

APPENDIX E

APPROVED MATERIALS LISTS

APPROVED MATERIALS LISTS

1. Approved Drainage Materials List
2. Approved Water Materials List
3. Approved Wastewater Materials List
4. Approved Paving Materials List
5. Approved Traffic Materials List
6. Approved Suppliers of Pre-Cast Concrete Screening Walls

The Engineer shall verify the current edition of the approved materials lists with the Engineering Division.

City of Mesquite
 Approved Materials List for Drainage
 Last Revised - April 13, 2020

BASIC PRODUCT CATEGORY	SUB-CATEGORY	MANUFACTURER	MODEL, TYPE, OR STYLE APPROVED	GOVERNING SPECIFICATION	GENERAL REQUIREMENTS	NOTES
Storm Drain						
Storm Sewer	<= 15"		PVC, SDR 26	ASTM D3034		
		ADS	N-12, HDPE, Double Wall, Smooth Interior	ASTM F2648		
	> 15"		Reinforced concrete pipe, Class III	ASTM C76		Spigot end coated with asphaltic primer for better adhesion of Butyl rubber sealant. Class IV or greater may be required depending on surface loads and depth of pipe.
Gaskets	> 20' from structure	Ram-Nek	Preformed Flexible Plastic Gaskets			Sufficient quantity must be used to achieve squeeze out
	<= 20' from structures		O-ring gasket	ASTM C443		
Manholes, Junction Structures	Ring & Cover	Bass & Hays	380-24P			
Inlets	Ring & Lid	Bass & Hays	BH184L	ASTM A48 CL35B	Cast iron inlet ring and cast iron locking inlet cover with 'Storm Drain City of Mesquite' lettering	

City of Mesquite
Approved Materials List for Water
Last Revised - April 13, 2020

BASIC PRODUCT CATEGORY	SUB-CATEGORY	MANUFACTURER	MODEL, TYPE, OR STYLE APPROVED	GOVERNING SPECIFICATION	GENERAL REQUIREMENTS	NOTES
Water Pipe						
Water Main	4" to 18" Dia		PVC, Class 305, DR 14	AWWA C900	Designed for minimum working pressure of 200psi and minimum field test pressure of 200 psi; HS-20 Live Load; HDPE and PVC shall be blue in color	Push on joints: ASTM D-3139; Gaskets: ASTM F477; Fusible PVC and Certa-Lok are acceptable PVC pipe materials
			HDPE, Class 333, DR7	ASTM F714, PE 4710		
	> 12" Dia		Ductile Iron, Class 52	AWWA C151		Interior cement mortar lining and exterior asphaltic coating in accordance with AWWA C104; Wrapped with polyethylene wrap
		>16" Dia		Reinforced Concrete Cylindrical Pipe (RCCP)		
Water Services	<1" Dia		Type K Copper			
			Type K Copper			
	>=1" Dia	Rehau Municipex	PEX-A	AWWA C904, ASTM F876	Blue Color	Cross-linked polyethylene; Stainless steel stiffeners shall be used; Install with 12 gauge detectable tracing wire with HDPE coating
Fire Hydrants						
Fire Hydrants		Mueller	Super Centurion 250-A423		Manufactured within 2 years of install date; 1~ 4" Steamer Nozzle; 2 ~ 2.5" Hose Nozzles; 1" Pentagon Operating Nut Turns Counter - Clockwise to Open; Install without chains	
		American Darling	B-84B-5			
		Waterous	Pacer WB67			
		Kennedy	K81A Guardian			
		Clow	Medallion			
Fire Hdyrant Paint	Aluminum	Flynt				
	Blue	Groco	GRO-LAC, QDM, Part No. 766-1010-01			
	Yellow	Groco	GRO-LAC, QDM, Part No. 766-2115-01			
Valves						
Valves	>= 6"	Mueller	Resilient Seat		Valves >24" shall be horiztonal installation valves	
		Mueller	Resilient Wedge			
		American Darling	Resilient Wedge			
		US Pipe & Foundry	Metro-Seal Resilient Wedge			
		American Flow Control	Series 2500 Resilient Wedge			
		Kennedy	Resilient Wedge			
		Clow	Resilient Wedge			
		MH	Resilient Wedge Gate Valve			
	American	AVK Resilient Seated Gate Valve Series 25, 4"-12"				
	> 36"	Mueller	Butterfly		Butterfly only allowed with approval of City of Engineer	
American Darling		Butterfly				
Pratt		Butterfly				
Air Release Valves		Vent-O-Mat	025 RBX 2521 (1") / 050 RBX 2521 (2")			
Valve Stacks and Boxes		Bass & Hays	Model 2436S			

