APPENDIX A-2

WASTEWATER APPROVED MATERIAL LIST

PLEASE TYPE OR PRINT CLEARLY IN BLACK INK

Project Name:		
Contract / Bid Number:		
Contractor's Name:		
Contractor's Address:		
Contractor's Signature:		
For	City Use Only	
(Refer to Sec	ction 01300 – Submittals)	
Engineer:	Date:	
Reviewed, No Comments:		
Reviewed, Comments as Noted:		
Reviewed, Comments Attached – Resubmit:	_	
Rejected, Revise and Re-submit, Comments Attached	d:	
Not Reviewed:		
City Project Manager:	Date:	
Comments:		

WASTEWATER APPROVED MATERIAL LIST

With the submission of this document, the CONTRACTOR understands that the use of the following selected items, as individually indicated using an "X", is mandatory. The products included in this list are approved for wastewater service only.

Recommendations for Approved Alternates, using other items that are not contained within this Checklist, shall be initiated, and submitted by the CONTRACTOR, in accordance with Section 00800-General Provisions, to the CITY and the ENGINEER for review and approval at least ten (10) calendar days in advance of need.

It is also understood by the CONTRACTOR that the CITY and the ENGINEER shall reject materials and products not in accordance with this Specifications and this Checklist.

Shop drawings shall be required for all structures and similar items not contained on this checklist, such as manholes, wet wells, and other castings.

Four (4) sets of the CONTRACTOR's and the ENGINEER's executed APPROVED MATERIALS CHECKLIST and any necessary shop drawings shall be submitted to the CITY and the ENGINEER for its use and approval, plus the number of sets needed for the CONTRACTOR's use.

Ordering material and products without specific written approval from the CITY of the submitted list and shop drawings is NOT recommended and is done at the CONTRACTOR's sole expense and responsibility.

NOTE: The latest changes approved by the CITY are indicated by "underlining" and deleted items by "strikethroughs".

American Iron and Steel, Buy American Act, or any procurement requirements identified in the contract documents shall take precedence over the materials listed in this checklist.

CONTENTS

Section 1: Valves and Accessories

Section 2: Pipe Material and Accessories

Section 3: Pipe Fittings

Section 4: Wetwells, Manholes, and Accessories

Section 5: Metalwork

Section 6: Finishes

Section 7: Equipment

WASTEWATER APPROVED MATERIAL LIST

SECTION 1: VALVES AND ACCESSORIES

<u>Automatic Combination Air / Vacuum Release Valve:</u>

Manufacturer Part Number Comments

H-Tec Model 986, 989, 990 Short Body for 989

Golden Anderson 929

ARI D-025 (short version)

Gate Valves 14-Inch Through 48-Inch (C-515, Resilient Seated, with Side Actuators, if Required):

<u>Manufacturer</u>	<u>Part Number</u>	<u>Comments</u>
Mueller	A-2361	Epoxy Coated
McWayne/Clow	F-6100	Epoxy Coated
American	Series 2500	Epoxy Coated

Gate Valves 3-Inch Through 12-Inch (C515, Resilient Seated Only):

<u>Manufacturer</u>	Part Number	<u>Comments</u>
Mueller	A-2361	Epoxy Coated
McWayne/Clow	F-6100	Epoxy Coated
American	Series 2500	Epoxy Coated

Check Valves:

Manufacturer Part Number Comments

Kennedy Mueller VSI

Plug Valves (Full / 100% Port):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

DeZurik

VSI

Val-Matic Eccentric Plug Valve

Insertion-Valves:

Manufacturer Part Number Comments

TEAM Insert-Valve 4" – 12" Hydra-Stop IV-250 / IVP-250

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Air / Vacuum Release Valve Enclosures (Medium Green):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Water Plus Corp. 107-G With Pin Allen Type Lock

Air / Vacuum Release Valve Service Saddles (All Stainless Wrap-Around Band, 2" NPT Outlet):

Manufacturer Part Number Comments

Total Piping Solutions T3 Series

Ford FS 313, 323, and 333 with Bellville washers for HDPE

Air / Vacuum Release Ball Valve (Stainless Steel, Full Bore, FIP x FIP):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Apollo 76F-100-A Series

