

**METROPOLITAN UTILITIES DISTRICT OF OMAHA
OMAHA, NEBRASKA**

**STANDARD SPECIFICATIONS FOR
WATER MAIN CONSTRUCTION INDEX**

GENERAL CONDITIONS		Revision Date	Pages
C Section		01-04-22	13
EXCAVATION		Revision Date	Pages
**	Contractor Excavation Shoring Requirements	10-30-25	9
SPECIFICATIONS		Revision Date	Pages
	MUD 100 Dry-Barrel Fire Hydrants	07-30-14	5
*	MUD 107 Coated and Cement Lined Steel Pipe and Fittings for Water Distribution Service	10-20-25	4
	MUD 109 Precast Concrete Manholes	10-05-09	2
*	MUD 110 Ductile Iron Pipe for Water Distribution Service	10-27-25	5
	MUD 111 Ductile Iron Fittings	05-18-17	1
	MUD 119 Materials	03-07-23	12
	MUD 120 Construction	03-15-23	44
	MUD 121 Cast-in-Place Concrete	-	2
	MUD 122 Resilient Seated Gate Valves for Water Supply Service	06-16-14	3
*	MUD 123 High Density Polyethylene (HDPE) Pipe and Fittings for Water Distribution Service	09-23-25	3
*	MUD 126 Polyvinyl Chloride (PVC) Pipe And Fittings for Water Distribution Service	10-09-25	3
O & M PROCEDURES		Revision Date	Pages
	E.225.2 Welding Procedure – Shielded Metal Arc Welding (SMAW)	11-30-09	7
*	E.225.3 Welding Procedure – Gas Metal Arc Welding (GMAW)	09-04-25	6
*	E.225.4 Welding Procedure – Oxy-Acetylene Welding	09-04-25	5
*	E.227.0 Qualification of Pipeline Welders	09-04-25	11
*	E.229.0 Visual Inspection of Test Welds	09-04-25	1
CONSTRUCTION STANDARDS		Revision Date	Pages
	No.0.2.1 Installation of Erosion and Sediment Control	01-22-08	10
*	No.0.3.0 Shoring Installation Requirements	10-29-25	15
	No.1.1.6 Abandonment of Vaults and Valve Boxes	08-22-16	5
	No.1.3.0 Bypass Piping	05-19-22	3
	No.1.4.0 Pressure Testing Water Mains	03-09-22	4
	No.1.4.3 Disinfecting and Flushing New Water Mains	01-18-23	3
	No.1.4.4 Disinfecting and Flushing Main Repairs and Connections	12-18-18	5

* Denotes Revision

** Denotes New

CONSTRUCTION STANDARDS (Cont.)		Revision Date	Pages
No.1.6.1	Air Taps On Ductile Iron, Cast Iron, PVC, And HDPE Water Mains 16" And Smaller	01-17-21	3
No.1.6.2	Sample Taps On Ductile Iron, Cast Iron, HDPE, And PVC Water Mains 16" Or Smaller	02-09-23	2
No.1.8.1	Precast Vault Installation – Water	05-19-15	12
No.1.8.3	Reinforced Vault Footings & Concrete Slab Design	03-01-12	3
No.1.8.4	CC Box Installation – Water	01-22-08	1
No.1.8.5	Typical CC Box, 24" Round Iron, or Square Roadway Box Installation in Gravel or Dirt Road Surfaces	12-15-00	1
No.1.8.11	Typical Backing Blocks For Water Mains	07-11-11	3
No.1.8.12	Immediate Support Backing Blocks (ISBB)	10-19-11	1
No.1.8.13	Screw Jacks For Support Backing With Extra Heavy (Sch 80) Black Pipe	04-20-12	1
No.1.9.1	Swivel x Solid Adapter (SSA) For 6" To 12" Water Mains	04-01-03	1
No.1.10.1	Excavations for Tapping Sleeves and Tees with Valves	12-15-00	2
No.1.11.1	Backfill and Compaction for 16" and Smaller Water Main Trenches	09-16-20	2
No.1.11.2	Pipe Embedment for 16" and Smaller Water Mains	02-01-06	1
No.1.11.3	Installation of Bentomat® CL Geosynthetic Clay Liner on Water Pipe and Fittings	03-12-15	7
No.1.12.1	Installation of Polyethylene Encasement on Cast Iron Or Ductile Iron Pipe and Fittings	09-16-20	5
No.1.13.1	Water Mains Crossing Sanitary and Storm Sewers	05-21-10	2
* No.1.14.1	Installation of Trace Wire on Water Mains	07-19-23	5
No.2.0.1	Direction of Water Valve Operation	01-17-22	2
No.2.2.0	Gate Valve Installation on 16" And Smaller PVC Water Mains	01-22-08	1
** No.2.3.0	Division Check Valve and Division Valve Installation on Water Mains	09-26-24	2
* No.3.0.1	Typical Hydrant Installation and Abandonment for 6", 8", 12", & 16" Water Mains	05-10-23	8
No.3.0.2	Fire Hydrant Spacing	12-03-09	1
No.3.1.1	Obsolete Fire Hydrants	07-30-14	1
No.3.1.2	Hydrant Color and Nozzle Thread Design	11-11-15	1
No.5.5.3	Use and Installation of Retainer Glands for PVC or Ductile Iron Pipe	02-22-17	3
* No.6.0.5	3/4", 1", 1-1/2", or 2" Service Taps on C900 PVC Water Mains	02-12-24	4
* No.6.0.6	3/4", 1", 1-1/2", or 2" Service Taps on 6", 8", and 12" HDPE PE 3408/4710 Water Mains	01-16-25	4
* No.8.2.1	Installation of a Single Insulating Washer Flange Insulating Set	07-29-25	2
* No.8.2.2	Installation of a Double Insulating Washer Flange Insulating Set	07-29-25	2
** No.8.3.1	Magnesium Anode Placement and Test Lead Detail (Gas and Water)	07-29-25	10
* No.8.3.3	Trace Wire, Anode and Test Lead Attachment Methods for Steel, Ductile Iron and Cast Iron Water Mains	02-14-24	9
** No.8.5.1	Application of Tapes, Wraps and Patches For Natural Gas Pipelines	07-29-25	6
* No.8.5.2	Application of Tapes, Wraps and Patches for Water Mains	07-29-25	5
** No.11.2.1	Plastic Pipe Installation	07-29-25	4
* No.11.2.3	Butt-Fusion	12-26-24	8

* Denotes Revision

** Denotes New

CONSTRUCTION STANDARDS (Cont.)			Revision Date	Pages
*	No.11.7.0	Electrofusion - Couplings & Corp. Saddles for HDPE Water Pipe	10-02-24	14
*	No.11.7.1	Sidewall Fusion – Corp. Saddles on HDPE Water Pipe	10-02-24	5

DRAWINGS			Revision Date	Pages
File No.416235(MUD 109)	30", 48" 54", 60" and 72" Precast Manhole Sections		10-01-09	11
File No.416128(MUD 119)	CC Valve Box for Water or Gas Gate Valves		04-15-11	1
File No.416206(MUD 119)	24" Manhole Ring and Cover		11-10-93	1
File No.416207(MUD 119)	24" Manhole Ring and Cover		03-13-00	1
File No.416232(MUD 119)	36" Manhole Ring and Cover		02-10-04	1
MUD 125(MUD 119) Fig 1	6" Chlorine Tube for Contractors		10-22-10	1
MUD 125(MUD 119) Fig 2	8" Chlorine Tube for Contractors		10-22-10	1