City of Mesquite
Approved Materials List for Water
Last Revised - April 13, 2020

BASIC PRODUCT CATEGORY	SUB-CATEGORY	MANUFACTURER	MODEL, TYPE, OR STYLE APPROVED	GOVERNING SPECIFICATION	GENERAL REQUIREMENTS	NOTES	
Fittings, Misc							
Tapping Sleeves		Mueller	H304		Require 3/4" NPT Brass Test Plug; Stainless Steel Tapping Sleeve with Stainless Steel Flange		
		Ford	FTSS, FTSS-MJ				
		Smith-Blair	665, 665MJ				
		Dresser	630				
		PowerSeal	Model 3490				
Restraint (Retainer) Glands	Ductile Iron	Romac Industries	SST III		Require 3/4" NPT Brass Test Plug; Stainless Steel Tapping Sleeve with Stainless Steel Flange		
		Uni-Flange	Series 1400				
		EBAA	Iron 1100 Series Megalug				
		Stargrip	Series 3000				
		Tyler Union	Field Lock, Tufgrip 1000				
	PVC	SIP Industries	EZ Grip				
		Uni-Flange	Series 1500				
		EBAA	Iron 2000PV Series Megalug				
		Stargrip	Series 4000				
		Tyler Union	Tufgrip 2000				
		SIP Industries	EZ Grip				
		Napco	Certa-Lok AWWA C900 Restrained Joint Integral Bell				
	Sigma	One Lok					
Ductile Iron Fittings		American Pipe			Require 3/4" NPT Brass Test Plug; Stainless Steel Tapping Sleeve with Stainless Steel Flange		
		Tyler Pipe Products					
		Clow Products					
		Star Pipe Products	Tees, bends, anchor nipples				
		Sigma/Nappco	Tees, bends, anchor nipples				
		Griffin Pipe Products					
	SIP Industries						
Restraint (Internal Joint Restraint)	C900 PVC Pipe	Eagle	LOC 900				
		Diamond	Lok-21				
Couplings		Romac Industries, Inc.	Macro HP				
Flushing Systems		Mueller Co.	Hydro-Guard HG-1 Automatic Flushing System				
Polyethylene Wrap				AWWA C105, Method A	All ductile iron pipe and fittings shall be wrapped	For wrapping pipe - blue color	
Bores							
Casing Spacers		Pipeline Seal and Insulator, Inc.	Model Ranger II				
		Power Seal	Model 4810				
Casing End Seals		Advanced Product & Systems, Inc.	Model AW (wrap around) End Seal				
		CCI Pipeline Systems	Model ESW Wrap Around Neoprene Rubber End Seal				

City of Mesquite
Approved Materials List for Water
Last Revised - April 13, 2020

BASIC PRODUCT CATEGORY	SUB-CATEGORY	MANUFACTURER	MODEL, TYPE, OR STYLE APPROVED	GOVERNING SPECIFICATION	GENERAL REQUIREMENTS	NOTES
Service Connections						
Corporation Valve (Stops)	3/4", 1", 1.5", 2"	Mueller	B-25008		AWWA C800 equipped with ball valve; For Ductile Iron pipe - use threaded corp stop with Teflon tape wrap;	
		Jones	J-1937-SG			
		Ford	FB-1000-3-Q, FB-1000-4-Q, FB-1000-6-Q, FB-1000-7-Q			
		A.Y. McDonald	4701BQ			
Angle Valve (Stops)	3/4", 1", 1.5", 2"	Mueller	B-24258 (3/4", 1"); B-24276 (1.5", 2")		AWWA C800 equipped with ball valve and lock wing	
		Jones	J-1963W-SG (3/4", 1"); J-1975W-SG (1.5", 2")			
		Ford	BA43-332-WQ (3/4"), BA43-444-WQ (1"), BFA43-666-WQ (1.5"), BFA43-777-WQ (2")			
		A.Y. McDonald	4602BQ			
Service Saddles	For PVC, DI, CI Pipe: 3/4", 1", 1.5", 2"	Mueller	BR-2B, BR-2S		AWWA C800 with AWWA taper threads outlet; CC Thread; Stainless Steel Bolt/Nut/Washer, with the exception of double strap	
		Jones	J-979, J-969			
		Ford	202B, 202BS			
	A.Y. McDonald	3825, 3845				
	For AC Pipe	Ford	FS2			Tapped, Minimum 12.5" Length
Access Hatch	For meter vaults	Forterra	Aluminum Hatch Pedestrian 36x36, Single Leaf, Trough Frame (Drawing No. SPT3636AL)		Hinged 1/4" aluminum diamond plate cover with 1/4" extruded aluminum frame. Hatch to be furnished with 316 Stainless Steel Snap Lock & Brass Hinges	
		Bilco	PCM-4			
Meter Boxes	3/4" Service	DFW Plastics	DFW1814F1PS-1KA%F with DFW18AMR-1KA%F-LID		HDPE Base Enclosure - With Slot; Not Traffic Rated; Cast Iron Ring with	Nominal 18-inch diameter
	1", 1.5", 2" Service	DFW Plastics	DFW2818F-1BA MCK with DFW20AMRI-1BA MCK-LID			Nominal 30" diameter

