

APPENDIX A

Approved Materials

Where indicated in "red" selection or input is needed by TOJ staff and/or stakeholder group.

I. General Materials

A. Preferred Materials

1. The following list of approved materials applies to all additions or modifications to the infrastructure of the Town of Johnstown, including streets, stormdrain, water and sewer systems.
2. All materials shall be designed, manufactured, and installed in accordance with these DESIGN STANDARDS.
3. When Construction Materials are submitted for review, please make a notation for products and manufacturers that are on this list. Refer to the Town’s Technical Specifications for additional information.

B. Additions or Changes

1. Proposed additions or changes to this Approved Material List shall be submitted to the Town of Johnstown in writing in accordance with Chapter 2 in Volume I of these DESIGN STANDARDS.

C. Steel Casing Pipe

1. Steel products must be manufactured in the U.S.

Manufacturer	Product Name or Series
Cascade Waterworks	
CCI Pipeline Systems	
EVRAZ North America	
Northwest Pipe Company	Permalock
Pittsburgh Pipe	www.pittsburghpipe.com/steel/steel-casing-pipe/
PSI Pipeline Seal and Insulator, Inc.	

D. Steel Casing Pipe Spacers

1. Install at 6’ to 8’ maximum intervals, or per manufacturer’s recommendations.

Manufacturer	Product Name or Series
Advance Products and Systems	Model SI Carbon Steel
Cascade Water Works	Model CCS-JR (restrained); Model CCS (standard)
CCI Piping Systems	#304 Carbon Steel (8” width to 24” diameter—12” width larger diameters);
Pittsburgh Pipe	Carbon Steel
GPT Industries	Model C with fusion bonded epoxy

E. Casing Pipe End Seals

Manufacturer	Product Name or Series
Cascade Waterworks	Model CCES
CCI Pipeline Systems	Model ESC, ESW
GPT Industries	Model W wrap around end seal or Link Seal
PSI Pipeline Seal and Insulator, Inc.	Model C, W, S & Link Seal

F. Marker Tape

1. Marker tape shall be 6” wide, minimum 0.04” thick polyethylene with line cautions printed on the top face. Tape shall be metallic blue in color for water line marked “Caution Buried Water Line”, or **XXX** in color for sewer line marked “Caution Buried Sewer Line”, or **XXX** in color for storm drain marked “Caution Buried Stormdrain”.

Manufacturer	Product Name or Series
x	x
x	x

G. Extruded Polystyrene (XPS) Pipe Wrap

Manufacturer	Product Name or Series
Owens Corning	FOAMULAR XPS
Polyguard	DOW Styrofoam XPS

H. Polyethylene Pipe Wrap

Manufacturer	Product Name or Series
American Ductile Iron Pipe	V-Bio Enhanced Polyethylene Encasement
Polyken	#900

I. Steel Pipe Wrap

Manufacturer	Product Name or Series
Protecto Wrap	200 & 200 GT 200-35 and GT 50 Cold Applied Pipe Tape Must be used with Protecto 1170 Primer

J. Foam Insulation (Blue Board)

Manufacturer	Product Name or Series
Amoco	Amofoam RCX
Dow Styrofoam	100 high load
Owen's Corning	Formular 400 or 404
Pittsburg Corning	FoamGlas One

K. Pipe Repair, Lining

Manufacturer	Product Name or Series
Hydratech	Hydratite
A.W. Cook	Horizontal Pipe Lining Mortar Stormdrain appl. only Can only be applied above 38 deg F
Contech	A2 Sanitary Sewer Slip Liner

L. Tracer Wire

1. Wire

Manufacturer	Product Name or Series
Copperhead	High Strength CCS

2. Ground Rod

Manufacturer	Product Name or Series
Copperhead	ANO-12

II. Stormdrain

A. Precast Concrete Structures

Manufacturer
Boughton's Precast, Inc
Copeland Precast Inc
Foley Products Company
Forterra
Lindsay Precast
Oldcastle Precast
Panhandle Concrete Products
Rinker Materials
Sema Precast, Inc

B. Pipe Material

1. The Town allows the use of reinforced concrete pipe (RCP) and high density polyethylene (HDPE) for stormdrain installations.

