

## **Index for Approved Materials List 2024**

### **1. Water Distribution System**

- Pressure Pipe up to 12” – Page 1
- Pressure Pipe 14” and Above – Page 1
- Water Service 1” to 2” – Page 1
- Tapping Saddle 1” and 2” – Page 1
- Tapping Saddle 4” Diameter and Above – Page 1
- Adaptors – Page 1

### **2. Valves**

- Curb Stop 1” (City Side) – Page 2
- Curb Stop 1” (Private Side) – Page 2
- Curb Stop 1.5” (City Side) – Page 2
- Curb Stop 2” (City Side and Private Side) – Page 2
- Corporation Stop 1.5” – Page 2
- Resilient Wedge Gate Valve 2” – Page 2
- Resilient Wedge Gate Valve 4” and Above – Page 2

### **3. Boxes**

- Meter Box, 1” Meter – Page 3
- Meter Box, 1.5” and 2” Meter – Page 4
- Meter Box, 3” and 4” Meter – Page 4
- Valve Box – Page 4

### **4. Fire Hydrant**

- Residential – Page 4
- Non-Residential – Page 4
- Break-off Check – Page 4

### **5. Air Relief Valve**

- Air Relief Valve – Page 5
- Pedestal Cabinet – Page 5
- Suction Screen – Page 5

## **6. Backflow Assembly**

- Reduced Pressure – Page 5
- Double Detector Assembly – Page 5

## **7. Storm Water**

- Storm Drain Pipe – Page 6
- Curb Inlet – Page 6
- Storm Drain Manhole – Page 6
- Storm Drain Outfall – Page 7

## **8. Sewer**

- Sewer Pipe Material – Page 7
- Sewer Manhole – Page 7

## **9. Streets**

- Curb Ramp – Page 9
- Survey Monument – Page 9
- Street Sign (Street Name) – Page 9
- Street Sign (Mast Arm Mounted) – Page 9
- Street Tree (Planting) – Page 9
- Street Tree (Streetscape) – Page 9

# Water

## Distribution System Mainline

1. Pressure Pipe up to 12"
  - a. PVC Pipe
    - i. DR-18 (CL 235), FM class 150, AWWA C900, CIP Equivalent O.D.
    - ii. DR-14 (CL305), FM class 200, AWWA C900, CIP Equivalent O.D.  
(Locations 101psi and above)
    - iii. Purple pipe required for recycled water applications.
  - b. Ductile Iron Pipe
    - i. class 200, AWWA C151, factory cement lined.
    - ii. Approved Poly Wrap to be used on all ductile iron pipe and fittings.
    - iii. Approved purple poly wrap for recycled water.
    - iv. Exposed ductile iron pipe to be epoxy coated.
2. Pressure Pipe 14" and above
  - a. PVC Pipe
    - i. DR-25 (CL 165), AWWA C905 CIP Equivalent O.D.
    - ii. DR-14 Class 305 FM Class 200 AWWA C900 (CIP equivalent O.D)  
(Locations 101psi and above)
    - iii. Purple pipe required for recycled water.
  - b. Ductile Iron Pipe
    - i. class 200, AWWA C151, factory cement lined.
    - ii. Approved Poly Wrap to be used on all ductile iron pipe and fittings.
    - iii. Approved purple poly wrap for recycled water.
    - iv. Exposed ductile iron pipe to be epoxy coated.
3. Water Service 1" to 2"
  - a. HDPE Pipe
    - i. Class 200, SDR 9, AWWA C901
    - ii. Compression Fittings with manufactures matching stainless steel insert.  
(Pack Joint not allowed)
    - iii. Purple pipe required for recycled water.
4. Tapping Saddle 1" and 2" IP Thread (CA Lead Compliant)
  - a. PVC
    - i. FORD 202BS
    - ii. Jones J969
    - iii. Mueller BR2W
  - b. Ductile
    - i. Ford 202BS
    - ii. Jones J969

- iii. Mueller BR2W
  - c. AC
    - i. Ford FC101
    - ii. Jones J969
    - iii. Mueller DR2S
- 5. Tapping Saddle 4" diameter and above
  - a. All materials
    - i. Submittal required.
- 6. Adaptors
  - i. Max Adaptor 4" ,6", 8", 12", 24".

