

PROPOSAL SUBMITTED BY:

FERGUSON WATERWORKS

Contractor's Name

1720 STATE STREET

Street

DEKALB

City

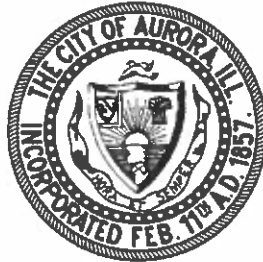
IL

State

P.O. Box

60115

Zip Code



CITY OF AURORA
KANE COUNTY
STATE OF ILLINOIS

REQUEST FOR QUOTATIONS FOR

**2024 Water & Sewer Division Materials and Supplies
Bid 23-98**

PROPOSALS DUE
November 1, 2023

AURORA, ILLINOIS



EXP.-11/30/23

Nadia L. Schweisthal

10/10/2023

PREPARED BY
CITY OF AURORA
Engineering Division
77 S. Broadway Avenue
AURORA, ILLINOIS 60507

Bid Number 23-98

TABLE OF CONTENTS

TITLE PAGE

TABLE OF CONTENTS

NOTICE TO BIDDERS

SPECIAL PROVISIONS

BID PROPOSAL

SCHEDULE OF PRICES

SIGNATURE SHEET

BIDDER'S CERTIFICATION

CERTIFICATE REGARDING DEBARMENT, SUSPENSION, OR OTHER
RESPONSIBILITY MATTERS

BIDDER CERTIFICATIONS IN COMPLIANCE WITH ARTICLE 33E TO THE "CRIMINAL
CODE OF 1961"

LOCAL VENDER PREFERENCE APPLICATION

HYDRANT PARTS LIST & DIAGRAM

**City of Aurora
Bid 23-98**

NOTICE TO BIDDERS

Time and Place of Opening of Bids

Sealed quotations for the materials and supplies described below will be received at the office of the City Clerk, 44 E. Downer Place, First Floor, Aurora, IL 60505 until 2:00 P.M., Wednesday, November 1, 2023. Quotes will not be opened publicly.

Description of Work

Name: 2024 Water & Sewer Division Materials and Supplies

Proposed Improvement: The City of Aurora is requesting quotations for the anticipated purchase of certain materials and supplies to be used by the Water & Sewer Maintenance Division during 2024.

Bidder Instructions

1. Specifications and other pertinent documents will be available on Monday, October 16, 2023 and may be obtained at online at: <https://www.aurora-il.org/bids.aspx>.
2. The City of Aurora reserves the right to reject any or all of the bids and to waive any and all irregularities and technicalities whenever such rejection is in the best interest of the City of Aurora.
3. All bid items will be evaluated separately and the supplier for each bid item will be chosen based on cost and availability of the item at the time of need.
4. Any bidder who owes the City money may be disqualified at the City's discretion.
5. The City encourages minority business firms to submit proposals and encourages the successful contract bidder to utilize minority businesses as subcontractors for supplies, equipment, services, and construction.
6. **The City of Aurora has a local preference ordinance that would apply to this contract.**

By Order of
City Clerk
City of Aurora

INDEX TO SPECIAL PROVISIONS

<i>Provision Number</i>	<i>Title</i>
<u>SP 1</u>	FIRE HYDRANT ASSEMBLY
<u>SP 2</u>	HYDRANT METER
<u>SP 3</u>	VALVES
<u>SP 4</u>	VALVE BOXES
<u>SP 5</u>	MISSION COUPLING
<u>SP 6</u>	REPAIR CLAMP
<u>SP 7</u>	DUCTILE IRON SLEEVE FITTINGS
<u>SP 8</u>	CAST COUPLINGS
<u>SP 9</u>	SINGLE BOLT CAST COUPLINGS
<u>SP 10</u>	MEGALUG RETAINER GLAND
<u>SP 11</u>	MECHANICAL JOINT ACCESSORY KIT
<u>SP 12</u>	DUCTILE IRON BORED OUT FLANGE
<u>SP 13</u>	SDR-26 PVC PIPE
<u>SP 14</u>	CLASS 52 DUCTILE IRON PIPE
<u>SP 15</u>	CORPORATION STOP
<u>SP 16</u>	CURB BOX
<u>SP 17</u>	METER HORN
<u>SP 18</u>	BALL VALVE
<u>SP 19</u>	METER COUPLING
<u>SP 20</u>	TYPE K COPPER
<u>SP 21</u>	WATER METER FLANGE KIT
<u>SP 22</u>	MARKING PAINT
<u>SP 23</u>	NEENAH FRAME AND GRATES
<u>SP 24</u>	HYDRAULIC CEMENT
<u>SP 25</u>	STORM STRUCTURES
<u>SP 26</u>	TYPE II BARRICADE
<u>SP 27</u>	GROUND CLAMP
<u>SP 28</u>	BUTYL MASTIC SEALANT
<u>SP 29</u>	MASTIC SEALING BAND
<u>SP 30</u>	ADS PIPE
<u>SP 31</u>	COMPOSITE ADJUSTMENT RINGS
<u>SP 32</u>	T-BOLTS AND NUTS
<u>SP 33</u>	INLET FILTERS
<u>SP 34</u>	CHIMNEY SEALS
<u>SP 35</u>	WATER SERVICE COUPLINGS
<u>SP 36</u>	HIGH PERFORMANCE HYDRANT GREASE FOR FOOD PROCESSING EQUIPMENT
<u>SP 37</u>	MINERAL OIL LUBRICANT
<u>SP 38</u>	HYMAX PRO DEDICATED SIZE COUPLINGS
<u>SP 39</u>	ANODE BAGS
<u>SP 40</u>	STAINLESS STEEL CLAMP FOR ANODE BAGS – “EZ STRAP”
<u>SP-41</u>	TPS ULTRA SLEEVE – JOINT REPAIR SLEEVE

CITY OF AURORA

Bid Number 23-98

CITY OF AURORA SPECIAL PROVISIONS

The following Special Provisions supplement the General Specifications, the Illinois Department of Transportation's Standard Specifications For Road and Bridge Construction (herein after called the Standard Specifications), the City of Aurora's Standard Specifications for Improvements, the Supplemental Specifications and Recurring Special Provisions, the Standard Specifications for Water And Sewer Main Construction in Illinois, Seventh Edition, the Standard Specifications for Traffic Control Items, Part 890 of the Illinois Plumbing Code (77 IL Admin Code 890.1150) and the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways and the Illinois Supplement to the National Manual on Uniform Traffic Control Devices in effect on the date of invitation for proposals. These special provisions apply to and govern the proposed improvement designated as the **Water & Sewer Maintenance Division 2024 Materials and Supplies Request for Quotations, Bid 23-98** and in case of conflict with any part or parts of said specifications; these Special Provisions shall take precedence and shall govern.

All questions should be received by the Purchasing Division by 4 pm Friday October 27, 2023 so that an addendum can be issued Monday October 30, 2023 if required. All questions received after Friday will not be addressed.

All appropriate parts shall be lead free and be stamped "NL". Materials are to be manufactured in the United States. **Any variation from the special provisions below should be approved prior to providing bid pricing.**

All materials shall be delivered to the Water & Sewer Maintenance Division within 5 business days of being ordered.

SP 1 - FIRE HYDRANT ASSEMBLY

These specifications are to be used in conjunction with the AWWA Standard C502 for fire hydrants for ordinary water works service, and the City of Aurora's Standard Specifications for Improvements.

All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502.

The hydrant shall be Waterous Pacer WB-67 (5 1/4" barrel) of a pattern approved by the Engineer. The seat must be bronze. The name or mark of the manufacturer, size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed.

Hydrant markers shall be RoDon Hydra-Finder Hydrant Markers or an engineer approved equal. The marker shall be a 3/8" diameter white laminar matrix fiberglass shaft with 6" wide high reflectivity red striping tape. The hydrant marker shall have a standard length of 5'. The fiberglass shaft shall be attached to a heavy duty MIL SPEC chrome-plated spring mount connected to a 5/8" diameter bolt-on steel flat mounting bracket.

See the Figure 6 attached at the end for a diagram showing the specific hydrant replacement parts.

The ALPHA restraint joint shall have a working pressure of 350 psi and be as licensed and manufactured by Romac Industries, Inc.

SP 2 - HYDRANT METER

The Hydrant Meter shall be designed to measure a wide variety of cold potable water flows from hydrants where flows are in one direction. The hydrant meter provided shall be a Zenner FHZ30S or approved equal. **The Bid Number 23-98**

hydrant meter shall comply with AWWA C701 Class II performance standards. The only moving parts in the meter shall be the rotor assembly and vertical shaft. All components of the meter shall be lead free. The optional NC2530B-CV check valve assembly shall be included with the hydrant meter. **The meters shall be 3" and read in century cubic feet.**

SP 3 - VALVES

The minimum requirements for all valves shall, in design, material and workmanship, conform to the standards of the latest AWWA C509-87, and C504. All materials used in the manufacture of waterworks valves shall conform to the AWWA standards designed for each material listed.

Gate Valve: Gate valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed ANSI/AWWA C-515-99 latest revision. Gate valves shall be Waterous series 2500 Resilient Wedge Gate Valves. All nuts, bolts, and threaded rods shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

All gate valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

Cutting in Valve: Cutting in valves shall be resilient wedge with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. All valves shall open by turning counterclockwise. Valves shall meet or exceed ANSI/AWWA C-509 latest revision. Cutting in valves shall be Clow Model 2640 cutting in joint (MCJ) end Valves. All nuts, bolts, and threaded rods shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

All cutting in valves shall be furnished with O-Ring Stem Seals. Number, size and design shall conform to the AWWA Standard for R/W valve O-Ring Stem Seals.