City of Mesquite
Approved Materials List for Wastewater
Last Revised - November 11, 2019

BASIC PRODUCT CATEGORY	SUB-CATEGORY	MANUFACTURER	MODEL, TYPE, OR STYLE APPROVED	GOVERNING SPECIFICATION	GENERAL REQUIREMENTS	NOTES
Sewer Pipes						
Sewer Main	4" to 15" Dia		PVC, SDR-26	ASTM D3034	Green color	Fusible PVC and Certa-Lok are acceptable PVC pipe materials
			HDPE, DR 13.5	ASTM F714, PE 4710		
	18" to 30" Dia		PVC, PS115	ASTM F679		Fusible PVC and Certa-Lok are acceptable PVC pipe materials
		Hobas Pipe, US Composite Pipe South and Ameron International	Fiberglass	ASTM D3262 / ASTM 4161		Must submit thickness design for wall thickness calculations
Aerial Crossing			Ductile iron pipe (CL 54) with Protecto 401 internal coating		Green color	
Service Laterals			PVC		Green color	Green color

Manhole and Appurtenances

Manhole Pipe connectors		A-Loc				
		National Pollution Control Systems Inc.	KOR-N-SEAL 306 Series			
		Press-Seal	PSX: Direct Drive			
Manhole Lids and Rings	Connectings Lines < 15" Dia	EJ USA, Inc.	30-in ERGO XL SS (Product No. 00148026L01)		30" Clear Opening; AASHTO HS-20 Load Rated; Words and Logo per Standard Detail	Equipped with MPIC Pick Slot, elastomer T-Gasket in lid, infiltration plugs at hinge
	Connecting Lines ≥ 15" Dia	Manhole Rehab, Inc. Composite Access Products	Sewper Cover 3200 Product Series Composite Manhole Frame and Cover (Model CAP ONE - 30, bolt down)			
	Retrofit Work Only	EJ USA, Inc.	24-in ERGO SS (Product No. NPR10-1213A)			Equipped with MPIC Pick Slot, elastomer T-Gasket in lid, infiltration plugs at hinge
Manhole Coating		Raven Lining Systems	Raven 405			125 mils thick
Manhole Grade Rings		LadTech Inc.	HDPE Adjustment Rings			
		Cretex Seals	ARPRO Expanded Polypropylene	ASTM D3575		
		EJ USA, Inc.	Infra-Riser			
Pre-Cast Manhole Ring Gasket		Hydroconduit	Profile			
		Hanson	CR 097			
Geotextile Material Under Manhole		Tencate	Mirafi 140N			
		Propex Geosolutions	Geotex 401			
Manhole Chimney Seals, Ring & Cover sealing systems		Pipeline Seal & Insulator Inc.	Riser-Wrap			
	Retrofit Work Only	Cretex	Interior Chimney Seal with stainless steel self locking bands			for use with EJ USA, Inc. 24-in manhole lid only
Threaded Lid Anchor						All manhole ring anchors must be embedded a minimum of 4.5-inches into concrete cone. All Stainless Steel Bolts Threads and Nuts must be coated with approved anti-seize compound: Permatex Nickel Anti-Seize or approved equal.
		Hilti USA	KWIK BOLT 3 SS 304 5/8" or equal			
		Simpson Strong-Tie	Strong Bolt 5/8"			

Miscellaneous

Double Cleanout Meter Box		Bass & Hays	3-LID2 (Sewer)			
---------------------------	--	-------------	----------------	--	--	--