Manufacturer	Product Name or Series
Advanced Drainage Systems	HDPE N-12 (12" - 60")
KRAH USA	HDPE

C. Stormdrain Manholes

1. "TOJ Storm" shall be cast into covers.

Manufacturer	Product Name or Series
Castings Inc.	MH-310-24 CI, MH-400-24 CI
D&L Foundry & Supply	A-1019
Neenah Foundry	R-1706

D. Stormdrain Inlets

1. Manhole and Inlet Covers must be stamped "No Dumping-Drains to River".

Manufacturer	Product Name or Series
Copeland Precast	1475
Oldcastle Infrastructure	"R"

E. Sand Oil Separators

Manufacturer	Product Name or Series
Snout	
Best Management Products, Inc.	

F. Geotextile Fabric

Manufacturer	Product Name or Series
Trevia	S1135 (under rock drop structures)
Trevia	S1120 (under all riprap)

G. Area Drains

1. All grates shall be pedestrian and bicycle safe if there are in an area where pedestrian or bicycle traffic is expected.

Manufacturer	Product Name or Series
Advanced Drainage Systems	Nyloplast
Copeland Precast	1500, 1520, 1525
East Jordan Ironworks	

III. Streets

A. General

1. For Annual Pavement Mix Design see list provided by the Public Works Director, or designee.

B. Truncated Domes

1. Truncated domes shall be brick red, tile red or cast iron to provide color contrast with the adjoining walk surface.
2. Cast iron truncated domes shall be utilized along arterial ROW's, heavy snowplow areas and as determined or approved by the City Engineer.
3. Surface applied products or products that are installed on a sand bed will not be allowed in new construction.

Manufacturer
ADA Solutions
Armor-Tile
Neenah Foundry
East Jordan Iron Works

C. Pavement Markings

1. Pre-Formed and Pre-Formed Thermoplastic (125 mil thickness required)

Manufacturer	Product Name or Series
3M	Stamark 380I ES
Ennis	Flint Premark
Swarco Industries	Preformed Thermoplastic

2. Epoxy

Manufacturer	Product Name or Series
Epoplex	LS50 Series
Ennis	Flint HPS-3
Swarco Industries	1180 Series

D. Pedestrian Crossing Beacons

Manufacturer	Product Name or Series
TAPCO	X
ELTEC	X
RRFB	X

E. Street Signs

1. Inks are NOT permitted.
2. Street Sign Sheeting:

Manufacturer	Product Name or Series
3M	DG Cubed Series 4000

3. Imaging:

Manufacturer	Product Name or Series
3M	EC Film Series 1170

F. Street Sign Posts

Manufacturer	Product Name or Series
Telespar 2" x 2"	NOTE: No flat bar, RTD, 1.9" Pipe OD, 18W x 36H U, jet black color

G. Bicycle Racks

Manufacturer	Product Name or Series
Urban Racks	Inverted U Style #1787

H. Control Joints

1. Must be T-shaped, 2 inches in depth.

I. Expansion Joints

1. Pre-formed compressible bituminous fiber Type M-213, ½” thick with removable ‘void cap’ to create ½” reveal for sealant.
2. Flexible Foam Expansion material is required for medians, around caissons, or other application as required by the Public Works Director or designee.
3. Sealant Types:

Manufacturer	Product Name or Series
Dow Corning	890SL
Tremco:	Tremflex 834, Sonolastic, or Sonolac
W.R. Meadows	Ceramar (For flexible foam applications)

J. Root Barrier

1. Must be installed to a minimum depth of 24”.

Manufacturer	Product Name or Series
Deep Root	UB 24-2

K. Street Lighting

1. Use Town standard fixtures and heads for all public and private streets, based on the appropriate street classification. Note there may be slight variations in design and height based upon options and availability between PVREA, Xcel Energy, and United Power.
2. Pole Mount:

Manufacturer	Product Name or Series
Holophane	PUCL2

3. Mast Mount

Manufacturer	Product Name or Series
Verd	Verdeon C-Series LED

IV. Water

A. Pipe Material

1. Ductile Iron Pipe (DIP)

Manufacturer
American Ductile Iron Pipe (ACIPCO)
Griffin Pipe Products Company
Pacific States Cast Iron Pipe Company
U.S. Pipe

