



MIAMI-DADE WATER AND SEWER DEPARTMENT STANDARDS REVIEW AND UPDATE

March 31, 2022

Contents/Overview

01 PROJECT BACKGROUND

02 SCOPE OF SERVICES

02.1 REVIEW PRE-APPROVED PRODUCT LIST

02.2 REVIEW & UPDATE STANDARD DETAILS

02.3 REVIEW & UPDATE STANDARD SPECIFICATIONS

02.4 REVIEW & UPDATE OF STANDARD DRAWINGS

02.5 LANDSCAPING AND AESTHETIC STANDARDS

02.6 COORDINATION ACROSS DIVISIONS

03 TECHNICAL CERTIFICATIONS AND PERFORMANCE SCHEDULE



01 PROJECT BACKGROUND

To ensure that the Miami-Dade Water and Sewer Department is following the current industry standards and best practices, the Department will seek consultant services to review department standards and provide updates as needed for Department review and approval.

Goal of the Standards Update:

To allow the Department to function more efficiently by having organized and clearly defined standards for materials, operations and processes. The final result will be a published product that allows both internal and external users to quickly obtain necessary information for performing water and sewer work of various types.



02.1 REVIEW PRE-APPROVED PRODUCT LIST

It is the Department's stated goal to provide its operations and maintenance forces with the best possible materials and equipment to allow them to perform their work safely and efficiently. The Department's goal is to specify quality products that can provide the longest possible service life at a reasonable cost.


QUALITY VALUE. ECONOMIC GROWTH.
www.miamidade.gov/water

MIAMI-DADE
COUNTY

Sheet Number: 9.0

Product Specifications

Miami-Dade Water & Sewer Department
Address: 3071 SW 38th Ave, Miami, FL 33146
Phone: (305) 665-7477



Minimum Standards

- AWWA C502
- MDWASD Specification: Section 15060, 15330

Other Requirements

- Color: Chrome Yellow

Applications

- Water

PRE-APPROVED MANUFACTURER

- 1) American (American Flow Control)
- 2) Clow
- 3) Kennedy
- 4) Mueller

Issue Date: 4/4/2016

Revised Date:

SIZE	MANUFACTURER	MODEL	SUBMITTED
5 1/4"	American (American Flow Control)	American-Darling B-84-B-5	<input type="checkbox"/>
5 1/4"	Clow	Medallion #F2545	<input type="checkbox"/>
5 1/4"	Kennedy	K-81-MD (DWG #80783 MD)	<input type="checkbox"/>
5 1/4"	Mueller	A-423 Super Centurion	<input type="checkbox"/>

MIAMI-DADE COUNTY FIRE HYDRANT

CITY OF MIAMI FIRE HYDRANT

COMMENTS:

Approved by: James B. Ferguson, PE

Title: Chief, Engineering and Design Division

Fire Hydrants
1 of 1


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MIAMI-DADE
COUNTY

Sheet Number: 2.1

Product Specifications

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Address: 3071 SW 38th Ave, Miami, FL 33146
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Minimum Standards

- AWWA C105, C110/A21.10, C115/A21.15, C153/A21.53, C600
- MDWASD specification: Sections 15060, UC-250

Other Requirements

- NSF61 (ANSI) for potable water applications
- Cement Lining for water application
- Ceramic Epoxy Lining for sewer application
- C110 Fittings may be required by the Department projects in saltwater areas or at locations with severe corrosion issues when specified on Plans
- Zinc Coating (brush applied for fittings) required in saltwater intrusion areas

Applications

- Water and Sewer

PRE-APPROVED MANUFACTURER

- 1) American
- 2) Integrity Fusion Products, Inc.
- 3) Romac Industries Inc.
- 4) Sigma Corporation
- 5) SIP Industries
- 6) Star Pipe
- 7) Tyler Union
- 8) U.S. Pipe

