LIST OF STANDARD DETAILS

SD-1     CURB INLET TYPE R
SD-2     GRATED INLET TYPE C
SD-3     GRATED INLET TYPE 13
SD-4     COMBINATION INLET TYPE 13
SD-5     PIPE INSTALLATION IN TRENCH
SD-6     STORM SEWER MANHOLE
SD-7     HAEDWALLS FOR PIPE CULVERTS
SD-8     WINGWALLS
SD-9     CONCRETE OR METAL END SECTIONS
SD-10    LOW WATER CROSSING

BCSDCM JULY, 1984
GRATED INLET TYPE 13

Section Thru Length

Section Thru Width

WRC ENG. REFERENCE: City and County of Denver
Standard S-34-31.b (with modifications)
BOULDER COUNTY
STORM DRAINAGE CRITERIA MANUAL

PIPE INSTALLATION IN TRENCH

RIGID PIPE

FLEXIBLE PIPE

MAXIMUM HEIGHT OF FILL OVER TOP OF PIPE IN FEET

( FILL HEIGHTS GREATER THAN MAXIMUM WILL REQUIRE SPECIAL DESIGN )

LEGEND

- Height of fill over top of pipe
- Loose granular bedding, as follows:
- Trench width
- Wall thickness of pipe

REINFORCED CONCRETE

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STEEL - 2 1/4" x 1/4" CORRUGATIONS

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RCP DESIGN CRITERIA:

Safety Factor = 1.33 on Unit

Soil Weight = 120 lb. per cu. ft.

Load Factor = 1.9

Bending Strength - Class B

NOTE: Where trench widths cause transition to embankment conditions, fill heights for projected pipe (Standard M-604-5) are shown.

CSP DESIGN CRITERIA:

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MINIMUM COVER FOR PRE-FABRICATED PIPE SHALL BE 2 FEET

MINIMUM COVER FOR EMBANKMENT DESIGN CRITERIA WILL REQUIRE COMPENSATING CHANGES IN PIPE DESIGN.

TRENCH INSTALLATION:

Trenches over 5 feet in depth shall be either shored or the trench walls shall be graded to the angle of repose. If shored, the bottom of the slope shall be a minimum of 1 foot above the top of the pipe.

Pipe shall be required when the bottom of the pipe is more than 3 feet above the bottom of the trench. Shoring shall extend a minimum of one foot above the bottom of the pipe.

Pipe bedding or bedding may be cut off. 1 foot above the top of the pipe after backfilling is complete.

REFERENCE: Colorado Department of Highways
Standard M-604-5 (with modifications)
TYPICAL PLAN VIEW

TYPICAL SECTION

HEADWALL WITH SLOPE PAVING

SINGLE

DOUBLE

Typical salivated anchor bolts (for use with corrugated metal pipe only)

GENERAL NOTES

All work shall be done in accordance with the Standard Specifications applicable to
the project.

Concrete shall be Class A or B.

Steel shall be provided in meeting codal—unless otherwise specified.

Concrete cover on concrete shall be minimum 4".

TYPICAL S'HEADWALL AND SLOPE PAVING FOR ROUND PIPE OR ARCH PIPE