed treatment works is to be submitted to the SEWER DEPARTMENT for a review of the outlined system, route of construction, estimated volumes of flow and whether an individual or comprehensive study of the sewerage system is required to be submitted by the applicant. No application will be considered unless a professional engineer registered in the State of New Jersey is in charge of the planning and design of the proposed treatment works and has affixed his or her seal and signature to the plans and reports that are submitted.

4.2.2 S-3 Application

- A. Engineer's Report. A complete engineer's report, stating the basis of design, is to be submitted to the SEWER DEPARTMENT by the applicant for each project. The report must contain the following minimum data:
 - 1. For Sewer Systems
 - a. a description of the geographic area to be served;
 - b. existing and predicted population of the areas to be served;
 - c. terrain data in sufficient detail to establish general topographic features of the area to be served;
 - d. proposed minimum and maximum grades;
 - e. required pump stations;
 - f. intended use of the proposed realty improvements and the characteristics of sewage expected from such use;
 - g. effect of the proposed sewerage facilities on existing or proposed sewerage systems;
 - h. amount of infiltration expected and its effect on design flow;
 - i. estimated daily flow and descriptive formula utilized in calculating such estimates;
 - j. description of materials to be used in the construction of all treatment works and a statement that materials being

used in the construction of the treatment works comply with the SEWER DEPARTMENT'S standard materials of construction;

- k. preliminary cost estimates of the treatment works to be constructed;
- l. other relevant factors which would affect design and use of the sewerage system, including a downstream capacity study of the existing collection system;
- m. any other information which may be required by NJDEP;
- n. any other information which may be required by the SEWER DEPARTMENT'S Rules & Regulations; and
- o. the basis of design, stating that all sanitary sewers have been designed:
 - 1) to carry four (4) times the average flow estimated for twenty-five (25) years in advance. In lieu of other values determined by the SEWER DEPARTMENT, average flow may be assumed to one hundred (100) gallons per person, per day, including infiltration and three (3) persons may be assumed per equivalent dwelling unit;
 - 2) on a "separate system" basis in which all water from roofs, basements, streets and any other areas are not discharged to the sanitary sewer system. No bypasses or overflows, which allow raw sewage to be discharged from sewers, are permitted to be installed; and
 - 3) to flow with a minimum velocity of not less than two feet (2') per second and force mains at not less than three feet (3') per second based on Manning's formula for full pipe flow using an "n" factor of 0.013 for ductile iron pipe and 0.010 for polyvinyl chloride pipe. Inverted siphons are not permitted.

2. For Pump Stations

- a. operational characteristics of the station at minimum, maximum and average flows (both present and future);
- b. provisions for emergency standby power consistent with standard specification requirements of the SEWER DEPARTMENT and handling of sewage in the event of the complete failure of the station;
- c. provisions for permanent safety equipment, noise control equipment and odor control equipment as consistent with the Rules & Regulations of the SEWER DEPARTMENT;
- d. preliminary cost estimates for construction and annual operating costs;
- e. other relevant factors which would affect design and use of the sewerage system; and
- f. any other information which may be required by NJDEP.

- B. General Map or Conceptual Plan of the Entire Project. A general map of the entire project must be furnished, showing existing and proposed sewers and pumping stations.
- C. Construction Plans, Profiles, and Specifications of all Proposed Sewer Mains. Plans are to be of uniform size, 24" x 36", with a ½" border on top, bottom, and right side, and a two inch (2") border on the left side, the last one for binding. Three (3) sets of plans must be submitted. The plans must show the following:
 - 1. Details. The plans must show existing and proposed treatment works and contours, all existing and proposed streets, surface elevations at all breaks in grade and street intersections, tributary area with population per acre, the true or magnetic meridian, boundary line, title, data, and scale. Any area from which sewage is to be pumped must be clearly indicated. All sheets are to be numbered.
 - 2. Symbols. Proposed sewer mains and other treatment works to be constructed are to be shown by solid lines. Existing sanitary sewer mains and team works are to be shown by dashed lines and labeled accordingly. All topographical symbols and conventions are to be those used by the United State Geological Survey.
 - 3. Elevations. All elevations must be related to NGVD 1929 Datum. All benchmarks must be shown. Elevations of street surfaces are to be noted. The elevations of sewer inverts at ends of lines and at changes of grades are to be written parallel with the sewer lines and between the street lines. The elevations of street surfaces should be shown to the nearest 0.1 foot, the sewer inverts to the nearest 0.01 foot. Sufficient benchmarks must be permanently established for the area.
 - 4. Distances, Grades and Sizes. Distances between manhole, pipe gradients, sewer main and lateral sizes and pipe material must be shown on the plans. Arrows should show the direction of the flow.
 - 5. General Site Plan. All plans for treatment works must include a general site plan showing property boundaries, contours, proposed improvement with capacities, underground piping, underground wires, and are to include the items referred to in the Engineer's Report that are related to the design drawing.

4.3 ESCROW FEES AND ESCROW ACCOUNTS

- 4.3.1** Escrow fees must be posted by the owner in the amount specified in these Rules, Regulations, and Rate Schedule. The funds will be held by the SEWER DEPARTMENT in an escrow account. The SEWER DEPARTMENT will, from time to time, withdraw funds from this escrow account to reimburse itself for costs incurred by the SEWER DEPARTMENT for inspection, engineering review, legal review or for other services provided to or on behalf of the applicant by the SEWER DEPARTMENT. In the event that the escrow fund is depleted or in deficit, the applicant must post additional escrow funds with the SEWER DEPARTMENT in an amount to be set by the SEWER DEPARTMENT. Any funds held in the escrow account will not bear interest for the applicant, unless otherwise provided by the Statute.

- 4.3.2** The amounts paid pursuant to the S-1 applications are nonrefundable and constitute the minimum amount that the SEWER DEPARTMENT is entitled to retain for the aforesaid services.
- 4.3.3** The applicant may request the return of any unused portion of the escrowed funds at the completion or termination of construction or after the SEWER DEPARTMENT has accepted all improvements, or after final release of all maintenance guarantees, whichever is later.
- 4.3.4** The SEWER DEPARTMENT may, in its discretion, refuse to process any application or issue any permit if there is a deficit in the escrow amount of any applicant.

4.4 NJDEP TREATMENT WORKS APPROVAL (TWA)

- 4.4.1** All applications for TWA from NJDEP are to be prepared by the applicant at its sole expense and are subject to review and approval by the SEWER DEPARTMENT and its consulting engineer. All applications will be submitted to NJDEP in the name of the SEWER DEPARTMENT as the applicant. All rights or entitlement contained in a TWA issued by NJDEP will belong to the SEWER DEPARTMENT and not to the applicant. The SEWER DEPARTMENT has the right to withhold the submission of a TWA application to NJDEP for good cause.
- 4.4.2** TWA must be secured for each section of a development or for each project or facility, whenever necessary, before the applicant can apply for S-4 sewer connection permits from the SEWER DEPARTMENT.
- 4.4.3** Final Planning or Zoning Board approval must be obtained prior to the submission of a TWA application to the SEWER DEPARTMENT for approval.
- 4.4.4** TWA applications will only be sent to NJDEP after approval by the SEWER DEPARTMENT of the S-3 application.

SECTION 5 - SEWER MAIN CONNECTIONS

5.1 INSTALLATION COSTS AND INDEMINICATION

All connections to sewer mains will be at the expense of the owner and shall include cleanout riser trap and vent, tapping, fittings, couplings, pipe, labor and related materials. Owner will be fully responsible for street excavation, restoration (including necessary permits) and the complete cost thereof.

The owner(s) shall indemnify the SEWER DEPARTMENT and the Borough from any loss or damage that may directly or indirectly be occasioned by all connections.

5.2 OWNERSHIP RESPONSIBILITIES

Responsibility for ownership, operation and maintenance of sewer main connections (including traps, vents and cleanouts) shall be as follows:

- Sewer Main:
Sewer Department
- Sewer Main Connection Fitting on Main Through Lateral:
Property Owner Being Served

Installation of sewer main connections shall be in conformance with the Uniform Plumbing Code, latest revision, and shall be under the jurisdiction of the Borough Plumbing Inspector. Any construction not approved shall be immediately removed and reconstructed in an approved manner. Any trench backfilled prior to inspection shall be reexcavated.

5.3 TRAPS, VENTS & RISERS

Grease, oil, and sand interceptors (traps) shall be provided when, in the opinion of the SEWER DEPARTMENT, CMCMUA, or the Control Authority, they are necessary for the proper handling of liquid wastes containing floatable grease in such amounts as to cause obstruction to the flow in a sewer main or other interference with the operation of the wastewater treatment facilities; or contain flammable wastes, sand, or other harmful ingredients, except such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the SEWER DEPARTMENT, CMCMUA, or the Control Authority and shall be located as to be readily and easily accessible for cleaning and inspection. In the maintaining of these interceptors, the captured materials shall not be discharged into the SEWER DEPARTMENT wastewater collection system. The owner(s) shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain records of the dates and means of disposal which are subject to review by the SEWER DEPARTMENT, CMCMUA, or the Control Authority. Any removal and hauling of the collected materials not performed by owner's (owners') personnel must be performed by currently licensed waste disposal firms.

Provide traps, vents and risers as shown on detail located in appendices.

5.4 SIZE AND KIND OF LATERAL

The SEWER DEPARTMENT reserves the right to determine the size and kind of sewer main connection piping for all new installations. All new piping sections shall conform to the applicable plumbing code.

5.5 LOCATION

Unless otherwise approved by the plumbing inspector, no sewer main connection piping shall be laid in the same trench with any gas pipe, water service, or any other facility of any public service company, nor within three feet of any open excavation, vault, or meter pit. Sewer main connection piping shall not be aligned under driveways or parallel running sidewalks.

All sewer main connection piping provided for future construction shall be extended two (2) feet beyond the property line.

Existing building sewers may be used in connection with new buildings only when they are found, upgraded to meet the requirements of these Rules and Regulations, and found to be acceptable to the Borough of Wildwood Crest plumbing inspector.

5.6 ELEVATION OF SANITARY FIXTURES

Under no circumstances shall any new sanitary fixtures be installed in a building at an elevation lower than the grade at the mushroom cap or top of fresh air inlet whichever is higher unless special precautions are incorporated into the new fixture installation to prevent surcharging of the new fixture from the sanitary sewer main because of high flows or a blockage. Prior to installation of any fixture which may be lower than the elevation heretofore specified, the property owner shall obtain the approval of the Borough Plumbing Inspector on the type of precautions that will be taken to eliminate the potential flooding of premises with sewage. In the event a fixture is found to be installed at any point lower than heretofore specified, the SEWER DEPARTMENT may revoke the sewer connection permit or discontinue service until the fixture is removed or positive control measures such as a properly maintained check valve are instituted to eliminate any potential surcharging of the building with sewage.

5.7 MAINTENANCE BY OWNER

All piping, traps, sewer vents, risers, check valves and fixtures owned by the property owner, shall be maintained by him in good order. All leaks in the sewer main connection system must be repaired immediately by the owner of the premises. The property owner shall be responsible for obtaining both Borough Highway and Borough Plumbing Permits and notifying both the SEWER DEPARTMENT and Plumbing Inspector of the party engaged by said owner to do any maintenance work, prior to work being commenced, and said party shall not backfill any trench until the work has been inspected and approved by both the Borough Plumbing Inspector and SEWER DEPARTMENT. Any work not acceptable shall be immediately removed and replaced by work which is acceptable.

5.8 SEWER DEPARTMENT NOT RESPONSIBLE

The SEWER DEPARTMENT shall in no way be responsible for maintaining any portion of the sewer main connection system owned by the property owner, or for damage done by sewage escaping there from; or for lines or fixtures on the owner's property; and the owner shall at all times comply with applicable municipal regulations with respect thereto, and make changes therein, required by reason of changes of grade, relocation of mains or otherwise.

5.9 REPLACEMENT OF SEWER MAIN CONNECTION SYSTEM

Where the replacement of the sewer main connection system from the main to the structure is found to be necessary, the property owner shall replace the service in the location as previously used, unless approved by the Borough Plumbing Inspector.

5.10 PROHIBITED CONNECTIONS

The following are prohibited connections into the sanitary sewers, either directly or indirectly:

- (a) Foundation underdrains, sump pumps
- (b) Floor drains, (from other than kitchen drains followed by grease traps and rest rooms); area drains or yard drains
- (c) Rain conductor or downspouts
- (d) Drains from air conditioning and refrigeration equipment
- (e) Drains from storm water inlets or catch basins
- (f) Drains from pieces of equipment or manufacturing processes (without an MIPP permit).
- (g) Privy vault, cesspool, sinkhole, septic tank or similar receptacle.

5.11 PROPERTY SERVED BY SINGLE SERVICE LATERAL

A separate and independent building sewer and lateral piping system shall be provided for each property.

An individual sewer main connection system, shall not serve more than one property but any such property, upon proper application by the owner may be served by two or more service laterals, each of which, for billing purposes, shall be considered as being one customer account.

5.12 POLICY ON BLOCKAGES

5.12.1 When notified of a blockage by the owner, the SEWER DEPARTMENT will inspect the sewer main and take any action that is necessary to assure that the piping downstream of the lateral connection is clear. If the blockage remains, the SEWER DEPARTMENT'S delegate will determine to the best of his judgment the location of the blockage. If it is judged that the blockage is between the sewer main connection and the building, the owner will be notified that it is his responsibility.

5.12.2 The SEWER DEPARTMENT may provide emergency cleaning assistance should a sewer main blockage cause sewer effluent to backup into an owner's property. The SEWER DEPARTMENT provides this assistance as a goodwill gesture only, and by doing so admits no liability for any damage which may have been caused. Before work commences, owner will be required to sign a statement indicating their understanding of the above. Owner will be advised of corrective measures which should be taken to prevent a re-occurrence of the problem. Except in extraordinary circumstances, emergency cleaning assistance will not be provided a second time at the same location or to the same owner.

5.13 LATERAL TESTING

See Section 7.0 for testing procedure.

SECTION 6 - TECHNICAL QUALITY OF PROPOSED WORK

6.1 Sewer System

The Engineer's Report, prepared by the Applicant's Engineer, shall contain the following minimum data and shall conform to the format as listed below:

- (a) Description of geographic area to be served.
- (b) Terrain data in sufficient detail to establish general topographic features of the area to be served.
- (c) Minimum and maximum grades proposed.
- (d) Pump stations required.
- (e) Intended use of the proposed realty improvements and the characteristics of sewerage expected from such use.
- (f) The effect of proposed sewerage facilities on existing or proposed sewerage systems.
- (g) The estimated average and peak daily flow.
- (h) Description of materials to be used.
- (i) Preliminary cost estimate of proposed sanitary sewer facilities.
- (j) Any other factors which would affect design and use of the sewerage system.

6.2 RELATED TECHNICAL STANDARDS - SEWER

6.2.1 General

All sewers must be designed on a "separate system" basis in which all storm water from roofs, cellars, streets and any other areas must not be conducted to the sanitary sewer system. No bypasses or overflows, which allow raw sewage to be discharged from sewers, shall be installed.

The system design and all detail designs must comply with the latest State of New Jersey Department of Environmental design requirements and regulations.

6.2.2 Sewer Design Standards

6.2.2.1 Minimum sewer main diameter shall be 8". All sanitary sewers shall be designed to carry four times the average flow estimated for twenty-five years in advance.