Issue Date: 4/4/2016

Revised Date: 11/29/2018

SIZE	MANUFACTURER	MODEL	SUBMITTED
4" - 48"	American	Flexible Ring and Lok Ring Fittings	<input type="checkbox"/>
4" - 48"	Integrity Fusion Products, Inc.	Backup Rings, 316 stainless steel, Epoxy Coated	<input type="checkbox"/>
4" - 48"	Romac Industries	Alpha EC Wide Range End Cap	<input type="checkbox"/>
4" - 48"	Sigma Corporation	C110 MJ D.I. Fittings Full body	<input type="checkbox"/>
4" - 48"	Sigma Corporation	C153 MJ Compact Fittings	<input type="checkbox"/>
4" - 48"	Sigma Corporation	C110 Flanged Fittings Cast Iron/ DI	<input type="checkbox"/>
4" - 48"	SIP Industries	DI Flange Fittings	<input type="checkbox"/>
4" - 48"	SIP Industries	DI Compact MJ Fittings	<input type="checkbox"/>
4" - 54"	Star Pipe	DI Compact MJ Fittings	<input type="checkbox"/>
4" - 54"	Star Pipe	DI Full Body MJ Fittings	<input type="checkbox"/>
4" - 54"	Star Pipe	DI Compact Push-On Fittings	<input type="checkbox"/>
4" - 54"	Star Pipe	DI Flanged Fittings	<input type="checkbox"/>
4" - 54"	Tyler Union	DI C110 Full body MJ	<input type="checkbox"/>
4" - 54"	Tyler Union	DI C153 Compact MJ	<input type="checkbox"/>
4" - 54"	Tyler Union	DI C110 Flanged MJ	<input type="checkbox"/>
4" - 48"	U.S. PIPE	MJ FITTINGS	<input type="checkbox"/>

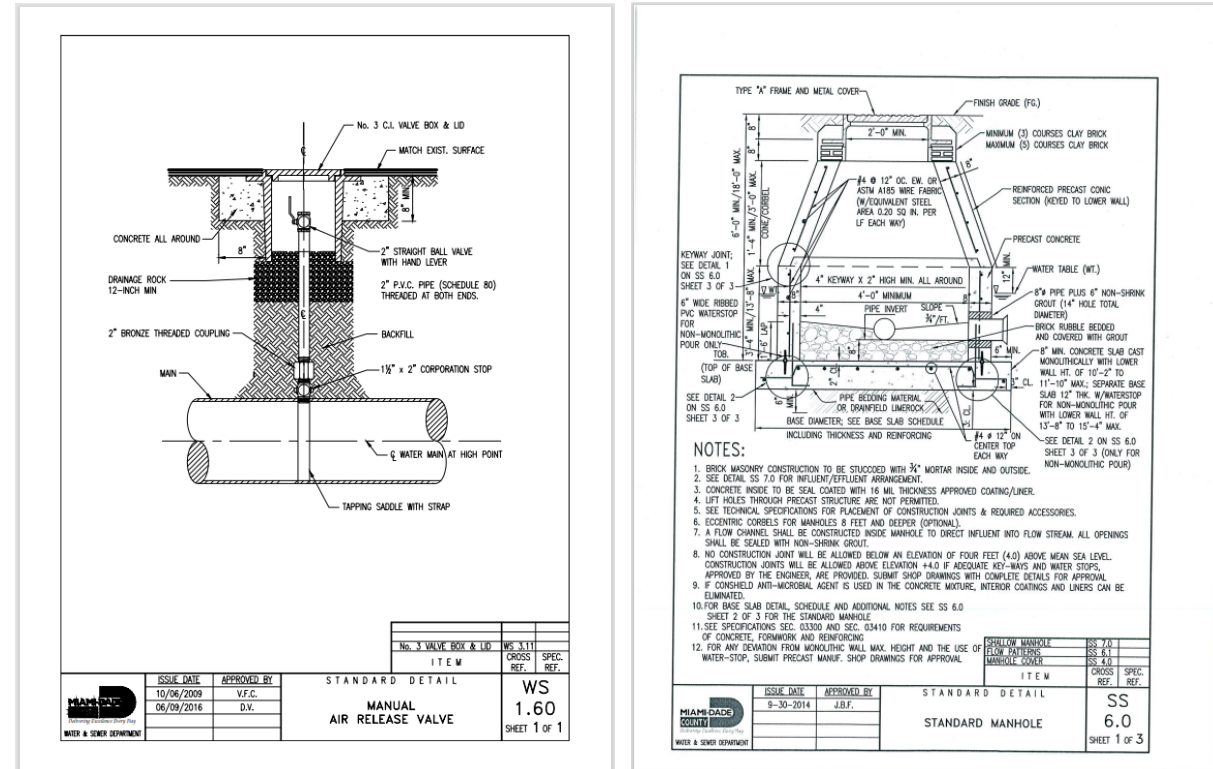
SIZES FURNISHED:
☐ 4" ☐ 12" ☐ 20" ☐ 42", 48" 54"
☐ 6" ☐ 14" ☐ 24"
☐ 8" ☐ 16" ☐ 30"
☐ 10" ☐ 18" ☐ 36"

