Department of Environmental Services 10 Felix Street Rochester, New York 14608 www.cityofrochester.gov

INFORMATIONAL PACKAGE TO BE DISTRIBUTED AT PRECONSTRUCTION MEETINGS

1. PURPOSE

This informational package was prepared by the Water Bureau for distribution at Preconstruction Meetings on projects that involve work on the City's water system. Its purpose is to furnish contractors and inspectors with supplemental information that will help them successfully complete the work. The following documents are included in this package:

- a. Water Bureau Approved Products List
- b. Water Main Improvement Verification of Completion Form
- c. Tracer Wire Testing Record & Certification Form
- d. Water Service Installation Data Card

2. APPROVED PRODUCTS LIST

Products listed have been approved for use on the City's water system. Detailed shop drawing submittals will be required for these products prior to their use on a project. Products proposed for use that do not appear on this list must be reviewed and approved by the Water Bureau. Product review will require submittal of shop drawings, material certifications and possibly product samples. If the product will come in contact with potable water, certification of conformance with ANSI/NSF-61 by an accredited independent third party North American laboratory must also be submitted. Depending on the type of product, additional documentation may also be required. Submittals for approval of products not appearing on this list should be sent to: Rochester Water Bureau, 10 Felix Street, Rochester, NY 14608, Attn: Managing Engineer. The Bureau's review and approval process may be lengthy, depending on the type of product and the documentation submitted.

3. WATER MAIN IMPROVEMENT VERIFICATION OF COMPLETION FORM

This form summarizes information about the initial flushing, pressure testing and disinfection of newly installed or rehabilitated water mains. Applicable sections of the form are to be completed by the Project Manager/Inspector, certified by an Engineer licensed in New York State who is employed by the firm responsible for inspecting the water system work and then faxed to the Monroe County Health Department (753-5098) and the Water Bureau's Managing Engineer (428-8844). The Health Department must receive this completed form before it will collect samples for bacteriological testing.

(Continued)

Phone: 585.428.7500 Fax: 585.428.6353 TTY: 585.428.6054 EEO/ADA Employer



4. TRACER WIRE TESTING RECORD & CERTIFICATION FORM

This form is to be used on projects that involve the installation of plastic (PVC, PVCO and HDPE) water mains or plastic (PE and PEX) water services. Tracer wires are required on plastic mains and services to allow the Bureau to locate them in the field. The Bureau typically uses inductive or conductive locating equipment (M-Scope) or magnetic locators to locate its buried pipes. Plastic pipe cannot be located using this equipment unless a tracer wire is installed with the pipe. This form must be completed by the Contractor, certified by the inspector and faxed to the attention of the Water Bureau's Managing Engineer (428-8844) after the Contractor has tested all tracer wires on plastic mains and services within the entire project or a section of the project verify the electrical continuity of the tracer wire system. The contractor's testing should be performed after all of the main and service tracer wire has been installed within the section to be tested and backfilled, but before final surface restoration is performed. After the Water Bureau receives the completed form, it will conduct field testing to confirm that the tracer wire is functional. Deficiencies will be identified by the Bureau and must be corrected by the Contractor.

5. WATER SERVICE INSTALLATION DATA CARD

This index card must be completed by the Contractor for all water services and pitometer taps that are installed as part of the project. This includes all small services (2" diameter or less) and large services (4" diameter or larger). Blank cards can be picked up at the Bureau's Maps and Records Office. All required information must be completed on the card and the completed card submitted directly to: Rochester Water Bureau, 10 Felix Street, Rochester, NY 14608, Attn: Managing Engineer. The data on these cards will be reviewed by the Bureau. Any deficiencies will be noted and returned to the Contractor for correction. Final payment to the Contractor will be withheld until all cards from the project have been submitted and approved by the Managing Engineer. For answers to questions about completing the cards, call the Water Bureau's Maps & Records Office at 428-7562.

6. MISCELLANEOUS INFORMATION

- Call the Water Bureau Dispatch Office (428-7500) to schedule the operation of a valve.
- Water valves and hydrants are to be operated only by authorized Bureau personnel.
- Proposed changes to the water main layout, as shown on the approved construction drawings, must be approved in advance by the Bureau's Managing Engineer.



All products that come into contact with drinking water shall be certified for conformance with American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 61 or Standard 14 for health effects. Products containing brass or bronze shall also be certified for conformance with ANSI/NSF Standard 61-Annex G or ANSI/NSF Standard 372 for "lead-free" lead content requirements. Certifications to be made by an ANSI approved third party certification program or laboratory.