The ALPHA restraint joint shall have a working pressure of 350 psi and be as licensed and manufactured by Romac Industries, Inc.

SP 4 - VALVE BOXES

Valve boxes and extensions must be cast iron only. Valve boxes shall be 6850 Series as manufactured by Tyler Union. Adjustable cast iron valve boxes shall be screw type. The screw type valve box shall be adjustable by screwing the upper section over the lower section. As shown on the schedule of prices, this item shall be bid as a complete system and as spare parts for purchase as needed. Castings with cast iron ring and cover, and cast iron parts of valve boxes, shall conform to the requirements of Standard Specifications for Gray Iron Castings, ASTM Designation A-48.

SP 5 - MISSION COUPLING

Mission repair couplings shall be Style CNSS non-shear sewer couplings as manufactured by Cascade Water Works, Mfg. Co. of Yorkville, IL. The coupling shall be constructed with an outer shell of T-304 (ASTM A-240/ASME SA-240) stainless steel with three stainless steel heavy duty worm gear fasteners (SAE J-1508 - MIL 5059-A) permanently welded in place and passivated per ASTM A-380. The shell shall fully encircle a 40 durometer ribbed gasket made from virgin SBR (ASTM D2000) rubber formulated for sewer service.

SP 6 - REPAIR CLAMP

Repair clamps shall be manufactured by The Ford Meter Company, Inc. (FS1), Cascade Waterworks MFG. (CR1), Smith/Blair (261), or an approved equal. All repair clamps shall have type 304 stainless steel components and an 18/8 grade. All clamps shall have a Nitrile (Buna-N) gasket. The lugs shall also be type 304 stainless steel.

SP 7 - DUCTILE IRON SLEEVE FITTINGS

All fittings shall be ductile iron conforming to the latest ANSI specifications A21.10 for short body fittings, twelve inches (12") or less, and AWWA C110 for fittings fourteen inches (14") or larger. Long body sleeves shall be provided unless directed otherwise. When specified to have mechanical joints, Mega Lug wedge action retaining glands, or approved equal shall be included. All nuts and bolts used for jointing shall be stainless steel, Grade 304 bolts, and Grade 316 nuts. Ductile Iron sleeves shall be manufactured by Tyler Union or an approved equal.

SP 8 - CAST COUPLINGS

Cast Couplings shall be manufactured by The Ford Meter Company, Inc. (Style FC1), Cascade Waterworks MFG. (Omega Coupling), Smith/Blair (441), or an approved equal. All couplings shall meet or exceed requirements of AWWA C-219 and should have a minimum working pressure of 250 psi. All couplings shall be certified to NSF/ANSI 61-G with Nitrile (Buna N) gaskets. An approved equal is to come with stainless steel Grade 304 bolts and Grade 316 nuts.

SP 9 - SINGLE BOLT CAST COUPLINGS

Single Bolt Cast Couplings shall be Alpha restrained joint manufactured by Romac Industries, Inc. or an approved equal. All couplings shall meet or exceed requirements of AWWA A 536, grade 65-45-12 and should have a minimum working pressure of 350 psi. All couplings shall contact gaskets certified by UL to meet NSF/ANSI 61. An approved equal is to come with stainless steel Grade 304 bolts and Grade 316 nuts.

SP 10 - MEGALUG RETAINER GLAND

MegaLug retainer glands shall be Series 1100 (DI) or Series 2000PV (PVC) as manufactured by EBBA Iron Inc. or approved equal (set screw retainer glands will not be accepted). The mechanical joint restraint shall be constructed of ductile iron meeting ASTM A536 and it shall have a pressure rating of 350 PSI. All nuts and bolts shall be stainless steel, Grade 304 bolts and Grade 316 nuts.

SP 11 - MECHANICAL JOINT ACCESSORY KIT

The mechanical joint accessory kit shall include a rubber gasket and a ductile iron backing flange of the size specified in the pay item and the appropriate number of bolts required for the kit size. The kit manufacturer shall be Tyler Union, or an approved equal, and the components shall be for use with ductile iron pipe.

SP 12 - DUCTILE IRON BORED OUT FLANGE

Ductile iron bored out flanges shall be manufactured by Tyler Union or an approved equal.

SP 13 - SDR-26 PVC PIPE

All pipe shall meet the requirements of ASTM D3034 for 4" through 15" and F679 for 18" through 36" pipe. All pipe shall be made from quality PVC resin, compounded to provide physical and mechanical properties that equal or exceed cell class 12454 or 12364 as defined in ASTM D1784. The bell shall consist of an integral wall section with a solid cross section elastomeric gasket which meets the requirements of ASTM F477.

SDR-26 PVC plastic pipe shall be tested as follows:

Manufacturer shall submit certified copies of all reports of tests conducted by an independent laboratory of PVC Plastic Pipe. Tests shall be conducted in accordance with Standard Method of Test for "External Loading Properties of Plastic Pipe by Parallel-Plate Loading", ASTM Standard D2412. Tests shall also be conducted in accordance with ASTM D 3212 to demonstrate joint performance at 5% maximum diametric deflection of the spigot, as specified in Article 7.4 of ASTM D 3212.

Maximum allowable ordinate as measured from the concave side of the pipe shall not exceed 1/16 inch per foot of length. Pipe shall be so constructed that the initial internal vertical diameter does not decrease by more than 5% in order to provide the complete hydraulic carrying capacity conceived by the design engineer, and to obtain the joint performance at 5% maximum diametric deflection as specified in Article 7.4 of ASTM D 3212.

SP 14 - CLASS 52 DUCTILE IRON PIPE

Ductile-iron pipe shall conform to ANSI Specification A21.51 or AWWA C151. Class 52, thickness designation, casting, marking, testing, etc. shall be provided in accordance with applicable ANSI or AWWA standards.

Cement lining shall be included in accordance with ANSI A21.4 (AWWA C-104). All pipe, specials and fittings shall be cement mortar lined in the shop with centrifugally spun lining in accordance with AWWA C205-85 or cement mortar lined mechanically in accordance with AWWA C602-83. Use ASTM C150, Type II, cement for lining. Field joints shall be made in accordance with AWWA C205, Appendix A.

Pipe joints shall be either push-on (rubber gasket) type as recommended by the pipe manufacturer. All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joint.

SP 15 - CORPORATION STOP

Corporation stops shall have flared connections conforming to ANSI/AWWA C-800 and shall be the following brands or approved equal: A.Y. McDonald 4701 or Ford F-600. All appropriate parts shall be lead free and be stamped "NL".

SP 16 - CURB BOX

All curb boxes shall be Minneapolis pattern with flared connections conforming to ANSI/AWWA C800 and shall be the following brands or approved equal: A.Y. McDonald 6104, Ford B22-444M, or Mueller H-15151. All curb boxes shall be 5'6" bury Minneapolis pattern with minimum 1-1/4" upper section equal to: A.Y. McDonald 5614 or Ford EM-55-56. (Accepted Brands: Mueller, Star Pipe Products, Sigma/Nappco, Bingham & Taylor or approved equal). All appropriate parts shall be lead free and be stamped "NL".

SP 17 - METER HORN

Meter horns shall be CH88-33 style as manufactured by The Fort Meter Box Company, Inc. or engineer approved equal. All brass shall conform to AWWA Standard C800 (ASTM B-62 and ASTM B-584, UNS NO C83600-85-5-5-5). Meter threads shall conform to AWWA C700. Copper shall conform to ASTM B-75 and shall consist of copper alloy #122.

SP 18 - BALL VALVE

Ford ball valves shall be manufactured in accordance with AWWA C800. The valve shall be designed to withstand water pressure up to 300 psi and maintain a watertight seal. The valve shall include a fluorocarbon-coated ball that is supported by molded Buna-N or EPDM rubber seats.

SP 19 - METER COUPLING

Meter couplings shall be C38-11-2-NL 5/8", C38-23-2-75-NL 3/4", or C38-44-2-625-NL 1" models as style as manufactured by The Fort Meter Box Company, Inc. or engineer approved equal. This item shall be bid per Package with 50 per package for the 5/8" size, 25 per package for the 3/4", and 15 per package for the 1" couplings. The 5/8" and 3/4" meter couplings shall have a 3/4" male thread size and the 1" meter couplings shall have a 1" male thread size. Couplings shall be Ford Meter Box no-lead brass products manufactured from UNS/CDA No. 89833 alloy.

SP 20 - TYPE K COPPER

Type K copper pipe shall be supplied in the diameter and length as specified. The type K copper shall have a color code of green and shall be in accordance with ASTM B 88 & AWWA publication M-22 entitled, "Water Service Lines And Meters".

SP 21 - WATER METER FLANGE KIT

The flange kit shall include two water meter flanges, two gaskets, four stainless steel nuts and bolts for the 1 ½" and 2" flanges, eight stainless steel nuts and bolts for the 3" and sixteen stainless steel nuts and bolts for the 4" flanges. All parts and components manufactured 100% in USA. Parts shall be manufactured in accordance with the following specifications: Bronze casting C87850 ECOBRASS (.09% lead max), Round flanges conforming to ANSI B16.1, Gaskets ANSI/AWWA C111/A21.11, Bolts ANSI B18.2.1, Nuts SAE J995 Grade 5 with dimensional tolerances ANSI B182.2.2, & plating ASTM F1491. All appropriate parts shall be lead free and be stamped "NL".

