



**APPROVED PRODUCTS LIST (1/2017)
CERTIFICATION AND CONCURRENCY STATEMENT**

Project Name: _____

Concurrency of Contractor: _____
Signature Date

Firm

Concurrency from the EOR
(Engineer of Record): _____
Signature Date

The execution of this document acknowledges that I (We), the above signed, have reviewed this Approved Products List (APL) in entirety, initialed all error corrections to the APL, and concur that the materials and products listed are acceptable and appropriate for the project noted above. As the engineer-of-record and/or contractor, I (We), the above signed, shall provide written notification to the City of Lake Worth for any material listed in the APL to which I object being implemented/ installed in the project noted above.

Individual product shop drawings will be required for all non-standard items. Products not listed in the APL, or APL listed products that defer in specification, shall be considered a non-standard product. Only lead-free Brass products shall be acceptable.

Utility Department:

APPROVED: _____
Signature Date

APPROVED AS NOTED: _____
Signature Date

*NOT APPROVED: _____
Signature Date

*Contractor to revise and resubmit by ____/____/____



WATER DISTRIBUTION

FIRE HYDRANTS:

- Mueller Super Centurion
A-423, 5 1/4" Plugged Drain
- Clow Medallion
5 1/4" F-2545
- American Darling
5 1/4" B-84-B-5

HYDRANT COATINGS:

Hydrants shall have a factory applied top coat of Tnemec Series 66 Yellow

BACKFLOW PREVENTION:

- BACKFLOW PREVENTORS (BFP) DOUBLE CHECK DETECTOR ASSEMBLIES

- Ames/Watts
3000SS/774 DCDA
- Febco
856
- Wilkins
950 DA

Note: The "Double Check Detector Assemblies" or "Reduced Pressure Principle Backflow Detector Assemblies" which are included on the latest "List of Approved Backflow Prevention Assemblies" as published by the University of Southern California or American Society of Sanitary Engineering may be approved as equal by the Lake Worth Water Utility Department.

- REDUCED PRESSURE ZONE (RPZ) DEVICE

Up to 2 1/2":

3" and up:

- Wilkins
975XL
- Watts
009M2 or 3 QT
- Ames
4000SS
- Wilkins
375

Note: Reduced Pressure Principle Backflow Prevention Assemblies and DCDA combinations which are included in the on the latest "List of Approved Backflow Prevention Assemblies" as published by the University of Southern California or by the American Society of Sanitary Engineering (with field testing) may be approved as equal by the Lake Worth Water Utility Department.

WATER SERVICE & FITTINGS:

- 1", 1.5" and 2" HIGH DENSITY POLYETHYLENE (HDPE) TUBING – CTS, DR9 (Blue or blue striped)

- ENDOT
- JM Eagle
- ADS
- IPEX



- STAINLESS STEEL STIFFENING INSERTS – For CTS tubing up to 2”

- | | | |
|---|---|---|
| <input type="checkbox"/> Ford 50 Series
(51, 52, 54, 55) | <input type="checkbox"/> Mueller 5287
(04, 05, 06, 07) | <input type="checkbox"/> AY McDonald
6133T
(3/4, 1, 1 1/2, 2) |
|---|---|---|

- 1”, 1.5” and 2” CORPORATION STOPS

- | | | |
|--|---|--|
| <input type="checkbox"/> Mueller
P-25008N | <input type="checkbox"/> AY-McDonald
74104B-22 | <input type="checkbox"/> Ford Meter
FB1000-4NL/FB1000-
6NL/ FB1000-7NL |
|--|---|--|

* When used in sanitary sewer applications no lead corporations is not a requirement

- CURB STOP FOR U BRANCH

- | | | |
|---|--|---|
| 5/8 x 3/4 x 3/4”: | 3/4”, 1”: | |
| <input type="checkbox"/> Mueller
H-14265 | <input type="checkbox"/> AY-McDonald
74604B | <input type="checkbox"/> Ford Meter
BA13-332W-NL
BA13-342W-NL
BA13-444W-NL |

- 1” ANGLE METER VALVE CURB STOP

- | | | |
|--|---|---|
| 5/8 x 3/4 x 1”, 1”: | 1 x 3/4 x 3/4”, 1”: | |
| <input type="checkbox"/> Mueller
B-24258N | <input type="checkbox"/> AY-McDonald
74602B-22 | <input type="checkbox"/> Ford Meter
BA43-342W-NL
BA43-444W-NL |