This list will be updated periodically. Materials must be on the current edition of this list at the time of use. Contact the Managing Engineer of the Water Bureau @ (585) 428-7569 for verification of current edition of this list.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Bituminous Coating	S900 S962 S966 S968	Polyguard	CA-9 Corrosion Control Coating, single component, cold applied, solvent release bitumen coating	N/A	
Restraint Devices (Ductile Iron Pipe)	S900	EBAA Iron, Inc.	Megalug Series 1100 (M.J. Fitting to DI Pipe), Megalug Series 1700 (D.I. Push-On Pipe Harness)	N/A	MEGA-BOND® coating on body and wedges, fluorocarbon coated M.J. hardware.
		Ford Meter Box Co.	Uniflange Series 1400 (M.J. Fitting to D.I. Pipe), Uniflange Series 1450 (D.I. Push-on Pipe Harness)	N/A	E-coating on body and wedges, fluorocarbon coated M.J. hardware.
		Infact Corporation	Foster Adapter	N/A	For restraint of M.J. ductile iron water main, fittings and valves to M.J. ductile iron water main, fittings and valves (excluding hydrants)
		U. S. Pipe & Foundry	Field Lok 350® Gasket	NSF 61 & 372	For restraint of push-on joint ductile iron pipe joints.
Restraint Devices (AWWA C900 PVC Pipe)	S900	EBAA Iron, Inc.	Sizes ≤ 12" Nominal Diameter. Megalug Series 2000PV or 19MJ00 (M.J. Fitting to PVC Pipe), Series 2500 or 2600 (PVC Pipe to PVC Fitting), Series 1500 or 1900 (PVC Push-On)	N/A	MEGA-BOND® coating on body and wedges, fluorocarbon coated M.J. hardware.
		Ford Meter Box Co.	Sizes ≤ 12" Nominal Diameter. Uniflange Series 1500 (M.J. Fitting to PVC Pipe), Series 1360 (PVC Pipe to PVC Fitting), Series 1390 (PVC Push-On)	N/A	E-coating on body and wedges, fluorocarbon coated M.J. hardware.
		Tyler Union	Sizes ≤ 12" Nominal Diameter. TUF Grip Series 2000 (M.J. Fitting to PVC Pipe), Domestic Version Only.	N/A	TUF-Bond™ coating on gland and e-coating for wedge, and wedge bolts; fluorocarbon coated M.J. hardware.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Restraint Devices (AWWA C909 PVCO Pipe)	S900	EBAA Iron, Inc.	Sizes ≤ 12" Nominal Diameter. Megalug Series 19MJ00 (M.J. Fitting to PVCO), Series 2600 (PVCO to PVC Fitting), Series 1900 (PVCO Push-on)	N/A	MEGA-BOND® coating on body and wedges, fluorocarbon coated M.J. hardware. See PVCO pipe M.J. torque recommendations.
		Ford Meter Box Co.	Sizes ≤ 12" Nominal Diameter. Uniflange Series 1500 or Series 1309 (M.J. Fitting to PVCO Pipe), Series 1369 (PVCO Pipe to PVC Fitting), Series 1399 (PVCO Push-On)	N/A	Fluorocarbon coated M.J. hardware. See PVCO pipe M.J. torque recommendations.
		Tyler Union	Sizes ≤ 12" Nominal Diameter. TUF Grip Series 2000 (M.J. Fitting to PVC Pipe), Domestic Version Only.	N/A	TUF-Bond™ coating on gland and e-coating for wedge, and wedge bolts; fluorocarbon coated M.J. hardware.
T-Bolts and Nuts	S900	Birmingham Fastener Manufacturing	Fluorocarbon Coated T-Head Bolts and Nuts, Blue	N/A	
Warning Tape	S900	Presco	3" Wide Detectable Underground Warning Tape	N/A	Blue, imprinted with "CAUTION WATER LINE BURIED BELOW".
		Pro-Line	3" Wide Detectable Underground Warning Tape	N/A	Blue, imprinted with "CAUTION WATER LINE BURIED BELOW".
		Terra Tape	3" Wide Sentry Line Detectable	N/A	Blue, imprinted with "CAUTION WATER LINE BURIED BELOW".
Fittings - Ductile Iron	S901	McWane Ductile	M.J. Full Body (AWWA C110) or Compact (AWWA C153), SBR gaskets. Nitrile gaskets to be used in potential petroleum contaminated soils.	UL 61 & 372	Double thickness cement mortar lining w/ asphalt coating.
		Tyler Union	M.J. Full Body (AWWA C110) or Compact (AWWA C153), SBR gaskets. Nitrile gaskets to be used in potential petroleum contaminated soils.	UL 61, 372 & Annex G	Epoxy coated or double thickness cement mortar lining w/asphalt coating.
Fittings - PVC	S901	Harrington Corporation - HARCO	PVC C907 Pressure Fittings, Injection Molded, 4"-8"	NSF 61	Colored blue
		Multi Fittings - IPEX	Blue Brute AWWA C907 PVC Injection Molded, 4"-12"	NSF 61 & Annex G	Colored blue
Petrolatum/Petroleum Wax Tape System	S901	Petro Coating Systems (PCS)	Primer Paste, Petro Mastic, Standard Temperature Petrolatum Tape	N/A	
		Chase Construction Products	Tapecoat Enviroprime, Tapecoat Envirotape	N/A	
		Denso	Denso Paste, Densyl Mastic or Denso Profiling Mastic, Densyl Tape	N/A	
		The Trenton Corporation	Wax Tape Primer, Fill-Pro PM-GP, #1 Wax Tape	N/A	
Pipe - Anchor Pipe	S901	Tyler Union	Swivel x Swivel or Swivel x Solid -Full body or compact styles	UL 61, 372 & Annex G	Tees, ells and adapters epoxy coated or cement mortar lining w/ asphalt coating.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Pipe - Ductile Iron	S901	McWane Ductile	Tyton Joint Pipe, 4"-24", SBR gaskets. Nitrile gaskets to be used in potential petroleum contaminated soils.	UL 61	Class 52 (domestic system) and Class 56 (Holly system), double thickness cement lined asphalt coated.
		Griffin Pipe Products	Tyton Joint Pipe, 4"-24", SBR gaskets. Nitrile gaskets to be used in potential petroleum contaminated soils.	NSF 61 & 372	Class 52 (domestic system) and Class 56 (Holly system), double thickness cement lined asphalt coated.
		United States Pipe & Foundry	Tyton Joint Pipe, 4"-24", SBR gaskets. Nitrile gaskets to be used in potential petroleum contaminated soils.	NSF 61 & 372	Class 52 (domestic system) and Class 56 (Holly system), double thickness cement lined asphalt coated.
Pipe - PVC	S901	IPEX	Blue Brute, 4"-12", SBR gaskets. Nitrile gaskets to be used in potential petroleum contaminated soils.	NSF 61 & 372	AWWA C900, DR 14, Pressure Class 305. Note recommended bolt torques for M.J. fittings.
		JM Manufacturing - JM Eagle	Blue Brute C900, 4"-12", SBR gaskets. Nitrile gaskets to be used in potential petroleum contaminated soils.	NSF 61 & 372	AWWA C900, DR 14, Pressure Class 305. Note recommended bolt torques for M.J. fittings.
Pipe - PVCO	S901	IPEX	Bionax CIOD Gasketed PVCO Pressure Pipe, 4"-12"	NSF 61 & 372	AWWA C909, Pressure Class 235, SBR gaskets unless otherwise noted. Note recommended bolt torques for M.J. fittings
		JM Manufacturing - JM Eagle	Ultra-Blue C909, 6"-12"	NSF 61 & 372	AWWA C909, Pressure Class 235, SBR gaskets unless otherwise noted. Note recommended bolt torques for M.J. fittings.
Polyethylene Tube Encasement	S901	All American Poly	8 mil minimum thickness, linear low-density polyethylene	N/A	
		Repcor, Inc.	8 mil minimum thickness, linear low-density polyethylene	N/A	
		Infinity Plastics, LLC	8 mil minimum thickness, linear low-density polyethylene	N/A	
		Trumble Manufacturing	8 mil minimum thickness, linear low-density polyethylene	N/A	
Tracer Wire (Open Cut)	S901	Pro-Line Safety Products	PE 30 Tracer Wire, #12 AWG solid, 30 mil blue HDPE insulation	N/A	
		Kris-Tech Wire Company	#12 AWG solid, 30 mil blue HMWPE insulation	N/A	
Tracer Wire (Trenchless)	S901	Copperhead Industries LLC	Soloshot Extra High Strength #12 AWG solid, steel core, copper clad, 45 mil blue HDPE insulation.	N/A	
		Pro-Line Safety Products Co.	Pro-Trace HDD-CCS PE45, #12 AWG solid, steel core, copper clad, 45 mil blue HDPE insulation	N/A	