Fittings
1 of 2



02.2 REVIEW & UPDATE STANDARD DETAILS

Standard Details are used by the industry for an easy visual interpretation of water and sewer construction procedures and practices. There are recommendations from a 2016 Standard Details Update that were only partially incorporated and not fully evaluated for Department staff.



02.3 REVIEW & UPDATE STANDARD SPECIFICATIONS

Review and Update of Standard Specifications Divisions 1 thru 50. The Department has published standard specifications on the internet and has project-specific specifications used by WASD Engineers and Consultants. Specifications from a 2016 Standard Specifications Update have been used for Department projects but further modification is necessary for the content published on the internet.

SECTION 33 05 07.13

HDPE PIPE HORIZONTAL DIRECTIONAL DRILL

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. Scope of Work:

1. This specification covers the requirements for furnishing all labor, equipment and materials associated with the installation of a high-density polyethylene (HDPE) gravity sanitary sewer pipe by directional drilling method. This shall include, but not be limited to, steerable directional boring equipment, boring pits and equipment, sheeting, maintenance of traffic, and coordination with other Contractors, miscellaneous appurtenances to complete the work as shown on the contract drawings, cleanup and disposal of spoils, and restoration. Directional drilling operations shall be performed within the right of way and/or easements shown on the drawings.

B. The work specified herein shall include:

1. Excavation of drilling and receiving pits.
2. Potholing or other similar practices as required to verify underground utilities along the entry and exit drill paths.
3. Drilling of a pilot hole at prescribed line and grade.
4. Reaming of the hole (as needed).
5. Pullback of the HDPE pipe through the hole.
6. Pressure testing of the HDPE pipe.
7. Connect HDPE to manholes (as needed and shown on the drawings).
8. All incidental work such as horizontal and vertical control points, survey, grids, permits, slurry treatment and disposal, shoring and casing of the pits if required, and all else necessary for the complete installation of the pipe in accordance with these specifications and contract drawings.

1.02 QUALITY ASSURANCE

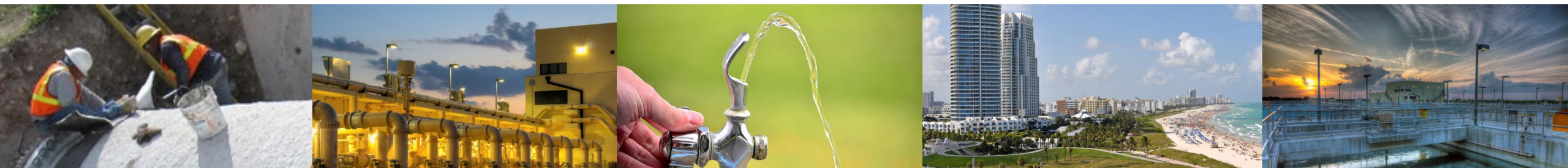
- ###### A. The requirements set forth in this document specify a wide range of procedural precautions necessary to insure that the very basic, essential aspects of a proper directional bore installation are adequately controlled. Strict adherence shall be required under specifically covered conditions outlined in this specification. Adherence to the specifications contained herein, or the Engineer's approval of any aspect of any directional bore operation covered by this specification, shall in no way relieve the Contractor of their ultimate responsibility for the satisfactory completion of the work authorized under the Contract.