- 1”, 1.5”, & 2” STRAIGHT METER VALVE CURB STOP

- | | | | |
|--|--|---|--------|
| 5/8 x 3/4 x 1”, 1” | 1 x 3/4 x 3/4”, 1” | 1 1/2” x 1 1/2”F | 2”x2”F |
| <input type="checkbox"/> Mueller
B-24350N | <input type="checkbox"/> AY-McDonald
76100MW-22 | <input type="checkbox"/> Ford Meter
B43-342W-NL
B43-444W-NL | |
| <input type="checkbox"/> Mueller
B-24335N | | <input type="checkbox"/> Ford Meter
BF43-666W-NL
BF43-777W-NL | |



- 1.5" & 2" ANGLE METER VALVE CURB STOP

1 1/2" & 2" Flanged

- | | | |
|--|---|---|
| <input type="checkbox"/> Mueller
B-24276N | <input type="checkbox"/> AY-McDonald
74602B-22 | <input type="checkbox"/> Ford Meter
BFA43-666W-NL
BFA43-777W-NL |
|--|---|---|

- 3/4" – 2" SERVICE FITTINGS

- | | | |
|--|--|--|
| <input type="checkbox"/> Mueller
P-15428N | <input type="checkbox"/> AY-McDonald
74753-22 | <input type="checkbox"/> Ford Meter
C84-XX-NL |
| <input type="checkbox"/> Mueller
P-15451N | <input type="checkbox"/> AY-McDonald
74754-22 | <input type="checkbox"/> Ford Meter
C14-XX-NL |
| <input type="checkbox"/> Mueller
P-15403N | <input type="checkbox"/> AY-McDonald
74758-22 | <input type="checkbox"/> Ford Meter
C44-XX-NL |

- DUAL WATER SERVICE U BRANCH

1 X 3/4 X 6.5":

1 X 3/4 X 6.5":

- | | | |
|--|--|---|
| <input type="checkbox"/> Mueller
H-15363N | <input type="checkbox"/> AY-McDonald
708T2M | <input type="checkbox"/> Ford Meter
U48-43-65-NL |
| | <input type="checkbox"/> AY-McDonald
708U2M | <input type="checkbox"/> Ford Meter
U18-43-65-NL |

- Y – BRANCH CONNECTIONS

1 1/2" X 1" x 1".

2" X 1" x 1".

- | | | |
|--|---|---|
| <input type="checkbox"/> Mueller
H-15343N
P-15343N | <input type="checkbox"/> AY-McDonald
708YSQQ | <input type="checkbox"/> Ford Meter
Y44-264-NL
Y44-274-NL
Y48-374-NL |
|--|---|---|

- METER COUPLING

5/8 X 3/4 X 3/4": 3/4 X 3/4 X 2 1/2":

- | | | |
|---|---|---|
| <input type="checkbox"/> Mueller
H-10890 | <input type="checkbox"/> AY-McDonald
74624 | <input type="checkbox"/> Ford Meter
C38-23-25-NL |
|---|---|---|



1":

1 X 1 X 2.63":

Mueller
H-10890

AY-McDonald
74624

Ford Meter
C38-24-35-NL

- DOUBLE STRAP SERVICE SADDLE FOR DIP - CC THREADS, STAINLESS STEEL STRAPS

1", 1 ½", 2":

JCM
406

Romac
202BS

Ford Meter
202B – for CIP
202BSD – for DIP

* When used in sanitary sewer applications no lead is not a requirement

- DOUBLE STRAP SERVICE SADDLE FOR PVC – CC THREADS, STAINLESS STEEL STRAPS

1", 1 ½", 2"

Mueller
BR2W

JCM
404

Romac
202NS

Ford Meter
FCD202

* When used in sanitary sewer applications no lead is not a requirement

- METER BOX UP TO 2"

For 1 ½" & 2" Meter:

For ¾" or 1" Meter:

For Dual Meter: ¾" or 1"

Oldcastle Precast
N36 BOX with
Nicor Read-Rite
B36 HDR Lid

Oldcastle Precast
B12 Box with
Nicor Read-Rite
B12 HDR Lid

Oldcastle Precast
B24 Box with
Nicor Read-Rite
B24 HDR Lid

- METER FLANGE

2" only:

Mc Donald
610F

Ford Meter
CF31-77-NL

- BLOW OFF VALVE

2"

Ford
BLA18-777-TA-NL



VALVES/ TAPS:

- GATE VALVES (AWWA C509, C515)

4" to 16"

Resilient Wedge and Bi Directional Flow Only with 2" square operating nut - left open.
UL/FM required on shut-off RSGV for Double Detector check valve application only.
Max working Pressure of 200 psi; tested at 400 psi

- Mueller 2362, 2361 American Darling 2500 Clow F-6100 Series

- BUTTERFLY VALVES (AWWA C504)

For use on 14" and larger Distribution Water Mains only. 24" and larger shall be class 200 valves

14" to 24"
150psi Rated

- Mueller Lineal III American 1450, 150-B Pratt Goundhog DeZurik Class 150B

- TAPPING VALVES – AWWA C509, C515

- American 2500 TM Mueller T-2362;T-2361 Clow F-6114

- VALVE BOX – Embossed with "WATER" for distribution mains, embossed with "SEWER" for force mains.

- Tyler Union 6850 & 6855

- VALVE IDENTIFICATION TAGS – Utilized when valve box is located outside of asphalt area within a concrete walkway or concrete collars. 3" Brass Disc by 1/8" thick with theft proof anchor pin. Engraved with 1/4" to 3/8" capitalized lettering. Each valve will have the following minimum information on tag: valve size (ex. 6"), type of valve (ex. GV, BV, PV), and operation instructions (R-21) right 21 turns to close.

- WAGCO Marker



PRESSURE CLASS:

- Class 350, sizes to be used on water mains: _____ (4" to 12")
- Class 250, sizes to be used on water mains: _____ (14" to 20")
- Class 200, sizes to be used on water mains: _____ (16" and up)
- Class 350, sizes to be used on FJ pipe: _____

• POLYVINYL CHLORIDE (PVC)

MANUFACTURER:

- JM Pipe CertainTeed NAPCO IPEX

CLASS:

- PVC C-900 DR 18, sizes to be used on water mains: _____ (4" to 12")
- PVC C-905, sizes to be used on water mains: _____ (over 12")
- (For C-905: up to 24" diameter use DR-18, up to 36" diameter use DR 21)**

• MECHANICAL JOINT RESTRAINT – Ductile Iron Pipe

- EBAA Iron MegaLug 1100 Ford Uni-flange Series 1400 Star Pipe Products Series 3000 (up to 12")
- Sigma One-Lok SLDE

• MECHANICAL JOINT RESTRAINT – PVC Pipe

- EBAA Iron MegaLug 2000 Ford Uni-flange Series 1500 Star Pipe Products Series 4000 (up to 12")
- Sigma One-Lok SLCE

• BELL JOINT RESTRAINT – Ductile Iron Pipe

Rods and nuts shall be 304 stainless steel with nuts coated to prevent galling.

- EBAA Iron 1600 TD Series EBAA Iron 1100 HD Series EBAA Iron 1700 Series
- Sigma One-Lok SSLDH Series Sigma One-Lok SLDEH Series Ford Uni-flange 1450-X



- BELL JOINT RESTRAINT – PVC Pipe

Rods and nuts shall be 304 stainless steel with nuts coated to prevent galling.

- | | | |
|--|--|--|
| <input type="checkbox"/> EBAA Iron
1600 TD Series | <input type="checkbox"/> EBAA Iron
1600 HD Series | <input type="checkbox"/> EBAA Iron
1100 HV Series |
| <input type="checkbox"/> Sigma PV-Lok
PWH Series | <input type="checkbox"/> Sigma One-Lok
SLCEH Series | <input type="checkbox"/> Ford Uni-flange
1450-C |

- FLANGED ADAPTER

- | | |
|---|---|
| <input type="checkbox"/> EBAA Iron
2100 Megaflange | <input type="checkbox"/> Smith Blair
Type 912 (Stainless steel bolts and nuts) |
|---|---|

- DUCTILE IRON FITTINGS – Cast ductile iron fittings 4” through 24” shall be pressure rated at 350 psi. All 30” through 36” fittings shall be pressure rated to 250 psi. Flanged joint fittings shall be rated at 250 psi minimum.