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Tracer Wire Splices (Connection of Service Wire to Main Wire)	S901	King Innovation	Dryconn Direct Bury Lug Aqua	N/A	For use in connecting service tracer wire with main tracer wire without cutting main wire.
		Blackburn	Bronze Split Bolt Connector, Range for Equal Main and Tap Conductor = #10 Str #12 Solid, Model No. E9H25	N/A	
Tracer Wire Splices (Single Wire Continuation)	S901	3M Company	Direct Bury Splice Kit DBR/Y-6	N/A	For use in connecting adjacent single wire along main run
		King Innovation	Dryconn DBSR Aqua	N/A	For use in connecting adjacent single wire along main run
		Pro-Line Safety Products	Pro-Trace TW Connector	N/A	For use in connecting adjacent single wire along main run
Tracer Wire Termination Boxes	S901	Bingham & Taylor	Style P445 DT for unpaved surfaces, w/"Water Test" cover,	N/A	Furnish with terminal board having min. of 2 stainless steel terminal connections.
Gate Valves (16"-24")	S903	Clow Valve Company	AWWA C515 Resilient Wedge, M.J.x M.J., Model 2638, 16"-24"	NSF	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
Gate Valves (4"-12")	S903	Clow Valve Company	AWWA C509 Resilient Wedge, M.J.x M.J., Model 2639, 4"-12"	NSF 61 & 372	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
		Kennedy Valve	AWWA C509 Resilient Wedge, M.J.x M.J., Model KS-FW, 4"-12"	NSF 61 & 372	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
		Mueller Co.	AWWA C509 Resilient Wedge, M.J.x M.J., Model A-2360	UL 61, 372 & Annex G	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
		U.S. Pipe Valve & Hydrant Division	AWWA C509 Resilient Wedge, M.J.x M.J., Model A- USPO	UL 61, 372 & Annex G	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
Tapping Sleeves (Ductile or Cast Iron)	S904	Mueller Company	H615/H616 (≤ 24"); T-9 (30", 36"). Sleeve shall be ordered to fit outside diameter (O.D.) of pipe being tapped.	UL 61 & Annex G	Pipe O.D. measurements are recommended when tapping pit cast iron pipe (Classes A thru D). Hardware to be fluorocarbon coated.
		Tyler Union	Tyler Mechanical Joint Tapping Sleeve. Sleeve shall be ordered to fit outside diameter (O.D.) of pipe being tapped.	UL 61 & Annex G	Pipe O.D. measurements are recommended when tapping pit cast iron pipe (Classes A thru D). Hardware to be fluorocarbon coated.
		U.S. Pipe Valve & Hydrant Division	H615/H616 ≤ 24". Sleeve shall be ordered to fit outside diameter (O.D.) of pipe being tapped.	UL 61 & Annex G	Pipe O.D. measurements are recommended when tapping pit cast iron pipe (Classes A thru D). Hardware to be fluorocarbon coated.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Tapping Sleeves (Stainless Steel)	S904	Ford Meter Box Co.	Model FTSS Stainless Steel Tapping Sleeve (main sizes ≤ 16" with outlet sizes ≤ 12"). Stainless steel test plug, flange and hardware. Furnish with coated stainless steel nuts to prevent seizing and galling.	UL 61 & Annex G	Not to be used when nominal size of tap is equal to nominal size of main or on Holly water mains. Pipe O.D. measurements are recommended when tapping pit cast iron pipe (Classes A thru D).
		Mueller Company	Model H-304SS Stainless Steel Tapping Sleeve (main sizes ≤ 24" with outlet sizes ≤ 12"). Stainless steel test plug, flange and hardware. Furnish with coated stainless steel nuts to prevent seizing and galling.	NSF 61 & 372	Not to be used when nominal size of tap is equal to nominal size of main or on Holly water mains. Pipe O.D. measurements are recommended when tapping pit cast iron pipe (Classes A thru D).
		PowerSeal Pipeline Products Corporation	Model 3490AS Stainless Steel Tapping Sleeve (main sizes ≤ 24" with outlet sizes ≤ 8"). Stainless steel test plug, flange and hardware. Stainless steel nuts to have fusion bonded coating to prevent seizing and galling.	Water Quality Association 61	Not to be used when nominal size of tap is equal to nominal size of main or on Holly water mains. Pipe O.D. measurements are recommended when tapping pit cast iron pipe (Classes A thru D).
		U.S. Pipe Valve & Hydrant Division (Division of Mueller Co.)	Model H-304SS Stainless Steel Tapping Sleeve (main sizes ≤ 24" with outlet sizes ≤ 12"). Stainless steel test plug, flange and hardware. Furnish with coated stainless steel nuts to prevent seizing and galling.	NSF 61 & 372	Not to be used when nominal size of tap is equal to nominal size of main or on Holly water mains. Pipe O.D. measurements are recommended when tapping pit cast iron pipe (Classes A thru D).
Tapping Valves	\$904	Clow Valve Co.	AWWA C509, Model 2639, Figure F6114, M.J. x Tapping Flange, Resilient Wedge Tapping Valve, 4"- 12"	NSF 61 & 372	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
		Kennedy Valve	AWWA C509, KS-FW, M.J. x Tapping Flange, Resilient Wedge Tapping Valve, 4"-12"	NSF 61 & 372	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
		Mueller Company	AWWA C509, Model T-2360, M.J. x Tapping Flange Resilient Wedge Tapping Valve	UL 61, 372 & Annex G	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.
		U.S. Pipe Valve & Hydrant Division	AWWA C509, Model T-USPO, M.J. x Tapping Flange Resilient Wedge Tapping Valve	UL 61, 372 & Annex G	Open right, stainless steel bonnet bolts & nuts. Gland hardware to be fluorocarbon coated.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Cutting - In Valves	S905	Clow Valve Company	AWWA C509, Model 2639, Figure F-6111 Cutting-in	NSF	Open right, stainless steel bonnet bolts & nuts. Gaskets for
			Resilient Wedge Gate Valve, 4"-12"	61 & 372	standard & oversized pipe. Gland hardware to be fluorocarbon coated.
		Kennedy Valve	AWWA C509, Model KS-FW, 8576SS Std. Resilient	NSF	Open right, stainless steel bonnet bolts & nuts. Gaskets for
			Wedge Gate Valve, 4"-12"	61 & 372	standard & oversized pipe. Gland hardware to be fluorocarbon coated.
		Mueller Company	AWWA C509, C-2360 Resilient Wedge Cut-In Valve,	UL	Open right, stainless steel bonnet bolts & nuts. Gaskets for
			4"-8"	61, 372 &	standard & oversized pipe. Gland hardware to be
				Annex G	fluorocarbon coated.
		U.S. Pipe Valve &	AWWA C509, C-USPO Resilient Wedge Cut-In Valve,	UL	Open right, stainless steel bonnet bolts & nuts. Gaskets for
		Hydrant Division	4"-8"	61, 372 &	standard & oversized pipe. Gland hardware to be
				Annex G	fluorocarbon coated.
Cutting -In Sleeves	S905	McWane Ductile	M.J. x P.E. Dual Purpose Cutting-in Sleeve	UL	Furnish with appropriate gaskets to connect to standard and
				61 & 372	oversized iron pipe. Hardware to be fluorocarbon coated
		Mueller Company	H-840/H-841 Cutting-in Sleeve	UL	Furnish with appropriate gaskets to connect to standard and
				61 & Annex G	oversized iron pipe. Hardware to be fluorocarbon coated
		Tyler Union	M.J. x P.E. Dual Purpose Cutting-in Sleeve (Tyler	UL	Furnish with appropriate gaskets to connect to standard and
			Pattern)	61, 372 & Annex G	oversized iron pipe. Hardware to be fluorocarbon coated
Insertion Coupling - PVC	S906	Harrington	Injection Molded Repair Coupling, 4"-8"	NSF	
moer don coup.m.g	3300	Corporation - HARCO	injection motoca nepair coapility i	61	
		· .	Injection Molded Repair Coupling, 4"-12"	NSF	
		Multi Fittings - IPEX	injection Moided Repair Coupling, 4 -12	61 & Annex G	
Insertion Sleeve - Ductile Iron	S906	McWane Ductile	M.J. Dual Purpose Solid Sleeve, Long Body, less than	UL	Double thickness cement mortar lining w/ asphalt coating.
Mechanical Joint (Less Than 24" Diameter)			24" diameter.	61 & 372	Hardware to be fluorocarbon coated.
-		Tyler Union	M.J. Dual Purpose Solid Sleeve, Long Body, less than	UL	Epoxy coated or double thickness cement mortar lining w/
			24" diameter.	61, 372 &	asphalt coating. Hardware to be fluorocarbon coated
				Annex G	
Insertion Sleeve - Bolted Sleeve	S906	Smith-Blair, Inc.	Style 411 (Straight), Style 413 (Transition), Style 415	UL	Epoxy coated. Hardware to be fluorocarbon coated
Type Coupling (24" Diameter and			(Reducing), length of center sleeve to be ≥ 10"	61, 372 &	
Larger)				Annex G	