6.2.2.2 Sewers and force mains shall be designed to flow with a minimum velocity of not less than two feet per second at full flow based on Mannings's formula with $n = 0.013$. Inverted siphons shall not be permitted unless approved by the SEWER DEPARTMENT Engineer.

6.3 SEWER MATERIALS STANDARDS

Materials used in the construction of sewer, and force mains, shall be as follows:

1. Gravity sewer mains shall be constructed of one the following materials:

a. PVC:

- Piping and Fittings:

4" - 15" diameter: SDR 35 conforming to ASTM D3034. Fittings shall be provided with Table No. 2 socket dimensions.

18-27" diameter: SDR 35 conforming to ASTM F794 with minimum pipe wall thickness T-1.

Pipe Cell Classification: 12454B.

- Joint Design: Conforming to ASTM D3212.
- Joint Material: Elastomeric ring rubber gasket conforming to ASTM F477.

b. Ductile Iron:

- Pipe: Minimum Class 52 with push on joints conforming to AWWA C151.
- Fittings: Mechanical joint short body fittings conforming to AWWA C153.
- Lining: Pipe fittings and lining shall conform to AWWA C104.

2. Inverted siphons shall consist of not less than two pipes with provisions for rodding and flushing. Flow control gates shall be provided on the chambers. Force mains and inverted siphons shall be constructed of the following:

- a. Less than 4" Diameter: As approved by the Engineer.
- b. 4" Diameter and Greater: Ductile iron conforming to the following:

Pipe:

Below Grade: Minimum Class 52 with push on joints conforming to AWWA C151.

Above Grade or Exposed: Minimum Class 53 with flanged joints conforming to AWWA C115. Uniflanges are not acceptable.

Fittings:

Below Grade: Mechanical joint short body conforming to AWWA C 153.

Above Grade or Exposed: Flanged conforming to AWWA C110, pressure Class 250.

Lining: Pipe and fittings lining shall conform to AWWA C104.

3. Manholes/Wet Wells/Valve Chambers: shall be constructed in accordance with the following:
 - a. All structures shall be precast reinforced concrete. Circular structures shall conform to ASTM C478 and rectangular/square structures shall conform to ASTM C913.
 - b. All structures shall be designed to withstand an AASHTO H-20: S16 live truck loading and groundwater level at finished grade.
 - c. Joints: Conforming to ASTM C443.
 - d. Joint Gaskets: Conforming to ASTM C361. If gaskets are not available due to manufacturer's recommended construction process provide two stands of butyl rubber tape around the entire circumference of each joint. Tape shall be suitable for application at 10 degree F without the supplying of a temporary heat source.
 - e. Pipe Connections to Structures:
 - New Structures:

Rubber Gasket Pipe to Manhole Seal: Conforming to ASTM C923. Gasket shall be cast integrally in manhole wall.
 - Existing Structures: Pipe shall be provided with an elastomeric plastic concrete manhole adapter as manufactured by Fernco or equal.
 - f. Castings: Conforming to ASTM A 48, Class 30 B.
 - g. Brick: Conforming to ASTM C-32.
 - h. Force Main Manhole Liners: Existing manholes that receive flow from a new force main shall be lined with a PVC liner as directed by SEWER DEPARTMENT. Proposed manholes which will receive flow from a force main shall be lined with a manhole painting system as directed by SEWER DEPARTMENT.

6.4 PUMP STATIONS - TECHNICAL STANDARDS

6.4.1 General

1. All SEWER DEPARTMENT owned pump stations shall be the submersible type provided with emergency generator and automatic transfer switch.
2. All SEWER DEPARTMENT owned pump stations shall be designed based on criteria provided by the NJDEP and Engineer.

3. Provide three (3) copies of the pump station operations and maintenance guide including, but not limited to:
 - a. Certified pump curves.
 - b. As-built plans of the pumping station.
 - c. Suggested maintenance schedule.
 - d. Complete and detailed schematics of all electrical systems and controls.
4. Provide minimum eight hours of manufacturer's training to WILDWOOD SEWER DEPARTMENT personnel.

6.4.2 Site Plans

- a. Landscaping shall be provided consistent with the site restoration/landscaping plan, preferably with vegetation of the evergreen species.
- b. Provide minimum driveway length of 40' from right-of-way line to gate. Minimum driveway width shall be 16'.

6.5 PLANS, PROFILES, AND SPECIFICATIONS OF ALL PROPOSED FACILITIES

6.5.1 Format

Plans shall be of uniform size 18" x 24", 24" x 36" or 30" x 48" with a 1/2" border on top, bottom and right side, and a 2" border on the left side, the last one for binding. All sheets shall be numbered. Drawing scale shall be 1" = 30' or larger (i.e., 1"=20').

6.5.2 General

The following is a list of information that must be shown on the plans as a minimum:

- a) Existing and proposed sanitary sewers.
- b) Existing and proposed storm sewers.
- c) Existing and proposed utilities.
- d) Topography.
- e) Existing and proposed streets.
- f) Tributary areas.
- g) True and/or magnetic north.
- h) Outbound line/property line.
- i) Title, date and scale.
- j) Areas from which sewage is to be pumped shall be labeled clearly.
- k) Pipe profiles.
- l) Manhole and pipe trench details.

6.5.3 Elevation

All elevations shall be based on U.S.G.S. datum and tied into a minimum of one U.S.G.S. monument.

6.5.4 Distances, Grades and Sizes

The distance and stationing between manholes, grades, sewer pipe sizes, elevations and materials shall be shown on the plans. Arrows shall show the direction of the flow.

6.6 PROPERTY TRANSFER

1. Applicant shall provide legal description for property to be transferred to the WILDWOOD SEWER DEPARTMENT, if applicable. All property corners to be set with concrete monuments.
2. Applicant shall file easements with County. Minimum sanitary sewer easement width is 25'.

6.7 INSTALLATION STANDARDS

Install materials in accordance with the following:

- a. All materials shall be installed in accordance with the details included in the appendices.
- b. All materials shall be as-built and tested in accordance with Section 7 of the Rules and Regulations.
- c. The general sewer main installation notes listed in the appendices shall be incorporated into each drawing set showing sewer main work.
- d. The interior of all pipe be shall be thoroughly cleaned before being lowered into trench.
- e. All sewer mains systems shall be watertight with all visible leaks being repaired.
- f. After cutting PVC pipe, provide beveled angle on spigot end of pipe.
- g. Unless otherwise approved by the Engineer, no pipe couplings are permitted between gravity sanitary sewer system manholes. For new construction, no changing of pipe materials is permitted between manhole sections.
- h. Under no circumstances shall pipe be laid when trench conditions or the weather is unsuitable for such work.
- i. All gravity sewer mains shall be installed with the aid of a laser.
- j. Within pump station wet wells all bolts and nuts shall be either Type 304 or 316 stainless steel.
- k. Minimum compressive strength for concrete shall be 4,000 psi. Concrete thrust blocks shall be installed on all force main bends greater than 10 degrees and at all tees, wyes, caps, valves, reducers and wherever else required.
- l. Connection to Existing Manholes: Core new opening in manhole, place the pipe stub to the inside face of the manhole and make a watertight seal around the stub with non-shrink grout. Modify the existing channel to accommodate the new pipe.

- m. All work shall be conducted in accordance with both OSHA Regulations and confined space procedures.
- n. All excavations shall be adequately guarded so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the Borough and the SEWER DEPARTMENT.

SECTION 7 - INSPECTION AND TESTING OF INSTALLED FACILITIES

7.1 INSPECTION OF SEWERAGE FACILITIES DISTRIBUTION SYSTEM DURING COURSE OF CONSTRUCTION

- 7.1.1** All sewerage system construction (including sewer main connections) in the BOROUGH OF WILDWOOD CREST shall be monitored by the Engineer / SEWER DEPARTMENT personnel to ensure compliance with the approved plans and specifications.

All systems (SEWER DEPARTMENT owned and privately owned) are subject to the testing procedures specified herein.

- 7.1.2** A temporary plug shall be installed in the manhole furthest downstream in any sewer main under construction and shall remain intact and unloosened until written permission is received from the Engineer to remove same. Owner's representative shall maintain the manhole and upstream piping in a clean and dewatered condition.
- 7.1.3** Owner shall provide all necessary labor, gas detectors, safety equipment, materials and other equipment to assist the Engineer during testing. Owner shall provide for maintenance of traffic during testing.

7.2 AS-BUILT REQUIREMENTS

7.2.1 General

The following procedure defines the minimum requirements imposed on the owner when submitting as-built sewer main and force main drawings.

The owner shall meet all the requirements listed under the preliminary submittal requirements section before commencing witnessed testing of any sewer main or force main.

Any submittals not meeting all the minimum requirements listed in the following procedure will not be reviewed by the Engineer.

7.2.2 PRELIMINARY AS-BUILT SUBMITTAL REQUIREMENTS

7.2.2.1 General

- a. This submittal consists of utilizing the approved drawing set with the design information distinguished from the corresponding as-built information. Methods such as circling or

drawing a thin line through the design information shall be utilized. The design and as-built information shall be legible.

- b. Each submittal shall consist of one (1) electronic copy and three (3) copies of each drawing included in the as-built transmittal. All drawings shall be signed and sealed by a State of New Jersey licensed surveyor.
- c. If the alignment of the sewer main or force main has been revised during construction the as-built alignment shall be shown.
- d. All titles to easements shall be based on the as-built alignment of the piping. All easements shall be recorded with CAPE MAY County Clerk by the applicant. Documentation substantiating that this has been accomplished shall be submitted to the Engineer.

7.2.2.2 Sewer Mains: As-builts shall comply with the following:

- a. As-built manhole rim elevations shall be provided.
- b. As-built invert elevation of all pipes penetrating each manhole shall be provided.
- c. As-built pipe lengths measured from manhole centerline to manhole centerline shall be provided.
- d. As-built pipe slopes shall be calculated by the applicant.
- e. As-built pipe diameter and pipe material shall be provided.
- f. The as-built length from each sewer main connection to the downstream manhole shall be provided. In addition, the as-built length from the last sewer main connection to the upstream manhole shall be provided.
- g. Any sewer main connection deviating from the standard wye connection and 1/4" per foot slope shall be noted.
- h. Any sewer main connection left for a future connection shall have the pipe cover and three (3) tie dimensions taken at the end of the lateral (i.e. measurement from a permanent object; corner of house, inlet, manhole, hydrant, etc.).
- i. All as-built concrete encasements and concrete cradles shall be noted.
- j. The as-built manhole frame and cover manufacturer's name and model number shall be listed.
- k. All the above information shall be shown on a plan drawing.

7.2.2.3 Force Mains: As-builts shall comply with the following:

- a. As-built invert elevation at each bend shall be provided. In addition the invert elevation at the force main as-built high point shall be provided.
- b. At each bend three (3) tie dimensions shall be taken.
- c. The dimensions for each thrust block shall be provided.
- d. When restrained joints are provided the dimension to the first unrestrained joint shall be provided.
- e. Manufacturer's data on air relief valves, gauges and all valves shall be provided separately.
- f. As-built drawings of any air relief and blow off chambers shall be provided.
- g. The as-built pipe length between bends shall be provided.

- h. As-built pipe diameter and pipe material shall be provided. References to ductile iron pipe being cement/non-cement lined shall be included.
- i. All the above information shall be shown on a plan and profile. The profiles shall show the location of all crossing utilities and their invert elevation.

7.2.2.4 Final As-Built Submittal Requirement

The final submittal is the record plan which consists of the entire project on one (1) 1"=100 feet scale plan view with the streets outlined and labeled, and the as-built sewer main and force main information shown. For smaller projects the record plan scale may be adjusted or the original drawings utilized as a background. The drawing size shall be twenty-four inches (24") by thirty-six inches (36"). Unless other arrangements are made by the owner, the Engineer shall prepare the final as-built submittal.

7.3 TESTING OF COMPLETED SYSTEM

7.3.1 General

All gravity sewer mains and force mains are required to pass the following tests to insure there will be neither exfiltration or infiltration:

Gravity Sewer Mains:

Exfiltration, Infiltration and Lamping Tests

Deflection Testing (PVC gravity sewer mains only.)

Video Taping

Gravity Sewer Main Connections:

Exfiltration Test

Force Mains:

Exfiltration

Manholes:

Vacuum

No testing will be witnessed by the Engineer until the requirements provided in the as-built section are met.

7.3.2 GRAVITY SEWER MAIN TESTING

7.3.2.1 Method Of Testing-Exfiltration Test For Gravity Sanitary Sewer Mains

- a. General Information:

1. Perform all tests in presence of the Engineer.
 2. Conduct exfiltration test when all utilities (including gas, water, telephone, sewers, manholes, and laterals) have been installed.
 3. Establish test section between consecutive manholes.
 4. All testing requirements shall be met prior to acceptance of sewer facilities by the Engineer.
- b. Procedure for exfiltration test (low pressure air test, 3.5 lb.):
1. Plug test section of sewer line at each end. Tap one (1) plug and provide air inlet connection for filling pipe from air compressor.
 2. Cap or plug all service laterals, stubs and fittings connecting to sewer test section, brace same against internal pressure to prevent air leakage by slippage and blowouts.
 3. Connect air hose to tapped plug selected for air inlet. Connect other end of air hose to portable air control equipment used for controlling air entry rate to sewer test section and monitoring air pressure in pipeline.
 4. Air control equipment shall include shut-off valve, pressure regulating valve, pressure reduction valve and monitoring pressure gauge having pressure range from 0 to 10 psi and an accuracy of 1/2 percent.
 5. Connect another air hose between air compressor (or other source of compressed air) and air control equipment. This completes test equipment set up.
 6. Supply air to test section slowly, filling pipeline until constant pressure of 4.0 psig (greater than average groundwater back pressure) is maintained.
 7. When constant pressure of 4.0 psig is reached, throttle air supply to maintain internal pressure above 4.0 psig for at least two (2) minutes, permitting temperature of entering air to equalize with temperature of pipe wall. During this stabilization period, check all capped and plugged fittings with a soap solution to detect leakage at connections.
 8. If leakage is detected, release pressure in line and tighten all leaky caps and plugs. Start test operation again by supplying air. When necessary to bleed off air to tighten or repair faulty connection, a new two-minute interval shall be allowed after pipeline has been refilled.
 9. After stabilization period, adjust air pressure to 4.0 psig (greater than average groundwater back pressure) and shut off or disconnect air supply. Observe gauge until air pressure reaches 3.5 psig. At 3.5 psig commence timing with a stop watch which is allowed to run until the line pressure drops to 3.0 psig. The time required, as shown on the stop watch, for a pressure loss of 0.5 psig is used to compute air loss.
 10. If the time, in minutes and seconds, for the air pressure to drop from 3.5 to 3.0 psig is GREATER than that shown in Table 1 for designated pipe size, the section undergoing test shall have passed.
 11. If the time, in minutes and seconds, for 0.5 psig drop is LESS than shown in Table 1 for designated pipe size, the section of pipe shall have failed the test. Necessary repairs shall be made by the Contractor and the line retested.

TABLE 1

TIME REQUIREMENTS FOR SEWER MAIN AIR TESTING MAIN

Sewer Main Diameter Inches*	Time, Minutes
4	2
6	3
8	5
10	7
12	11
14	15.5
15	17
16	20
18	25
20	32
21	34
24	45
27	57
30	71

*Multi Pipe Sizes: When sewer line undergoing test is 8 inch or larger diameter pipe and includes different sized laterals, the test time shown for the sewer line shall be utilized and no time adjustments for the laterals shall be considered.