B. Standards:

1. Referenced ASTM Specifications:

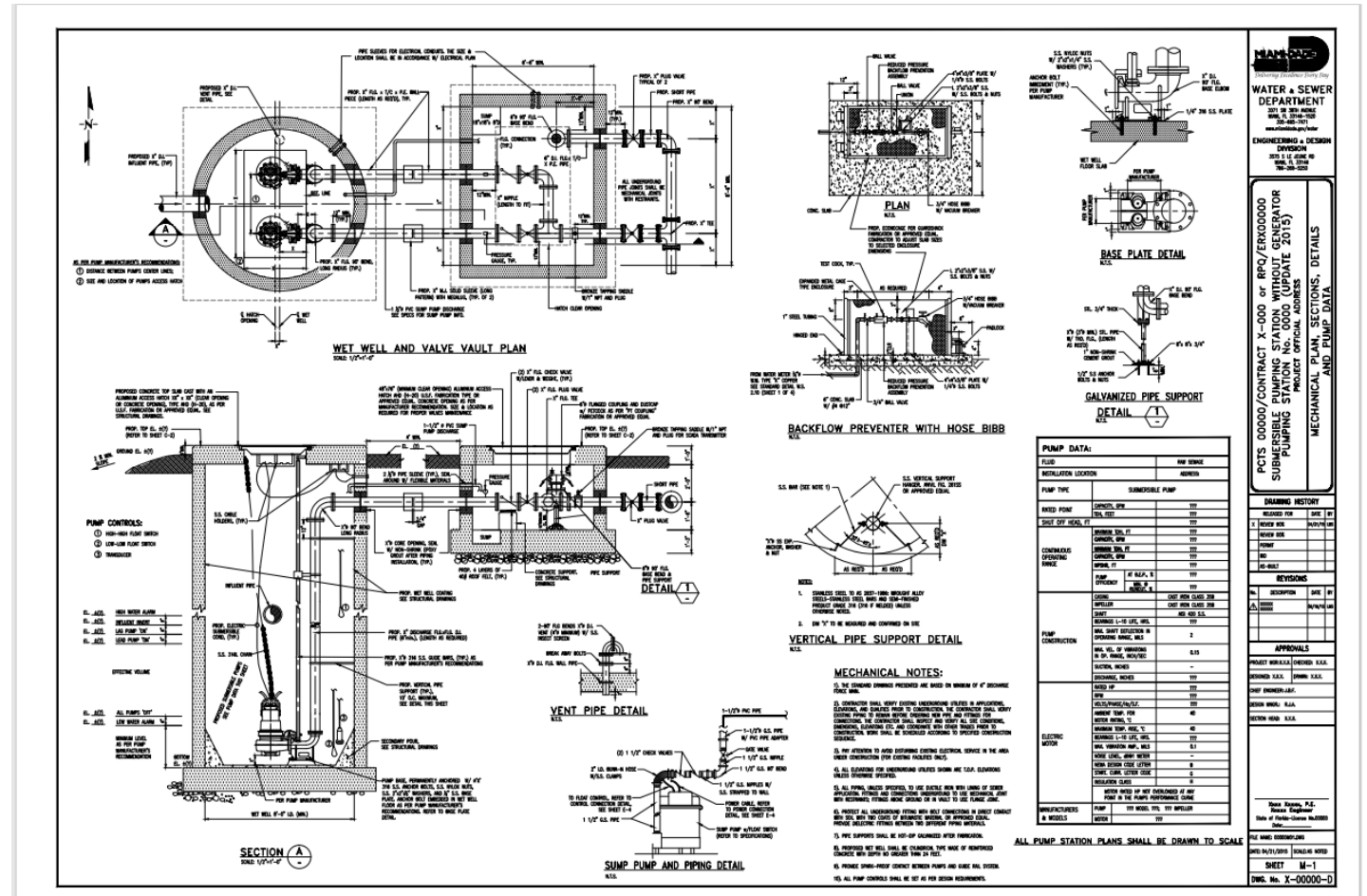
[S] [W]-### (Insert Contract No.)