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Valve Box	S909	Bibby Ste-Croix, USA	5¼", 2 Piece Slide Style, flange on top section approximately 2" to 3" below top of top section.	N/A	"Water" Cover
		Bingham & Taylor	5¼", Buffalo Style Slip Type, 2 Piece, Fig. No. 4908, flange on top section approximately 2" to 3" below top of top section.	N/A	"Water" Cover
Pitometer Ball Valve (for Ductile/Cast Iron Pipe or PVC/PVCO Pipe)	S911	Ford Meter Box Co.	B81-455-NL, 1" valve with $1\frac{1}{4}$ " MIP inlet x $1\frac{1}{4}$ " FIP outlet and multi-directional HP-4 brass angled handle, brass cotter pin & $3/8$ " stainless steel operating rod.	UL 61 & Annex G	Provide brass bushing on inlet, 1½" MIP x 1½" FIP (Ford C18-56).
Pitometer Corporation Stop (for Ductile/Cast Iron Pipe or PVC/PVCO Pipe)	S911	A.Y. McDonald	73148B, ball style, 1½" AWWA inlet x 1½" FIP outlet.	Truesdail 61, 372 & Annex G	For cast or ductile iron pipe, must be installed in service saddle on water mains less than 16" diameter and use 1%" min. diameter hole cutter. For PVC/PVCO pipe, must be installed in service saddle for all water mains and use 1%" min. dia. shell cutter.
		Cambridge Brass	301-A6F6-NL, Ball Style, 1½" AWWA inlet x 1½" FIP outlet	CSA 61, 372 & Annex G	For cast or ductile iron pipe, must be installed in service saddle on water mains less than 16" diameter and use 1%" min. diameter hole cutter. For PVC/PVCO pipe, must be installed in service saddle for all water mains and use 1%" min. dia. shell cutter.
		Ford Meter Box Co.	FB1600-6-NL Ball Style, 1½" AWWA inlet x 1½" FIP outlet	UL 61 & Annex G	For cast or ductile iron pipe, must be installed in service saddle on water mains less than 16" diameter and use 1%" min. diameter hole cutter. For PVC/PVCO pipe, must be installed in service saddle for all water mains and use 1%" min. dia. shell cutter.
		Mueller Company	B-20045N Ball Style, 1½" AWWA inlet x 1½" FIP outlet	UL 61, 372 & Annex G	For cast or ductile iron pipe, must be installed in service saddle on water mains less than 16" diameter and use 1%" min. diameter hole cutter. For PVC/PVCO pipe, must be installed in service saddle for all water mains and use 1%" min. dia. shell cutter.
Pitometer Tap Valve Box	S911	Bibby Ste-Croix, USA	7" Valve Box, 3 Piece Screw Type	N/A	"Water" Cover, #6 Base
		Bingham & Taylor	7" Shaft, 3 Piece Screw Type, Fig. No. 5001	N/A	"Water" Cover, No. 6 Round Base.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Corporation Stop (AWWA x Copper Flare) for Copper Services	S912	A.Y. McDonald	74701B Ball Style: ¾", 1", 1½", 2"	Truesdail 61, 372 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight.
		Cambridge Brass	301NL Ball Style: ¾", 1", 1½", 2"	CSA 61, 372 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight.
		Ford Meter Box Co.	FB600-NL Ball Style: ¾", 1", 1½", 2"	UL 61 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight.
		Mueller Company	B-25000N Ball Style, ¾", 1", 1½", 2"	UL 61, 372 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight.
Corporation Stop (AWWA x PE Compression) for Polyethylene Services	S912	A.Y. McDonald	74701BQ Ball Style: 1", 1½", 2"	Truesdail 61, 372 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. Maximum lead content of 0.25% by weight. 1% " for new services only.
		Cambridge Brass	301NL CB Comp. Ball Style, 1", 1½", 2"	CSA 61, 372 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. Maximum lead content of 0.25% by weight. 1½" for new services only.
		Ford Meter Box Co.	FB1000-Q-NL Ball Style, 1", 1½", 2"	UL 61 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. Maximum lead content of 0.25% by weight. 1½" for new services only.
		Mueller Company	B25008N 110 Comp. Ball Style: 1", 1½", 2"	UL 61, 372 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. Maximum lead content of 0.25% by weight. 1½" for new services only.
Drilling Machines & Shell Cutters for Small Service/Pito Tap Connections to PVC/PVCO Pipe	S912	Ford Meter Box Co.	Model 77 Drilling Machine w/PVC shell cutters: $\frac{1}{8}$ " cutter for 1 $\frac{1}{8}$ " saddle (pito tap), 1 $\frac{1}{8}$ " cutter for 2" saddle.	N/A	PVC Shell cutters to have 2 slots min. and shall be capable of retaining the cut coupon
		Mueller Company	E-5 Drilling Machine w/PVC shell cutters: $\frac{7}{8}$ " cutter for 1" saddle, 1-7/16" cutter for 1 $\frac{1}{2}$ " saddle (pito taps), 1 $\frac{3}{4}$ " cutter for 2" saddle.	N/A	PVC Shell cutters to have 2 slots min. and shall be capable of retaining the cut coupon
		Reed Manufacturing	CDTM2100 Series Drilling Machine w/PVC shell cutters: $\frac{7}{8}$ " cutter for 1" saddle, 1-7/16" cutter for 1 $\frac{1}{2}$ " saddle (pito tap), 1 $\frac{3}{4}$ " for 2" saddle.	N/A	PVC Shell cutters to have 2 slots min. and shall be capable of retaining the cut coupon

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Service Saddle (Ductile Iron/Cast Iron Pipe)	S912	A.Y. McDonald	Model 3825 double bronze strap, AWWA taper threads, EPDM gasket. Not for use in potential petroleum contaminated soils.	Truesdail 61	Standard brass NSF 61 certified for all sizes. See specification/detail for table showing when saddles are required.
		Cambridge Brass	Series 810 double bronze strap, AWWA taper threads, Nitrile gasket. For use in both potential petroleum contaminated soils and non-petroleum contaminated soils.	CSA 61	Standard brass NSF 61 certified for all sizes. See specification/detail for table showing when saddles are required.
		Ford Meter Box Co.	Style 202B double bronze strap, AWWA taper threads, EPDM gasket. Not for use in potential petroleum contaminated soils.	UL 61	Standard brass NSF 61 certified for all sizes. See specification/detail for table showing when saddles are required.
		Mueller Company	BR2B Series double bronze strap, AWWA taper threads, Nitrile gasket. For use in both potential petroleum contaminated soils and non-petroleum contaminated soils.	NSF 61	Standard brass NSF 61 certified for all sizes. See specification/detail for table showing when saddles are required.
Service Saddle (PVC/PVCO Main)	S912	A.Y. McDonald	Model 3895 brass hinged/Model 3805 brass bolted, for C900 PVC, AWWA taper thread outlet, EPDM gasket	Truesdail 61	Standard brass NSF 61 certified for all sizes. Service saddles required for all taps on PVC/PVCO pipe.
		Cambridge Brass	Series 800 brass hinged for C900, AWWA taper thread outlet, Nitrile gasket	CSA 61	Standard brass NSF 61 certified for all sizes. Service saddles required for all taps on PVC/PVCO pipe.
		Ford Meter Box Co.	Style S90 Design A brass hinged or bolted for C900 PVC, AWWA taper thread outlet, EPDM gasket	UL 61	Standard brass NSF 61 certified for all sizes. Service saddles required for all taps on PVC/PVCO pipe.
		Mueller Company	S-13000/H13000 Series hinged or bolted for C900 PVC, AWWA taper thread outlet, Nitrile gasket	NSF 61	Standard brass NSF 61 certified for all sizes. Service saddles required for all taps on PVC/PVCO pipe.
Service Tubing - Copper	S913	Cambridge-Lee Industries, LLC	Copper Water Tube, Type K, ASTM B88, ¾", 1", 1½", 2"	NSF 61 & 372	
		Cerro Flow Products, Inc.	Copper Water Tube, Type K, ASTM B88, $rac{3}{4}$ ", 1", 1 $rac{1}{2}$ ", 2"	NSF 61 & 372	
		Wieland Copper Products, Inc.	Copper Water Tube, Type K, ASTM B88, ¾", 1", 1½", 2"	UL 61 & Annex G	
		Mueller Industries	Streamline Copper Water Tube, Type K, ASTM B88, $\frac{3}{4}$ ", 1", 1 $\frac{1}{2}$ ", 2".	NSF 61 & 372	
		Great Lakes Copper, Inc.	Copper Water Tube, Type K, ASTM B88, $\frac{3}{4}$ ", 1", 1 $\frac{1}{2}$ ", 2".	NSF 61 & 372	

