



# DENVER

THE MILE HIGH CITY

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS | ENGINEERING DIVISION

## Storm Drainage and Sanitary Sewer Construction Detail and Technical Specifications

---

### *Table of Contents*

	<i>Section</i>	<i>Page</i>
1.0	Scope.....	1-1
2.0	Site Preparation.....	2-1
3.0	Existing Facilities.....	3-1
4.0	Utility Trenching and Excavation.....	4-1
5.0	Bedding and Backfilling .....	5-1
6.0	Surface Restoration.....	6-1
7.0	Pipe Jacking, Boring, Casing and Micro Tunneling	
7.1	Tunneling, Jacking and Boring .....	7.1-1
7.2	Micro Tunneling.....	7.2-1
8.0	Structural Excavation.....	8-1
9.0	Testing, Inspection and Acceptance .....	9-1
10.0	Storm/Sanitary Sewer Pipe and Culverts	
10.1	Precast Concrete Pipe .....	10.1-1

**Table of Contents – cont.**

<i>Section</i>	<i>Page</i>
10.3 Precast Reinforced Box Conduits.....	10.3-1
10.4 Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe.....	10.4-1
10.5 Ductile Iron Pipe .....	10.5-1
10.6 Polyvinyl Chloride (PVC) Sewer Pipe.....	10.6-1
10.7 Cured In Place Pipe .....	10.7-1
10.8 Formed-In-Place PVC Trenchless Repair Method.....	10.8-1
10.20 Pipe Bursting .....	10.20-1
11.0 Structures and Appurtenances.....	11-1
12.0 Riprap and Slope/Channel Protection.....	12-1
13.0 Fencing.....	13-1
14.0 Removal and Disposal of Construction Debris and Contaminated Materials .....	14-1
15.0 Manhole Rehabilitation.....	15-1
15.1 Cured-In-Place Fiberglass/Epoxy Resin Liner.....	15.1-1
15.2 Spectrashield Manhole Liner.....	15.2-1
15.3 High Build Novolac Epoxy .....	15.3-1
20.0 Grass Sodding.....	20-1
21.0 Sprinkler Systems .....	21-1
22.0 Seeding.....	22-1
23.0 Storm Water Management Plans (SWMPs) .....	23-1
25.0 Hot-Mix Asphalt Pavement .....	25-1
26.0 Excavation and Embankment .....	26-1

**Supplemental Information**

Measurement and Payment.....	1-38
Alley Patching (Resurfacing) Specifications.....	1-9