SP 22 - MARKING PAINT

Marking paint provided shall be Krylon Industrial Quik-Mark (or approved equal) for inverted use, water based, 20 ounces in size (net weight 17 oz), and of the color specified. The paint shall also be environmentally safe.

SP 23 - NEENAH FRAMES AND GRATES

Frames and lids shall be manufactured by NEENAH and the type specified. All manhole type B covers shall have "CITY OF AURORA" cast into the top in two (2) inch high lettering and shall be the concealed pick hole type. All type B covers shall have a machined surface and a watertight rubber gasket seal.

Bid Number 23-98

SP 24 - HYDRAULIC CEMENT

Hydraulic cement shall be Speccrete W-10 Waterstopper Plug Cement or an engineer approved equal. The compressive strength shall be a minimum 4,200 P.S.I. after 28 days per ASTM C-109. The hydraulic cement shall have a final set time of 3-5 minutes per CRD C-621. The requested material shall come in a 50 pound pail. The cost supplied shall be for each 50 pound pail of hydraulic cement.

SP 25 – STORM STRUCTURES

New storm structures shall be constructed of pre-cast reinforced concrete in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois.

SP 26 – TYPE I BARRICADE

All type I barricades shall be in conformance with the Illinois Department of Transportation's "Standard Specifications For Road and Bridge Construction" (current edition) and be equipped with a yellow light that is battery operated.

SP 27 – GROUND CLAMP

Ground clamps shall be Burndy C11N model or engineer approved equal. The ground clamp shall be cast bronze for cable to water pipe or copper tube connection using a 10 – 2 AWG. It shall connect to a ½" to 1" water pipe with a torque of 50 of-in.

SP 28 – BUTYL MASTIC SEALANT

Butyl Mastic Sealant shall be NPC-Bidco C-56 Trelleborg or engineer approved equal. Each roll of Butyl Mastic Sealant shall be thickness, width and length as specified in the individual pay items. All approved equals shall meet or exceed the following:

- Federal Specifications SS-S-210 A "Sealing Compound, Preformed Plastic for Pipe Joints", Type 1, Rope Form
- AASHTO Designation M-198 75 I, Type B, Flexible Plastic Gasket (Bitumin)
- ASTM Designation C-990-91.

SP 29 – MASTIC SEALING BAND

Mastic Sealing Band shall be used to externally seal manhole cone and barrel sections. The band shall have an outer layer of rubber or polyethylene with an under layer of rubberized mastic (with a protective film), meeting the requirements of ASTM C-877, **type II or *type III.

SP 30 – ADS PIPE

Pipe shall consist of N-12 Dual Wall WT IB HDPE Pipe as manufactured by Advanced Drainage Systems (ADS) or approved equal. The pipe supplied shall utilize water tight joints meeting ASTM D3212. The pipe shall be joined using a bell & spigot joint meeting AASHTO M252 for 4-10 inch diameter pipe, AASHTO M294 for 12-60 inch diameter pipe, and ASTM F2306 for 12-60 inch diameter pipe. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. Material for pipe and fitting production shall be high-density polyethylene conforming with the minimum requirements of cell classification 424420C for 4-10 diameters, and 435400C for 12-60 inch diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content shall not exceed 4%.

Bid Number 23-98

SP 31 – COMPOSITE ADJUSTMENT RINGS

The acceptable manufacturer shall be PRO-RING by Cretex Specialty Products or an approved equal. The grade adjustment rings shall be manufactured from ARPRO Expanded Polypropylene, (EPP), black. 5000 series meeting ASTM D3575 and ASTM D48-1913; B6D7G4L3M24S2T17W7. The rings shall be manufactured using a high compression molding process to produce a finished density of 120 g/l ((7.5pcf). "Grade" adjustment rings may contain either an upper or lower keyway (tongue and groove) for vertical alignment and/or an adhesive trench on the underside with a flat top. The grade adjustment rings shall be capable of supporting the minimum requirements of AASHTO M-306, H-25 and HS-25, be UV stable and be resistant to chemicals and corrosion commonly associated with the sanitary and storm sewer environments. Composite rings shall be set with 3/8"x3.5" butyl rope between each ring, frame and/or top of structure.

SP 32 – T-BOLTS AND NUTS

All T-Bolts and Nuts shall be manufactured per ANSI/AWWA C111/A21.11. The acceptable manufacturer shall be Active Waterworks Industries or an approved equal. T-Bolts shall be stainless steel grade 304 and nuts shall be stainless steel grade 316. The size shall be 3/4" x 3.5". The cost supplied shall be per each case of 125 T-Head Bolts and Nuts.

SP 33 – INLET FILTERS

All inlet filters shall be Flex Storm Catch-it models as manufactured by Advanced Drainage Systems or an approved equal. The models provided shall fit inside the IDOT frame types listed.

SP 34 – CHIMNEY SEALS

All chimney seals shall be bandless and be Adaptor-Seal, Infi-Shield, CanUSA (wrapid seal), Flexrib or approved equal external chimney seal.

SP 35 – WATER SERVICE COUPLINGS

All water service repair couplings shall be the model and manufacturer listed in the attached table below or an engineer approved equal. All connections to copper pipes shall utilize a flared fitting.

Water Service Coupling Models		
Part	Ford Meter Co.	A.Y. McDonald Mfg. Co.
3/4" Flare Copper to 3/4" Flare Copper Coupling	Q22-33-NL	74758 3/4"
3/4" Flare Copper to 1" Flare Copper Coupling	Q22-34-NL	74758 3/4"x1"
1" Flare Copper to 1" Flare Copper Coupling	Q22-44-NL	74758 1"
5/8" Double Extra Strong Lead (XXS) or 3/4" Strong Lead (S) to 3/4" Flare Copper Lead-Pack Coupling	Q12-33-Q32-23-NL	74758C-68 3/4"x5/8", 74758C-66 3/4"
3/4" XS to 3/4" Flare Copper Lead-Pack Coupling	Q22-33-NL	74758C-67 3/4"

3/4" XXS to 3/4" Flare Copper Lead-Pack Coupling	Q32-33-NL	74758C-68 3/4"
5/8" XXS or 3/4" S to 1" Flare Copper Lead-Pack Coupling	Q12-34-Q32-24-NL	74758C-68 1"x5/8", 74758C-66 1"x3/4"
3/4" XS to 1" Flare Copper Lead-Pack Coupling	Q22-34-NL	74758C-67 1"x3/4"
1" S to 1" Flare Copper Lead-Pack Coupling	Q12-44-NL	74758C-66 1"
1" XS to 1" Flare Copper Lead-Pack Coupling	Q22-44-NL	74758C-67 1"
1" XXS to 1" Flare Copper Lead-Pack Coupling	Q32-44-NL	74758C-68 1"

SP 36 – HIGH PERFORMANCE HYDRANT GREASE FOR FOOD PROCESSING EQUIPMENT

The product shall be a high performance multipurpose grease used for food and beverage processing equipment. The acceptable product shall be FM Grease 387 as manufactured by Fuchs Lubricants Co. or an approved equal. This product shall be acceptable as a grease with incidental food contact (H1) according to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds (2013). This product shall be provided in the **1 pound size** and shall be paid for as an each pay item.

SP 37 – MINERAL OIL LUBRICANT

The product shall be a medium SAE 20 grade oil used for general oiling or hydraulics. The acceptable product shall be FMO-350, ISO Grade 68, USP White Mineral Oil as manufactured by Lubriplate Lubricants or an approved medium SAE 20 grade oil equal. This product shall be acceptable for use as a release agent (3H) and as a lubricant with incidental food contact (H1) according to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds (2013). This product shall be provided in the **5 gallon pail size** and shall be paid for as an each pay item.

SP 38 – HYMAX PRO DEDICATED SIZE COUPLINGS

HYMAX Pro dedicated size coupling shall be of Standard EPDM gasket material and accommodate a variety of pipe material, AISI 304 stainless steel, two/four-bolt stab-fit design as manufactured by HYMAX a Mueller brand or an approved equal. All nuts and bolts shall be stainless steel.

SP 39 – ANODE BAGS

The product shall be a 17 lb Magnesium SuperMAG High Potential Anode packaged in either bags or cardboard cartons in low resistivity, quick wetting, prepared backfill consisting of 75% hydrated gypsum, 20% bentonite, and 5% sodium sulphate. Connecting wire should be standard 10 ft. of solid or stranded #13 AWG copper lead. The acceptable manufacturer should be Galvotec Alloys Inc. – specify SuperMAG.

SP 40 – STAINLESS STEEL CLAMP FOR ANODE BAGS – “EZ Strap”

The acceptable manufacturer shall be Cathodic Protection Management (CPM). The acceptable product shall be a stainless steel clamp with a lug diameter that allows a maximum #10 AWG wire with a stainless steel set screw used to make contact with the connected metallic structure. Acceptable vendors currently include: Water Products Company, Mid-American Water Inc, and Core & Main – specify “EZ-Strap”.

SP 41 – TPS ULTRA SLEEVE – JOINT REPAIR SLEEVE

The acceptable product shall be an ULTRA-SLEEVE Wide Range Bell Joint Repair Sleeve. The acceptable manufacturer shall be Total Piping Solutions, Inc. (TPS).