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Service Tubing - Polyethylene	S913	Charter Plastics	SDR-9 CTS O.D., PE 4710, 250 psi, Blue Ice tubing, 1", $1\frac{1}{2}$ ", 2", blue outer layer.	NSF 61,14	
		Endot Industries	SDR-9 CTS O.D., PE 4710, 250 psi, EndoPure Tubing, 1", 1½", 2", blue outer layer.	NSF 14 & Annex G	
		Oil Creek Plastics	SDR-9 CTS O.D., PE 4710, 250 psi, Aqua-Jet Tubing, 1", 1½", 2", blue outer layer	NSF 14	
		Advanced Drainage Systems (ADS)	SDR-9 CTS O.D., PE 4710, 250 psi, Potable Water Service Tubing, 1", 1½", 2", blue outer layer.	NSF 14	
Service Tubing - PEX (Cross-Linked Polyethylene)	S913	Rehau	SDR-9 CTS O.D., AWWA C904, PEXa, 200 psi/73.4°F @ 0.63 Design Factor, Material Designation Code 3306, MUNICIPEX Water Service Pipe, 1", 1½", 2", blue outer layer.	NSF 14, 61, 372	
Service Tubing/Pipe Couplings to Connect New Copper Water Service to Existing Service	S913	A.Y. McDonald	74758 series (3 part - flare copper x flare copper), 74758C-55 series (flare copper x pack joint iron), 74758C-66,67,68 series (flare copper x pack joint lead).	Truesdail 61, 372 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight.
		Ford Meter Box Co.	C22-NL-series (3 part - flare copper x flare copper), C25-NL series (flare copper x pack joint iron through 1"), C45-NL-series (pack joint copper x pack joint iron for 1½" and 2"), Lead-Pak series (flare copper x pack joint lead, through 1" and pack joint copper x pack joint lead for 1½" & 2").	UL 61 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight.
		A.Y. McDonald	74758Q series (McQuick Compression CTS PE x McQuick Compression CTS PE, McQuick Compression CTS PE x flare copper, McQuick Compression CTS PE x pack joint iron or 74758 series pack joint CTS PE x pack joint iron), Mac-Pak series (pack joint CTS PE x pack joint lead).	Truesdail 61, 372 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight. Stainless steel inserts required for all sizes.
		Ford Meter Box Co.	C44-Q-NL series (Quick Joint CTS PE x Quick Joint CTS PE and Quick Joint CTS PE x Quick Joint copper), C45-NL series (pack joint CTS PE x pack joint iron), Lead-Pak series (pack joint CTS PE x pack joint lead).	UL 61 & Annex G	No Lead Brass required for all sizes. Maximum lead content of 0.25% by weight. Stainless steel inserts required for all sizes.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Curb Box	S914	Bibby Ste-Croix, USA	2½" Service Box, Screw Type with H.D. screw top, Fig. 95E, complete.	N/A	"Water" Cover, extends to 66 inches. Furnish enlarged base (Code V313) for use with $1\frac{1}{2}$ " & 2" curb stop.
		Bingham & Taylor	2½" Cast Iron Top/Injection Molded Plastic White Bottom Combination Curb Box, Screw Type, Item No. CIP2B110015FWWH94RPBP, complete.	N/A	"Water" Cover, extends to 64 inches. Furnish enlarged base (Fig. No. 4980) for use with $1\frac{1}{2}$ " & 2" curb stop.
		Bingham & Taylor	2½" Cast Iron Curb Box, Screw Type, Fig. No. 4901-B, Size No. 94F, complete.	N/A	"Water" Cover, extends to 66 inches. Furnish enlarged base (Fig. No. 4980) for use with $1\frac{1}{2}$ " & 2" curb stop.
Curb Stop (Copper Flare x Copper Flare) for Copper Services	S914	A.Y. McDonald	76100: ¾", 1", 1½", 2" Furnish w/dielectric insulator on outlet	Truesdail 61, 372 & Annex G	No Lead Brass required for all sizes.
		Cambridge Brass	202NL: ¾", 1", 1½", 2". Furnish w/dielectric insulator on outlet	CSA 61, 372 & Annex G	No Lead Brass required for all sizes.
		Ford Meter Box Co.	B22-SI-NL: $\frac{3}{4}$ ", 1", 1½", 2". Furnish w/dielectric insulator on outlet	UL 61 & Annex G	No Lead Brass required for all sizes.
		Mueller Company	B-25204N: ¾", 1", 1½", 2". Furnish w/dielectric insulator on outlet	UL 61, 372 & Annex G	No Lead Brass required for all sizes.
Curb Stop (PE Compression x PE Compression) for Polyethylene Services	S914	A.Y. McDonald	76100Q: 1", 1½", 2"	Truesdail 61, 372 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. 1% " for new services only.
		Cambridge Brass	202NL CB Comp.: 1", 1½", 2"	CSA 61, 372 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. 1% " for new services only.
		Ford Meter Box Co.	B44-Q-NL: 1", 1½", 2"	UL 61 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. 1% " for new services only.
		Mueller Company	B-25209 110 Comp., 1"; B-25209N, 2"	UL 61, 372 & Annex G	No Lead Brass and stainless steel inserts required for all sizes. 1% " for new services only.
Inside Meter Setter (for relocating water meter on existing service)	S915	Ford Meter Box Co.	No Lead Handyhorn (HH-NL Series) or No Lead Pretzelhorn (PH-NL Series) setters w/ inlet-outlet pack joint connections	UL 61 & Annex G	No Lead Brass required for all sizes. Handyhorns (5/8", 5/8"x3/4" and 3/4" meter sizes); Pretzelhorns (5/8", 5/8"x3/4", 3/4" and 1" meter sizes)
		A.Y. McDonald	No Lead Handyhorn (742 Series) or No Lead Pretzelhorn (746 Series) setters w/ inlet-outlet pack joint connections	Truesdail 61, 372 & Annex G	No Lead Brass required for all sizes. Handyhorns (5/8", 5/8"x3/4" and 3/4" meter sizes); Pretzelhorns (5/8", 5/8"x3/4", 3/4" and 1" meter sizes)
Temporary Bypass Pipe	S916	North American Specialty Products	Certa-Lok Yelomine Pipe; 2" through 6", restrained joint PVC Pressure Piping System, min. pressure class = 200 psi (SDR 21)	NSF 14, 61 & 372	

