I. **FIRE HYDRANTS**

Mueller “Super Centurion 250”
American Darling “B-84B”
Waterous “Pacer WB67”
Kennedy “K81D Guardian”
U.S. Pipe & Foundry “Metropolitan 250 M-94”
Clow “Medallion”
American AVK Series 2780

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Operating nuts (& cap nuts) to be tapered pentagon shape not less than 1” high.
Size to be # 4 (11/4” measured across opposite points)

II. **VALVES**

Mueller Resilient Wedge
Mueller Butterfly
American Darling Resilient Wedge
American Darling Butterfly
U.S. Pipe & Foundry “Metro-Seal” Resilient Wedge
American Flow Control – Series 2500 Resilient Wedge Valve
Kennedy Resilient Wedge
Clow Resilient Wedge
Pratt Butterfly
American AVK Resilient Seated Gate Valve Series 25

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III. **VALVES – AIR RELEASE / COMBINATION AIR & VACUUM**

Iowa F-3066 Air Release
Golden Anderson Figure 950 – Kinetic Custom Combination Air Valve

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IV. **WATER LINE PIPING**

Type “K” Soft Copper (2” or smaller)
C-900 PVC – (CL200 DR14 & CL150 DR18)
RCCP – (TYPE C301 & C303)
DI – (CL50 & CL51)
C-909 PVC Pipe- (CL200 & CL150)
AWWA C901 – Solid Wall High Density Polyethylene Pipe (HDPE) (2” only)

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V. SEWER LINE PIPING

SDR-35 PVC
DI (CL50 & CL51)
RCCP (TYPE C301 & C303)
Ultra-Rib PVC ASTM F794-88

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VI. TAPPING SLEEVES AND SERVICE SADDLES

Sleeves

Mueller Traverse Tapping Sleeve
Mueller H-304 Stainless Steel Tapping Sleeve w/Stainless Steel Flange
Tyler Traverse Tapping Sleeve
Clow Traverse Tapping Sleeve
Dresser Style 630 Heavy Stainless Steel Tapping Sleeve
Ford All Stainless Tapping Sleeve Style FTSS
Ford All Stainless Tapping Sleeve Style FTSS-MJ
Smith-Blair 665 Stainless Steel Tapping Sleeve with Stainless Steel Flange
Smith-Blair 665MJ Stainless Steel Tapping Sleeve with Stainless Steel Flange
Romac Industries, SST III
JCM Industries All Stainless Steel Tapping Sleeve – Style 432 & 439

Saddles

Dresser Style 291 Doublewide Stainless Steel Strap Service Saddle
Mueller Bronze Double Strap Service Saddle
Mueller DR2S Series Double Strap Ductile Iron Saddle
PowerSeal Model 3417 Ductile Iron Saddle with Straps
Smith-Blair Bronze 323 Double Strap Service Saddle
Smith-Blair “317” Double Stainless Steel Strap Saddle
Ford “FC202” Nylon Coated Double Strap Saddle
Romac “202N” Double Strap Service Saddle
JCM 406 Double Stainless Strap Coated Service Saddle - 2” thru 12”

NOTE: ALL OF THE ABOVE SERVICE SADDLES ARE TO BE CC THREAD. SADDLES MUST BE SUPPLIED WITH STAINLESS STEEL BOLT/NUT/WASHER, WITH EXCEPTION TO A DOUBLE STRAP BRONZE SADDLE. DUCTILE BODY SADDLES MUST BE FUSION BONDED EPOXY/ NYLON. STAINLESS TAPPING SLEEVES MUST BE SUPPLIED WITH STAINLESS BOLT/NUT/WASHER AND FLANGE.

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VII. RESTRAINT (RETAINER) GLANDS

Uni-Flange Series 1400 for 4” thru 12” (Ductile)
Uni-Flange Series 1500 for 4” thru 12” (PVC)
EBAA Iron 1100 Series Megalug – Ductile Iron
EBAA Iron 2000PV Series Megalug – C900
Stargrip Series 4000 – C900 PVC
Stargrip Series 3000 – D.I. Pipe
Sigma – One Lok for C900/905 Pipe

VIII. CORPORATION STOPS

Mueller “H-15008” Corporation Stop CC Thread x, Compression for ¾” and 1”
Mueller “H-15013” Oriseal Stop CC Thread x, Compression for 1 ½” and 2”
Ford “F-1000-G” 1”, “FB1000-G” 1 ½” and 2”
Ford “F-1000-Q” 1”, “FB1000-Q” 1 ½” and 2”
CC Thread x Compression
James Jones “J-3401 SG” 1” only
McDonald “4701T” Plug Style ¾” thru 2”