2. Polyvinyl Chloride (PVC)

Manufacturer	Product Name or Series
Diamond Plastics	C900, C905
J-M Eagle	C900, C905, C909
North American Pipe Corporation (NAPCO)	C900, C905
North American Specialty Products	C900, Certa-Lok, C900/RJ, C905/RJ
VinylTech	C900, C905
With Internal Joint Restraint:	
J-M Eagle	Eagle Loc 900
Diamond Plastics	Lok-21
IPEX, Inc.	TerraBrute C900

B. Ductile Iron Fittings (MJ)

1. All fittings must be fusion-bonded epoxy coated.

Manufacturer
Sigma Corporation
SIP Industries
Star Pipe Products
Tyler Union
U.S. Pipe and Foundry Company

C. Tapping Sleeves (larger than 2")

Manufacturer	Product Name or Series
Cascade Waterworks Mfg.	CST-SL
Clow Valve Co	Stainless Steel
Ford Meter Box Co	Stainless Steel
Mueller Co	H304
Powerseal Pipeline Products Corp	3490MJ
Romac Industries, Inc.	SST
Smith Blair Inc	Stainless Steel

D. Gate Valves

1. All gate valves must be 304 stainless steel body with 304 stainless steel bolts.

Manufacturer	Product Name or Series
American AVK Company	2500 Series 2 Resilient Wedge
American Flow Control	Waterous 2500 (open left) Series #?
M & H Valve Co	Style 4067
Mueller Co	A-2362

E. Butterfly Valves (above 12")

Manufacturer	Product Name or Series
Clow Valve Co/M&H Valve Co	Style 4500 (3"-24") & Style 1450 (30"-54")
DeZurik	AWWA C504
Henry Pratt Co	Groundhog
Mueller Co	Lineseal III or XPII
Pentair	Keystone RMI Dubex
Valmatic	Series 2000

F. Air Relief Valves (2" and smaller)

Manufacturer	Product Name or Series
A.R.I.	D-040

G. Air Relief Valves (greater than 2")

Manufacturer	Product Name or Series
DeZurik	APCO
Valmatic	
Vent-O-Mat	RBX Series

H. Check Valves

Manufacturer
American Flow Control
G.A. Industries, LLC
Mueller Co
Valmatic
Watts

I. Valve Boxes

1. Valve Boxes shall be 5-1/4" shaft, screw type riser.
2. Slip type riser allowed only with Town Utility Director or designee approval.
3. Valve Box Lids shall have the word "WATER" cast into the lid.
4. Valve box lids for fire service lines shall have a locking lid assembly with the word "FIRE" cast into the lid.

Manufacturer	Product Name or Series
Castings Inc.	Series 6850 with drop lid
SIP Industries	6000-6020; 6116-6118 screw; 6301-6308; 6351-6354; 6355-6356 (fire service)
Tyler Union	Series 6850 with drop lid
East Jordan Iron Works	Series 8550

J. Fire Hydrants

1. Fire hydrant threads shall be National Standard Thread (NST).

Manufacturer	Product Name or Series
Mueller Co	Super Centurion 250 Model A423 (Oil)
American AVK	Series 27, Modern Style
American Flow Control	Waterous Pacer, WB67-250 (Oil)

2. Fire Hydrant Paint Color
 - a) Fire hydrants shall be Orange -Federal 595, Standard #12473.

Manufacturer	Product Name or Series
Sherwin Williams	Modified Kem 400 Enamel w/urethane

3. Blow-off Hydrants (2")

Manufacturer	Product Name or Series
Mueller Co	Model A-412
American AVK	Series 67

K. Service Tapping Saddles (2" and smaller)

1. Brass or bronze bolted style body required.

Manufacturer	Product Name or Series
A.Y. McDonald Mfg. Co	4855A
Cascade Waterworks Mfg.	CNS2
Ford Meter Box Co, Inc	FS303 and FC202
Mueller	DR2S
Power Seal Pipeline Products Corp	3412 AS
Romac Industries Inc	306 and 202NS
Smith-Blair Inc	372

L. Service Lines Through Meter Pit

1. Diameter from 3/4" to 2"

Pipe Material
Type K Copper-AWWA C800

2. 4" diameter and larger

Pipe Material
PVC or DIP may be used (See Section IV.1)