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Hydrants	S917	Clow Valve Co.	Clow Medallion 5-1/4" Fire Hydrant, Model F-2545 furnished with optional upper stem jam nut installed.	N/A	5-6" min. bury depth for dom. system and 6'-0" min. for Holly system. One 4½" pumper con. & two 2½" hose connections. Furnish with factory applied polyester coated "Super-Coat" finish.
		Kennedy Valve	Guardian K81D	N/A	5-6" min. bury depth for dom. system and 6'-0" min. for Holly system. One 4½" pumper con. & two 2½" hose connections. Furnish with factory applied polyester coated finish.
		U.S. Pipe Valve & Hydrant	Metropolitan M-94	N/A	5-6" min. bury depth for dom. system and 6'-0" min. for Holly system. One 4½" pumper con. & two 2½" hose connections. Furnish with factory applied epoxy primer and
Water Meter Vault - Precast S92 Concrete	S920	Kistner Concrete Products, Inc.	Precast concrete, design loading: A.A.S.H.T.O. HS-20-44 with 30% impact and equivalent soil pressure of 130 psf. Bituminous coated exterior.	N/A	Furnish with galvanized ladder, "Ladder-Up" safety post, sump, access and pipe openings, aluminum hatch or cast iron manhole frame and cover.
		Lakelands Concrete Products, Inc.	Precast concrete, design loading: A.A.S.H.T.O. HS-20-44 with 30% impact and equivalent soil pressure of 130 psf. Bituminous coated exterior.	N/A	Furnish with galvanized ladder, "Ladder-Up" safety post, sump, access and pipe openings, aluminum hatch or cast iron manhole frame and cover.
Water Meter Vault - Aluminum Hatch for Lawn Areas	S920	Bilco	Aluminum hatch, Model J-2AL (30"), J-4AL (36"), J-5AL (42") and JD-2AL (48"). All models furnished with stainless steel hardware.	N/A	These models are designed for pedestrian rating of 300 lb./ft² min. If higher loads are anticipated, furnish models that satisfy anticipated loads.
		East Jordon Iron Works	Aluminum hatch, Model H30301601 (30"), H36361601 (36"), H42421601 (42") and H48481701 (48"). All models furnished with stainless steel	N/A	These models are designed for pedestrian rating of 300 lb./ft² min. If higher loads are anticipated, furnish models that satisfy anticipated loads.
Water Meter Vault - Cast Iron Manhole Frame and Cover	S920	Neenah Foundry	Model R-1740-B (30" clear), R-1740-D (36"clear), R- 1741-E (42" clear), R-1741-F (48"clear)	N/A	Heavy duty cast iron frame and self-sealing cover. 42" and 48" clear sizes furnished with removable offset inner lid.
Water Meter Vault - Interior Rising Stem Gate Valves	S920	Clow Valve Company	AWWA C509, Model 2639, Figure F-6136 OS&Y, flanged ends, Resilient Wedge Gate Valve, 4"-12"	NSF 61 & 372	Open left, stainless steel bonnet bolts & nuts. Furnish with handwheel.
		Kennedy Valve	AWWA C509, Model KS-FW, Fig. No. 8068A OS&Y, flanged ends, Resilient Wedge Gate Valve, 4"-12"	NSF 61 & 372	Open left, stainless steel bonnet bolts & nuts. Furnish with handwheel.
Water Meter Plate Strainer	S920	Badger Meter, Inc.	Badger Bronze Plate Strainers, flanged ends, cast bronze, low lead alloy (LL-NS) 3", 4" and 6".	NSF 61, Annex G & 372	
		Neptune Technology Group	Neptune Plate Strainers 3"-10", flanged ends.	NSF 61, Annex G & 372	