## Valves

1. Curb Stop 1" (City Side)
  - a. Angle Ball Valve, FIP x Meter Nut (CA Lead Compliant)
    - i. Ford BA13444WNL
    - ii. Jones J1966W
    - iii. Mueller-024265-330N
  - b. 1.5" x 1" Brass Bushing (CA Lead Compliant)
    - i. Ford C8446QNL
    - ii. Jones E-1921SG
  - c. 1.5" FIP x 1.5" CTS Compression (CA Lead Compliant) (Pack Joint Not Allowed)
    - i. Ford-C104-44-Q-NL
    - ii. Jones – E1921SG
    - iii. Mueller- 015451-500N
2. Curb Stop 1" (Private Side)
  - a. Angle Ball Valve, FIP x Meter nut. (CA Lead Compliant)
    - i. Ford BA13444WNL
    - ii. Jones 1966W
    - iii. Mueller B-24259N
  - b. Straight Ball Valve FIP x Meter Nut (CA Lead Compliant)
    - i. Ford B13444WNL
3. Curb Stop 1.5" (City Side)
  - a. Angle Ball Valve, Flange x FIP (CA Lead Compliant)
    - i. Ford -BFA13666WNL
    - ii. Jones-E-1962WSGP
  - b. 2" x 1.5" brass bushing (CA Lead Compliant)
    - i. Ford-BBA-76-NL
    - ii. Mueller-H-10037N
  - c. 2" FIP x CTS Compression (CA Lead Compliant) (Pack joint not allowed)
    - i. Ford C1477QNL

- ii. Jones-E-2607SG
  - iii. Mueller-H15451N
- 4. Curb Stop 2" (City Side)
  - a. Angle Ball Valve, Flange x CTS Compression (CA Lead Compliant) (Pack joint not allowed)
    - i. Ford BFA43777WQNL
- 5. Curb Stop 2" (Private Side)
  - a. Angle Ball Valve, Flange x CTS Compression (CA Lead Compliant) (Pack joint not allowed)
    - i. Ford- BA13-232WR-NL
- 6. Corperation Stop 1.5"
  - a. 1.5" MIP x CTS Compression (CA Lead Compliant) (Pack Joint Not Allowed)
    - i. Ford FC8466QNL
- 7. Resilient Wedge Gate Valve 2"
  - a. 2" FIP x 2" FIP
    - i. Clow F-6108
    - ii. Mueller A-2360
  - b. 2" FIP x FIP Close Nipple (CA Lead Compliant)
    - i. Ford- TN-2-NL
    - ii. Mueller-2132-001
  - c. 2" MIP x CTS Compression (CA Lead Compliant) (Pack Joint Not Allowed)
    - i. Ford C8477QNL
    - ii. Mueller-015428 550N
- 8. Resilient Wedge Gate Valve 4" and above
  - a. 4" thru 12"
    - i. AWWA C509 and C515, Cast Iron, epoxy coated.
    - ii. Flange x Flange or flange x MJ Only at tee's
    - iii. Stainless steel bolts
  - b. 14" and above
    - i. AWWA C515, Cast Iron, epoxy coated.
    - ii. flange x MJ Only at tee's
    - iii. Stainless steel bolts only.

### Boxes

- 1. Meter box, 1" meter
  - a. Standard
    - i. Christy N30 Box
    - ii. Christy FL30 Fiberlyte Solid Lid
  - b. Traffic Rated

- i. Christy B1324 Box
    - ii. Christy B1324-51JH Solid Lid
  - 2. Meter box, 1.5" and 2" meter
    - a. Standard
      - i. B1730 Box
      - ii. B1730 Lid
    - b. Traffic Rated
      - i. B1730 Box
      - ii. B1730 Lid
  - 3. Meter box, 3" and 4" meter
    - a. Standard
      - i. B44 Box
      - ii. B44 D2 Lid
    - b. Traffic Rated
      - i. B3048 Box
      - ii. B3048 53 GH Lid
  - 4. Valve Box
    - a. Potable Water
      - i. Christy G-05T box
      - ii. Christy G-05ct lid marked "WATER"
    - b. Recycled Water
      - i. Christy G-05T box
      - ii. Christy G-05ct lid marked "RECYCLED WATER"

### Fire Hydrant

- 1. Residential
  - a. Two 2.5" connections and one 4.5" connection.
  - b. Painted white.
    - i. Clow 960
    - ii. Jones J4060
- 2. Non-Residential
  - a. One 2.5" connection and two 4.5" connections.
  - b. Painted white for potable water.
  - c. Painted purple for recycled water.
    - i. Clow 865
    - ii. Jones J4065
- 3. Break off check
  - i. Jones J6000

- ii. Clow LP 619

#### Air Relief Valve

1. Air Relief Valve
  - i. Crispen UL10
  - ii. APCO 143C
  - iii. Valmatic 201C
2. Pedestal Cabinet
  - i. Marconi TV80SB
3. Suction Screen
  - i. Flow Ezy Filters Inc. Nut style strainer F-8

#### Backflow Assembly

1. Reduced Pressure
  - a. Approved assembly appearing on "List of Approved Backflow Prevention Devices" (of latest edition) by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research. "CA Lead Compliant"
2. Double Detector Assembly
  - a. Approved assembly (unit includes paired bypass water meter with separate double check backflow assembly) appearing on "List of Approved Backflow Prevention Devices" (latest edition) by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research.
  - b. If chemical additives are used in fire system, a reduced pressure detector check backflow assembly is required.