- c. Procedure for air pressure correction due to groundwater:
1. Air pressure correction is required when prevailing groundwater is above sewer line being tested. Under this condition, air test pressure shall be increased 0.433 psi for each foot groundwater level is above invert of pipe.
 2. Establish height of groundwater (in feet) above pipe invert:
 - a) During Sewer And Manhole Construction, install one-half inch diameter pipe nipple (threaded one or both ends, approximately ten inches long) through manhole wall directly on top of one of the sewer pipes entering manhole, with threaded end of nipple extending inside the manhole.
 - b) Seal pipe nipple with a threaded one-half inch (1/2") cap.
 - c) Immediately before air testing, determine groundwater level by removing the threaded cap from nipple, blowing air through the pipe nipple to remove any obstructions, and connecting clear plastic tube to pipe nipple.
 - d) Hold plastic tube vertically permitting water to rise to groundwater level.
 - e) After water level has stabilized in plastic tube, measure vertical height of water, in feet, above invert of sewer pipe.

3. Determine air pressure correction, which is added to 4.0 psig normal starting pressure of test, by dividing the vertical height in feet by 2.31. The result gives air pressure correction in pounds per square inch to be added:

Example: If the vertical height of water from the sewer invert to the top of the water column measures 11.55 feet, the additional air pressure required would be

$$\frac{(11.55)}{2.31} = 5 \text{ psig}$$

Starting pressure of the test would be 4.0 plus 5 or 9.0 psig, and the one-half pound drop becomes 8.5 psig. There is no change in the allowable drop (0.5 psig) or in the time requirements established for the basic air test.

7.3.2.2 Method Of Testing - Infiltration Test for Gravity Sanitary Sewer Mains

a. General:

1. All work relating to infiltration testing shall be performed in the presence of the Engineer. The weir will be provided by the Engineer.
2. All requirements of this specification shall be met prior to acceptance of sewer facilities.

b. Procedure for infiltration test:

1. Examine the sanitary sewer system for infiltration at the downstream end of the system after construction has been completed.
2. In the event that there is infiltration and water is flowing at the downstream end of the system, then the source and volume of flow shall be determined by an infiltration test.
3. The test shall consist of isolating the source of infiltration by plugging the first upstream manhole and observing to see if the flow stops. This procedure is repeated one manhole at a time until each source has been isolated.
4. When the infiltration has been isolated to a section or area, the volume of flow shall be determined using a ninety-degree (90°) v-notch weir inserted into the pipe.
5. The actual infiltration rate will be determined by the Engineer based on weir measurements. This rate will be compared with the allowable infiltration rate of 50 gallons/inch diameter/mile of pipe/per day (24 hours).
6. If the allowable infiltration rate is greater than the actual infiltration rate, the infiltration test passes. If the actual infiltration is greater than the allowable infiltration rate then the infiltration test fails.
7. In the event the infiltration test fails, the section of the pipe involved shall be repaired as necessary and the test repeated.

7.3.2.3 Method Of Testing - Lamping for Gravity Sanitary Sewer Mains

a. General:

1. Lamping shall be performed on all gravity sanitary sewer mains.
2. Lamping will be performed by the Engineer. The owner shall provide all necessary labor, gas detectors and safety equipment to assist the Engineer during the lamping inspection.

b. Procedure for Lamping:

1. Lamping consists of visually examining the inside of the pipe between two consecutive manholes using light and mirror.
2. The light is shown from one manhole towards the other manhole.
3. A mirror is held at the invert of pipe and adjusted so that light and barrel of pipe can be seen.
4. The barrel of the pipe shall have no vertical deflection and at least seventy-five percent (75%) of the barrel shall be visible in the horizontal direction.
5. In the event that lamping shows the pipe not laid to line and grade within the acceptance limits specified above, then it shall be repaired and relamped as necessary until the lamping complies with the acceptance limits.
6. No lamping shall be performed until all gravity lines have been jet cleaned and vacuumed.

7.3.2.4 Method Of Testing - Deflection Test for Gravity Sanitary Sewer Mains

a. General:

For pipe conforming to the requirements of ASTM D 3034, F 679 and F 794 maximum allowable pipe deflection (reduction in vertical inside diameter) shall be 7 1/2%.

For pipe conforming to the requirements of ASTM D 2241, AWWA C-900 and AWWA C-905 maximum allowable pipe deflection (reduction in vertical inside diameter) shall be 5%.

b. Procedure for Deflection Testing:

Deflection tests shall be successfully performed on the complete installation by means of one of the following methods prior to the acceptance of construction.

1. "Go-No-Go" mandrel properly sized.
2. Calibrated television.

7.3.2.5 Method Of Testing - Video Taping Test for Gravity Sanitary Sewer Mains

a. General

1. Owner to submit one original and one copy of the Inspection and Work Report specified in this Section.

2. Owner to submit two (2) copies of the video taping.
3. Reports and video tapes shall be reviewed and approved by the Engineer prior to system activation.

b. Television Inspection:

1. Owner's representative to perform closed circuit television inspection of pipe.
2. Engineer shall have access to view television monitor screen at all times.
3. Owner's representative to provide pulling cable or rod for camera with footage meter so point of observation will be known at all times.
4. Owner's representative shall provide temporary water to insure a minimum of 1/4" depth of water is flowing through the piping during the television inspection work.
5. The location of all laterals shall be determined during the television inspection, and included in the Inspection and Work Report to be furnished.
6. If videotaping and reports indicate a deficiency in the installation of the sanitary sewer main, the owner shall correct the deficiency and reteleviser the new sanitary sewer main.

c. Video Tapes / Discs:

1. Provide extra high quality video (VHS) tapes or discs (DVD) which clearly show conditions as they appeared on the television monitor screen.
2. Provide specific views as the Engineer may request during television inspection and repair operations.
3. Coordinate all video tapes with the specified Inspection and Work Report.

d. Inspection and Work Report:

Submit bound, typewritten reports to the Engineer outlining all work accomplished. Reports shall include:

1. Results of television inspection, including a description of all noteworthy areas.
2. Listing of lateral locations. Coordinate report with the video tapes showing other views as required by Engineer.
3. Any additional information as required by Engineer.
4. All noted items shall be identified by station. The centerline of the downstream manhole in each section shall be considered Station 0+00.

7.3.2.6 Method of Testing - Exfiltration Test for Laterals

Prior to initiating the final connection of a lateral at the main, the lateral shall be pressure tested. The lateral shall be made tight from the point of connection at main to the lowest cleanout in the building and pressure tested under a ten foot head of water. The water level at the top of the test head shall not drop for at least 15 minutes. All other applicable plumbing code testing shall be completed.

7.4 SANITARY FORCE MAIN INSPECTION AND TESTING

7.4.1 General

Once both construction and the as-builts have been completed on the force main and all its appurtenances, the Contractor may request testing.

The Contractor will be responsible for supplying all equipment, tools, safety equipment and personnel to perform the necessary tests. He will also provide personnel, as required to assist the Engineer during his visual inspection. The Engineer shall be present at all times during pressure testing of a force main.

A visual inspection of all terminations and manholes will be performed to insure that construction on this force main system meets all the drawing and specifications requirements, and in addition, all clean-up work has been completed.

7.4.2 Method Of Exfiltration Test

7.4.2.1 General Requirements:

- a. Perform all tests in presence of the Engineer.
- b. Conduct exfiltration test prior to backfilling trench.
- c. Establish test sections between valves, or as directed by the Engineer.
- d. Sections of main shall be tested before connection to existing mains. At connections to existing mains, existing static pressure shall be applied for test. No joints shall be covered until tested in presence of Engineer.
- e. All visible leaks shall be repaired regardless of the amount of leakage. Defective joints, pipe and fittings shall be removed and replaced by the Contractor.
- f. All requirements of this specification shall be met prior to acceptance of force main by the SEWER DEPARTMENT.

7.4.2.2 Procedure for exfiltration test:

- a. Expel air from pipe through blow-offs, or taps required for release of air from high points. Taps for release of air and blow-offs for filling pipe and releasing air shall be provided by the owner's representative.
- b. Fill each pipe section slowly with water, and subject pipe to hydrostatic pressure of 150 psi for two (2) hours.

- c. When test pressure is reached, measure amount of make-up water required to maintain this pressure during the two (2) hour test period. Pressure shall remain constant on the pipe and shall not drop more than 5 pounds nor be increased more than 5 pounds during the test period.
- d. The maximum amount of makeup water that can be added shall be as follows:

Test Pressure	Nominal Pipe Diameter (Inches)	Allowable Leakage Per 1000 feet of Pipe (GPH)
150 PSI	3	0.28
	4	0.37
	6	0.55
	8	0.74
	10	0.92
	12	1.10
	14	1.29
	16	1.47
	18	1.66
	20	1.84
	24	2.21
	30	2.76
	36	3.31

- e. Acceptance shall be determined based on the amount of makeup water to be added to the pipe being tested. If any test of pipe has leakage greater than the specified amount the owner's contractor shall locate and make repairs as necessary until the leakage is within the specified allowance.

7.5 MANHOLE TESTING

7.5.1 General

- a. All gravity sewer and force main manholes shall be tested.
- b. Testing of "Live Doghouse" type manholes is waived
- c. Regardless of test results all visible leaks shall be eliminated.

7.5.2 Method of Test

- a. Each manhole shall be tested immediately after assembly and prior to backfilling.
- b. All lift holes shall be plugged with an approved non-shrink grout.
- c. No grout will be placed in the horizontal joints before testing.
- d. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole.
- e. The test head shall be placed at the inside of the top of the cone section and the seal inflated in accordance with the manufacturer's recommendation.
- f. A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to 9 inches. The manhole shall

pass if the time is greater than 60 seconds for a 48" diameter manhole, 75 seconds for 60", and 90 seconds for 72."

- g. If the manhole fails the initial test, necessary repairs shall be made from the manhole exterior with a non-shrink grout while the vacuum is still being drawn. Retesting shall proceed until a satisfactory test is obtained.

SECTION 8 - BILLING, PAYMENTS, DELINQUENCIES, ETC.

8.1 RENDERING OF BILLS FOR SEWER SERVICE

A single bill for sewer services will be rendered quarterly to each customer. Normally, the bill will be printed the second week of the month and rendered as soon as thereafter as practicable.

Bills are payable at the designated pay agency of the WILDWOOD SEWER DEPARTMENT.

Any fees incurred due to the collection of outstanding balances shall be the sole responsibility of the customer.

8.2 PAYMENT SCHEDULE

- 8.2.1** For all new treatment/user charges, if a bill is not paid within 30 days of the date of billing, a 10% penalty will be added as a one time charge.

- 8.2.2** In the case of when a disputed bill is resolved, the customer's payment is due within 10 days of the termination of the dispute.

8.3 DELINQUENT ACCOUNTS

- 8.3.1** Any bill unpaid after 30 days of presentation shall be classified as delinquent. Any bill unpaid after 44 days of presentation shall be subject to discontinuance of service (water shutoff) after not less than 10 days of written notice.

- 8.3.2** If service is discontinued for non-payment of the account, it will not be restored until the turn on fee (payable in cash) plus all unpaid charges are paid or satisfactory arrangements have been made for payment.

- 8.3.3** If the check used as payment to prevent shutting off of service is returned by the bank for non-sufficient funds, a processing fee will be charged against the account. The processing fee is listed in Appendix I.

- 8.3.4** Any unpaid balance of service charges and penalties hereon may be a lien against the property and action may be initiated.

- 8.3.5** At the WILDWOOD SEWER DEPARTMENT'S discretion the delinquent user may be permitted to temporarily suspend discontinuation of service by providing a minimum of 40% of the unpaid bill and entering into a contract with the WILDWOOD SEWER

DEPARTMENT to make monthly payments in amounts and duration as determined by the WILDWOOD SEWER DEPARTMENT. At the WILDWOOD SEWER DEPARTMENT'S discretion one missed monthly payment will immediately resume discontinuance of services procedures.

8.4 DISCONTINUANCE OF SERVICE

Service may, at the sole discretion of the WILDWOOD CREST SEWER DEPARTMENT, be discontinued for any of the following reasons:

- (a) Misrepresentation in application
- (b) Non payment of any charge occurring under the application.
- (c) Non payment of bills within time prescribed.
- (d) Violation of any rules of the WILDWOOD CREST SEWER DEPARTMENT.

8.5 RENEWAL SERVICE

Service will be renewed when the conditions under which such service was disconnected are corrected and upon payment of all accrued charges.

8.6 DEPOSITS

8.6.1 Deposits are required from customers taking service for a period of less than thirty (30) days, in an amount equal to the estimated gross bill for such temporary period, plus the cost of making and discontinuing such service. Deposits are required from any other customer who becomes habitually delinquent, provided that in no instance will deposits be required in excess of the estimated gross bill for any single billing quarter plus one (1) month with a minimum charge for the one month being the current user rate for the first 5,000 gallons/quarter.

8.6.2 Any customer having paid a deposit shall pay bills for sewerage service as rendered, in accordance with the rules of the WILDWOOD SEWER DEPARTMENT, and the deposit shall not be considered as payment on account of a bill during the time the customer is receiving service.

8.6.3 Deposits shall be returned to the depositor at final settlement if all outstanding sewer fees have been paid. The WILDWOOD SEWER DEPARTMENT shall have the right to apply the deposit against outstanding bills at final settlement.

8.6.4 No interest will be paid on deposits.

8.7 ABATEMENTS

At the WILDWOOD SEWER DEPARTMENT'S discretion abatements on metered bills for leaks or water wasted due to damaged fixtures may be provided up to a maximum of 50% of the amount determined by the WILDWOOD SEWER DEPARTMENT to be an exceedance over the anticipated bill.

If the WILDWOOD SEWER DEPARTMENT was to consider abatement, a plumber's bill for the repairs must accompany the request.

APPENDIX I

STANDARD CONSTRUCTION NOTES

SANITARY SEWER NOTES

ALL WORK SHALL BE IN ACCORDANCE WITH THE BOROUGH'S SEWER DEPARTMENT RULES AND REGULATIONS.

THE CONTRACTOR SHALL ARRANGE A PRECONSTRUCTION MEETING WITH THE SEWER DEPARTMENT AND THE DEPARTMENT'S ENGINEER AT LEAST ONE (1) WEEK PRIOR TO COMMENCING CONSTRUCTION.

ALL MATERIALS SHALL BE IN ACCORDANCE WITH DETAILS SHOWN. ANY DEVIATIONS SHALL BE SUBMITTED TO THE SEWER DEPARTMENT FOR REVIEW.

BEFORE COMMENCING WORK, THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATION OF ALL EXISTING TIE-IN MANHOLES.

PROVIDE MINIMUM 3.0 FEET OF COVER OVER ALL SANITARY SEWER MAINS.