PROPOSAL

TO: THE HONORABLE MAYOR AND CITY COUNCIL
CITY OF AURORA
44 EAST DOWNER PLACE
AURORA, ILLINOIS 60507

1. Proposal of FERGUSON WATERWORKS
for the improvement known as the 2024 Water & Sewer Division Materials and Supplies, Bid 23-98.
2. The plans and specifications for the proposed improvements are those prepared by the City of Aurora Engineering Division and approved by the City Council of Aurora, Illinois.
3. In submitting this proposal, the undersigned declares that the only persons or parties interested in the proposal as principals are those named herein, and that the proposal is made without collusion with any person, firm, or corporation.
4. The undersigned further declares that he has carefully examined the proposals, plans, specifications, form of contract and contract bond, and special provisions, if any, and that he has inspected in detail the site of the proposed work and that he has familiarized himself with all of the local conditions affecting the contract and detailed requirements of construction, and understands that in making this proposal he waives all right to plead any misunderstanding regarding the same.
5. The undersigned further understands and agrees that if the proposal is accepted, he is to furnish and provide all necessary machinery, tools, apparatus and other means of construction and to do all of the work and to furnish all of the materials and labor required.
6. The undersigned declares that he understands that the quantities mentioned are approximate only, and that they are subject to increase or decrease; that he will take in full payment therefore the amount of the summation of the actual quantities, as finally determined, and multiplied by the unit prices shown in the schedule of prices contained herein.
7. The undersigned agrees that the unit prices submitted herewith are for the purpose of obtaining a gross sum and for use in computing the value of extras and deductions; that if there is a discrepancy between the gross sum bid and that resulting from the summation of the quantities multiplied by their respective unit prices, the latter shall apply.
8. The undersigned agrees that if the City decides to extend or shorten the improvement, or otherwise alter it by extras or deductions, including the elimination of any one or more of the items, as provided in the specifications, he will perform the work as altered, increased or decreased, at the contract unit prices without claim for profits lost as a result of any work or items eliminated by the City of Aurora.
9. The undersigned agrees that the Engineer may, at any time during the progress of the work covered by this contract, order other work or materials incidental thereto, and that all such work and materials as do not appear in the proposal or contract as a specific item accompanied by a unit price, and which are not included under the bid price for other items in this contract, shall be performed as extra work, and that he will accept as full compensation therefore the actual cost plus ten percent (10%), the actual cost to be determined as provided for in the specifications.
10. The City of Aurora reserves the right to reject any or all of the bids and to waive any and all irregularities and technicalities. The City of Aurora shall either award the project or reject the bids within **Sixty (60)** calendar days after the bid opening. This time frame may be extended upon mutual agreement of the City and the Bidder.

Bid Number 23-98

11. The undersigned of this proposal agrees that he or she has examined all sections of this Proposal, Specifications, and Bidding Documents and hereby understands and accepts the provisions for access, or the lack of access, to the construction site and shall claim no compensation other than the prices as bid for this condition of accessibility.
12. The undersigned agrees to indemnifying and saving harmless the City of Aurora, its officers, agents, employees, and servants by filing with the City, prior to the execution of the contract, copies of completed Certificates of Insurance satisfactory to the City, with the City of Aurora named as primary, non-contributory additional insured; automobile liability insurance covering owned, non-owned, and hired vehicles with limits of liability as stated in the attached Special Provisions.
13. No contract will be awarded to any bidder where that bidder or any principal or supervisory personnel of the bidder has been personally involved with another business that has been delinquent or unfaithful in any former contract with the City or where that bidder or any supervisory personnel of the bidder has been personally involved with another business that is a defaulter as surety or otherwise upon obligation to the City.
14. The entire set of specifications shall be submitted with each proposal.
15. The City has the right to terminate this Contract, in whole or in part, for any reason or if sufficient funds have not been appropriated to cover the estimated requirement of the Services not yet performed, by providing Bidder with **thirty (30)** days notice specifying the termination date. On the date specified, this Contract will end. If this Contract is terminated by the City, as provided herein, the City shall pay the Bidder only for services performed up the date of termination. After the termination date, Bidder has no further contractual claim against the City based upon this Contract and any payment so made to the Bidder upon termination shall be in full satisfaction for Services rendered. Bidder shall deliver to the City all finished and unfinished documents, studies and reports and shall become the property of the City.
16. **The City of Aurora has a local preference ordinance that would apply to this contract.** O18-070 approved August 28, 2018 defines "Local business" to mean a vendor or contractor who has a valid, verifiable physical business address located within the corporate boundaries of the City of Aurora at least twelve months prior to a bid or proposal opening date, from which the vendor, contractor or consultant operates or performs business on a daily basis, including manufacturing production or distribution. The business must disclose the percentage of workforce in the City of Aurora; be registered with the City of Aurora, if applicable; be subject to City of Aurora taxes (inclusive of sales taxes); be current with property tax payments and sales tax payments; not have any outside cited code violations; not have any outstanding debts to the City of Aurora; have adequately qualified and trained staff to service the bid of interest.
17. The undersigned submits herewith this **Schedule of Prices** covering the materials requested under this contract:



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
Fire Hydrants & Related Parts			
1	Waterous Fire Hydrant Assembly, 4 1/2' Bury	EA	NO BID
2	Waterous Fire Hydrant Assembly, 5' Bury	EA	
3	Waterous Fire Hydrant Assembly, 5 1/2' Bury	EA	
4	Waterous Fire Hydrant Assembly, 6' Bury	EA	
5	Waterous Fire Hydrant Assembly, 4 1/2' Bury w/Alpha Standard Base	EA	
6	Waterous Fire Hydrant Assembly, 5' Bury w/Alpha Standard Base	EA	
7	Waterous Fire Hydrant Assembly, 5 1/2' Bury w/Alpha Standard Base	EA	
8	Waterous Fire Hydrant Assembly, 6' Bury w/Alpha Standard Base	EA	
9	Waterous Fire Hydrant Assembly, 4 1/2' Bury w/Alpha XL Base	EA	
10	Waterous Fire Hydrant Assembly, 5' Bury w/Alpha XL Base	EA	
11	Waterous Fire Hydrant Assembly, 5 1/2' Bury w/Alpha XL Base	EA	
12	Waterous Fire Hydrant Assembly, 6' Bury w/Alpha XL Base	EA	
13	Waterous Fire Hydrant Extension, 6"	EA	
14	Waterous Fire Hydrant Extension, 12"	EA	
15	Waterous Fire Hydrant Extension, 18"	EA	
16	Waterous Fire Hydrant Extension, 24"	EA	
17	Waterous Traffic Kit, Old Style (K525/10")	EA	
18	Waterous Traffic Kit, New Style (K528/16")	EA	
19	Waterous Hydrant Kit K834, Hydrant Head w/Traffic Kit	EA	
20	Waterous Hydrant Kit K836, Hydrant Head	EA	
21	Waterous Hydrant Part #60 (Hydrant Head)	EA	
22	RoDon Hydra-Finder Hydrant Marker, 60"	EA	\$ 24.28
23	Drain Plunger #7	EA	NO BID
24	Nozzle Cap Hose #10	EA	
25	Nozzle Cap Pumper #10	EA	
26	Cap Gasket Hose #11	EA	
27	Cap Gasket Pumper #11	EA	
28	Nozzle - Hose #12	EA	
29	Nozzle - Pumper #12	EA	
30	Lower Operating Nut #17A	EA	
31	Upper Operating Nut #17B	EA	
32	Crossarm #30	EA	
33	Valve Seat #31	EA	
34	Upper Valve Washer #34	EA	



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
35	Main Valve Rubber #35	EA	NO BID
36	Lower Valve Washer #36	EA	
37	O-Ring (Support wheel), 1-1/8 x 1-3/8 #59	EA	
38	Flange Lock Ring #64	EA	
39	Coupling Sleeve (2 halves) #67	EA	
40	Solid Coupling #67B	EA	
41	O-Ring (Lower tube seal), 1-7/8 x 2-1/8 #83	EA	
42	Support Wheel Gasket #84	EA	
43	Brass Lock Nuts #87	EA	
44	Hydrant Coupling Stud #88	EA	
45	Nozzle Section Bushing Assembly #89	EA	
46	Thrust Ring #90	EA	
47	Upper Standpipe Gasket #92	EA	
48	Breakable Flange #113	EA	
49	O-Ring (Pumper Nozzle) 5-1/4 X 5-5/8 #116	EA	
50	Pumper Nozzle Retainer #117	EA	
51	O-Ring (Hose Nozzle) 3-1/4 X 3-5/8 #118	EA	
52	Hose Nozzle Retainer #119	EA	
53	T-Bolts and Nuts (Per Case)	EA	
54	High Performance Hydrant Grease for Food Processing Equipment (1 lb)	EA	
55	Mineral Oil Lubricant (5 Gal)	EA	✓
Valves and Related Parts			
56	Clow Cutting in Valve, 2"	EA	NO BID
57	Clow Cutting in Valve, 4"	EA	
58	Clow Cutting in Valve, 6"	EA	
59	Clow Cutting in Valve, 8"	EA	
60	Clow Cutting in Valve, 10"	EA	
61	Clow Cutting in Valve, 12"	EA	
62	American Flow Control Gate Valve, 2" w/ Mechanical Joint Ends	EA	
63	American Flow Control Gate Valve, 4" w/ Mechanical Joint Ends	EA	
64	American Flow Control Gate Valve, 6" w/ Mechanical Joint Ends	EA	
65	American Flow Control Gate Valve, 8" w/ Mechanical Joint Ends	EA	
66	American Flow Control Gate Valve, 10" w/ Mechanical Joint Ends	EA	
67	American Flow Control Gate Valve, 12" w/ Mechanical Joint Ends	EA	
68	American Flow Control Gate Valve, 14" w/ Mechanical Joint Ends	EA	✓