City of Mesquite
Approved Materials List for Paving
Last Revised - May 20, 2019

BASIC PRODUCT CATEGORY	SUB-CATEGORY	MANUFACTURER	MODEL, TYPE, OR STYLE APPROVED	GOVERNING SPECIFICATION	GENERAL REQUIREMENTS	NOTES
Pedestrian Elements						
Detectable Warnings		ADA Solutions, Inc.	(Wet Set) Replaceable Tactile Warning Surface Unit (glass and carbon fiber reinforced composite)			Color: Brick Red or Clay Red
		ADA Solutions, Inc.	Cast-in-Place Composite Tactile Warning Tile Units (glass and carbon fiber reinforced composite)			Color: Brick Red or Clay Red
		Strong Go Industries, LLC	Tech-Way Dome-Tiles (precast polymer concrete tiles)			Color: Terracotta; 24" x 24" or 24" x 30" or 24" x 36" with stainless steel anchoring system
		Engineered Plastics, Inc.	Armor Tile Cast in Place Tile (vitrified polymer composite)			Color: Brick Red or Colonial Red
Miscellaneous						
Root Barrier		Deep Root	UB 24-2			

City of Mesquite
Approved Materials List for Traffic
Last Revised - May 20, 2019

BASIC PRODUCT CATEGORY	SUB-CATEGORY	MANUFACTURER	MODEL, TYPE, OR STYLE APPROVED	GOVERNING SPECIFICATION	GENERAL REQUIREMENTS	NOTES
Traffic Paint		Ennis-Flint			YPT 12 Yellow; WPT 12 White	
		Centerline Supply, LTD				
		Pathmark Traffic Products of Texas				
		Sherwin-Williams				
		TxDOT MPL - Traffic Paint				
Pavement Markings	Prefabricated	Ennis-Flint	Premark			8", 12", 24" wide stripes
	Thermoplastic	TxDOT MPL - Thermoplastic Pavement Marking Materials				4", 6" wide stripes
Raised Pavement Markers		Apex Universal Inc.				
		Pac-Tec Inc. - Ray-O-Lite Division				
		Semex				
		3M Company				
		Rayolite				
Traffic Buttons		Apex Universal Inc.				
		Artuk				
		Batterson LLP				
		Applied Ceramics Inc.				
		Pac-Tec Inc. - Ray-O-Lite Division				
		TrafCo Industries Inc.				
		Trantex Inc.				
		Ennis-Flint				
Traffic Signs	Signs					High Intensity Grade Prismatic(HIP); School zone signs - Flourescent Yellow Green (FYG); Diamond Grade required on case-by-case basis
	Illuminated Street Name Signs - Mounting Hardware	Astro-Brac				
	Sign Posts					
Traffic Signals	Conduit, Electrical Conductors, Ground Boxes, Electrical Services, Pedestal Pole Assemblies	TxDOT MPL - Illumination and Electrical Supplies				

City of Mesquite
Approved Suppliers of Pre-Cast Concrete Screening Walls

Revised: September 10, 2015

Note: Suppliers on this list have a product produced locally that meet the City of Mesquite General Design Standard for Pre-Cast Concrete Screening Walls

However, a project specific submittal with plans, specifications and supporting design calculations are still required.

All materials must be new and in good condition.

Subject to compliance with City of Mesquite General Design Standards (GDS) for Pre-Cast Concrete Screening Walls. Screening walls of brick or other material are generally prohibited except for limited repair of existing walls.

1. StoneTree® Fence/Wall System as manufactured by **Turner Pre-Cast Concrete Products**, Rhome, Texas; or approved other.

2. Verti-Crete Pre-Cast Concrete Walls as manufactured by **Hawk Construction Co., LLC.**, Princeton, Texas

APPENDIX F

TECHINICAL SPECIFICATIONS

Measurement and Payment section of technical specifications apply only to projects contracted by the City.

TECHNICAL SPECIFICATIONS

Landscape and Irrigation

- 02900 Standard Landscaping Specifications
- 02441 Standard Irrigation Specifications

General

- 10020 Testing Laboratory Services
- 10030 Trenching and Backfilling

Paving

- 20010 Steel Reinforcement
- 20020 Lime Treated Subgrade
- 20022 Removal of Existing Pavement
- 20030 Reinforced Concrete Pavement, Curb and Gutters and Sidewalks
- 20080 Milling Pavement
- 20081 Asphalt Paving Overlay
- 20082 Cleaning and Sealing of Joints and Cracks
- 20083 Microsurfacing

Utilities

- 30010 Water Utilities
- 30030 Sanitary Sewer Utilities
- 30050 Pipe Bursting
- 30051 Adjustment of Utility Appurtenances

Traffic

- 40010 Pavement Striping, Markers, and Buttons
- 40020 Traffic Signals
- 40030 Traffic Signs and Posts