M. Corporation Stops

1. Compression Ball Valves Q CTS compression style only, with CC taper thread.

Manufacturer
A.Y. McDonald Mfg. Co.
Ford Meter Box Co.
Mueller Co

N. Curb Stops With Ball Valves

1. Q CTS compression style only, non-thread

Manufacturer
A.Y. McDonald Mfg. Co.
Cambridge Brass
Ford Meter Box Co.
Mueller Co

O. Curb Stop Boxes

1. Arch Pattern with 2-hole lid, 1.5" and 2" diameter connections.

Manufacturer	Product Name or Series
A.Y. McDonald Mfg. Co	5615A
Mueller Co	Mark II - H-10304

P. Service Line Couplings

1. Q CTS Compression style only.

Manufacturer
A.Y. McDonald Mfg. Co.
Cambridge Brass
Ford Meter Box Co.
Mueller Co

Q. Meter Setters

1. NL, Q CTS compression x Q CTS compression, with padlock wing.
 - a) 3/4" – 7.5" lay length and 1"-10.75" lay length-locking ball valve- meter set horizontally.

Manufacturer
A.Y. McDonald Mfg. Co.
Ford Meter Box Co.

Mueller Co

b) 1-1/2" and 2" dual ball valve style only

Manufacturer
A.Y. McDonald Mfg. Co.
Ford Meter Box Co.
Mueller Co

R. Meter Pits

1. Pits for 3/4" and 1"

Manufacturer	Product Name or Series
Sigma	Raven 20" x 48" Round Pit

2. Risers/Extensions for 3/4" and 1"

Manufacturer	Product Name or Series
Sigma	Raven Round Extension

3. Meter Pit Cover/Bonnet for 3/4" and 1"

a) Aluminum frost proof covers/lids are required. Lids must have two 4" holes recessed with predrilled 2" antenna hole.

Manufacturer	Product Name or Series
Castings Inc.	W32CI M70D20AL Frost Proof

S. Meters

1. 3/4" to 1"

Manufacturer	Product Name or Series
Kamstrup	x

2. 1.5" and larger

Manufacturer	Product Name or Series
Kamstrup	x

3. 1.5" and larger (irrigation only)

Manufacturer	Product Name or Series
Kamstrup	x

T. Joint Restraint Devices

Manufacturer	Product Name or Series
EBBA	Megalug
Ford Meter Box Co.	UniFlange
Sigma	OneLok
SIP Industries	EZ Grip
Star Pipe Products	All but 200 series
Tyler Union	Tufgrip

U. Foster Type Adaptors

Manufacturer
INFACT Corp.

V. Foam Insulation (Blue Board)

Manufacturer	Product Name or Series
Amoco	Amofoam RCX
Dow Styrofoam	100 high load
Owen's Corning	Formular 400 or 404
Pittsburg Corning	FoamGlas One

W. Mechanical Couplings

1. Straight Couplings

Manufacturer	Product Name or Series
Romac	4" to 12" Style XR501 4" to 16" Style ALPHA 16" and larger Style 400
Smith-Blair	Style 441 (all sizes)

2. Insulated Couplings

Manufacturer	Product Name or Series
Romac	4" to 12" Style IC501 4" to 16" Style ?? 16" and larger Style IC400
Smith-Blair	Style 416 (all sizes)

3. Reducing Couplings

Manufacturer	Product Name or Series
Dresser	Style 62 (all sizes)
Romac	4" to 24" Style RC501 16" to 60" Style RC400
Smith-Blair	Style 415 (all sizes)

4. Transition Couplings

Manufacturer	Product Name or Series
Dresser	Style 162 (all sizes)

5. Flange Coupling Adapter and Restrained Couplings

Manufacturer	Product Name or Series
Romac	Restrained Flanged Coupling Adapter (RFCA) (all sizes)
Smith-Blair	Style 913 and Style 923 (all sizes)

X. Manhole Frame and Covers for Vaults

1. "TOJ WATER" shall be cast into all covers.