Schedule of Prices
City of Aurora Water & Sewer
Maintenance Division
2024 Materials and Supplies
Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
69	American Flow Control Gate Valve, 16" w/ Mechanical Joint Ends	EA	NO BID
70	American Flow Control Gate Valve, 2" w/ ALPHA Standard Restrained Joint Ends	EA	
71	American Flow Control Gate Valve, 4" w/ ALPHA Standard Restrained Joint Ends	EA	
72	American Flow Control Gate Valve, 6" w/ ALPHA Standard Restrained Joint Ends	EA	
73	American Flow Control Gate Valve, 8" w/ ALPHA Standard Restrained Joint Ends	EA	
74	American Flow Control Gate Valve, 10" w/ ALPHA Standard Restrained Joint Ends	EA	
75	American Flow Control Gate Valve, 12" w/ ALPHA Standard Restrained Joint Ends	EA	
76	American Flow Control Gate Valve, 14" w/ ALPHA Standard Restrained Joint Ends	EA	
77	American Flow Control Gate Valve, 16" w/ ALPHA Standard Restrained Joint Ends	EA	
78	American Flow Control Gate Valve, 2" w/ ALPHA XL Restrained Joint Ends	EA	
79	American Flow Control Gate Valve, 4" w/ ALPHA XL Restrained Joint Ends	EA	
80	American Flow Control Gate Valve, 6" w/ ALPHA XL Restrained Joint Ends	EA	
81	American Flow Control Gate Valve, 8" w/ ALPHA XL Restrained Joint Ends	EA	
82	American Flow Control Gate Valve, 10" w/ ALPHA XL Restrained Joint Ends	EA	
83	American Flow Control Gate Valve, 12" w/ ALPHA XL Restrained Joint Ends	EA	
84	American Flow Control Gate Valve, 14" w/ ALPHA XL Restrained Joint Ends	EA	
85	American Flow Control Gate Valve, 16" w/ ALPHA XL Restrained Joint Ends	EA	
86	Tyler Valve Box, 664-S Complete w/Lid	EA	\$ 237.00
87	Tyler Valve Box, 664-S Top Section Only	EA	110.45
88	Tyler Valve Box, 664-S Bottom Section Only	EA	106.74
89	Tyler Valve Box Extension, #58-A	EA	67.76
90	Tyler Valve Box Extension, #59-A	EA	81.00
91	Tyler Valve Box Extension, #60-A	EA	81.68
92	Tyler Valve Box Extension, #69A - 9"	EA	68.69
93	Tyler Valve Box Extension, #69A - 18" (Foreign OK)	EA	NO BID
94	Tyler Valve Box Extension, #69A - 24" (Foreign OK)	EA	NO BID
Repair Parts and Fittings			
95	4" Non-Shear Mission Coupling (Clay to Plastic)	EA	19.61
96	6" Non-Shear Mission Coupling (Clay to Plastic)	EA	36.34
97	8" Non-Shear Mission Coupling (Clay to Plastic)	EA	53.00
98	10" Non-Shear Mission Coupling (Clay to Plastic)	EA	83.01
99	12" Non-Shear Mission Coupling (Clay to Plastic)	EA	113.03
100	15" Non-Shear Mission Coupling (Clay to Plastic)	EA	225.96
101	4" Non-Shear Mission Coupling (Plastic to Plastic)	EA	12.90
102	6" Non-Shear Mission Coupling (Plastic to Plastic)	EA	24.72



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
103	8" Non-Shear Mission Coupling (Plastic to Plastic) " DEIKS "	EA	40.63
104	10" Non-Shear Mission Coupling (Plastic to Plastic)	EA	68.88
105	12" Non-Shear Mission Coupling (Plastic to Plastic)	EA	84.77
106	15" Non-Shear Mission Coupling (Plastic to Plastic)	EA	204.49
107	2" x 8" Repair Clamp POWERSEAL	EA	54.88
108	4" x 8" Repair Clamp	EA	67.55
109	6" x 8" Repair Clamp	EA	80.88
110	6" x 8" Repair Clamp w/ 3/4" Tap	EA	100.08
111	6" x 8" Repair Clamp w/ 1" Tap	EA	100.08
112	6" x 10" Repair Clamp	EA	98.49
113	6" x 12" Repair Clamp	EA	113.92
114	6" x 24" Repair Clamp	EA	275.46
115	6" x 36" Repair Clamp	EA	420.20
116	8" x 8" Repair Clamp	EA	94.73
117	8" x 8" Repair Clamp w/ 3/4" Tap	EA	113.98
118	8" x 8" Repair Clamp w/ 1" Tap	EA	113.98
119	8" x 10" Repair Clamp	EA	127.89
120	8" x 12" Repair Clamp	EA	134.17
121	8" x 16" Repair Clamp	EA	153.30
122	8" x 24" Repair Clamp	EA	312.32
123	8" x 36" Repair Clamp	EA	500.61
124	10" x 8" Repair Clamp w/ 3/4" Tap	EA	154.96
125	10" x 8" Repair Clamp w/ 1" Tap	EA	154.96
126	10" x 10" Repair Clamp	EA	162.52
127	10" x 12" Repair Clamp	EA	169.29
128	10" x 16" Repair Clamp	EA	200.87
129	10" x 24" Repair Clamp	EA	339.62
130	12" x 8" Repair Clamp w/ 3/4" Tap	EA	157.17
131	12" x 8" Repair Clamp w/ 1" Tap	EA	157.17
132	12" x 12" Repair Clamp	EA	202.61
133	12" x 16" Repair Clamp	EA	229.08
134	12" x 24" Repair Clamp	EA	377.45
135	12" x 36" Repair Clamp	EA	621.09
136	4" Tyler Cut in Sleeve	EA	563.46
137	6" Tyler Cut in Sleeve	EA	773.29



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
138	8" Tyler Cut in Sleeve	EA	1001.00
139	10" Tyler Cut in Sleeve	EA	1227.16
140	12" Tyler Cut in Sleeve	EA	1633.62
141	4" Full Body MJ Ductile Iron Solid Sleeve	EA	NO BID
142	6" Full Body MJ Ductile Iron Solid Sleeve	EA	↓
143	8" Full Body MJ Ductile Iron Solid Sleeve	EA	
144	10" Full Body MJ Ductile Iron Solid Sleeve	EA	
145	12" Full Body MJ Ductile Iron Solid Sleeve	EA	
146	14" Full Body MJ Ductile Iron Solid Sleeve	EA	
147	16" Full Body MJ Ductile Iron Solid Sleeve	EA	
148	2" Cast Couplings POWERSEAL 3501	EA	40.54
149	4" Cast Couplings	EA	93.15
150	6" Cast Couplings	EA	115.05
151	8" Cast Couplings	EA	158.75
152	10" Cast Couplings	EA	226.58
153	12" Cast Couplings	EA	310.54
154	14" Cast Couplings	EA	473.21
155	16" Cast Couplings	EA	505.16
156	2" Single Bolt Standard Cast Couplings ALPHA ROMAC	EA	NO BID
157	4" Single Bolt Standard Cast Couplings	EA	355.97
158	6" Single Bolt Standard Cast Couplings	EA	490.07
159	8" Single Bolt Standard Cast Couplings	EA	632.79
160	10" Single Bolt Standard Cast Couplings	EA	803.11
161	12" Single Bolt Standard Cast Couplings	EA	945.41
162	14" Single Bolt Standard Cast Couplings	EA	NO BID
163	16" Single Bolt Standard Cast Couplings	EA	2911.16
164	2" Single Bolt XL Cast Couplings	EA	NO BID
165	4" Single Bolt XL Cast Couplings	EA	376.32
166	6" Single Bolt XL Cast Couplings	EA	518.10
167	8" Single Bolt XL Cast Couplings	EA	1068.99
168	10" Single Bolt XL Cast Couplings	EA	849.05
169	12" Single Bolt XL Cast Couplings	EA	1055.34
170	14" Single Bolt XL Cast Couplings	EA	NO BID
171	16" Single Bolt XL Cast Couplings	EA	2959.41
172	2" Single Bolt Transition Cast Couplings	EA	NO BID



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
173	4" Single Bolt Transition Cast Couplings	EA	372.15
174	6" Single Bolt Transition Cast Couplings	EA	513.12
175	8" Single Bolt Transition Cast Couplings	EA	662.56
176	10" Single Bolt Transition Cast Couplings	EA	840.90
177	12" Single Bolt Transition Cast Couplings	EA	989.90
178	14" Single Bolt Transition Cast Couplings	EA	NO BID
179	16" Single Bolt Transition Cast Couplings	EA	NO BID
180	4" Megalug Restraint for Ductile Iron Pipe	EA	27.06
181	4" Megalug Restraint for PVC Pipe	EA	33.23
182	6" Megalug Restraint for Ductile Iron Pipe	EA	31.85
183	6" Megalug Restraint for PVC Pipe	EA	40.26
184	8" Megalug Restraint for Ductile Iron Pipe	EA	48.61
185	8" Megalug Restraint for PVC Pipe	EA	59.60
186	10" Megalug Restraint for Ductile Iron Pipe	EA	71.94
187	10" Megalug Restraint for PVC Pipe	EA	112.69
188	12" Megalug Restraint for Ductile Iron Pipe	EA	104.68
189	12" Megalug Restraint for PVC Pipe	EA	118.43
190	2" Tyler Mechanical Joint Accessory Kit	EA	NO BID
191	4" Tyler Mechanical Joint Accessory Kit	EA	NO BID
192	6" Tyler Mechanical Joint Accessory Kit	EA	NO BID
193	8" Tyler Mechanical Joint Accessory Kit	EA	NO BID
194	10" Tyler Mechanical Joint Accessory Kit	EA	NO BID
195	12" Tyler Mechanical Joint Accessory Kit	EA	NO BID
196	4" Ductile Iron Tyler Bored Out Flange	EA	NO BID
197	6" Ductile Iron Tyler Bored Out Flange	EA	NO BID
198	8" Ductile Iron Tyler Bored Out Flange	EA	NO BID
199	10" Ductile Iron Tyler Bored Out Flange	EA	NO BID
200	12" Ductile Iron Tyler Bored Out Flange	EA	NO BID
201	6" Hymax Coupling	EA	329.57
202	8" Hymax Coupling	EA	372.10
203	10" Hymax Coupling	EA	478.68
204	12" Hymax Coupling	EA	564.99
205	16" Hymax Coupling	EA	1547.49
206	4" TPS Ultra Sleeve - Joint Repair Sleeve	EA	1248.70
207	6" TPS Ultra Sleeve - Joint Repair Sleeve	EA	1359.77