33 05 07.13-1



02.4 REVIEW & UPDATE STANDARD DRAWINGS

Review of Standard Drawings. The Department has published an Appendix in Part V of the online standards.



02.5 LANDSCAPING AND AESTHETIC STANDARDS

Develop the perspective of cost and constructability as well as future maintenance considerations.
New County requirement to include landscaping in projects.



SECTION 02900

LANDSCAPING

PART 1. GENERAL

1.01 SCOPE OF WORK

- A. Work included in this Section includes tree removal, tree relocations, furnishing and planting trees, plants and grass of the species, sizes and quality specified, fertilizing, watering, maintaining plants, and guarantee.
- B. The schedule of trees and plants, if applicable, is shown on the drawing, and indicates the common and botanical names, the quantities and sizes of plants to be used.
- C. Plant material, if required, is defined as trees and shrubs as scheduled on the drawing.

PART 2. PRODUCTS

2.01 SODDING

- A. General:
 1. Solid sod shall be planted in the unpaved areas abutting the structures and extending to the limits shown on the Plans.
- B. Materials:
 1. Solid Sod:
 - a. Solid sod shall be certified bitter blue St. Augustine. The sod shall be firm touch texture having a compact growth of grass with good root development. It shall contain no weeds or other objectionable vegetation.
 - b. The soil embedded in the sod shall be good clean earth, free from stones and other debris. The sod shall be free from fungus, vermin and other diseases. The sod and soil shall be approximately 1-1/2" thick.
 - c. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be cut into uniform dimensions. Sod shall be laid with closely abutting joints with a tamped or rolled surface.
 2. Top Soil: Soil utilized for planting grasses shall be a mixture of pulverized 50% rock free siliceous sand and 50% clean mulch from an approved source. All ingredients shall be free of sticks, roots, rocks, lumps or other impurities or debris. All soil shall be delivered in a loose friable condition. Top soil may be "unsuitable top soil" removed during

[S] [W]### (Insert Contract No.)

02900 - 1



02.6 COORDINATION ACROSS DIVISIONS

Coordination with WASD Operation Divisions

- Sewer Collection
- Water Distribution
- Pump Station
- Water Production Operations
- Sewer Treatment Plant Operations

Coordination with Technical WASD Divisions

- Engineering and Construction
- Regulatory and Compliance
- Survey
- Planning
- Donations



TECHNICAL CERTIFICATION REQUIREMENTS

6.00 Water and Sanitary Sewer Systems

6.01 Water Distribution and Sanitary Sewage Collection and Transmission

6.01 A Utility Tunneling for Water Distribution and Sanitary Sewage Collection and Transmission Systems

6.02 Water and Sanitary Sewage Pumping Facilities

6.03 Water and Sanitary Sewage Treatment Plants

10.00 Environmental Engineering

10.01 Stormwater and Drainage Design

10.09 Wellfield, Groundwater, and Surface Water Protection and Management

11.00 General Structural Engineering

12.00 General Mechanical Engineering

13.00 General Electrical Engineering

14.00 Architecture

15.00 Surveying and Mapping

15.01 Land Surveying

15.03 Underground Utility Location

16.00 General Civil Engineering

17.00 Engineering Construction Management

20.00 Landscape Architecture



03

TECHNICAL CERTIFICATONS REQUIREMENTS AND SCHEDULE

SCHEDULE

Task Description	Department Representative	Days from NTP
Review Pre-Approved Products List	Engineering	365 days
Update of Standard Details	Engineering	540 days
Review and Update of Standard Specifications Divisions 1 thru 48	Engineering	540 Days
Review of Standard Drawings	Engineering/Pump Station	365 Days





QUESTIONS?

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Miami-Dade Water and Sewer Department