- | | | | |
|--|---|---|----------------------------------|
| <input type="checkbox"/> Tyler/Union | <input type="checkbox"/> US Pipe | <input type="checkbox"/> American | <input type="checkbox"/> Griffin |
| <input type="checkbox"/> Union Foundry | <input type="checkbox"/> Star Pipe Products | <input type="checkbox"/> Sigma Products | |

- DETECTABLE MARKING TAPE FOR WATER MAINS – Reading “CAUTION WATER LINE BURIED BELOW”.

- | | | |
|---|---|---|
| <input type="checkbox"/> Empire Level MFG Corp
Magna Tec | <input type="checkbox"/> T. Christy Enter.
TA-TD-6-BPW | <input type="checkbox"/> Pro-Line
Safety
Products |
|---|---|---|

- TRACER WIRE - APWA Color Coded Blue, 12 AWG

- | | |
|--|--|
| <input type="checkbox"/> Copperhead 1245 EHS | <input type="checkbox"/> Pro-Line Products – HD-CCS PE45 |
|--|--|

- ROOT BARRIER SYSTEMS

- | | |
|--------------------------------------|--|
| <input type="checkbox"/> Bio-Barrier | <input type="checkbox"/> DeepRoot UB36-2, UB48-2 |
|--------------------------------------|--|

- AUTOMATIC FLUSHING DEVICE

- | |
|--|
| <input type="checkbox"/> Eclipse Model 9400 WC |
|--|



SEWER COLLECTION

MANHOLE RING AND COVER

- LOW TRAFFIC AREAS:

US Foundry No. 170E EU Cover US Foundry No. 750 NH Cover

- HIGH TRAFFIC AREAS – All hinged covers will be installed so that the lid is opened

Pamrex 24

- MANHOLE ADJUSTMENT RINGS – Existing manhole only, max 4” height adjustment

Manhole Systems MS-101 Andrews Metal Products, Inc. #2, #5 Neehan Enterprises R1979 Series

- MANHOLE RING ADJUSTMENT – New and Existing Manholes

(1) Brick chimney can be field installed with 2-5 courses of bricks. The finished surface must have a field applied corrosion barrier applied, see lining products below.

(2) Precast reinforced concrete rings (4000 psi) for field installation. The finished surface must have a field applied corrosion barrier system applied, see lining products below.

Tri-County U.S. Concrete Products U.S. Precast

MANHOLE TO PIPE ADAPTERS

- RIGID MANHOLE TO PVC ADAPTER – “Sand Collars”

Harco SDR 26 Double Bell/Double Gasket GPK-Fargo SDR 18

- FLEXIBLE MANHOLE TO PIPE CONNECTOR SLEEVES (Cast-in)

Press-Seal Gasket Corp Cast-a-Seal 12-08 manhole A-LOCK Products Inc Seal gasket for lower invert of drop

Cast-a-Seal For C900 and D.I. Pipe



- MANHOLE FLEXIBLE PIPE CONNECTOR SLEEVE – For use in structures with Cast-in liners and Cast-in “turn back”.

- Press-Seal Gasket Corp- PSX Direct Drive 12 M Boot (dbl ridge w/stainless bands) NPC Trelleborg Kor-n-Seal I 10B Series

LINING PRODUCTS CONCRETE STRUCTURES

- MANHOLE/ WETWELL LINER - For Existing Structures and Field Applied Systems

- Kerneos Sewpercoat Global Materials Refratta HAC 100 Mainstay System ML-72 micro silica, with DS-5 epoxy liner coat (new Structures require only DS-5 epoxy)
- Strong Seal High Performance Mix

- NEW STRUCTURES FOR CAST-IN SOLID LINER

- Agru SURE-GRIP Polypropylene Liner with 3M sealant tape 5354 and ADEKA P-201 Waterstop Agru SURE-GRIP HDPE Linear with 3M sealant tape 5354 and ADEKA P-201 Waterstop

- EXTERIOR COATING – Two Coats for application:

- PRO-TECH Coal Tar Epoxy Parts A & B

- JOINT SEAL FOR MANHOLES AND AIR RELEASE MANHOLES

- K.T. Snyder Company RAM-NEK, plastic gasket joint Madewell 806 Flexible Joint Seal

- MANHOLE INFLOW PREVENTOR

- L.F. Manufacturing Inc. RainGuard LFN-SV USSI Inflow Defender SV-1



VALVES

- AIR RELEASE VALVE (2") – For use on long horizontal pipe sections and located every 500 yards.