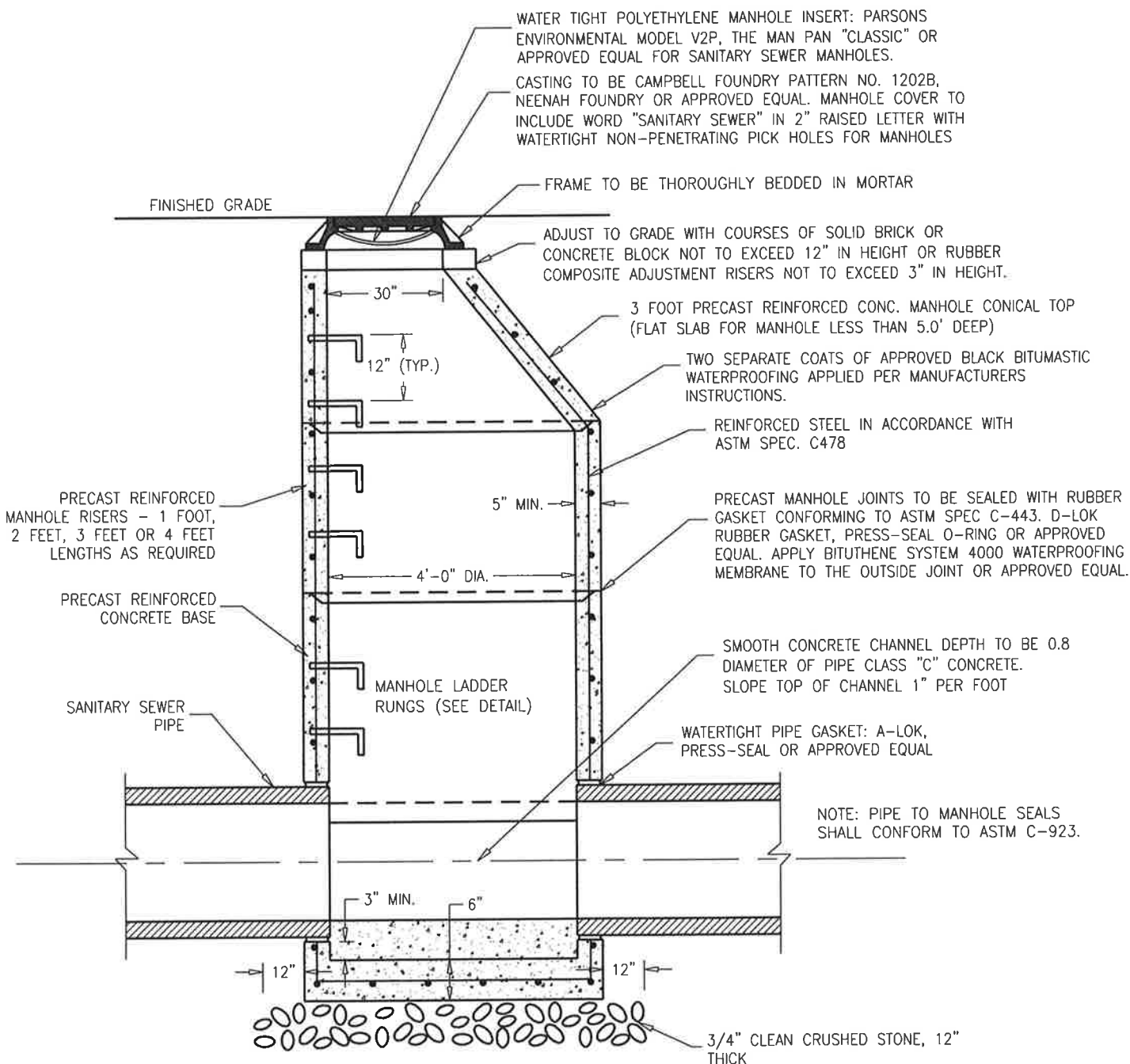
MANHOLES LOCATED IN GRASS AREAS SHALL HAVE THE COVER RAISED MINIMUM THREE INCHES (3") ABOVE THE SURROUNDING GRADE WITH FILL MATERIAL GRADUALLY SLOPING AWAY FROM THE COVER.

THE EXISTING SANITARY SEWER MAIN SHALL NOT BE USED AS A CONSTRUCTION DRAIN.

THE LAST DOWNSTREAM MANHOLE PRIOR TO CONNECTING TO THE SANITARY SEWER SYSTEM SHALL BE PROVIDED WITH A PLUG ON THE DOWNSTREAM PIPE PENETRATION. THE PLUG IS PERMITTED TO BE MOVED ONLY AFTER THE CONTRACTOR HAS COMPLETED CLEANED AND DEWATERED THE PROPOSED UPSTREAM SANITARY SEWER.

PROVIDE TEN FOOT (10') MINIMUM HORIZONTAL SEPARATION BETWEEN SANITARY SEWER MAINS AND WATER MAINS.

ALL SEWER MAINS SHALL BE INSTALLED WITH THE AID OF A LASER.



NOTES:

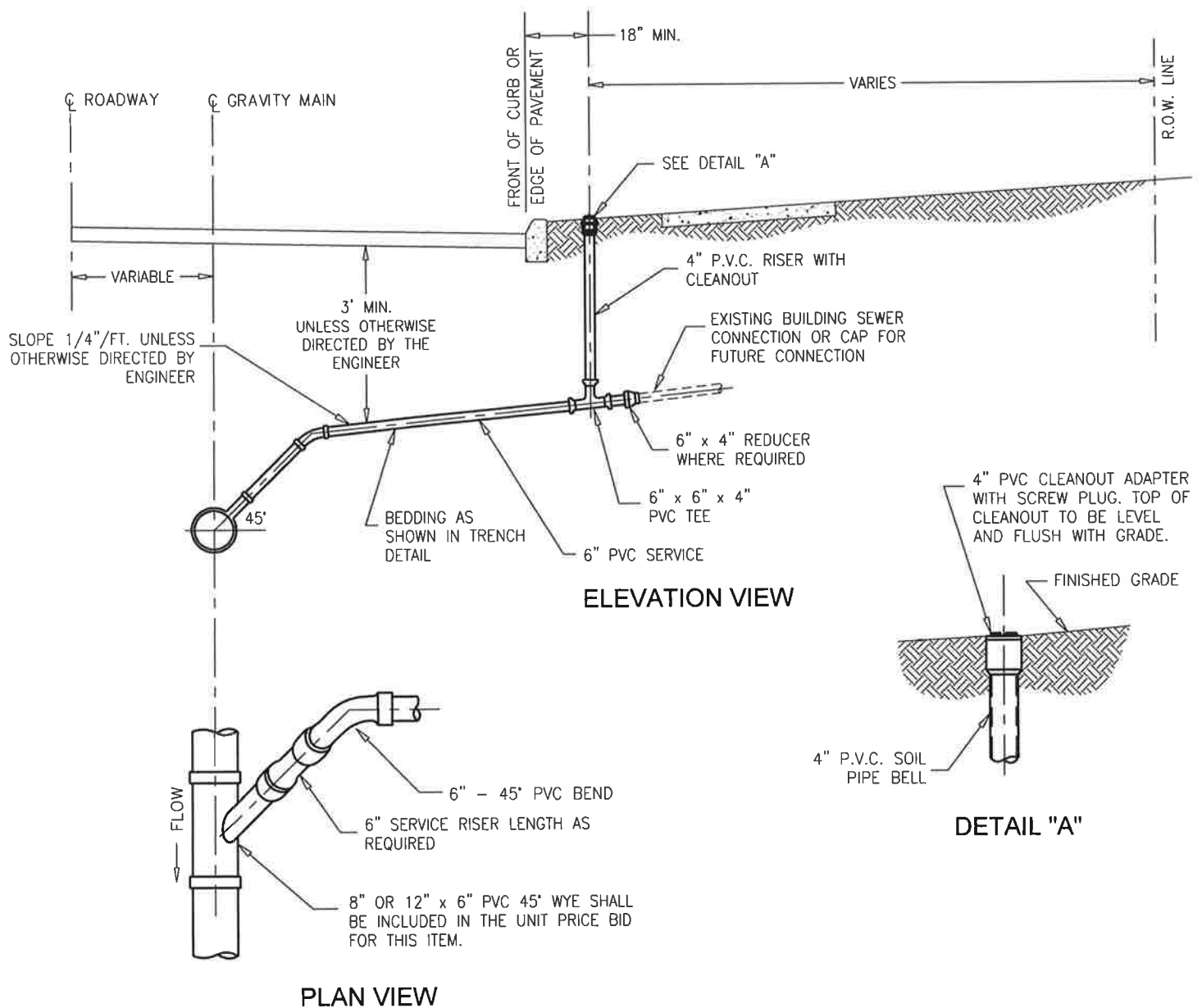
1. PRECAST MANHOLE IN ACCORDANCE WITH ASTM C478, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. MANHOLE TO BE MANUFACTURED BY ATLANTIC CONCRETE OR APPROVED EQUAL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ADEQUATE BALLAST TO OFFSET FLOATATION FORCES ACTING ON MANHOLES IN WET AREAS.

SANITARY SEWER MANHOLE, 4' DIAMETER

N.T.S.

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1



NOTES:

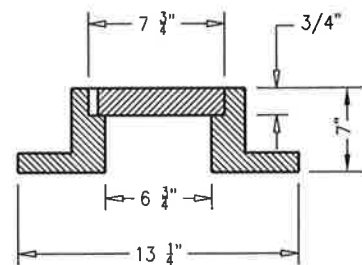
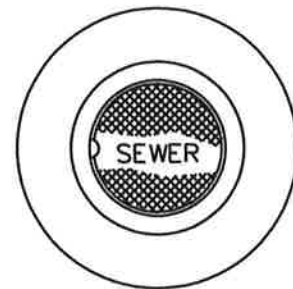
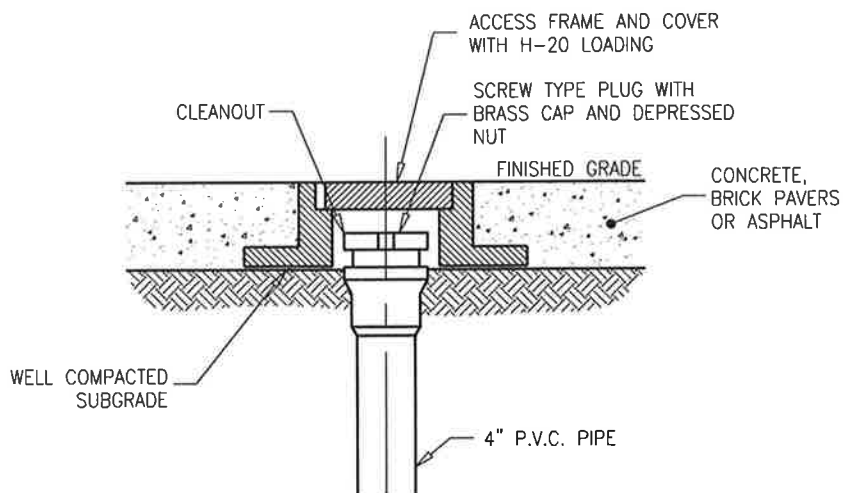
1. DETAIL "A" TO BE USED IN GRASS AND SIDEWALK AREAS ONLY.
2. RECESSED NUT TYPE CLEANOUT SHALL BE USED IN CONCRETE SIDEWALK.
3. ALL SERVICES TO P.V.C. PIPE SHALL BE SDR-26 OR SDR-35 CONFORMING TO ASTM-D-3034.
4. CONNECTION TO SANITARY SEWER MAIN MUST BE MADE WITH HOLE SAW. CONNECTION WITH HAMMER AND CHISEL OR ANY OTHER MEANS WILL NOT BE PERMITTED.
5. INSERTA TEE USED FOR CONNECTION TO EXISTING SANITARY SEWER MAIN MUST BE APPROVED BY THE BOROUGH PRIOR TO INSTALLATION.

TYPICAL SANITARY SEWER LATERAL DETAIL

N.T.S.

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2



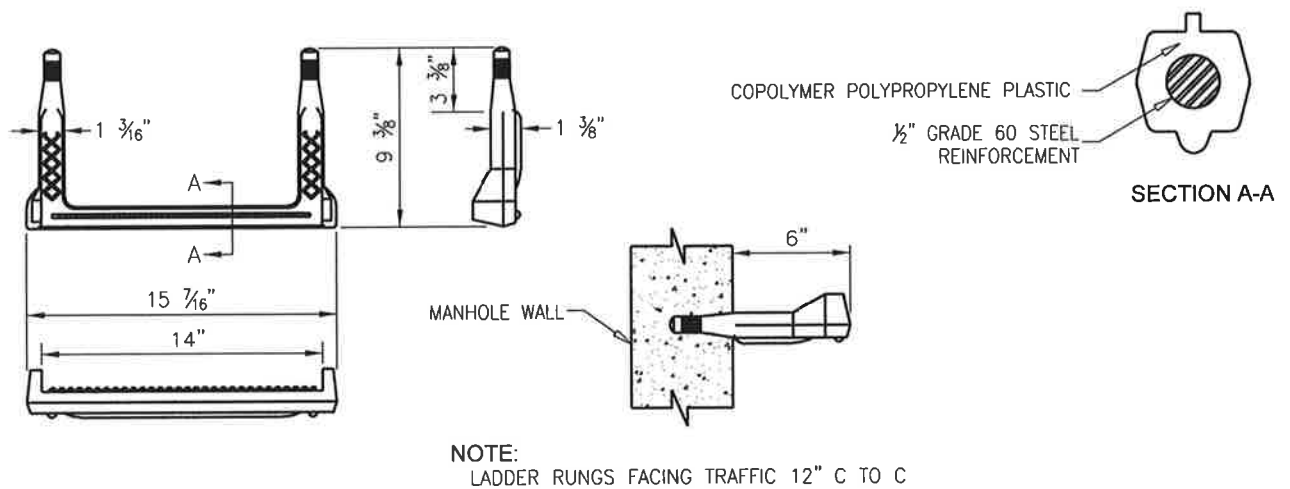
NOTES:

1. FOR USE IN CONCRETE/BRICK PAVEMENT DRIVEWAYS OR ASPHALT AREAS ONLY.
2. THERE WILL BE NO SEPARATE PAYMENT FOR SANITARY SEWER ACCESS FRAMES AND COVERS, BUT THE COST SHALL BE INCLUDED IN THE COST FOR "SANITARY SEWER SERVICES"

PATTERN NUMBER 4173 CAMPBELL
FOUNDRY CO. OR APPROVED EQUAL

SANITARY SEWER ACCESS FRAME AND COVER DETAIL

N.T.S.



COPOLYMER POLYPROPYLENE PLASTIC LADDER RUNG

N.T.S.

PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER

EXISTING GRADE

EXISTING ROADWAY

TRENCH WIDTH + 24"

CL OF PIPE

SAWCUT, MEET & MATCH EXISTING PAVEMENT ELEVATIONS. APPLY HOT-POURED RUBBER ASPHALT JOINT SEALER. (TYPICAL BOTH SIDES)

"SELECT FILL" BACKFILL TO BE N.J.D.O.T. DESIGNATION 1-13 UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

NOTES:

1. SEWER PIPE MATERIAL SHALL BE IN ACCORDANCE WITH THE BOROUGH'S RULES AND REGULATIONS.
2. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE BOROUGH'S RULES AND REGULATIONS.
3. A MINIMUM COVER OF 36" SHALL BE MAINTAINED.