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST	
208	8" TPS Ultra Sleeve - Joint Repair Sleeve	EA	1610.61	
209	10" TPS Ultra Sleeve - Joint Repair Sleeve	EA	2125.70	
210	12" TPS Ultra Sleeve - Joint Repair Sleeve	EA	2269.91	
Watermain Pipe Items				
211	4" CL 52 Ductile Iron Pipe, 18'	EA	NO BID ↓	
212	6" CL 52 Ductile Iron Pipe, 18'	EA		
213	8" CL 52 Ductile Iron Pipe, 18'	EA		
214	10" CL 52 Ductile Iron Pipe, 18'	EA		
215	12" CL 52 Ductile Iron Pipe, 18'	EA		
216	16" CL 52 Ductile Iron Pipe, 18'	EA		
217	Magnesium SuperMAG High Potential Anode-17 Lb.	EA		
218	Stainless Steel Clamp for Anode Bags - "EZ Strap"	EA		
Water Service Related Items				
219	3/4" Flared Corporation Stop	EA	32.54	
220	1" Flared Corporation Stop	EA	49.72	
221	1 1/2" Flared Corporation Stop	EA	152.54	
222	2" Flared Corporation Stop	EA	266.47	
223	3/4" Full Port Flared Curb Box	EA	78.30	
224	1" Full Port Flared Curb Box	EA	105.66	
225	1 1/2" Full Port Flared Curb Box	EA	248.28	
226	2" Full Port Flared Curb Box	EA	401.68	
227	1 1/4" Curb Box	EA	42.64	
228	1 1/2" Curb Box	EA	74.17	
229	1 1/4" Curb Box Top	EA	12.70	
230	Curb Box Extension Replacement Slip Sleeve	EA	19.83	
231	3/4" Type K Copper - 60' Roll	EA	NO BID ↓	
232	3/4" Type K Copper - 100' Roll	EA		
233	1" Type K Copper - 60' Roll	EA		
234	1" Type K Copper - 100' Roll	EA		
235	1 1/2" Type K Copper - 60' Roll	EA		
236	1 1/2" Type K Copper - 100' Roll	EA		
237	2" Type K Copper - 40' Roll	EA		NO BID
238	2" Type K Copper - 60' Roll	EA		NO BID
239	3/4" Copper to 3/4" Copper Coupling	EA		18.01
240	3/4" Copper to 1" Copper Coupling	EA	28.46	



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
241	1" Copper to 1" Copper Coupling	EA	31.55
242	3/4" Copper to 3/4" Strong Lead-Pack Coupling	EA	32.01
243	3/4" Copper to 3/4" Extra Strong Lead-Pack Coupling	EA	37.82
244	3/4" Copper to 3/4" Double Extra Strong Lead-Pack Coupling	EA	44.59
245	1" Copper to 3/4" Strong Lead-Pack Coupling	EA	56.12
246	1" Copper to 3/4" Extra Strong Lead-Pack Coupling	EA	54.07
247	1" Copper to 1" Strong Lead-Pack Coupling	EA	66.70
248	1" Copper to 1" Extra Strong Lead-Pack Coupling	EA	47.55
249	1" Copper to 1" Double Extra Strong Lead-Pack Coupling	EA	60.16
Meter Items			
250	3/4" Ford Meter Horn AY McDONALD	EA	84.03
251	1" Ford Meter Horn AY McDONALD	EA	130.72
252	3/4" Ford Ball Valve (Check Specifications)	EA	NO BID
253	1" Ford Ball Valve (Check Specifications)	EA	NO BID
254	5/8" x 1/2" Pipe Thread Ford Meter Coupling	Pkg	521.50
255	5/8" x 3/4" Pipe Thread Ford Meter Coupling	Pkg	592.50
256	3/4" Ford Meter Coupling	Pkg	330.00
257	1" Ford Meter Coupling	Pkg	274.50
258	1 1/2" Large Bronze Meter Flange Kit	EA	112.68
259	2" Large Bronze Meter Flange Kit	EA	154.71
260	3" Large Bronze Meter Flange Kit	EA	288.01
261	4" Large Bronze Meter Flange Kit	EA	460.13
262	3" Zenner FH230S Hydrant Meter w/Check Valve	EA	NO BID
263	Ground clamp, 1 1/2"	EA	NO BID
Storm Sewer Items			
264	Manhole Frame & Solid Lid, 4", R-1647-B	EA	NO BID
265	Manhole Frame & Solid Lid, 7", R-1772-B	EA	↓
266	Manhole Frame & Solid Lid, 9", R-1713-B	EA	
267	Combination Inlet Frame, Grate, & Curb Box, R-3015-R	EA	
268	Beehive Grate, R-4340-B	EA	
269	Beehive Grate, R-4341-A	EA	
270	Beehive Grate, R-4342	EA	
271	Solid Cover R-1712	EA	
272	Open Cover R-2502, Type D	EA	
273	Curb Box - R-3015	EA	



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
274	Curb Frame R-3015	EA	NO BID
275	Grate - R-3015	EA	NO BID
276	Inlet Filter for IDOT Type 1 Frame (Manhole Frame) ADS	EA	130.49
277	Inlet Filter for IDOT Type 8 Frame (Beehive Frame) ADS	EA	130.49
278	Inlet Filter for IDOT Type 23 Frame (Combination Curb Frame) ADS	EA	152.44
279	Composite Adjusting Ring, 3/4" x 1-1/2"	EA	48.26
280	Composite Adjusting Ring, 0.75"	EA	35.19
281	Composite Adjusting Ring, 1"	EA	39.21
282	Composite Adjusting Ring, 1.25"	EA	45.15
283	Composite Adjusting Ring, 1.5"	EA	51.28
284	Composite Adjusting Ring, 1.75"	EA	55.30
285	Composite Adjusting Ring, 2"	EA	63.35
286	Composite Adjusting Ring, 2.25"	EA	69.38
287	Composite Adjusting Ring, 2.5"	EA	74.41
288	Composite Adjusting Ring, 4"	EA	108.59
289	Composite Adjusting Ring, 6"	EA	149.82
290	2' x 24" Catch Basin with Base	EA	NO BID
291	2' x 30" Catch Basin with Base	EA	↓
292	2' x 36" Catch Basin with Base	EA	
293	2' x 48" Catch Basin with Base	EA	
294	3' x 36" Catch Basin with Base	EA	
295	3' x 16" Barrel Section	EA	
296	3' x 24" Barrel Section	EA	
297	3' x 36" Barrel Section	EA	
298	3' x 48" Barrel Section	EA	
299	3' x 18" Cone Offset	EA	
300	3' Flat Top Eccentric Opening, Non-Tongue and groove	EA	
301	3' Flat Top Concentric Opening, Non-Tongue and groove	EA	
302	3' Flat Top Eccentric Opening, Tongue and Groove	EA	
303	3' Flat Top Concentric Opening, Tongue and groove	EA	
304	3' Diameter Base	EA	
305	4' Flat Top, 6" Thickness, Concentric Opening, Tongue and Groove	EA	
306	4' Flat Top, 6" Thickness Eccentric Opening Tongue and Groove	EA	
307	4' Flat Top, 6" Thickness, Concentric Opening, Non-Tongue and Groove	EA	
308	4' Flat Top, 6" Thickness Eccentric Opening Non-Tongue and Groove	EA	↓