Val-Matic
VM-48AS

ARI
S-025

- AIR/ VACUUM VALVE (2", 3") – For use at lift stations, installed downstream of the pump's check valve

Val-Matic
VM-301ASV

ARI
K-020

- COMBINATION AIR VALVE (2" x 1"; 2" x 2"; 3" x 2") – For use at high points

Val-Matic
VM-49AS

ARI
D-025

GA Industries
941

- GATE VALVES - Resilient Wedge and Bi Directional Flow Only with 2" square operating nut - left open. Max working Pressure of 200 psi; tested at 400 psi
4" to 6"

Mueller
2362, 2361

American
Darling 2500

Clow
F-6100 Series

- ECCENTRIC PLUG VALVES – AWWA C-517 - Fusion Bonded Epoxy inside and outside, ductile iron body, nickel seat weld, ductile iron plug encapsulated with Buna-N rubber, bi-directional shutoff.

PRATT

DeZurik

Clow

- CHECK VALVES – Lever and Weight, Lever and Air Cushion, Level and Spring, full port, fusion body epoxy inside and outside, stainless steel body seat.

M&H
159-02

Mueller
2600-6-01

Clow
5382

American
50SC



SEWER PIPE MATERIALS

- DUCTILE IRON PIPE (DIP)
 Interior: Protecto 401 Epoxy Lined
 Exterior: In ground placement, bituminous asphalt coating per AWWA C-104/A21.4
 Installations below water table: Polyethylene Encasement per AWWA C-105/A21.5
 Toruseal or Flange-Tyte gaskets are required for flanged pipe.

Note: When DIP is utilized in wetwells and air release valve vaults the exterior of the pipe must be coated with an epoxy product that is approved by the water department.

MANUFACTURER:

- American Griffin US Pipe McWayne Clow

CLASS:

- Class 350, sizes to be used on force mains: _____ (4" to 18")
 Class 350, sizes to be used on gravity mains: _____ (6" to 12")
 Class 250, sizes to be used on force mains: _____ (over 18")
 Class 250, sizes to be used on gravity mains _____ (over 14")
 Class 350, sizes to be used on FJ pipe: _____

- POLYVINYL CHLORIDE (PVC) - GREEN

MANUFACTURERS: JM Pipe; CertainTeed; NAPCO; IPEX

CLASS:

- PVC C-900 DR-18, sizes to be used on force mains: _____ (4" to 12")
 PVC C-905, sizes to be used on force mains: _____ (over 12")
 (For C-905: up to 24" diameter use DR-18, up to 36" diameter use DR 21)

PVC SDR-26, sizes to be used on gravity mains: _____
 Depth of pipe less than 12ft – Transition from SDR 26 to SDR 18 not permitted in run between manholes

PVC SDR-18, sizes to be used on gravity mains: _____
 Depth of pipe greater than or equal to 12ft



GRAVITY SEWER MAIN FITTINGS

- GRAVITY SEWER FITTINGS

- IPEX Plastic Trends Vassallo Harrington Corp.

- COUPLINGS FOR USE ON EXISTING FACILITIES – Must have stiffening collars with stainless steel shear rings

- FERNCO, RC Series Mission Coupling, Flex Seal Series

- COUPLING FOR USE TO CHANGE PIPE TYPE – Required when installing DIP in a PVC run of main or lateral that is too close to another utility.

- Harrington Corp.
HARCO PVC to C900
or DIP bell to bell adapter Flow Control

- TAPS INTO EXISTING PIPE – Tie-in to an existing main that has been Insituformed or lined by another method

- Inserta Tee

- CLEANOUT CASTING

- U.S Foundry
No. 7621

PRESSURE PIPE MAIN FITTINGS

- FOR PRESSURE PIPE: *FITTINGS, ADAPTERS, RESTRAINT DEVICES, AND VALVE BOXES SEE APPROVED MANUFACTURES LIST IN WATER DISTRIBUTION.

***FITTINGS MUST HAVE - Protecto 401 Epoxy Interior Lining**

- CORE-IN CONNECTION TO MANHOLE

- PSI-Link Seal by GPT



SANITARY SEWER PUMP STATIONS

- SUBMERSIBLE PUMPS

Wilo-EMU

Flygt

ABS