VARIES

6"

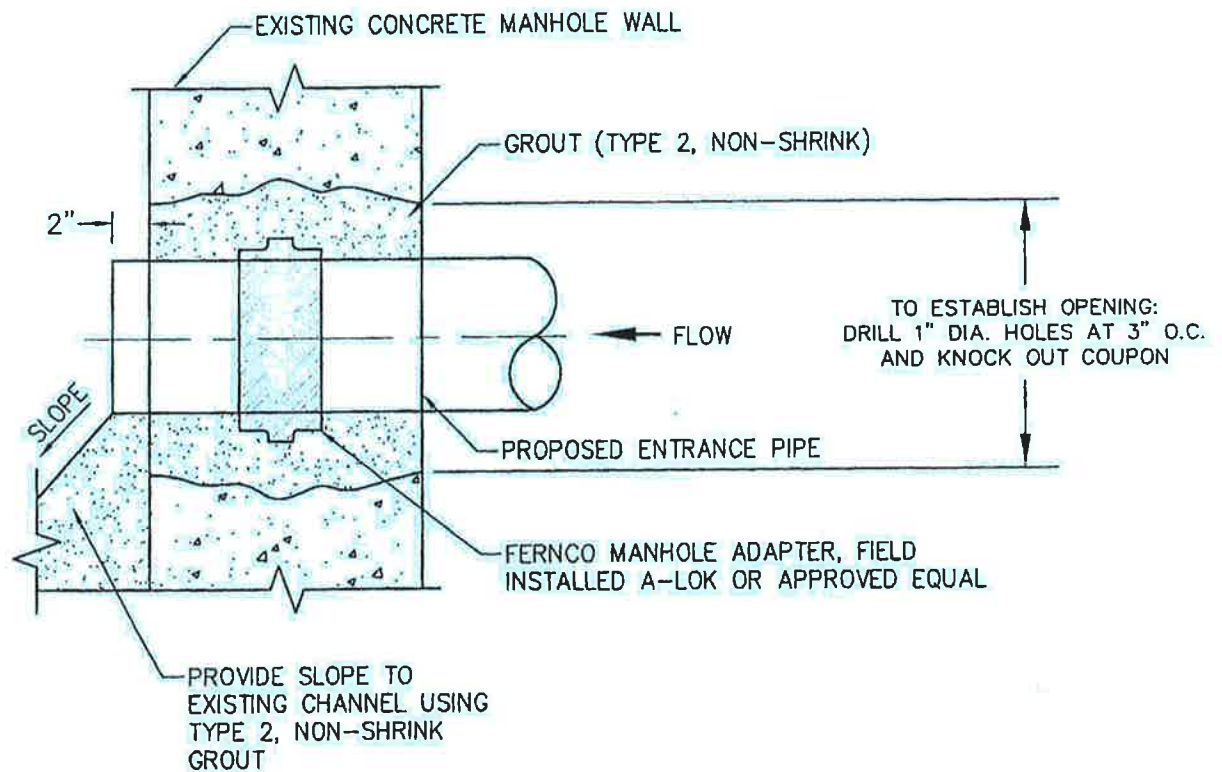
ADDITIONAL 3/4" CLEAN STONE TRENCH STABILIZATION (USE ONLY AS DIRECTED BY THE ENGINEER)

D + 18"

3/4" CLEAN STONE BEDDING FROM 6" BELOW PIPE TO THE SPRINGLINE OR IN ACCORDANCE WITH ASTM D 2321-74.

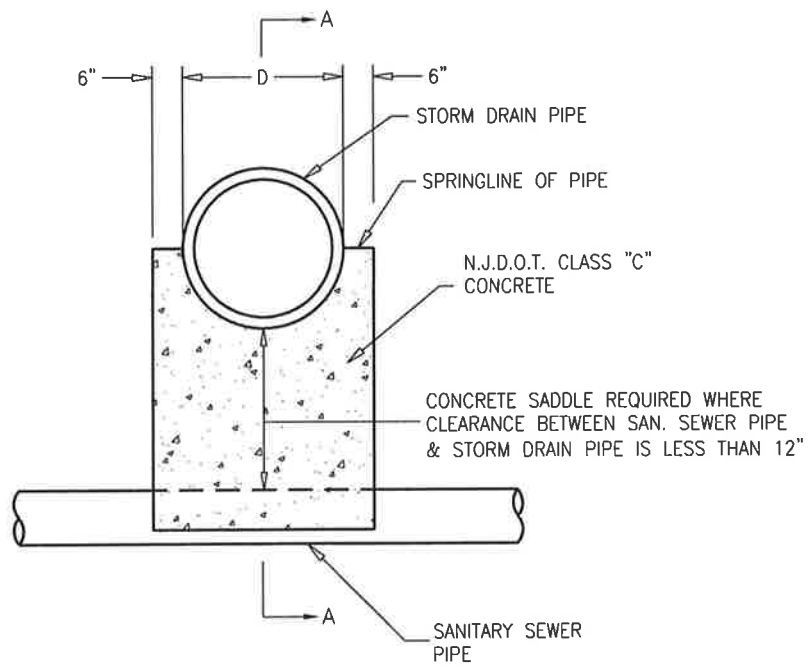
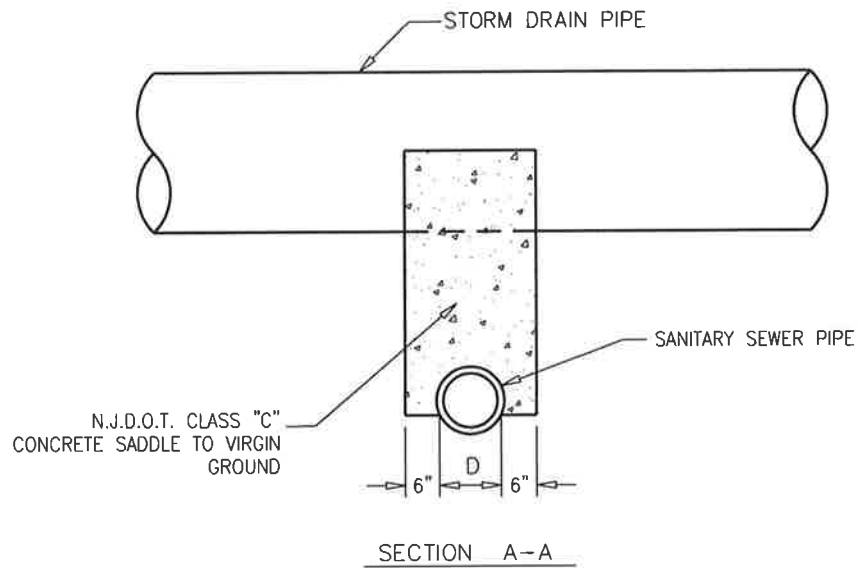
TYPICAL TRENCH DETAIL

N.T.S.



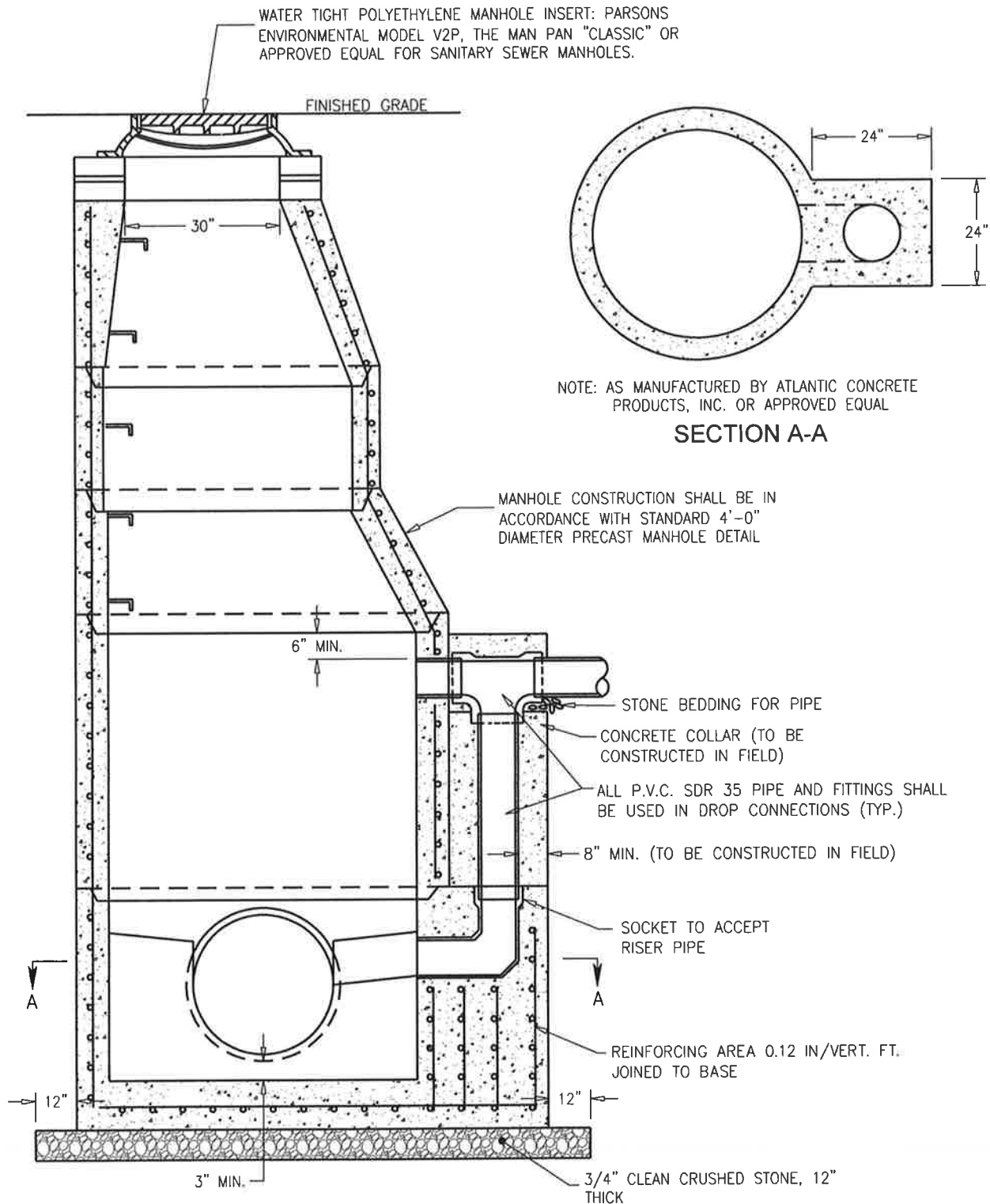
CONNECTION TO EXISTING MANHOLE DETAIL

N.T.S.



CONCRETE SADDLE DETAIL

N.T.S.



PRECAST EXTERNAL DROP SANITARY SEWER MANHOLE DETAIL

N.T.S.

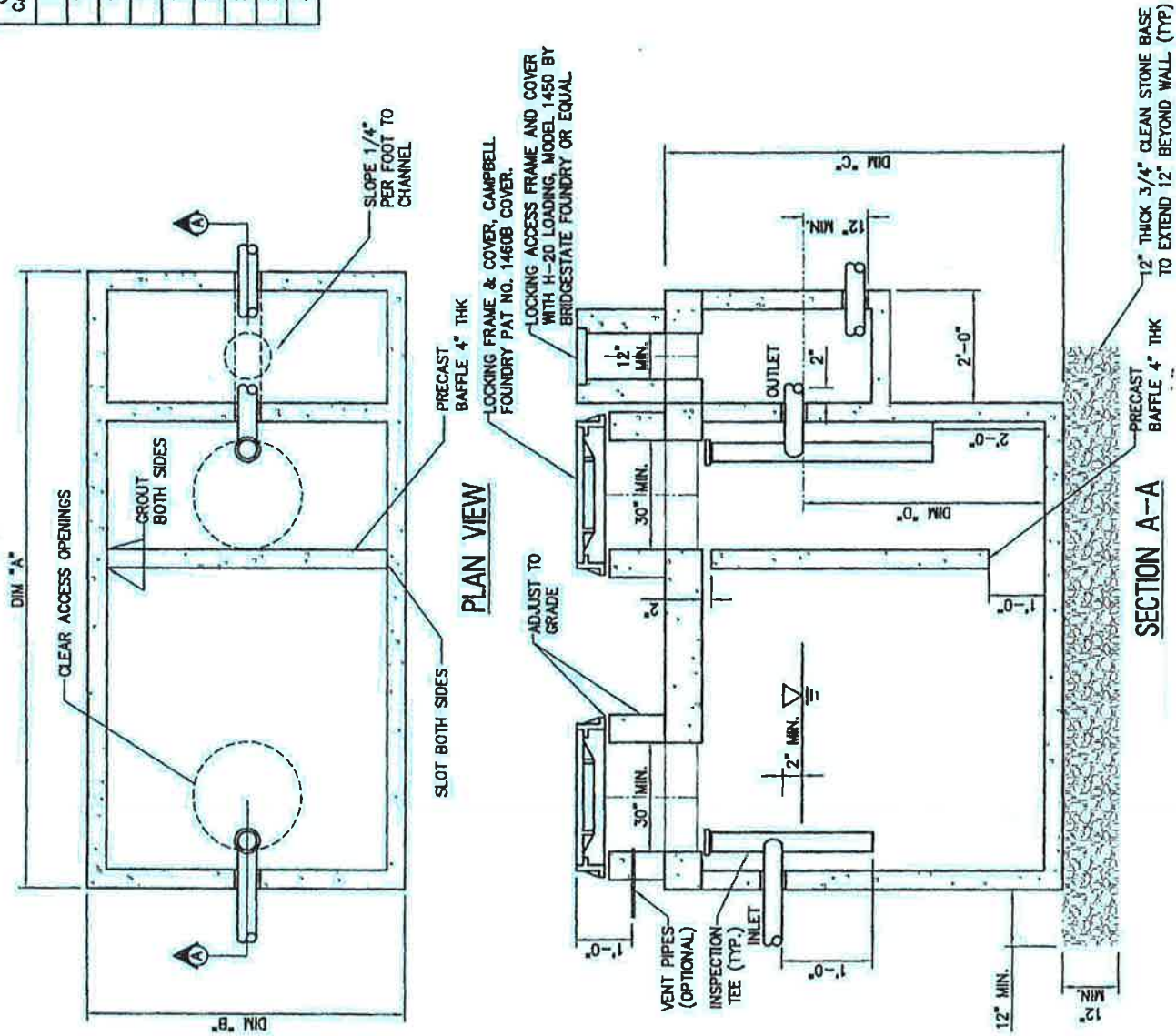
S

8

GALLON CAPACITY	DIM "A"	DIM "B"	DIM "C"	DIM "D"
600	7'-0"	4'-8"	7'-0"	3'-6"
750	7'-0"	4'-8"	7'-0"	4'-3"
1000	7'-0"	5'-0"	7'-2"	5'-8"
1250	9'-0"	5'-0"	7'-2"	5'-2"
1500	9'-0"	5'-8"	7'-2"	5'-4"
1750	11'-2"	5'-8"	7'-2"	4'-11"
2000	11'-2"	6'-8"	8'-0"	4'-7"
2500	12'-8"	6'-8"	8'-0"	5'-6"
3000	12'-8"	6'-8"	8'-0"	6'-0"

NOTES:

1. CONCRETE: 28 DAY $f_c = 4000$ PSI. STRUCTURE TO BE OF PRECAST CONSTRUCTION, AS MANUFACTURED BY ATLANTIC CONCRETE OR APPROVED EQUAL.
2. REBARS: ASTM A615 GRADE 60
3. MESH: ASTM A-185 GRADE 65
4. DESIGN: A0318-B3 BUILDING CODE ASTM C-857 MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES.
5. LOADS: H-20 TRUCK WHEEL W/30% IMPACT PER AASHTO.
6. FILL W/CLEAN WATER PRIOR TO START UP OF SYSTEM.
7. CONTRACTOR TO SUPPLY & INSTALL ALL PIPING AND SANITARY TEES, 4 CLEAN OUTS, FOR CLEANING TOWARD TRAP AND FOR CLEANING AWAY FROM TRAP ON BOTH THE INLET AND OUTLET/ALT. DUAL SWEEP CLEAN OUTS.
8. GRAY WATER ONLY; BLACK WATER SHALL BE CARRIED BY SEPARATESEWER.
9. COAT OUTSIDE WITH TWO COATS (MIN DFT. = 25 MILS) OF BLACK BITUMASTIC WATER PROOFING SUPPLIED BY KOPPERS CO. INC. OR APPROVED EQUAL; INTERIOR TO BE COATED WITH ONE COAT WHITE EPOXY. APPLY PER MFR. INSTRUCTIONS.
10. SEPARATOR TO BE PLACED IN GRASS AREA, AS AVAILABLE.
11. EXTERIOR PENETRATIONS TO HAVE A-LOK GASKET, OR APPROVED EQUAL.
12. FOR GREASE SEPARATOR SIZES LARGER THAN SHOWN IN THE TABLE ABOVE, CONSULT WITH WSO AND ITS ENGINEER.