<u>Valve Box with Lids (5 ¼ - Inch, ASTM A48 30B Heavy Duty Cast or Ductile Iron, with "SEWER"</u> Cast into the Lid Top:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Tyler 461-S, 462-S, 6850, 6860 Must be Cast in USA

Bingham/Taylor I5B20, I5B18

Valve Box Stabilizer (Green):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Bingham & Taylor ADP90001GRN

Valve Box Debris Cap:

Manufacturer Part Number Comments

Bingham & Taylor ODSDEISP12B

Curb Stop and Check Valve Assembly / Lateral Kit:

Manufacturer Part Number Comments

E-One

WASTEWATER APPROVED MATERIAL LIST

SECTION 2: PIPE MATERIALS AND ACCESSORIES

FRPM (Fiberglass Reinforced Polymer Mortar) Pipe:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

HOBAS Pipe USA, Inc. Filament Wound Pipe

PVC (Light Green) 4-Inch and Larger Pipe (AWWA C-900, DR18):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Bristolpipe

PVC (Light Green) 4-Inch and Larger Pipe (AWWA C-900, DR18) (Continued):

Manufacturer Part Number Comments

J-M Manufacturing

IPEX

Diamond Plastics Freedom Plastics National Pipe

NAPCO (North American Pipe Company)

Underground Solutions Fusible PVC Requires COSUD Approval

PVC Gravity Pipe – Mains and Services (SDR 26, Light Green in Color:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Certainteed Can-Tex

J-M Manufacturing
Diamond Plastics

Freedom Plastics Bristolpipe

National Pipe

.. ...

Vassallo

NAPCO (North American Pipe Company)

<u>Ductile Iron Pipe (4-Inch to 12-Inch = PC 350, 16-Inch to 20-Inch = PC 250, 24-Inch to 64-Inch = PC 200) (DI Flanges as Applicable, AWWA C115) (P401 Coating System):</u>

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

American Clow

WASTEWATER APPROVED MATERIAL LIST

Griffin McWane US Pipe

HDPE Pipe (DR11, Green Striped):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Driscopipe Series 1000 Chevron Plexco

Painting Finish (Exterior):

Manufacturer Part Number Comments

Koppers No. 505

Carboline Bitumastic 300M

Force Main Locating Wire (Single Strand 12-Guage Solid Copper Wire with Green Colored

Insulated Covering:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Copperhead CCS (Reinforced Tracer Wire) 1230 HS Open Cut Installation
Copperhead CCS (Reinforced Tracer Wire) 1245 EHS HDD Installation

<u>Force Main Identification Tape (Light Green, 6-Inches Wide, 2-Inches High Black Lettering, Non-Adhesive Backed):</u>

Manufacturer Part Number Comments

Pro-Line

<u>Buried Force Main Warning Tape (Light Green, 3-Inches Wide, 1-Inch-High Black Lettering, Non-Adhesive Backed):</u>

Manufacturer Part Number Comments

Zurn / Wilkins 375, 375XL, 975XL

Poly Pig:

Manufacturer Part Number Comments

Knapp Poly Pig Girard Poly Pig

Wastewater Service Saddle (Ductile Iron Saddle Body, Stainless Steel Strap):

<u>Manufacturer</u> <u>Part Number</u> Comments

Romac "CB" Sewer Saddle For use with lined VC Pipe

WASTEWATER APPROVED MATERIAL LIST

Gravity Service Fittings (SDR 26):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Multi Harco

Royal Plastic Trends

Pipe Adapters:

Manufacturer Part Number Comments

Fernco Flex Coupling Fernco The Hulk

Indiana Steel Maxadapter

SECTION 3: PIPE FITTINGS

Fittings (All Sizes), Compact, Ductile Iron AWWA 153):

Manufacturer Part Number Comments

American Romac Alpha or MJ Ends

Tyler / Union US Pipe Sigma Starr

SIP Industries

Flange Adapters:

Manufacturer Part Number Comments

Rockwell International Type 913
Baker Type 602
Dresser International Type 128
Smith Blair Series 900