Schedule of Prices
City of Aurora Water & Sewer
Maintenance Division
2024 Materials and Supplies
Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
309	4' Flat Top, 12" Thickness, Concentric Tongue and Groove	EA	NO BID
310	4' Flat Top, 12" Thickness, Eccentric Tongue and Groove	EA	
311	4' Flat Top, 12" Thickness, Concentric Non-Tongue and groove	EA	
312	4' Flat Top, 12" Thickness, Eccentric Non-Tongue and groove	EA	
313	4' x 32" Manhole with Base	EA	
314	4' x 48" Barrel Section	EA	
315	4' Base	EA	
316	5' Flat Top, 6" Thickness, Concentric Opening, Tongue and Groove	EA	
317	5' Flat Top, 6" Thickness Eccentric Opening Tongue and Groove	EA	
318	5' Flat Top, 6" Thickness, Concentric Opening, Non-Tongue and Groove	EA	
319	5' Flat Top, 6" Thickness Eccentric Opening Non-Tongue and Groove	EA	
320	5' Flat Top, 12" Thickness, Concentric Tongue and Groove	EA	
321	5' Flat Top, 12" Thickness, Eccentric Tongue and Groove	EA	
322	5' Flat Top, 12" Thickness, Concentric Non-Tongue and groove	EA	
323	5' Flat Top, 12" Thickness, Eccentric Non-Tongue and groove	EA	
324	5' x 32" Manhole with Base	EA	
325	5' x 48" Barrel Section	EA	
326	5' Base	EA	NO BID
327	12" Diameter ADS N-12 (Water Tight Joints, 20' Sticks)	EA	189.20
328	15" Diameter ADS N-12 (Water Tight Joints, 20' Sticks)	EA	263.00
329	12" Diameter RCP	EA	NO BID
330	15" Diameter RCP	EA	
331	18" Diameter RCP	EA	
332	24" Diameter RCP	EA	
333	12" Diameter RCP Flared End Section	EA	
334	15" Diameter RCP Flared End Section w/Gate	EA	
335	18" Diameter RCP Flared End Section w/Gate	EA	
336	24" Diameter RCP Flared End Section w/Gate	EA	
Sanitary Sewer Items			
338	6" MaxAdaptor Universal Sewer Repair Coupling	EA	93.34
339	8" MaxAdaptor Universal Sewer Repair Coupling	EA	122.99
340	10" MaxAdaptor Universal Sewer Repair Coupling	EA	153.69
341	12" MaxAdaptor Universal Sewer Repair Coupling	EA	184.37
342	Sanitary Manhole Chimney Seals	EA	757.65
343	4" SDR-26 PVC 11 Degree Bend	EA	40.67



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
344	4" SDR-26 PVC 22.5 Degree Bend	EA	38.27
345	4" SDR-26 PVC 45 Degree Bend	EA	28.85
346	6" SDR-26 PVC 11 Degree Bend	EA	56.15
347	6" SDR-26 PVC 22.5 Degree Bend	EA	72.07
348	6" SDR-26 PVC 45 Degree Bend	EA	52.87
349	6"x6" SDR-26 PVC WYE	EA	106.00
350	6"x6" SDR-26 PVC Tee	EA	93.85
351	8" SDR-26 PVC 11 Degree Bend	EA	135.77
352	8" SDR-26 PVC 22.5 Degree Bend	EA	128.08
353	8" SDR-26 PVC 45 Degree Bend	EA	131.37
354	8"x6" SDR-26 PVC WYE	EA	137.75
355	8"x6" SDR-26 PVC Tee	EA	130.89
356	10" SDR-26 PVC 22.5 Degree Bend	EA	283.91
357	10" SDR-26 PVC 45 Degree Bend	EA	258.89
358	10"x6" SDR-26 PVC WYE	EA	307.97
359	10"x6" SDR-26 PVC Tee	EA	299.31
360	4" SDR-26 PVC Pipe, 14'	EA	NO BID
361	6" SDR-26 PVC Pipe, 14'	EA	↑ ↓ NO BID
362	8" SDR-26 PVC Pipe, 14'	EA	
363	10" SDR-26 PVC Pipe, 14'	EA	
364	12" SDR-26 PVC Pipe, 14'	EA	
365	15" SDR-26 PVC Pipe, 14'	EA	
366	18" SDR-26 PVC Pipe, 14'	EA	NO BID
Miscellaneous Items			
367	Krylon Industrial Quik-Mark Blue Marking Paint, 17 Oz	EA	4.76
368	Krylon Industrial Quik-Mark Green Marking Paint, 17 Oz	EA	4.76
369	Krylon Industrial Quik-Mark White Marking Paint, 17 Oz	EA	4.76
370	Hydraulic Cement, 50 LB Pail	EA	61.06
371	Masonry Mortar Type M, 80lb Bag	EA	NO BID
372	Concrete Precast Brick - 2.25" x 3.5" x 7.5"	Pallet	NO BID
373	Concrete Precast Block - 3.5" x 7.5" x 15.5"	Pallet	NO BID
374	Mastic Sealing Band, 3"x50'	Roll	NO BID
375	Mastic Sealing Band, 6"x50'	Roll	65.56
376	Mastic Sealing Band, 9"x50'	Roll	100.03
377	Mastic Sealing Band, 12"x50'	Roll	109.39



Schedule of Prices
 City of Aurora Water & Sewer
 Maintenance Division
 2024 Materials and Supplies
 Bid 23-98

RETURN WITH BID

(For complete information covering these items, see specifications)

NO.	ITEM	UNIT	UNIT COST
378	Butyl Rubber Sealant, 3/8"x3 5"x16'	Roll	74.75
379	Butyl Rubber Sealant, 3/4"x3/4"x16'	Roll	46.34
380	Type I Barricade	EA	NO BID
381	Magnetic Locator - Schonstedt (Or Equivalent) Magnetic Locator w/ Hard Case	EA	NO BID



(If an individual)

Signatures

Signature of Bidder _____

Business Address _____

(If a partnership)

Firm Name _____

Signed by _____

Business Address _____

Insert
Names and
Addresses of
All Partners

(If a corporation)

Corporate Name FERGUSON WATERWORKS

Signed By PAUL DREW BRANCH MANAGER
President

Business Address 1720 STATE ST DEKALB IL 60115

~~BRANCH MANAGER~~ ~~President~~ PAUL DREW

Secretary _____

Treasurer _____

Attest Kyle [Signature]

~~BRANCH MANAGER~~
PROJECT MANAGER



BIDDER'S CERTIFICATION

I/We hereby certify that:

- A. A complete set of bid papers, as intended, has been received, and that I/We will abide by the contents and/or information received and/or contained herein.
- B. I/We have not entered into any collusion or other unethical practices with any person, firm, or employee of the City which would in any way be construed as unethical business practice.
- C. I/We have adopted a written sexual harassment policy which is in accordance with the requirements of Federal, State and local laws, regulations and policies and further certify that I/We are also in compliance with all other equal employment requirements contained in Public Act 87-1257 (effective July 1, 1993) 775 ILCS 5/2-105 (A).
- D. I/We operate a drug free environment and drugs are not allowed in the workplace or satellite locations as well as City of Aurora sites in accordance with the Drug Free Workplace Act of January, 1992.
- E. I/We will abide by all other Federal, State and local codes, rules, regulations, ordinances and statutes.
- F. I/We have in place a:
 - written program which meets or exceeds the program requirements of the Substance Abuse Prevention on Public Works Projects Act (Public Act 95-0635), and will provide a written copy thereof to the City of Aurora or
 - collective bargaining agreement which deals with the subject matter of the Substance Abuse Prevention on Public Works Projects Act (Public Act 95-0635) – **Contractor shall check the box for the policy that applies.**

COMPANY NAME FERGUSON WATERWORKS

ADDRESS 1720 STATE STREET

CITY/STATE/ZIP CODE DEKALB IL

NAME OF CORPORATE/COMPANY OFFICIAL PAUL DREW

TITLE BRANCH MANAGER PLEASE TYPE OR PRINT CLEARLY

AUTHORIZED OFFICIAL SIGNATURE *Paul Drew*

DATE 10/31/2023

Subscribed and Sworn to

TELEPHONE (815) 756-2800

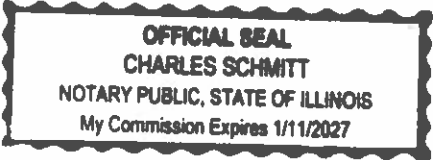
Before me this 31 day

FAX No. (815) 756-2877

of October, 2023

E-MAIL ADDRESS paul.drew@ferguson.com

Charles Schmitt
Notary Public



Certification Regarding Debarment, Suspension and Other Responsibility Matters

The prospective participant to the best of its knowledge and belief that it and its principles:

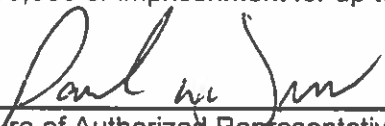
(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

(c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in fine of up to \$10,000 or imprisonment for up to 5 years, or both.

 10/31/2023

(Signature of Authorized Representative) (Date)

I am unable to certify the above statements. My explanation is attached.

EPA FORM 5700-49 (11-88)

Bidder Certification In Compliance with Article 33E to the "Criminal Code of 1961"

I PAUL DREW, do hereby certify that:
(Name)

1. I am BRANCH MANAGER of the FERGUSON WATERWORKS
(Position) (Firm)
and have authority to execute this certification on behalf of the firm
2. This firm is not barred from bidding on this contract as a result of a violation of Section 33E-3, Bid-rigging, or Section 33E-4, Bid Rotating, as set forth in Article 33E to the "Criminal Code of 1961."

Name of Firm FERGUSON WATERWORKS
Signature Paul Drew
Title BRANCH MANAGER
Date 10/31/2023
Corporate Seal (where appropriate)

On this 31st day of October 2023, before me appeared (Name)
PAUL DREW to me personally known, who, being duly
sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by
(Name of Firm) FERGUSON WATERWORKS to execute the affidavit and did so as his or
her free act and deed.

Notary Public Charles Schmitt Commission Expires 1/11/27

Notary Seal





City of Aurora, IL - Local Vendor Preference Application

The business identified below is requesting to be placed on the City of Aurora, Illinois Local Vendor Preference list, in accordance with ordinance O20-029 approved April 28, 2020.

- 1) Date Submitted: _____
- 2) Name of Business: _____
- 3) Address of Local Office: _____
- 4) City, State, Zip: _____
- 5) Company's Web Address: _____
- 6) Phone: _____ Fax: _____
- 7) County your Local Business is Located In: _____

Submitted By (Signature): _____

Print Name and Title: _____

Email Address: _____

Sec. 2-410.-Prequalification; local bidder.