# Storm Water

## Storm Drain Pipe

1. Pipe within the ROW and easements
  - a. Reinforced Concrete Pipe, 15" minimum diameter, conforming to ASTM C76, Type II Portland Cement (ASTM C150), Class III unless circumstances dictate higher class as follows:

i.	Less than 2.5' Cover (6" min D)	Class IV	(2000 D)
ii.	2.5' - 7.9' Cover	Class III	(1500 D)
iii.	8.0' - 11.9' Cover	Class IV	(2000 D)
iv.	12.0' - 17.0' Cover	Class V	(3000 D)
  - b. HDPE
    - i. Density Polyethylene (HDPE) pipe shall be in the N-12 form factor, which is classified as Type S, meaning smooth on the inside but corrugated outside.
  - c. Pipe for storm drain mains where approved by City Engineer.
    - i. A-2000 PVC pipe with double sealing gasketed joint pipe, 4-in to 36-in diameters
  - b. Pipe for storm drain mains in shall installations in areas of landscaping, parks, and low impact traffic
    - i. SDR 26 PVC pipe using elastomeric gasket joint in a bell and spigot assembly system.

## Curb Inlet

- 1) Curb Inlet:
  - a. US Concrete Group model 4AC hood with CP3648 base
- 2) Access Cover:
  - a. US Concrete Group concrete cover with NPDES cast iron logo and pick hole

## Storm Drain Manhole

- 1) Manhole Structure:
  - a. Pipe smaller than 18" - US Concrete Group 20-48C
  - b. 18" to 48" pipe - US Concrete Group 20-60CC
- 2) Frame and Cover (marked "STORM DRAIN" with open or closed pick hole):
  - a. South Bay Foundry 1900
  - b. D&L Supply A-1024
- 3) Gasket for barrel section joints:
  - a. Ram-nek
- 4) Exterior Coating:
  - a. External Joint Wrap conforming to ASTM C-990 and ASTM C-877
    1. JK Polysource EZ-Wrap
    2. ConSeal CS-212

## Storm Drain Outfall

- 1) Field Drain:
  - a. US Concrete Group 3K with 2 side openings and heavy locking grate

# Sewer

## Sewer Pipe Material

- 1) Pipe and Fittings:
  - a. Laterals and Mains - SDR26 gasketed PVC (Green)
  - b. Fittings – SDR26 Gasketed
- 2) Cleanout Box:
  - a. Non-traffic bearing - Christy F8 box with F8D lid marked "SEWER"
  - b. Traffic bearing - Christy G05 box with G05C lid marked "SEWER"
- 3) Plastic Mechanical Gripper Plug:
  - a. Cherne Industries end of pipe series, sized to fit
- 4) Wye (sized to fit sewer main):
  - a. Plastic Trends
  - b. Multifittings
- 5) Coupling (for adding cleanout to existing lateral only):
  - a. Shear band coupling with stainless steel sleeve and clamps
  - b. Maxadaptor

## Sewer Manhole

- 1) Manhole Structure:
  - a. Pipe smaller than 18" - US Concrete Group 20-48C
  - b. 18" to 48" pipe - US Concrete Group 20-60CC
- 2) Frame and Cover (marked "SANITARY SEWER" with closed pick hole):
  - a. South Bay Foundry 1900 CPH
  - b. D&L Supply A-1024 CPH
- 3) Gasket for barrel section joints:
  - a. Ram-nek

- 4) Interior Coating:
  - a. Thoroseal and Waterplug mixture
  
- 5) Exterior Coating:
  - a. External Joint Wrap conforming to ASTM C-990 and ASTM C-877
    - i. JK Polysource EZ-Wrap
    - ii. ConSeal CS-212

# Streets

## Curb Ramp

- 1) Detectable Warning Surface:
  - a. Armor-Tile ADA-C-3648-YW (federal yellow), sized to fit

## Survey Monument

- 1) Cast Iron Monument Ring and Cover:
  - a. D&L Foundry K6001
  - b. Southbay Foundry B1000

## Street Sign (street name)

- 1) Sign Bracket:
  - a. 2" Pipe Cap - Hawkins V14F(HD)SL-105-90
  - b. 90 degree crosspiece – Hawkins V14F(HD)SL-107

## Street Sign (mast arm mounted)

- 1) Sign Bracket:
  - a. Hawkins MIOJ-OCB250

## Street Tree (planting)

- 1) Root Barrier:
  - a. Century Products 24" diameter by 12" or approved equal

## Street Tree (streetscape)

- 1) Root Barrier:
  - a. Century Products 24" diameter by 12" or approved equal
- 2) Bubbler:
  - a. Toro 570570-FB-25-PC
- 3) Tree Grate:
  - a. 48" by 48" tree well – Neenah R9002
  - b. 64" by 32" tree well – Neenah R9105