GREASE SEPARATOR DETAIL

N.T.S.

Borough of Wildwood Crest SEWER USE ORDINANCE

TABLE OF CONTENTS

SECTION 1 - GENERAL PROVISIONS

- 1.1 Purpose and Policy
- 1.2 Administration
- 1.3 Abbreviations
- 1.4 Definitions

SECTION 2 - GENERAL SEWER USE REQUIREMENTS

- 2.1 Prohibited Discharge Standards
- 2.2 National Pretreatment Standards
- 2.3 State Pretreatment Standards
- 2.4 Local Limits
- 2.5 Right of Revision
- 2.6 Dilution

SECTION 3 - PRETREATMENT OF WASTEWATER

- 3.1 Pretreatment Facilities and Best Management Practices
- 3.2 Additional Pretreatment Measures
- 3.3 Accidental Discharge/Slug Control Plans
- 3.4 Hauled Wastewater

SECTION 4 - WASTEWATER DISCHARGE NOTIFICATION

- 4.1 Wastewater Analysis
- 4.2 Wastewater Discharge Requirement
- 4.3 Wastewater Discharge Notifications: Existing Connections
- 4.4 Wastewater Discharge Notifications: New Connections
- 4.5 Wastewater Discharge Notification Contents
- 4.6 Application Signatories and Certification
- 4.7 Wastewater Discharge Decisions

SECTION 5 - REPORTING REQUIREMENTS

- 5.1 Baseline Monitoring Reports
- 5.2 Compliance Schedule Progress Reports
- 5.3 Reports on Compliance with Categorical Pretreatment Standard Deadline
- 5.4 Periodic Compliance Reports
- 5.5 Reports of Changed Conditions
- 5.6 Reports of Potential Problems
- 5.7 Notice of Non Routine Discharge/Repeat Sampling and Reporting
- 5.8 Notification of the Discharge of Hazardous Waste
- 5.9 Analytical Requirements
- 5.10 Sample Collection
- 5.11 Timing
- 5.12 Record Keeping

SECTION 6 - COMPLIANCE MONITORING

6.1 Right of Entry: Inspection and Sampling

SECTION 7 - CONFIDENTIAL INFORMATION

SECTION 8 - ADMINISTRATIVE ENFORCEMENT REMEDIES

- 8.1 Notification of Violation**
- 8.2 Consent Orders**
- 8.3 Compliance Orders**
- 8.4 Emergency Suspensions**
- 8.5 Termination of Discharge**

SECTION 9 - AFFIRMATIVE DEFENSES TO DISCHARGE VIOLATIONS

- 9.1 Upset**
- 9.2 Prohibited Discharge Standards**
- 9.3 Bypass**

SECTION 10 - WASTEWATER COLLECTION & TREATMENT RATES

SECTION 11 - EFFECTIVE DATE

WILDWOOD CREST SEWER USE ORDINANCE

ORDINANCE NO. _____

SECTION 1 - GENERAL PROVISIONS

1.1 Purpose and Policy

This ordinance sets forth uniform requirements for users of the sanitary sewer collection system for the Borough of Wildwood Crest, which discharges sanitary sewage to the Cape May County Municipal Utilities Authority for treatment, and enables the Borough of Wildwood Crest and the Cape May County Municipal Utilities Authority to comply with all applicable State and Federal laws, including the Clean Water Act (33 United States Code § 1251 *et seq.*) and the General Pretreatment Regulations (40 Code of Federal Regulations Part 403). This ordinance hereby incorporates all aspects of the Borough of Wildwood Crest Sewer Department Rules and Regulations by reference. The objectives of this ordinance are:

A. To prevent the introduction of pollutants into the Borough of Wildwood Crest collection system or the Cape May County Municipal Utilities Authority Treatment Works that will interfere with its operation;

B. To prevent the introduction of pollutants into the Borough of Wildwood Crest collection system or Cape May County Municipal Utilities Authority Treatment Works that will pass through the Cape May County Municipal Utilities Authority Treatment Works, inadequately treated, into receiving waters, or otherwise be incompatible with the Cape May County Municipal Utilities Authority Treatment Works;

C. To protect both Borough of Wildwood Crest collection system and Cape May County Municipal Utilities Authority Treatment Works personnel who may be affected by wastewater and sludge in the course of their employment and the general public;

D. To promote reuse and recycling of industrial wastewater and sludge from the Cape May County Municipal Utilities Authority Treatment Works;

E. To provide for fees for the equitable distribution of the cost of operation, maintenance, and improvement of the Borough of Wildwood Crest collection system; and

F. To enable Cape May County Municipal Utilities Authority Treatment Works to comply with its National Pollutant Discharge Elimination System permit conditions, sludge use and disposal requirements, and any other Federal or State laws to which the Cape May County Municipal Utilities Authority Treatment Works is subject.

This ordinance shall apply to all users of the Borough of Wildwood Crest collection system which discharge sewage to the Cape May County Municipal Utilities Authority Treatment

Works. This ordinance and the Borough of Wildwood Crest Sewer Department Rules and Regulations provide for monitoring activities; establishment of administrative review procedures; require user reporting; and provide for the setting of fees for the equitable distribution of costs resulting from the program established herein.

1.2 Administration

Except as otherwise provided herein, the Borough of Wildwood Crest Sewer Department Superintendent / Supervisor shall administer, implement, and enforce the provisions of this ordinance. Any powers granted to or duties imposed upon the Superintendent / Supervisor may be delegated by the Superintendent / Supervisor to other Wildwood Sewer Department personnel.

1.3 Abbreviations

The following abbreviations, when used in this ordinance, shall have the designated meanings:

- BOD - Biochemical Oxygen Demand
- CFR - Code of Federal Regulations
- CMCMUA - Cape May County Municipal Utilities Authority
- COD - Chemical Oxygen Demand
- EPA - U.S. Environmental Protection Agency
- gpd - gallons per day
- mg/l - milligrams per liter
- NJDEP - New Jersey Department of Environmental Protection
- NJPDES - New Jersey Pollutant Discharge Elimination System

- NPDES - National Pollutant Discharge Elimination System
- RCRA - Resource Conservation and Recovery Act
- SIC - Standard Industrial Classification
- TSS - Total Suspended Solids
- U.S.C. - United States Code

1.4 Definitions

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this ordinance, shall have the meanings hereinafter designated.

A. Act or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. § 1251 *et seq.*

B. Approval Authority. New Jersey Department of Environmental Protection (NJDEP)

C. Authorized Representative of the User.

(1) If the user is a corporation:

(a) The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(b) The manager of one or more manufacturing, production, or operation facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five (25) million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.

(3) If the user is a Federal, State, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

(4) The individuals described in paragraphs 1 through 3, above, may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the Borough of Wildwood Crest.

D. Biochemical Oxygen Demand or BOD. The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at 20° centigrade, usually expressed as a concentration (e.g., mg/l).

E. Borough. The Borough of Wildwood Crest, New Jersey.

F. Cape May County Municipal Utilities Authority (CMCMUA) or Borough of Wildwood Crest Sewer Department (SEWER DEPARTMENT) Treatment Works. A

“treatment works,” as defined by Section 212 of the Act (33 U.S.C. §1292) which is owned by CMCMUA or SEWER DEPARTMENT. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances which convey wastewater to a treatment plant.

G. Categorical Pretreatment Standard or Categorical Standard. Any regulation containing pollutant discharge limits promulgated by EPA in accordance with Sections 307(b) and (c) of the Act (33 U.S.C. § 1317) which apply to a specific category of users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.

H. Control Authority The NJDEP if the NJDEP has not approved CMCMUA’s Pretreatment Program Submission in accordance with 40 CFR 403.11; or CMCMUA if NJDEP has approved CMCMUA’s Pretreatment Program Submission in accordance with 40 CFR 403.11. As of the effective date of this ordinance, NJDEP is the Control Authority.

I. Environmental Protection Agency or EPA. The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director, or other duly authorized official of said agency.

J. Existing Source. Any source of discharge, the construction or operation of which commenced prior to the publication by EPA of proposed categorical pretreatment standards, which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.

K. Grab Sample. A sample which is taken from a wastestream without regard to the flow in the wastestream and over a period of time not to exceed fifteen (15) minutes.

L. Indirect Discharge or Discharge. The introduction of pollutants into the CMCMUA from any nondomestic source regulated under Section 307(b), (c), or (d) of the Act.

M. Instantaneous Maximum Allowable Discharge Limit. The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

N. Interference. A discharge, which alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the CMCMUA, its treatment processes or operations or its sludge processes, use or disposal; and therefore, is a cause of a violation of CMCMUA’s NJPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder, or any more stringent State or local regulations: Section 405 of the Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the Solid Waste

Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research, and Sanctuaries Act.

O. Medical Waste. Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.

P. New Source.

(1) Any building, structure, facility, or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

(a) The building, structure, facility, or installation is constructed at a site at which no other source is located; or

(b) The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(c) The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.

(2) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Section (1)(b) or (c) above but otherwise alters, replaces, or adds to existing process or production equipment.

(3) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

(a) Begun, or caused to begin, as part of a continuous onsite construction program

(i) any placement, assembly, or installation of facilities or equipment; or

(ii) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

(b) Entered into a binding contractual obligation for the purchase of facilities or equipment which is intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Q. Noncontact Cooling Water. Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

R. Pass Through. A discharge which exits the CMCMUA into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of CMCMUA's NJPDES permit, including an increase in the magnitude or duration of a violation.

S. Person. Any individual, partnership, co partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all Federal, State, and local governmental entities.

T. pH. A measure of the acidity or alkalinity of a solution, expressed in standard units.

U. Pollutant. Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity, or odor).

V. Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into the CMCMUA. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard.

W. Pretreatment Requirements. Any substantive or procedural requirement related to pretreatment imposed on a user, other than a pretreatment standard.

X. Pretreatment Standards or Standards. Pretreatment standards shall mean prohibited discharge standards, categorical pretreatment standards, and local limits.

Y. Prohibited Discharge Standards or Prohibited Discharges. Absolute prohibitions against the discharge of certain substances; these prohibitions appear in Section 2.1 of this ordinance.

Z. Septic Tank Waste. Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks.

AA. Sewage. Human excrement and gray water (household showers, dishwashing operations, etc.).

BB. Sewer Department Superintendent / Supervisor. The person designated by the Borough of Wildwood Crest to supervise the operation of the Borough of Wildwood Crest sanitary sewer collection system, and who is charged with certain duties and responsibilities by this ordinance, or a duly authorized representative.

CC. Significant Indirect User.

1. Any user including, but not limited to, any significant indirect user as defined in 40 CFR 403.3 but excluding municipal collection systems, who discharges wastewater into the Wildwood collection system where:
 - i. The user is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and does not meet the criteria for being a Non-Significant Categorical Industrial User as set forth in 40 CFR 403;
 - ii. The user's average volume of process wastewater exceeds 25,000 gallons per day;
 - iii. The amount of BOD, COD or Suspended Solids in the industrial process wastewater discharge exceeds the mass equivalent of 25,000 gallons per day of the domestic waste of the CMCMUA;
 - iv. The volume of industrial process wastewater in the discharge exceeds five percent or more of the average daily dry weather flow of the CMCMUA;
 - v. The user's discharge of process wastewater contributes, five percent or more of the daily mass loading of any of the pollutants listed in N.J.A.C. 7:14A- 4, Appendix A Tables II through V;
 - vi. The user is designated as an SIU by the Control Authority on the basis that the user has a reasonable potential for adversely affecting the local agency's operation;
 - vii. The user is designated as an SIU by the Control Authority on the basis that the user has been in violation of any Federal, State, or local pretreatment standard or requirement, including, but not limited to, significant noncompliance as defined in 40 CFR 403.8(f)(2)(vii); or
 - viii. The Control Authority determines it would be consistent with the intent of the Pretreatment Act or State Act to require a permit for the indirect user;

and

2. Any user in areas of the State in which NJDEP is the Control Authority where:
 - i. The user is determined to be a hazardous waste facility that received a permit in accordance with N.J.A.C. 7:26G-12;

- ii. The user's discharge consists of landfill leachate, which is either pure, treated, or diluted; or
 - iii. The user's discharge consists of 25,000 gallons per day or more of process wastewater and/or polluted ground water which is pumped from the ground in order to decontaminate an aquifer; however
3. Upon finding that any user in the State has no reasonable potential for adversely affecting the local agency's operation or for violating any Federal, State, or local pretreatment standard or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from a user or a local agency, and in accordance with 40 CFR 403.8, determine that any user specified in paragraphs 1 or 2 above is not a significant indirect user.

DD. Slug Load or Slug. Any discharge at a flow rate or concentration which could cause a violation of the prohibited discharge standards in Section 2.1 of this ordinance.

EE. Standard Industrial Classification (SIC) Code. A classification pursuant to the *Standard Industrial Classification Manual* issued by the United States Office of Management and Budget.

FF. Storm Water. Any flow occurring during or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

GG. Suspended Solids. The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquid, and which is removable by laboratory filtering.

HH. User or Indirect User. A source of indirect discharge.

II. Wastewater. Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are contributed to the CMCMUA.

JJ. Wastewater Treatment Plant or Treatment Plant. That portion of the CMCMUA which is designed to provide treatment of municipal sewage and industrial waste.

KK. Wildwood Sewer Department. The UTILITY which owns and operates the wastewater collection system for which this Ordinance governs. Also referred to by the abbreviation "SEWER DEPARTMENT".

SECTION 2 - GENERAL SEWER USE REQUIREMENTS

2.1 Prohibited Discharge Standards

A. General Prohibitions. No user shall introduce or cause to be introduced into the Borough of Wildwood Crest sanitary sewer collection system and CMCMUA any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the Borough of Wildwood Crest sanitary sewer collection system discharging into CMCMUA whether or not they are subject to categorical pretreatment standards or any other National, State, or local pretreatment standards or requirements.