EBAA MEGA Flange Restraining Romac Alpha FC, RFCA Restraining

Casing Spacers (All Sizes) Stainless Steel with Vinyl Runners Centering:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Cascade Series CCS / CCPS / AZ

RACI Series S/T, F/G, P/Q, M/N, E/H

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BWM SS

<u>Interior Coatings – Ductile Iron Pipe:</u>

Manufacturer Part Number Comments

InduronProtecto 401Permox CTFPermox CTF

Restrained Joints - Ductile Iron Pipe:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

American Cast Iron Pipe Flex Ring or Lok-Ring US Pipe TYTON® or HDSS

Mechanical Restraining Joints – Ductile Iron Pipe:

Manufacturer Part Number Comments

EBAA Iron Inc. Mega-Lug Series 1100

Series 1700 Bell Restrainer

Series RS-3800 Restrainer - sleeve included

Sigma One LOK SLD, PV LOK

Star Pipe Products Stargrip Series 3000, 300S & 3000OS

Stargrip Series 3100S & 3100P Flange Adapter Series 200 & 400

Retainer Glad Series 600

Tyler / Union Tufgrip Series 1000

US Pipe EZ Grip

Mechanical Restraining Joints – PVC Pipe:

Manufacturer Part Number Comments

EBAA Iron Inc. Megalug Series 2000PV

Series 1500 and 1600

Bell Restrainer (4-Inch to 12- Inch)
Series RS-3800 Restrainer Sleeve Included

JCM 620 and 621 Sur-Grip Bell Joint

1350, 1360, 1390 Bell Restrainer

900 Adapter Flange 1300 Fitting Restrainer

1500 Series

Sigma One LOK SLC and PV LOK Series

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WASTEWATER APPROVED MATERIAL LIST

PVP and **PVPF**

Star Pipe Products PVC Stargrip Series 4000 and

4000P, PVC Harness Series 1000, 1100 & 1200, Adapter Flange Series 200, 400, \$, 4200

Series 200, 400, & 4200

Tyler / Union Tuf Grip TLP Series for PVC Pipe Use

SIP EZ Grip
Ransom International Rieberlock

<u>Tapping Sleeves – Smaller than 24-Inch:</u>

Manufacturer Part Number Comments

JCM Model 432 Mueller H-304 SS

<u>Tapping Sleeves – Smaller than 24-Inch (Continued):</u>

Manufacturer Part Number Comments

Romac SST

Size on Size Tapping Sleeves:

Manufacturer Part Number Comments

Mueller H-615, 616, 619
American Flow Control Series 2800

<u>Tapping Sleeves (Mechanical Joint):</u>

Manufacturer Part Number Comments

JCM Series 414 Romac SST-MJ

Pipe Repair / Transition Couplings:

Manufacturer Part Number Comments

Hymax 3", 14" or Larger AC-PVC/DI

Romac Alpha 4" through 12" PVC/DI/HDPE Romac Macro 4" through 12" AC-PVC/DI

Anti-Seize Lubricants:

Manufacturer Part Number Comments

Loctite Never Seize

Bostik

WASTEWATER APPROVED MATERIAL LIST

Line Stop Fittings (Stainless Steel Body, Flange and Hardware, check insertion plug type with line stopping service):

Manufacturer Part Number Comments

JCM 440 4" - 8" stainless steel flange DIP

completion plug, carbon steel blind flange (epoxy coated), 10" - 20" all stainless-steel body and hardware, stainless or carbon steel flange, DIP completion plug, carbon steel blind flange (epoxy coated), 24" and larger all stainless-steel body and hardware, stainless or carbon steel flange, DIP completion plug, carbon steel blind

flange (epoxy coated)

Line Stop Fittings (Stainless Steel Body, Flange and Hardware, check insertion plug type with line stopping service) (Continued):

Manufacturer **Part Number** Comments

Hydra-Stop **HSF 250 Total Piping Solutions** Triple Tap

Pipe Repair Clamps:

Manufacturer Part Number **Comments**

JCM

Smith Blair

Total Piping Solutions Quick Cam

SECTION 4: WETWELLS, MANHOLES, AND ACCESSORIES

Concrete Joint Seal:

Manufacturer Part Number **Comments**

K.T. Snyder Co. Rub-R-Neck

Plastic Joint Sealer:

Manufacturer Part Number **Comments**

K.T. Snyder Co. Ram Neck

Atlantic Concrete Product

WASTEWATER APPROVED MATERIAL LIST

Joint Wrap:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

A-Lok Butyl-Lok

Calcium Aluminate Coatings:

Manufacturer Part Number Comments

Kerneos Aluminates SewperCoat Strong Strong Seal HP

Polyurethane Coatings:

Manufacturer Part Number Comments

SprayRoq SprayWall

Manhole Boot:

Manufacturer Part Number Comments

Trelleborg Kor-n-Seal Link Seal S-316

Polymer Concrete Manhole:

Manufacturer:

USCP

Manhole Frame & Cover:

ManufacturerPart NumberCommentsUS FoundryUSF 170-EORS GasketedGMI CorporateModel 2600 F/CGasketedCAPComposite

Cleanout Handhole ("S" or "Sewer" Cast in Lid):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

US Foundry USF 7621

SECTION 5: METALWORK

Hatches (Gutter Type, Pad Lockable, Structural Aluminum, Diamond Pattern Surface):

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WASTEWATER APPROVED MATERIAL LIST

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Bilco H-20 Loading

Halliday Products, Inc.

H-20 Loading
Babcock-Davis

H-20 Loading

USF Fabrication

Hatch Nets:

Manufacturer Part Number Comments

Safe Approach Hatch Net 121

Anti-Seize Lubricants:

Manufacturer Part Number Comments

Anti-Seize Technology Pure White

<u>Anti-Seize Lubricants (Continued):</u>

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Dixon Ticonderoga AS-470
Loctite Never-Seize
Glass Capsule Polyester Resin Adhesive Anchors:

Manufacturer Part Number Comments

Hilti HVA Cobra Anchors

Expanding-Type Anchors:

Manufacturer Part Number Comments

Trubolt Anchors ITW Ramset/Redhead

McCullock Industries Kwick-Bolt

<u>Impact Anchors:</u>

Manufacturer Part Number Comments

Hilti, Inc. Metal Hit Anchors Rawplug Company Rawl Zamac Nailin

Coatings:

Manufacturer Part Number Comments

Sherwin-Williams Zinc-Clad XL Alvin Products Galvax

WASTEWATER APPROVED MATERIAL LIST

ZRC Worldwide Galvite

SECTION 6: FINISHES

Paints:

Manufacturer Part Number Comments

Tnemec Carboline Ameron

International Coating, Inc.

Epoxy Polyamide Fillers:

Manufacturer Part Number Comments

Tnemec 54-660

Topcoat Epoxy Block Filler

Ameron Nu-Klad 105

Keeler & Long Kolor No. 3400

Epoxy Polyamide:

Manufacturer Part Number Comments

Tnemec 66-Color H.B. Epoxoline

Carboline 890 Ameron Amercoat

Keeler & Long Kolor-Poxy Primer No. 3200

Bond Coat:

Manufacturer Part Number Comments

Kop-Coat Bitumastic No. 300-M

Keeler & Long CT 400

Coal Tar Epoxy:

Manufacturer Part Number Comments

Kop-Coat Bitumastic No. 300-M

Keeler & Long CT 400

Conditioner:

Manufacturer Part Number Comments

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WASTEWATER APPROVED MATERIAL LIST

Kop-Coat Bitumastic 2CB

Keeler & Long CT 300

Acrylic Coating:

Manufacturer Part Number Comments

Tnemec Series 130-6602 Envirofill

Carboline Flexxide Keeler & Long 6440

Acrylic Emulsion:

Manufacturer Part Number Comments

Tnemec Series 180 WB Tneme-crete

Carboline D3359

Keeler & Long Aqua-Kolor Enamel W-2 Series

Ferrous Metal Epoxy Polyamide Primer:

Manufacturer Part Number Comments

Tnemec 66-1211 Epoxy Primer

Carboline 893 Primer
Ameron Amercoat 71

Keeler & Long Kolor-Poxy Primer No. 3200

Ferrous Metal Epoxy Polyamide:

Manufacturer Part Number Comments

Tnemec 66-Color H.B. Epoxoline

Kop-Coat Hi-Gard Epoxy
Carboline 890 Epoxy

Keeler & Long Kolor-Poxy Primer

Aliphatic Polyurethane:

Manufacturer Part Number Comments

Tnemec 72-Color Endura

Carboline 134 Ameron Amercoat

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WASTEWATER APPROVED MATERIAL LIST

Keeler & Long Acythane Enamel

Aliphatic Polyurethane (When Using Roller):

Manufacturer Part Number Comments

Tnemec 70

Carboline 134 (for roller) Ameron Amershield

Keeler & Long Acrythane Enamel Y-1 Series

Epoxy Polyamide:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Tnemec 140-1211 Porta-Pox Plus

Kop-Coat 340 Gold Primer
Carboline 187 Primer
Ameron Amercoat 71

Keeler & Long Kolor-Poxy Primer No. 3200

Epoxy Amine-Cure:

Manufacturer Part Number Comments

Tnemec 04

Carboline 187 Finish Use 187 primer when not using

shop primer

on Aluminum

Galvanized Steel Coating Wash Primer and/or Epoxy Polyamide:

Manufacturer Part Number Comments

Tnemec 66-Color H.B. Epoxoline Carboline Rustbnd Primer/Sealer

Ameron Amchem Galvaprep on Galvanized Steel

Amchem Aiodine 1200 plus

Ameron Amerlock 400

Keeler & Long Vinyl Brutyal Wash Primer No. 7840

Kolor-Poxy Primer No. 3200

Aliphatic Polyurethane:

Manufacturer Part Number Comments

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WASTEWATER APPROVED MATERIAL LIST

Tnemec 72 Color Endura Shield 11 Gloss

Kop-Coat

Carboline Carbothane 134 H.S. Ameron Amercoat 450 GL

Keeler & Long Acrythane Enamel Y-1 Series

Aliphatic Polyurethane Gloss (When Using Roller):

Manufacturer Part Number Comments

Tnemec 70 Color Endura Shield

Kop-Coat Carboline

Aliphatic Polyurethane Gloss (When Using Roller) (Continued):

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Ameron Amershield

Keeler & Long Acrythane Enamel Y-1 Series

Alternate Coating Systems:

<u>Manufacturer</u> <u>Part Number</u> <u>Comments</u>

Carboline Galvonox Type 1

Keeler & Long No. 6820

Zinc Chromate Primer:

Manufacturer Part Number Comments

Carboline 1037WP

Keeler & Long Vinyl-Brutyral Wash Primer No. 7840

Aluminum Pigmented Epoxy Paint:

Manufacturer Part Number Comments

Carboline Carbomastic 90

Keeler & Long Kolormastic No. 1000

Coal Tar Epoxy (High Build):

Manufacturer Part Number Comments

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WASTEWATER APPROVED MATERIAL LIST

Tnemec 46H-413

Kop-coat Bitumastic No. 300-M Ameron Amercoat 78HB

Keeler & Long CT 400

Quality Control:

Manufacturer Part Number Comments

Tinker & Rasor

K-D Bird Dog Holiday Detector

SECTION 7: EQUIPMENT

Submersible Pumps (Less than 30 HP):

Manufacturer Part Number Comments

Hydromatic

Flygt Myers

Barnes Pumps Goulds Pumps

Submersible Pumps (30 HP and Greater):

Manufacturer Part Number Comments

Fairbanks Flygt Pumps

Peristaltic Metering Pumps:

Manufacturer Part Number Comments

Flowrox FXMS

Diaphragm Metering Pumps:

Manufacturer Part Number Comments

Grundfos

Stop Gates and Slide Gates:

Manufacturer Part Number Comments

Alpha Laval, Inc. CoPlastic Gate

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WASTEWATER APPROVED MATERIAL LIST

Tools:

Manufacturer Part Number Comments

Snap On Crescent

Stanley