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Water Meters (3" to 10") Compound, Turbo and Fire Service	S920	Varies	Varies	Varies	Meters are to be purchased from and picked up at the Water Bureau. Up to 6 week lead time for large meters.
Water Meter Vault - Locking Bleed Valve Assembly	S920	Ford Meter Box Co.	3/4" tapping saddle w/F.I.P outlet threads (Cat. #202B-IP3-NL); 3/4" curb stop w/M.I.P. ends & padlock wings (Cat. #B88-333W-NL)	N/A	No Lead Brass required.
Water Meter Vault - Modular Seal for Pipe Openings in Vault Walls	S920	Pipeline Seal & Insulator, Inc.	Link-Seal Modular Seals, Model S-316 with EPDM seal elements and 316 Stainless Steel hardware.	N/A	
Bell Joint Clamp	S923	Dresser	Style 60	N/A	Furnish with fluorocarbon coated or stainless steel bolts $\&$ nuts.
		Smith Blair	Model 274	N/A	Furnish with fluorocarbon coated or stainless steel bolts & nuts.
Water Meter Pit (1" & Smaller) for Lawn Areas	S924	Ford Meter Box Co.	Series PD No Lead Brass Plastic Pit Setter, tile diameter as required for meter size. 54" minimum service line bury depth. Lockwing angle ball valve meter swivel inlet. Lockwing angle ball valve meter swivel outlet except for yard hydrants which shall have angle cartridge dual check valve outlet.	N/A	Furnish with Ford Wabash Double Lid Covers having recessed lid with 2" hole (for electronic meter read) and plastic inner lid, Model W32-T for 18" tile I.D., W3-T for 20" tile I.D. and W4-T for 21" tile I.D.
		A.Y. McDonald	Series 780W No Lead Brass Plastic Pit Setter, tile diameter as required for meter size. 54" minimum service line depth. Lockwing angle ball valve meter swivel inlet. Lockwing angle ball valve meter swivel	N/A	Furnish with A.Y. McDonald recessed cover with 2" center hole (for electronic meter read) and plastic inner lid, riser and frame, Model 74M32WTCX800 for 18" tile I.D. and 74M4WTCX800 for 21" tile I.D.
Water Meter Pit (1½" & 2") for Lawn Areas	S924	Ford Meter Box Co.	Series PM No Lead Brass Plastic Pit Setter, 36" tile diameter, 54" minimum service line bury depth. Lockwing angle ball valve meter swivel inlet and outlet.	N/A	Meter bypass not allowed without prior approval of Water Bureau. Furnish with Ford Monitor Cover with 2" hole (for electronic meter read) with inner frost lid, Model MC-36-MB-T.
		A.Y. McDonald	Series 780 No Lead Brass Plastic Pit Setter, 36" tile diameter, 54" minimum service line bury depth. Lockwing angle ball valve meter swivel inlet and	N/A	Meter bypass not allowed without prior approval of Water Bureau. Furnish with A.Y. McDonald Monitor Cover with 2" hole (for electronic meter read) with inner frost lid, Model
Water Meters (5/8" - 2")	S924 S915	Varies	Varies	Varies	Meters are to be purchased from the Water Bureau.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Yard Hydrant	S925	Woodford	Model W34 Freezeless Yard Hydrant w/cast iron, above ground lockable operating head and lift handle, 3/4" brass male hose nozzle, 1" galvanized	N/A	Shutoff valve shall operate below the frost line and be capable of draining when closed. Furnish with 5 foot bury depth.
Thermite Weld Equipment/Mold	S962	Erico	Cadweld Weld Molds, CAHBA1L-PS - #4 AWG to iron pipe, CAHBA1G-PS - #8 thru #12 AWG to iron pipe	N/A	For attaching wire to ductile or cast iron pipe and fittings ≤ 24" dia. Use adapter sleeve (CAB-133-1H) for wire sizes 10 AWG and 12 AWG.
		Thermoweld	Thermo Mold CS-33 M159-PS - #4 AWG to iron pipe, CS-33 M156-PS - #8 thru #12 AWG to iron pipe	N/A	For attaching wire to ductile or cast iron pipe and fittings ≤ 24" dia. Use adapter sleeve (#38-0200-00) for wire sizes 10 AWG and 12 AWG
Thermite Weld Metal	S962	Erico	Cadweld CA25XF19 or CA25PLUSXF19 for #8 thru #12 AWG and CA45XF19 or CA45PLUSXF19 for #4 AWG	N/A	For attaching wire to ductile or cast iron pipe and fittings ≤ 24" dia. Use adapter sleeve (CAB-133-1H) for wire sizes 10 AWG and 12 AWG.
		Thermoweld	Thermoweld cartridge size 25CI for #8 thru #12 AWG and 45CI for #4 AWG	N/A	For attaching wire to ductile or cast iron pipe and fittings ≤ 24" dia. Use adapter sleeve (#38-0200-00) for wire sizes 10 AWG and 12 AWG.
Joint Bond Wire	S962	Kalas Manufacturing	Cathodic Protection Cable, #4 or #8 AWG stranded copper wire with 0.110" thick HMWPE insulation.	N/A	Use #8 wire for pipe diameter sizes ≤ 12" and #4 wire for pipe diameter sizes > 12"
		Houston Wire & Cable Co. (HWC)	Cathodic Protection Cable, #4 or #8 AWG stranded copper wire with 0.110" thick HMWPE insulation.	N/A	Use #8 wire for pipe diameter sizes ≤ 12" and #4 wire for pipe diameter sizes > 12"
Exothermic Weld Protection System	S962 S966 S968	Royston	Handy Cap IP pre-primed for sealing wires sizes as large as #8 AWG. Handy Cap XL IP for sealing wire sizes #6, #4 and #2 AWG.	N/A	Tapecoat Omniprime is required when application temperature is below 40°F.
		Thermoweld	Thermocap PC pre-primed	N/A	
Ground Clamps - Bronze (for attaching anode lead wire to copper tube)	S966	Galvan Electrical	GC2, 1¼" to 2" copper tube	N/A	All bronze body and screws, UL rated for direct burial
copper tube)		Garvin Industries	GCB8125200, 1¼" to 2" copper tube	N/A	All bronze body and screws, UL rated for direct burial
Wire Connection Copper Tube Nuts (for attaching anode lead wire to copper tube)	S966	A.Y. McDonald	74700A Flare Nut with Anode (3/4", 1")	Truesdail 61, 372 & Annex G	No Lead Brass required for all sizes.
,		Ford Meter Box Co.	No Lead Brass Thaw Wire Copper Tube Nuts, CTN-3-THW-NL (3/4") and CTN-4-THW-NL (1")	UL 61 & Annex G	No Lead Brass required for all sizes.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Magnesium Anodes (High Potential)	S966	Corrpro Companies, Inc.	High Potential Cast Magnesium Anode in prepackaged bags w/backfill and #12 AWG solid wire TW,THWN or THHN jacket	N/A	Open circuit voltage potential = 1.70-1.77 volts vs. CU/CUSO4 reference electrode, Backfill 75% Gypsum, 20% Bentonite, 5% Sodium Sulfate
		Galvotec Alloys	SuperMAG High Potential Cast Magnesium Anode in prepackaged bags w/backfill and #12 AWG solid wire TW,THWN or THHN jacket	N/A	Open circuit voltage potential = 1.70-1.77 volts vs. CU/CUSO4 reference electrode, Backfill 75% Gypsum, 20% Bentonite, 5% Sodium Sulfate
		Stuart Steel Protection	High Potential Cast Magnesium Anode in prepackaged bags w/backfill and #12 AWG solid wire TW, THWN or THHN jacket	N/A	Open circuit voltage potential = 1.70-1.77 volts vs. CU/CUSO4 reference electrode, Backfill 75% Gypsum, 20% Bentonite, 5% Sodium Sulfate
Cathodic Protection Test Station (Paved Surface)	S968	Bingham & Taylor	7" Shaft, 3 Piece Screw Type, Fig. No. 5001	N/A	"Water" Cover, No. 6 Round Base. Furnish with terminal board with 7 stainless steel terminal connections.
Cathodic Protection Test Station (Unpaved Surface)	S968	Bingham & Taylor	Complete 6" Shaft by 24" depth CP Test Box Item P5B668DT24CPT7T for unpaved surfaces, w/"Water Test" cast cover,	N/A	Furnish with terminal board having 7 stainless steel terminal connections.
Reference Electrodes (Copper- Copper Sulfate)	S968	Electrochemical Devices, Inc.	Model UL, Longlife Underground Reference Cu/CuSO4 Electrode, w/50' #14 AWG HMWPE, 30 yr. design life	N/A	Stability = +/- 5 mV, current drain of 0.01 microAmps continuous, gelled element and backfill in cotton bag, 25 lbs.
Reference Electrodes (Silver-Silver Chloride)	S968	Electrochemical Devices, Inc.	Model UL, Longlife Underground Reference Ag/AgCl Electrode, w/50' #14 AWG HMWPE, 30 yr. design life	N/A	Stability = +/- 5 mV, current drain of 0.01 microAmps continuous, gelled element and backfill in cotton bag, 25 lbs.
Large Diameter Butterfly Valves (24" - 36")	Misc.	Henry Pratt Company	Groundhog Buried Service Butterfly Valve, 24" - 36", AWWA C504, Pressure Class 150B, mechanical joint, with Pratt MDT operator (MDT-4S for 24", MDT-5 for 30" and MDT-5S for 36"). 8 mil min. dry film thickness epoxy coated interior and exterior. Open right.	UL 61 & Annex G	Gland hardware to be fluorocarbon coated. Furnish with Henry Pratt Torque Guard Limiter with shear pin located near road surface set to 200 ftlbs and 10 ft. extension rod that can be cut in the field. Hardware attaching actuator to body shall be stainless steel. Bi-directional leakage tests at 150 psi and certified performance tests to be submitted with valve.
		Val-Matic Valve and Manufacturing Corp.	Series #2000, Buried Service Butterfly Valve, 24" - 36", AWWA C504, Pressure Class 150B, mechanical joint with actuator (LS-4A for 24", LS -5A for 30" and 36"). 8 mil min. dry film thickness epoxy coated interior and exterior. Open right.	UL 61	Gland hardware to be fluorocarbon coated. Furnish with Aunspach Controls Model D86-250 Valve Overtorque Protector with shear pin located near road surface set to 200 ftlbs and 10 ft. extension rod that can be cut in the field. Hardware attaching actuator to body shall be stainless steel. Bi-directional leakage tests at 150 psi and certified performance tests to be submitted with valve.

PRODUCT	CITY SPEC.	MANUFACTURER	MODEL/STYLE	CERT. LAB & STANDARD	DESCRIPTION/COMMENTS
Detector Check Valves for Holly Fire Services	Misc.	Mueller	Model EDC IV, spring loaded, fusion bonded epoxy coating on exterior and interior of cast iron body, trim kit for bypass meter with 3/4" brass or copper pipe and fittings.	N/A	UL Listed/FM approved for fire service. Bypass meter and couplings to be purchased from the Water Bureau.
		Flomatic	Model SDC, spring loaded, fusion bonded epoxy coating on exterior and interior of cast iron body, trim kit for bypass meter with 3/4" brass or copper pipe and fittings.	N/A	UL Listed/FM approved for fire service. Bypass meter and couplings to be purchased from the Water Bureau.