B. Specific Prohibitions. No user shall introduce or cause to be introduced into the Borough of Wildwood Crest sanitary sewer collection system and CMCMUA the following pollutants, substances, or wastewater:

(1) Pollutants which create a fire or explosive hazard in the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA, including, but not limited to, wastestreams with a closed-cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21;

(2) Wastewater having a pH less than 5.5, or more than 9.5, or otherwise causing corrosive structural damage to the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA equipment;

(3) Solid or viscous substances in amounts which will cause obstruction of the flow in the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA resulting in interference;

(4) Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the CMCMUA;

(5) Wastewater having a temperature greater than 150°F or 65°C, or which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104°F (40°C);

(6) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through;

(7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the Borough of Wildwood Crest sanitary sewer collection or CMCMUA in a quantity that may cause acute worker health and safety problems;

(8) Trucked or hauled pollutants, except at discharge points designated by CMCMUA in accordance with Section 3.4 of this ordinance;

(9) Noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to

create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;

(10) Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent, thereby violating CMCMUA's NJPDES permit;

(11) Wastewater containing any radioactive wastes or isotopes except in compliance with applicable State or Federal regulations;

(12) Storm water, surface water, ground water, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water, and unpolluted wastewater, unless specifically authorized by the Wildwood Sewer Department Superintendent / Supervisor;

(13) Sludges, screenings, or other residues from the pretreatment of industrial wastes;

(14) Medical wastes, except as specifically authorized by CMCMUA in a wastewater discharge permit;

(15) Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test;

(16) Detergents, surface-active agents, or other substances which may cause excessive foaming in the CMCMUA;

(17) Fats, oils, or greases of animal or vegetable origin in concentrations greater than 100 mg/l, containing substances which may solidify or become viscous at temperatures between 32 degrees F and 150 degrees F or

(18) Wastewater causing readings on an explosion hazard meter at the point of discharge into the Borough of Wildwood Crest sanitary sewer collection system, or at any point in the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA, of more than five percent [5 %] of the Lower Explosive Limit of the meter.

(19) Wastes containing phenolic compounds over 1.0 ppm, expressed as phenol.

(20) Any waters or wastes with BOD in excess of 350 mg/L.

(21) Any waters or wastes with suspended solids content in excess of 300 mg/L, or containing suspended solids of such character or gravity that unusual attention or expense is required to handle or treat such materials.

(22) Unusual volume or concentration of wastes being delivered in a “slug” manner by which it is meant that the normal concentration or loading shall not be exceeded by more than a 4.0 factor for any sixty minute period.

Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA.

Nothing in the section shall be construed to prohibit a special agreement (including, but not limited to NJPDES permits) allowing discharge of wastewaters containing pollutant concentrations in excess of those noted above following review and approval by the SEWER DEPARTMENT and the Control Authority.

2.2 National Pretreatment Standards

Every user shall conform with applicable requirements under the Federal General Pretreatment Standards (40 CFR 403) and Federal Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 405-471, subject to review by the Control Authority.

2.3 State Pretreatment Standards

The New Jersey Department of Environmental Protection (NJDEP) pretreatment standards found at N.J.A.C 7:14A Subchapter 19 are hereby incorporated. In addition, pretreatment standards of N.J.A.C 7:14A Subchapter 21 which are applicable to indirect users are incorporated except where this ordinance expressly imposes a more stringent standard.

2.4 Local Limits

All dischargers into the Borough of Wildwood Crest sanitary sewer collection system must adhere to the latest local limits as established by the Cape May County MUA treatment system.

These limits are established to protect against pass through and interference. No person shall discharge wastewater containing in excess of the local limits.

These limits apply at the point where the wastewater is discharged to the Borough of Wildwood Crest sanitary sewer collection system. All concentrations for metallic substances are for “total” metals unless indicated otherwise. CMCMUA may impose mass limitations in addition to, or in place of, the concentration-based limitations above.

2.5 Right of Revision

The Borough of Wildwood Crest Sewer Department or the CMCMUA reserve the right to establish, by ordinance, more stringent standards or requirements on discharges to the Borough of Wildwood Crest sanitary sewer collection system or CMCMUA treatment works.

2.6 Dilution

No user shall ever increase the use of processed water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable pretreatment standard or requirement. The CMCMUA may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements, or in other cases when the imposition of mass limitations is appropriate.

SECTION 3 - PRETREATMENT OF WASTEWATER

3.1 Pretreatment Facilities and Best Management Practices

Users shall provide wastewater treatment as necessary to comply with this ordinance and shall achieve compliance with all categorical pretreatment standards, local limits, and the prohibitions set out in Section 2.1 of this ordinance within the time limitations specified by EPA, the State, the CMCMUA, or the Borough of Wildwood Crest Sewer Department, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the user's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the Borough of Wildwood Crest Sewer Department and the CMCMUA for review, and shall be acceptable to the Borough of Wildwood Crest Sewer Department and the CMCMUA before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the user from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the Borough of Wildwood Crest Sewer Department under the provisions of this ordinance. The Borough of Wildwood Crest Sewer Department may authorize or require use of Best Management Practices such as materials substitution or segregation of wastestreams in lieu of or in conjunction with pretreatment, in conformance with 40 CFR 403.

3.2 Additional Pretreatment Measures

A. Whenever deemed necessary, the Borough of Wildwood Crest Sewer Department and the CMCMUA may require users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage wastestreams from industrial wastestreams, and such other conditions as may be necessary to protect the Borough of Wildwood Crest Sewer Department or the CMCMUA and determine the user's compliance with the requirements of this ordinance.

B. The Borough of Wildwood Crest Sewer Department or the CMCMUA may require any person discharging into the Borough of Wildwood Crest sanitary sewer collection system to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow.

C. Grease, oil, and sand interceptors shall be provided when, in the opinion of Borough of Wildwood Crest Sewer Department or the CMCMUA, they are necessary

for the proper handling of wastewater containing excessive amounts of grease and oil, or sand; except that such interceptors shall not be required for residential users. All interception units shall be of type and capacity approved by Borough of Wildwood Crest Sewer Department and the CMCMUA and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned, and repaired regularly, as needed, by the user at their expense.

D. Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

3.3 Accidental Discharge/Slug Control Plans

At least once every two (2) years, the Borough of Wildwood Crest Sewer Department and the CMCMUA shall evaluate whether each significant indirect user needs an accidental discharge/slug control plan. The Borough of Wildwood Crest Sewer Department and the CMCMUA may require any user to develop, submit for approval, and implement such a plan. Alternatively, the Borough of Wildwood Crest Sewer Department or the CMCMUA may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

A. Description of discharge practices, including nonroutine batch discharges;

B. Description of stored chemicals;

C. Procedures for immediately notifying Borough of Wildwood Crest Sewer Department and the CMCMUA of any accidental or slug discharge, as required by this ordinance; and

D. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response.

3.4 Hauled Wastewater

A. Septic tank waste may be introduced into the Borough of Wildwood Crest sanitary sewer collection system and CMCMUA only at locations designated by Borough of Wildwood Crest Sewer Department and the CMCMUA and at such times as are established by the Borough of Wildwood Crest Sewer Department and the CMCMUA. Such waste shall not violate Section 2 of this ordinance or any other requirements established by the Borough of Wildwood Crest Sewer Department and the CMCMUA.

B. The Borough of Wildwood Crest Sewer Department and the CMCMUA also may prohibit the disposal of hauled industrial waste. The discharge of hauled industrial waste is subject to all other requirements of this ordinance.

C. Industrial waste haulers may discharge loads only at locations designated by the Borough of Wildwood Crest Sewer Department and the CMCMUA. No load may be discharged without prior consent of the Borough of Wildwood Crest Sewer Department and the CMCMUA. The Borough of Wildwood Crest Sewer Department and the CMCMUA may collect samples of each hauled load to ensure compliance with applicable standards. The Borough of Wildwood Crest Sewer Department and the CMCMUA may require the industrial waste hauler to provide a waste analysis of any load prior to discharge.

D. Industrial waste haulers must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes.

SECTION 4 - WASTEWATER DISCHARGE NOTIFICATION

4.1 Wastewater Analysis

When requested by the Borough of Wildwood Crest Sewer Department or the CMCMUA, a user must submit information on the nature and characteristics of its wastewater. The Borough of Wildwood Crest Sewer Department or the CMCMUA may prepare a form for this purpose and may periodically request users to update this information.

4.2 Wastewater Discharge Requirement

A. No significant indirect user shall discharge wastewater into the Borough of Wildwood Crest sanitary sewer or to CMCMUA without first notifying the Borough of Wildwood Crest Sewer Department and the CMCMUA, and obtaining a NJPDES permit from the Control Authority, except as provided below.

Any user planning to modify its discharge activities so as to become a significant indirect user shall notify the Borough of Wildwood Crest and CMCMUA at least 180 days prior to the proposed modification, and shall not modify its discharge activities prior to obtaining a NJPDES permit from the Control Authority.

Any user shall notify the Borough of Wildwood Crest and CMCMUA immediately upon discovering that it has become a significant indirect user due to regulatory changes or as a result of receiving or obtaining relevant data including, but not limited to, wastewater analysis or flow data. Such a user may continue discharging until a NJPDES permit is obtained at the discretion of, and subject to such conditions as may be specified by, the Borough of Wildwood Crest and the Control Authority and subject to submittal of a permit application within a timeframe specified by the Control Authority.

B. The Borough of Wildwood Crest Sewer Department and the CMCMUA may require other users to provide notification of discharge, as necessary, to carry out the purposes of this ordinance.

C. Notifying the Borough of Wildwood Crest Sewer Department and the CMCMUA of a discharge does not relieve a permittee of its obligation to comply with all Federal and State pretreatment standards or requirements or with any other requirements of Federal, State, and local law.

4.3 Wastewater Discharge Notifications: Existing Connections

Any user required to notify the Borough of Wildwood Crest Sewer Department and the CMCMUA who was discharging wastewater into the CMCMUA prior to the effective date of this ordinance and who wishes to continue such discharges in the future, shall, notify the Borough of Wildwood Crest Sewer Department and the CMCMUA, and shall not cause or allow discharges to the Borough of Wildwood Crest Sewer Department and the CMCMUA to continue after 180 days of the effective date of this ordinance except at the discretion of, and subject to such conditions as may be specified by, the Borough of Wildwood Crest and the Control Authority and subject to submittal of any required permit application within a timeframe specified by the Control Authority.

4.4 Wastewater Discharge Notifications: New Connections

Any user required to notify the Borough of Wildwood Crest Sewer Department and the CMCMUA who proposes to begin or recommence discharging into the Borough of Wildwood Crest sanitary sewer and the CMCMUA must obtain such approvals as are required from the NJDEP, CMCMUA and Borough of Wildwood Crest prior to the beginning or recommencing of such discharge.

4.5 Wastewater Discharge Notification Contents

All users required to notify the Borough of Wildwood Crest Sewer Department and the CMCMUA must submit following information:

- A. All information required by applicable sections of this ordinance;
- B. Description of activities, facilities, and plant processes on the premises, including a list of all raw materials and chemicals used or stored at the facility which are, or could accidentally or intentionally be, discharged to the Borough of Wildwood Crest Sewer Department or the CMCMUA;
- C. Number and type of employees, hours of operation, and proposed or actual hours of operation;
- D. Each product produced by type, amount, process or processes, and rate of production;

E. Type and amount of raw materials processed (average and maximum per day);

F. Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge;

G. Time and duration of discharges; and

H. Any other information as may be deemed necessary by the Borough of Wildwood Crest Sewer Department or the CMCMUA to evaluate the wastewater discharge.

Incomplete or inaccurate applications will not be processed and will be returned to the user for revision.

4.6 Application Signatories and Certification

All wastewater discharge notifications must be signed by an authorized representative of the user.

4.7 Wastewater Discharge Decisions

The Borough of Wildwood Crest Sewer Department and the CMCMUA will evaluate the data furnished by the user and may require additional information.

SECTION - REPORTING REQUIREMENTS

5.1 Baseline Monitoring Reports

A. Within either one hundred eighty (180) days after the effective date of a categorical pretreatment standard, or the final administrative decision on a category determination under 40 CFR 403.6(a) (4), whichever is later, existing categorical users currently discharging to or scheduled to discharge to the Borough of Wildwood Crest Sewer Department and the Control Authority shall submit a report which contains the information listed in paragraph B, below. At least ninety (90) days prior to commencement of their discharge, new sources, and sources that become categorical users subsequent to the promulgation of an applicable categorical standard, shall submit to the Control authority, a report which contains the information listed in paragraph B, below. A new source shall report the method of pretreatment it intends to use to meet applicable categorical standards. A new source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.

B. Users described above shall submit the information set forth below.

(1) Identifying Information. The name and address of the facility, including the name of the operator and owner.

(2) Environmental Permits. A list of any environmental control permits held by or for the facility.

(3) Description of Operations. A brief description of the nature, average rate of production, and standard industrial classifications of the operation(s) carried out by such user. This description should include a schematic process diagram which indicates points of discharge to the Borough of Wildwood Crest Sewer Department and the CMCMUA from the regulated processes.

(4) Flow Measurement. Information showing the measured average daily and maximum daily flow, in gallons per day, to the Borough of Wildwood Crest Sewer Department and the CMCMUA from regulated process streams and other streams, as necessary, to allow use of the combined wastestream formula set out in 40 CFR 403.6(e).

(5) Measurement of Pollutants.

(a) The categorical pretreatment standards applicable to each regulated process.

(b) The results of sampling and analysis identifying the nature and concentration, and/or mass, where required by the standard or by the Control Authority, of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and long-term average concentrations, or mass, where required, shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with EPA/NJDEP requirements.

(6) Certification. A statement, reviewed by the user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the pretreatment standards and requirements.

(7) Compliance Schedule. If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

(8) Signature and Certification. All baseline monitoring reports must be signed and certified in accordance with this ordinance.

5.2 Compliance Schedule Progress Reports

The following conditions shall apply to the compliance schedule required by this ordinance:

A. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation);

B. No increment referred to above shall exceed nine (9) months;

C. The user shall submit a progress report to the Control Authority no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the user to return to the established schedule; and

D. In no event shall more than nine (9) months elapse between such progress reports to the Control Authority.

5.3 Reports on Compliance with Categorical Pretreatment Standard Deadline

Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source following commencement of the introduction of wastewater into the Control Authority, any user subject to such pretreatment standards and requirements shall submit to the Control Authority, a report containing the information described in this ordinance. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with this ordinance.

5.4 Periodic Compliance Reports

A. All significant indirect users shall, at a frequency determined by the Control Authority, but in no case less than twice per year (in June and December), submit a report indicating the nature and concentration of pollutants in the discharge which are limited by pretreatment standards and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with this ordinance.

B. All wastewater samples must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.

5.5 Reports of Changed Conditions

Each user must notify the Borough of Wildwood Crest Sewer Department and the CMCMUA of any planned significant changes to the user's operations or system which might alter the nature, quality, or volume of its wastewater before the change. The Borough of Wildwood Crest Sewer Department and the CMCMUA may require the user to submit such information as may be deemed necessary to evaluate the changed condition.

5.6 Reports of Potential Problems

A. In the case of any discharge, including, but not limited to, accidental discharges, discharges of a nonroutine, episodic nature, a noncustomary batch discharge, or a slug load, that may cause potential problems for the Borough of Wildwood Crest Sewer Department or the CMCMUA, the user shall immediately telephone and notify the Borough of Wildwood Crest Sewer Department and the CMCMUA of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the user.

B. Within five (5) days following such discharge, the user shall, unless waived by Borough of Wildwood Crest Sewer Department and the CMCMUA, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to the Borough of Wildwood Crest Sewer Department and the CMCMUA, natural resources, or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties, or other liability which may be imposed pursuant to this ordinance.

C. A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees who to call in the event of a discharge described in paragraph A, above. Employers shall ensure that all employees, who may cause such a discharge to occur, are advised of the emergency notification procedure.

5.7 Notice of Non Routine Discharge/Repeat Sampling and Reporting

If sampling performed by a user indicates a non routine discharge, the user must notify the Borough of Wildwood Crest Sewer Department and the CMCMUA within twenty-four (24) hours of becoming aware of the discharge. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Borough of Wildwood Crest Sewer Department and the CMCMUA within thirty (30) days after becoming aware of the non routine discharge.