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IX. ANGLE STOPS

Mueller “H-14258” on 1”, “H-14277” on 1 ½” and 2”
Compression x Meter Saddle Nut on 1”
Compression x Meter Flange on 1 ½” and 2”
Ford “KV43-444-WG” on 1”, “KV43-666-WG” on 1 ½” and “FV43-777-WG” on 2”
Ford “KV43-444-WQ” on 1”, “KV43-666-WQ” on 1 ½” and “FV43-777-WG” on 2”
James Jones “J-4201 SG” on 1” only
McDonald Brass “4602T” Plug Style ¾” and 1” only

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X. DUCTILE IRON FITTINGS (C110 OR C153)

Tyler Pipe Products
Cloow Products
Star Pipe Products
Sigma/Nappco Products
Griffin Pipe Products
SIP Products

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XI. MANHOLE LIDS AND RINGS (400# - 24")

Bass & Hays Foundry 400-24
Bass & Hays Foundry 400-24D
Western Iron Works
Vulcan Foundry
AccuCast 400-24
Neenah R-1687 Manhole Frame, Solid Lid, Heavy Duty
Certain Teed PAMREX Hinged Manhole Ring & Cover (**exceptions to installation instructions listed below in Procedures)

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XII. VALVES STACKS AND BOXES

Bass & Hays Pattern #340-1 (Shorty) Valve Box
Bass & Hays Complete Box (Screw Type) with Drop Lid
Tyler Pipe #6895 (Shorty) Valve Box
Tyler Pipe Complete Box (Screw Type) with Drop Lid
AccuCast Shorty Valve Box, Model #115001
AccuCast Standard Valve Box, Model #111100
C-900 Water Pipe for the Stacks
Sigma "Shorty" Valve Box
C-900 Water Pipe for the Stacks

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XIII. AERIAL CROSSING PAINT

Tnemec 66
Mobile 78
Koppers 200HB

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XIV. FIRE HYDRANT PAINT

Tnemec 2H Series, 37-77 Primer
Mobile Series 11-A-19
Tnemec Series 530-1201 Omnitane (replaces 43-38)
Flynt Aluminum Paint (Mfg. by Flynt Paint Products, Greenville, Texas)

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XV. METER BOXES AND LIDS

Bass & Hays 55A1S “Texas Special”
Bass & Hays 34AS
Bass & Hays 62AS (Traffic Bearing) Domestic Made
Bass & Hays P34P14D15 Plastic Box with Cast Iron Ring
DFW Plastics, Inc. DFW-1814 meter box
Bass & Hays 3lidP Plastic Meter Box Lid
Bass & Hays #5-8, lid with hole for AMR for “Texas Special”
DFW-18 AMR lid

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XVI. VALVE STEM EXTENSIONS (WITH CENTERING DEVICES)

Bolt-on Type B (Rohan)
“Wimco” Clip-on Type (Heavy Duty Clips Only)

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XVII. MANHOLE INSERTS (DISHES)

Knutson Industries - J.C. Utility Sales Inc., Dallas, Texas
No Flow Inflow Dishes as manufactured by No Flow Inflow, Inc. (.187 Material Thickness)

XVIII. MANHOLE RISERS (HDPE)

HDPE Adjustment Rings by Ladtech Inc.

XIX. MANHOLE RISERS (CONCRETE)

Concrete riser rings available thru many vendors. Rings will be solid, no cracks, not irregular shaped.

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**WATER LINE TIE-IN PROCEDURES**

1. When tying a new water line into an existing water line, where pressure testing and chlorination will occur on the new line, the testing will be accomplished against a new valve – not an existing system valve. Any exception must be made by the Utility Operations Superintendent or Public Works Manager, or in the absence of either a Utility Operations Supervisor.
2. Installing property line cleanout on rehab/new sewer line installations: When installing new sewer laterals/cleanouts, continue new lateral to existing tie in of City line to private (home) line. When installing cleanout, do not place in sidewalk; carry past sidewalk into grass even if necessary to cut property side line past existing cleanout. If cleanout has to be installed in lead walk or property owners’ sidewalk, no cleanout will be installed.

3. When installing PAMREX manhole ring, skip step #9 – do not install the trough under the infiltration Plug – leave concrete solid under the plug. Also insure that the secondary seal is placed on the lip of the cover during installation. These lids are to be used in dirt areas only and are not to be placed in low lying areas.