Manufacturer	Product Name or Series
Castings Inc.	MH-310-24 CI, MH-400-24 CI
D&L Foundry & Supply	A-1019
Neenah Foundry	R-1706

Y. Test Stations

1. For Cathodic Protection

Manufacturer	Product Name or Series
Brooks Products	1-RT
Farwest Corrosion	1-RT

2. For Locating Wire

Manufacturer	Product Name or Series
C.P. Test Services Inc.	Mini Box
Rhino Hideout	

Z. Steel Pipe Wrap

Manufacturer	Product Name or Series
Protecto Wrap	200 & 200 GT 200-35 and GT 50 Cold Applied Pipe Tape Must be used with Protecto 1170 Primer

AA. Backflow Preventors (Double Check Valves)

1. Retest and certification required before operational approval.
2. All reduced pressure models require air gap funnel drain.

Manufacturer	Product Name or Series
Apollo	DCLF4A Lead Free
Febco	LF860
Watts	LF009
Wilkins	LF375 (Service Line 3" and greater) LF975 (Service Line less than 3")

BB. Backflow Enclosures

1. All backflow assembly valves 3" and larger are required to be an Outside Stem & Yoke (OS&Y) configuration,
2. All enclosures are required to have ASSE 1060 Class II certification. (freeze retardant enclosures with insulation)
3. All enclosures are required to have a manufacturer label showing manufacturer name and model number.

Manufacturer	Product Name or Series
HydroCowl	x
Hot Box	x
G&C	x
Safe-T-Cover	x

V. Sewer

A. Pipe Material

1. All sewer pipe must be PVC, See Section IV.1.

Manufacturer	Product Name or Series
Diamond Plastics	
J-M Eagle	
North American Pipe Corporation (NAPCO)	CertaFlo GreenLine, Yelomine
VinylTech	

B. Manhole Frame and Cover

1. "TOJ SEWER" shall be cast into all covers.
2. Standard Frame and Cover:

Manufacturer	Product Name or Series
Castings Inc.	MH-310-24 CI, MH-400-24 CI
D&L Foundry & Supply	A-1161, A-1163
Neenah Foundry	R-1706-1

3. Locking Watertight Frame and Cover

Manufacturer	Product Name or Series
Castings Inc.	MH-310-24 CI, MH-400-24 CI
D&L Foundry & Supply	A-1161- A-1163
Neenah	R-1706-1

C. Manhole Grade Adjustment Systems

Manufacturer	Product Name or Series
East Jordan Iron Works	Precision cover systems
PCSI	Fully adjustable manhole system

Cretex	PRO-RING
Oldcastle Infrastructure	Concrete
Amercast	Steel

D. Manhole Pipe Penetration Gaskets

1. For New Manholes

Manufacturer	Product Name or Series
A-Lok	
Kor-N-Seal	
Press Seal Gasket Corporation	Cast-a-seal

2. For Core Drill Applications (flexible pipe-to-manhole connections)

Manufacturer	Product Name or Series
Press Seal	PSX Direct Drive

E. Manhole Preformed Plastic Gaskets

Manufacturer	Product Name or Series
Concrete Sealants Inc	Conseal CS-202
General Sealants Inc	GS #79 or #4
Henry Company	RubR-Nek
Hamilton Kent	Kent Seal, Butyl Rubber Sealant

F. Manhole Lining (Cold Pour)

Manufacturer	Product Name or Series
Environmental Coatings LLC	Sewer Shield 100 & 150
RLS Inc	Raven 405
Spectra Shield	Liner System
Sprayroq, Inc	Spray Wall
Warren Environmental	S-301

G. Manhole Damp Proofing

Manufacturer	Product Name or Series
DECO 20	Damp proof coating
Sonneborn	Hydrocide 600

H. External Joint Wrap

1. For Manhole Riser Section:

Manufacturer	Product Name or Series
Henry Company	RU 716-RubR-Nek
Conseal	CS-212

2. For Pipe Applications:

Manufacturer	Product Name or Series
Mar Mac Construction Products Co	MacWrap

I. Pipe Coupling Devices

1. Pre-formed adjustable pipe couplings w/stainless steel bands

Manufacturer	Product Name or Series
Mission Rubber Co	"Flex-Seal" or "Heavy Weight"
Joints Coupling	Custom Repair Couplings
Fernco	

J. Exterior Grease Trap Systems and Covers

1. Systems

Manufacturer	Product Name or Series
Ashland	x
Endura	x
Watts	x

Zurn	x
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2. Covers

Search (ejco.com)	x

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