5.8 Notification of the Discharge of Hazardous Waste

A. Any user who commences the discharge of hazardous waste shall notify the Borough of Wildwood Crest Sewer Department and the CMCMUA, the EPA Regional

Waste Management Division Director, and State hazardous waste authorities, in writing, of any discharge into the Borough of Wildwood Crest Sewer Department and the CMCMUA of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the user discharges more than one hundred (100) kilograms of such waste per calendar month to the Borough of Wildwood Crest Sewer Department and the CMCMUA, the notification also shall contain the following information to the extent such information is known and readily available to the user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve (12) months. All notifications must take place no later than one hundred and eighty (180) days after the discharge commences. Any notification under this paragraph need be submitted only once for each hazardous waste discharged.

B. In the case of any notification made under this section, the user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

C. This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this ordinance, a permit issued thereunder, or any applicable Federal or State law.

5.9 Analytical Requirements

All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge notification shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable categorical pretreatment standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analyses must be performed in accordance with procedures approved by EPA or NJDEP.

5.10 Sample Collection

A. Except as indicated in Section B, below, the user must collect wastewater samples using flow proportional composite collection techniques. In the event flow proportional sampling is infeasible, the Borough of Wildwood Crest Sewer Department or the CMCMUA may authorize the use of time proportional sampling or a minimum of four (4) grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. In addition, grab samples may be required to show compliance with instantaneous discharge limits.

B. Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.

5.11 Timing

Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed, postage prepaid, into a mail facility serviced by the United States Postal Service, the date of receipt of the report shall govern.

5.12 Record Keeping

Users subject to the reporting requirements of this ordinance shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this ordinance and any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements. Records shall include the date, exact place, method, and time of sampling, and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least five (5) years. This period shall be automatically extended for the duration of any litigation concerning the user or the Borough of Wildwood Crest Sewer Department or the CMCMUA, or where the user has been specifically notified of a longer retention period by the Borough of Wildwood Crest Sewer Department and the CMCMUA.

SECTION 6 - COMPLIANCE MONITORING

6.1 Right of Entry: Inspection and Sampling

The Borough of Wildwood Crest Sewer Department and the CMCMUA shall have the right to enter the premises of any user to determine whether the user is complying with all requirements of this ordinance and any wastewater discharge permit or order issued hereunder. Users shall allow the Borough of Wildwood Crest Sewer Department and the CMCMUA ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.

A. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Borough of Wildwood Crest Sewer Department and the CMCMUA will be permitted to enter without delay for the purposes of performing specific responsibilities.

B. The Borough of Wildwood Crest Sewer Department and the CMCMUA shall have the right to set up on the user's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the user's operations.

C. The Borough of Wildwood Crest Sewer Department and the CMCMUA may require the user to install monitoring equipment as necessary. The facility's sampling

and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the user at its own expense.

D. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the Borough of Wildwood Crest Sewer Department or the CMCMUA and shall not be replaced. The costs of clearing such access shall be borne by the user.

E. Unreasonable delays in allowing the Borough of Wildwood Crest Sewer Department or the CMCMUA access to the user's premises shall be a violation of this ordinance.

SECTION 7 - CONFIDENTIAL INFORMATION

Information and data on a user obtained from reports, surveys, wastewater discharge notifications and correspondences, and monitoring programs, and from the Borough of Wildwood Crest Sewer Department and the CMCMUA inspection and sampling activities, shall be available to the public without restriction, unless the user specifically requests, and is able to demonstrate to the satisfaction of the Borough of Wildwood Crest Sewer Department and the CMCMUA that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets under applicable State law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the user furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NJPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other "effluent data" as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction.

SECTION 8 - ADMINISTRATIVE ENFORCEMENT REMEDIES

8.1 Notification of Violation

When the Borough of Wildwood Crest Sewer Department or the CMCMUA finds that a user has violated, or continues to violate, any provision of this ordinance, or order issued hereunder, or any other pretreatment standard or requirement, the Borough of Wildwood Crest Sewer Department or the CMCMUA may serve upon that user a written Notice of Violation. Within ten (10) days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the Borough of Wildwood Crest Sewer Department and the CMCMUA. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the Notice of Violation. Nothing in this section shall limit the authority of the Borough of Wildwood Crest Sewer

Department and the CMCMUA to take any action, including emergency actions or any other enforcement action, without first issuing a Notice of Violation.

8.2 Consent Orders

The Borough of Wildwood Crest Sewer Department and the CMCMUA may enter into Consent Orders, assurances of voluntary compliance, or other similar documents establishing an agreement with any user responsible for noncompliance. Such documents will include specific action to be taken by the user to correct the noncompliance within a time period specified by the document.

8.3 Compliance Orders

When the Borough of Wildwood Crest Sewer Department or the CMCMUA finds that a user has violated, or continues to violate, any provision of this ordinance or order issued hereunder, or any other pretreatment standard or requirement, the Borough of Wildwood Crest Sewer Department or the CMCMUA may issue an order to the user responsible for the discharge directing that the user come into compliance within a specified time. If the user does not come into compliance within the time provided, sewer service may be discontinued unless adequate treatment facilities, devices, or other related appurtenances are installed and properly operated.

8.4 Emergency Suspensions

The Borough of Wildwood Crest Sewer Department and the CMCMUA may immediately suspend a user's discharge, after informal notice to the user, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons. The Borough of Wildwood Crest Sewer Department and the CMCMUA may also immediately suspend a user's discharge, after notice and opportunity to respond, that threatens to interfere with the operation of the Borough of Wildwood Crest Sewer Department or the CMCMUA, or which presents, or may present, an endangerment to the environment.

A. Any user notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, the Borough of Wildwood Crest Sewer Department or the CMCMUA may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to Borough of Wildwood Crest Sewer Department or the CMCMUA, its receiving stream, or endangerment to any individuals. The Borough of Wildwood Crest Sewer Department or the CMCMUA may allow the user to recommence its discharge when the user has demonstrated to the satisfaction of Borough of Wildwood Crest Sewer Department and the CMCMUA that the period of endangerment has passed.

B. A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing

the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the Borough of Wildwood Crest Sewer Department and the CMCMUA.

Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section.

8.5 Termination of Discharge

In addition to the provisions of this ordinance, any user who violates the following conditions is subject to discharge termination:

- A. Violation of wastewater discharge notification conditions;
- B. Failure to accurately report the wastewater constituents and characteristics of its discharge;
- C. Failure to report significant changes in operations or wastewater volume, constituents, and characteristics prior to discharge;
- D. Refusal of reasonable access to the user's premises for the purpose of inspection, monitoring, or sampling; or
- E. Violation of the pretreatment standards in Section 2 of this ordinance.

Such user will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under this ordinance why the proposed action should not be taken. Exercise of this option by Borough of Wildwood Crest Sewer Department or the CMCMUA shall not be a bar to, or a prerequisite for, taking any other action against the user.

SECTION 9 - AFFIRMATIVE DEFENSES TO DISCHARGE VIOLATIONS

9.1 Upset

A. For the purposes of this section, "upset" means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

B. An upset shall constitute an affirmative defense to an action brought for noncompliance with categorical pretreatment standards if the requirements of paragraph (C), below, are met.

C. A user who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and the user can identify the cause(s) of the upset;

(2) The facility was at the time being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures; and

(3) The user has submitted the following information to the Borough of Wildwood Crest Sewer Department and the CMCMUA within twenty-four (24) hours of becoming aware of the:

(a) A description of the indirect discharge and cause of noncompliance;

(b) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and

(c) Steps being taken and/or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

D. In any enforcement proceeding, the user seeking to establish the occurrence of an upset shall have the burden of proof.

E. Users will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with categorical pretreatment standards.

F. Users shall control production of all discharges to the extent necessary to maintain compliance with categorical pretreatment standards upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

9.2 Prohibited Discharge Standards

A user shall have an affirmative defense to an enforcement action brought against it for noncompliance with the general prohibitions in this ordinance if it can prove that it did not know, or have reason to know, that its discharge, alone or in conjunction with discharges from other sources, would cause pass through or interference and that either:

A. A local limit exists for each pollutant discharged and the user was in compliance with each limit directly prior to, and during, the pass through or interference; or

B. No local limit exists, but the discharge did not change substantially in nature or constituents from the user's prior discharge when CMCMUA was regularly in compliance with its NJPDES permit, and in the case of interference, was in compliance with applicable sludge use or disposal requirements.

9.3 Bypass

A. For the purposes of this section,

(1) "Bypass" means the intentional diversion of wastestreams from any portion of a user's treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

B. A user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (C) and (D) of this section.

C. (1) If a user knows in advance of the need for a bypass, it shall submit prior notice to Borough of Wildwood Crest Sewer Department and the CMCMUA at least ten (10) days before the date of the bypass, if possible.

(2) A user shall submit oral notice to the Borough of Wildwood Crest Sewer Department and the CMCMUA of an unanticipated bypass that exceeds applicable pretreatment standards within twenty-four (24) hours from the time it becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

D. (1) Bypass is prohibited, and the Borough of Wildwood Crest Sewer Department and the CMCMUA may take an action against a user for a bypass, unless the user submitted notices as required under paragraph (C) of this section.

(2) The Borough of Wildwood Crest Sewer Department and the CMCMUA may approve an anticipated bypass, after considering its adverse effects, if Borough of Wildwood Crest Sewer Department and the CMCMUA determine that it will meet the conditions listed in paragraph (D)(1) of this section.

SECTION 10 - WASTEWATER COLLECTION & TREATMENT RATES

The wastewater collection and treatment system rates as listed in the Borough of Wildwood Crest Sewer Department Rules and Regulations are hereby incorporated by reference.

SECTION 11 - EFFECTIVE DATE

This ordinance shall be in full force and effect immediately following its passage, approval, and publication, as provided by law.

Appendix D

List of Emergency Repairs Since August 2017

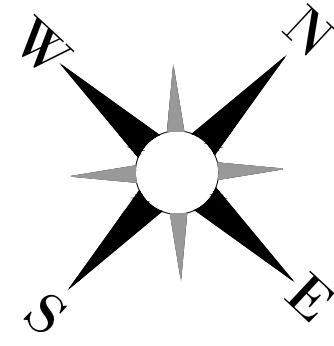
The following is a list of emergency repairs made since August 1, 2017:

	Location
1	New Jersey Avenue & Sweet Briar Road
2	7609 Pacific Avenue – between Atlanta Avenue & Farragut Road
3	7502 Pacific Avenue – between Stanton & Farragut Roads
4	Rambler Road near Seaview Avenue
5	6002 New Jersey Avenue – between Aster & Cardinal Roads
6	Police Department Lateral
7	6308 New Jersey Avenue – between Wisteria & Columbine Roads
8	7609 Pacific Avenue – between Atlanta & Farragut Avenues (2 nd occurrence in same vicinity)

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Exhibit I

Map of Sanitary Sewer Mains by Pipe Material



TOWNSHIP OF LOWER

SUNSET LAKE

TOWNSHIP OF LOWER

CITY OF WILDWOOD

ATLANTIC OCEAN

LEGEND

-  - Polyvinyl Chloride (PVC)
-  - Asbestos Concrete (ACP) or
Vitrified Clay (VCP)

 - Cape May County Road

SANITARY SEWER PIPE MATERIAL MAP

BOROUGH OF WILDWOOD CREST

CAPE MAY COUNTY, NJ

D&A FILE #: WWC-G-004

**DeBLASIO &
ASSOCIATES**

CONSULTING ENGINEERS AND PLANNERS

4701 NEW JERSEY AVENUE, WILDWOOD, NJ 08260
PHONE: (609) 854-3311, FAX: (609) 854-4323

JUNE 2018

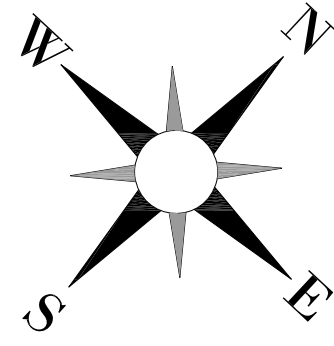
EXHIBIT I



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Exhibit II

Map of Roadway Condition Ratings



TOWNSHIP OF LOWER

SUNSET LAKE

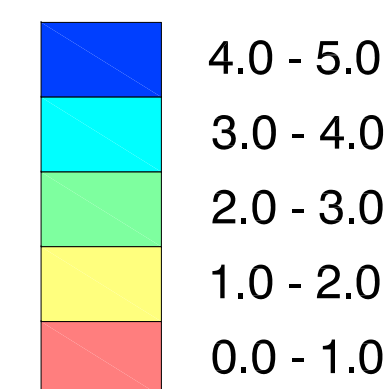
TOWNSHIP OF LOWER

CITY OF WILDWOOD

ATLANTIC OCEAN

LEGEND

ROAD SURFACE RATINGS:



--- 621 --- - Cape May County Road

ROAD SURFACE RATINGS MAP

BOROUGH OF WILDWOOD CREST

CAPE MAY COUNTY, NJ

D&A FILE #: WWC-G-004

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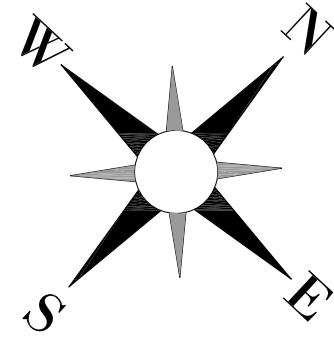
EXHIBIT II



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Exhibit III

Map of Improvements by Priority



TOWNSHIP OF LOWER

SUNSET LAKE

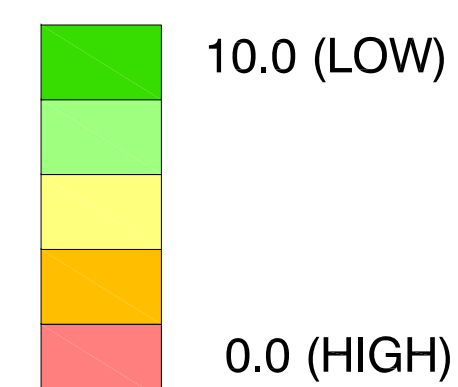
TOWNSHIP OF LOWER

CITY OF WILDWOOD

ATLANTIC OCEAN

LEGEND

PRIORITY RATINGS:



--- 621 --- - Cape May County Road

RECOMMENDED IMPROVEMENTS BY PRIORITY MAP

BOROUGH OF WILDWOOD CREST
CAPE MAY COUNTY, NJ

D&A FILE #: WWC-G-004

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JUNE 2018

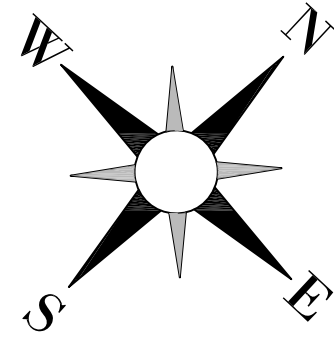
EXHIBIT III



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Exhibit IV

Map of Street Moratoriums



TOWNSHIP OF LOWER

SUNSET LAKE

TOWNSHIP OF LOWER

CITY OF WILDWOOD

ATLANTIC OCEAN

MORATORIUM EXPIRATION DATE

- - JANUARY 1, 2019
- - JANUARY 1, 2020
- - JANUARY 1, 2021
- - JANUARY 1, 2022

621 - **REQUIRES A CAPE MAY COUNTY ROAD OPENING PERMIT**

STREET OPENING MORATORIUM MAP

BOROUGH OF WILDWOOD CREST

CAPE MAY COUNTY, NJ

D&A FILE #: WWC-G-004

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MAY 2018

EXHIBIT IV



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