- (a) If an interested business would like to prequalify as a "local business", such a business shall complete and submit the prequalification application along with supporting documentation, as listed below, and the applicable fee as set by the City Council, to the Finance Department:
 - a. Evidence that the business has established and maintained a physical presence in the City of Aurora, by virtue of the ownership or lease of all or a portion of a building for a period of not less than twelve (12) consecutive months prior to the submission of the prequalification application; and
 - b. Evidence demonstrating that the business is legally authorized to conduct business within the State of Illinois and the City of Aurora, and has a business registered to operate in the City if required; and
 - c. Evidence that the business is not a debtor to the City of Aurora. For purposes of this subparagraph, a debtor is defined as having outstanding fees, water bills, sales tax or restaurant/bar tax payments that are thirty (30) days or more past due, or has outstanding weed or nuisance abatements or liens, has failure to comply tickets or parking tickets that are not in dispute as to their validity and are not being challenged in court or other administrative processes.

Back up documentation for (a) a. and (a) b. must accompany this submittal or application will be rejected.

Please note for (a) c. above the City of Aurora will verify internally that your company does not have any outstanding fees. Your company should make sure that to the best of its knowledge all bills are current.

Return completed application, with all required backup documentation to:
City of Aurora, Attn: Purchasing Division, 44 E. Downer Place, Aurora, IL 60507
Or email to: PurchasingDL@aurora.il.us

Do not write below this line: For City of Aurora use ONLY

- (a) a.
- (a) b.
- (a) c.

Date: _____

Approved: _____
Letter Sent: _____

Denied: _____
Initials: _____

Parts List – Ductile Iron Pacer

Figure 6. 250 PSI Working Pressure Ductile Iron Pacer (Models W67-250 and WB67-250)

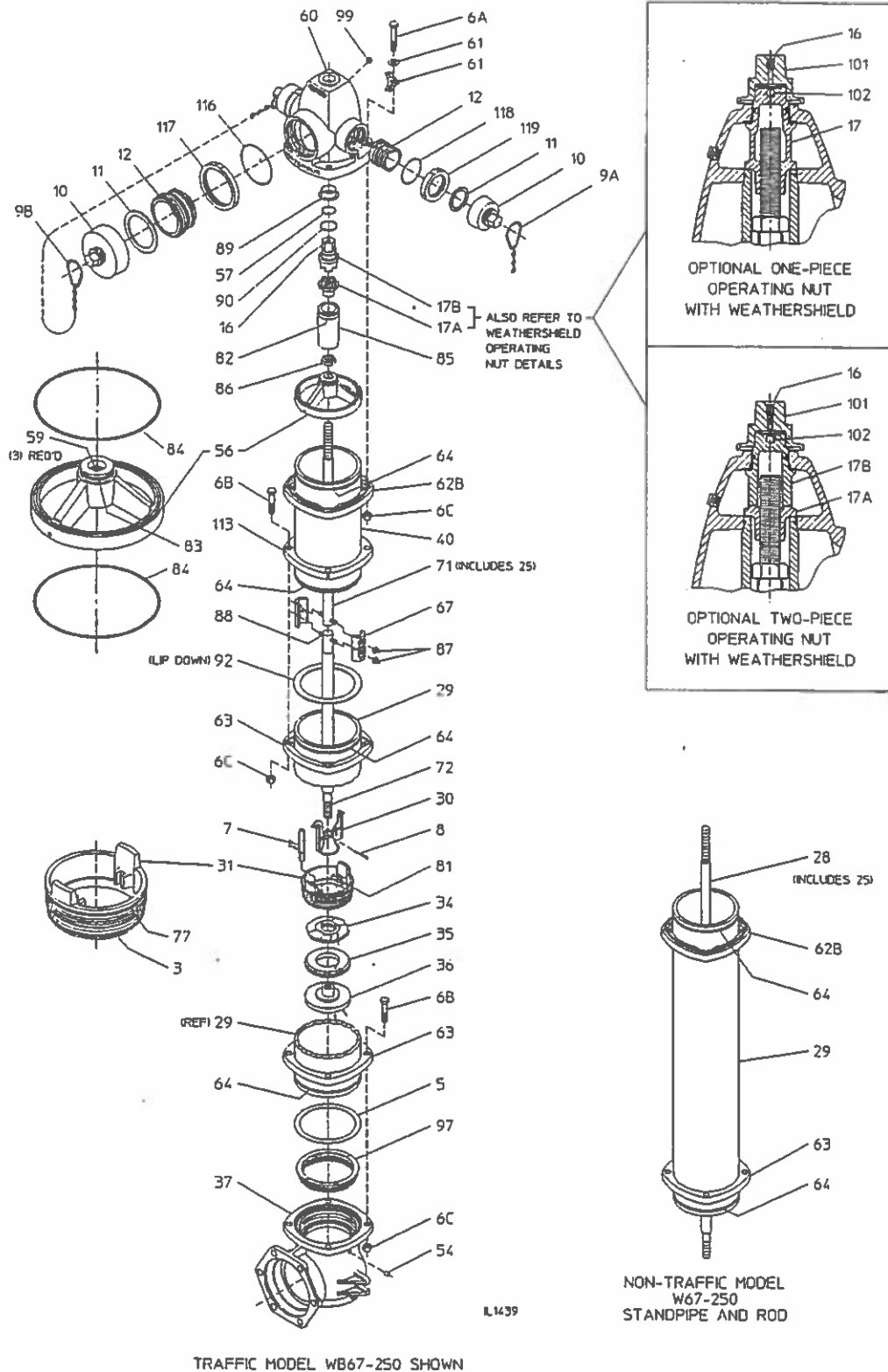


Table 3. Parts List for 250 PSI Working Pressure Ductile Iron Pacer (Models W67-250 and WB67-250)

REF NO.	DESCRIPTION	MATERIAL
3	O-ring (Lower valve seat), 5-5/8 x 5-7/8	Buna N
5	Lower standpipe gasket	Neoprene
6A	Hex hd bolt, 5/8-11 x 3-3/4 in.	Zinc plated steel
6B	Hex hd bolt, 5/8-11 x 3 in.	Zinc plated steel
6C	Hex nut, 5/8-11	Zinc plated steel
7	Drain plunger	Red brass
8	Cotter pin, 1/4 x 1-1/2 in.	Stainless steel, Type 304
9A, 9B	Nozzle cap chain, single or double	Zinc-plated steel
10	Nozzle cap, hose or pumper	Ductile iron
11	Cap gasket, hose or pumper	Neoprene
12	Nozzle, hose or pumper	Brass
16	Flat hd screw, 1/4-20 x 1/2 in.	Stainless steel, Type 304
17	Operating nut (one-piece)	Bronze
17A	Lower operating nut	Bronze
17B	Upper operating nut	Ductile iron**
25	Valve rod bushing (included with 71 & 28)	Red brass
28	Rod Assembly (includes 25) (non-Traffic model)	Steel rod
29	Lower standpipe (Traffic model)	Centrifugally cast ductile iron pipe
29	Standpipe (non-Traffic model)	Centrifugally cast ductile iron pipe
30	Crossarm	Bronze
31	Valve seat	Bronze
34	Upper valve washer	Ductile iron
35	Main valve rubber	Urethane
36	Lower valve washer	Ductile iron
37	Hydrant bottom	Ductile iron
40	Upper standpipe (Traffic model)	Centrifugally cast ductile iron pipe*
54	Drain bushing	Brass
56	Support wheel	Ductile iron
57	O-ring (Operating nut), 1-1/2 x 1-3/4	Buna N
59	O-ring (Support wheel), 1-1/8 x 1-3/8	Buna N
60	Nozzle section	Ductile iron
61	Bury depth plate	Aluminum
61	Bury depth plate washer	Zinc plated steel
62B	Upper standpipe flange	Ductile iron
63	Standpipe flange	Ductile iron
64	Flange lock ring	Stainless steel, Type 430
67	Coupling sleeve (2 halves)	Cast iron
71	Upper rod assembly (includes 25) (Traffic model)	Steel rod
72	Lower rod (Traffic model)	Steel rod
77	O-ring (Upper valve seat), 5-7/8 x 6-1/8	Buna N
81	Groove pin, 3/32 x 7/16 in.	Beryllium copper
82	O-ring (Upper tube seal), 2-3/8 x 2-5/8	Buna N
83	O-ring (Lower tube seal), 1-7/8 x 2-1/8	Buna N
84	Support wheel gasket	Buna N
85	Support tube	Ductile iron
86	Stop nut, 1"- 8	Zinc plated steel
87	Coupling nut, 1/2-20	Brass
88	Coupling stud, 1/2-20 x 2-9/16 in.	Stainless steel, Type 430
89	Nozzle section bushing assembly	Brass
90	Thrust ring	Teflon
92	Upper standpipe gasket	Neoprene
97	Valve seat insert	Bronze
99	Pipe plug, 1/4 NPT	Brass
101	Weathershield nut	Ductile iron
102	Spirol pin, hvy, 1/4 x 2-1/4 in.	Stainless steel
113	Breakable flange	Ductile iron
116	O-ring (pumper nozzle), 5-1/4 x 5-3/4	Buna N
117	Pumper nozzle retainer	Ductile iron
118	O-ring (hose nozzle), 3-1/4 x 3-5/8	Buna N
119	Hose nozzle retainer	Ductile iron

*AWWA Standard C151 (ANSI 21.51)

**Bronze or iron optional on some nut sizes.