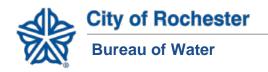


CITY OF ROCHESTER BUREAU OF WATER WATER MAIN IMPROVEMENT VERIFICATION OF COMPLETION FORM

Project Name:			☐ Domestic ☐ Holly
Water Main Certified:			Size:
From:		То:	
Contractor:		•	
Foreman:			
Inspection Firm:			
Inspector:			
		ETION & INITIAL FLUS	<u>SHING</u>
Date of Construction Compl	etion:		
Date of Initial Flushing:			
No leakage (0 gal) and no pressu Required test pressures: 150 p.s. Date of Pressure Test:	ire drop (0 psi) allowed fo	r 1 continuous hour while mai 250 p.s.i. for Holly mains.	ter Specification - S900) Intaining constant test pressure.
		Gauge Location:	
Begin Time:	☐ AM ☐ PM	Begin Gauge Reading:	p.s.i.
End Time:	AM PM	End Gauge Reading:	p.s.i.
Gauge Calibration Date:		Gauge Calibrated By:	
Name of Testing Firm: (if oth	•		
Rochester Water Bureau Pr	essure Gauge Number	er, if used:	
	DISINFECTION (A	WWA Standard C651)	
Start Date of Disinfection:		Start Time:	☐ AM ☐ PM
End Date of Disinfection:	_	End Time:	☐ AM ☐ PM
Date of Final Flushing:	_		
	CERTIFI	CATION	
I,	, cer	tify that the above water s	supply improvement was
completed in conformance w	rith approved plans, sp	pecifications and any app	roved amendments and
was pressure tested and disi		• • •	•
above recorded results. The	water main is hereby	ready for bacteriological t	esting.
	, P.E.		
Signature		NYSPE License No.	Date

NOTE: Email form to Monroe County Department of Public Health at water@monroecounty.gov .

Fax copy to City of Rochester Water Bureau, Attn: Managing Engineer @ 428-8844.



TRACER WIRE TESTING RECORD & CERTIFICATION FORM

INSTRUCTIONS

Tracer wires shall be tested after all water main and water service tracer wires within the section to be tested have been installed and backfilled. Upon successful completion of tracer wire testing, fax this completed form to the Water Bureau's Managing Engineer at (585) 428-8844.

INSTALLATION AND TESTING INFORMATION

Project/Street Name:	Date of Test:			
Test Limits - From:	Test Limits - To:			
Tracer Wire Installed By (Company Name):	Foreman:			
Length of Water Main Tracer Wire Tested:	Number of Water Service Tracer Wires Tested:			
Tested By (Company Name):	Tested By (Individual's Name):			
Testing Equipment Used:				
Tracer Wire Installation and Testing Inspecte	d By (Inspection Firm and Inspector's Name):			
CONTRACTOR'S	CERTIFICATION			
	tracer wire within the referenced project limits has			
I certify that the water main and water service been installed and tested in accordance with t	tracer wire within the referenced project limits has			
I certify that the water main and water service been installed and tested in accordance with t Specifications.	tracer wire within the referenced project limits has he City of Rochester's Standards and Date			
I certify that the water main and water service been installed and tested in accordance with t Specifications. Foreman's Signature	tracer wire within the referenced project limits has he City of Rochester's Standards and Date EERTIFICATION Courate and that the work was completed in			

December 2014 EEO/ADA Employer 🏵

CITY OF ROCHESTER							
WATER SERVICE INSTALLATION DATA							
PROPERTY ADDRESS:	_						
STREET SERVICE TAPPED ON (IF DIFFERENT):	_						
DATE OF INSTALLATION: DOMESTIC OR HOLLY SYSTEM?							
TAP SIZE: DISTANCE, MAIN TO ROW LINE: SIDE OF ST. TAPPED:	_						
CURB STOP/VALVE SIZE: SERVICE LENGTH: SERVICE MATERIAL:	_						
CONTRACTOR/PLUMBER:	_						
TAP INSTALLED BY: INSPECTOR:	_						
CURB OR OPERATING VALVE LOCATION *:							
	_						
TAP OR GUARD VALVE LOCATION (IF DIFFERENT):							
	_						
INSULATOR INSTALLED? IF YES, WHERE: TAP CURB STOP							
ANODE INSTALLED? IF YES, SIZE: LBS., ATTACHED TO: TAP , SERVICE , MAIN	_						
INSIDE SERVICE MATERIAL & SIZE:	_						
* MEASURED FROM ROW OF NEAREST INTERSECTING STREET OR HYDRANT, WHICHEVER IS CLOSER OCT. 2013							

NOTES:

- 1. WATER SERVICE CARD WILL BE SUPPLIED BY WATER BUREAU. REQUIRED INFORMATION IS TO BE TYPED OR NEATLY PRINTED ON WATER SERVICE CARD.
- 2. WATER SERVICE CARD FOR WATER SERVICE THAT IS ABANDONED AT TAP IS TO BE MARKED "ABANDONED AT TAP" ACROSS FACE OF WATER SERVICE CARD WITH CONTRACTOR'S NAME AND DATE ABANDONED BEING NOTED.
- 3. MEASUREMENT FOR LOCATION OF CURB STOP IS TO BE TAKEN FROM RIGHT-OF-WAY EXTENSION OF NEAREST INTERSECTING STREET AS MEASURED PARALLEL TO STREET ON WHICH WATER SERVICE IS INSTALLED, OR FROM NEAREST HYDRANT LOCATED OFF OF SAME WATER MAIN, WHICHEVER IS CLOSER (SEE NOTE 4 FOR EXCEPTION). WHENEVER POSSIBLE, MEASUREMENTS SHOULD BE LESS THAN 300 FEET.
- 4. IF NEAREST INTERSECTING STREET RIGHT-OF-WAY EXTENSION IS NOT PERPENDICULAR TO THE STREET RIGHT-OF-WAY ON WHICH THE CURB STOP IS LOCATED, THE CURB STOP MEASUREMENT SHOULD BE TAKEN FROM THE NEAREST HYDRANT ATTACHED TO THE WATER MAIN WHICH THE WATER SERVICE IS CONNECTED TO. IF SUCH A HYDRANT IS NOT AVAILABLE, THEN ANOTHER PERMANANT FEATURE, PRE-APPROVED BY THE WATER BUREAU, SHALL BE USED FOR THE CURB STOP MEASUREMENT.
- 5. MEASUREMENTS ARE TO BE ENTERED IN TENTHS OF FEET. DO NOT USE INCHES. ROUNDING TO THE NEAREST 0.5 FEET IS ACCEPTABLE.
- 6. IF SERVICE IS INSTALLED WITH HORIZONTAL BEND, DRAW A SKETCH ON THE BACK OF THE CARD SHOWING THE LOCATIONS OF THE MAIN, CORPORATION, SERVICE AND CURB STOP. THE DISTANCE BETWEEN THE BEND AND CURB STOP AND OFFSET DIMENSIONS BETWEEN THE BEND AND THE CORPORATION AND CURB STOP SHOULD BE SHOWN IN THE SKETCH.

CITY OF ROCHESTER

WATER SERVICE CARD

STD. DWG. REVISED 10-23-13 NO. R913-3