Detailed specifications for pipe culvert installation, including sizes, slopes, and anchor details.
NOTE: The separate pipe runner shown is required when Cross Pipe Connection Option A1 is used.

PIECE RUNNER DETAILS

OPTION A1 OPTION A2

BOTTOM ANCHOR PIPE DETAILS

OPTION B1 OPTION B2

BOTTOM ANCHOR TOEWALL DETAILS

SECTION A-A

PIECE COULVERTS

PIPE RUNNER LENGTH (See table.)

12" Cross pipe

Anchor toewall

SECTION

SHOWING TYPICAL PIPE COULVERT AND RIPRAP

Pipe Option B2 on corrugated metal pipe (CMP) culvert. Reinforced concrete pipe culvert (RCP) details are similar. Riprap not shown for clarity.

MATERIAL NOTES:

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SYNTHETIC FIBERS LISTED IN THE "FIBERS FOR CONCRETE" MATERIAL PRODUCER LIST (MPL) MAY BE USED IN LIEU OF STEEL REINFORCING IN RIPRAP CONCRETE UNLESS NOTED OTHERWISE.

- PROVIDE PIPE RUNNERS, CROSS PIPES, AND ANCHOR PIPES CONFORMING TO THE REQUIREMENTS OF ASTM A530 TYPE E OR S, GR B, ASTM A500 GR B, OR API 5LX52.

- PROVIDE ASTM A307 BOLTS AND NUTS.

- SELECT ALL STEEL COMPONENTS, EXCEPT CONCRETE REINFORCING, AFTER RANTON (CLEANOUT) OPENINGS APPROXIMATELY PERPENDICULAR TO THE PIPE RUNNERS.

- PIPE RUNNERS ARE DESIGNED FOR A TRAVEERING LOAD OF 1,800 POUNDS AT YIELD ACCELERATED BY RESEARCH REPORT 280-1. "SAFETY TREATMENT OF ROADSIDE CROSS-DRAINAGE STRUCTURES".

- SAFETY AND TREATMENT SPECIFICATIONS SHOWN HEREIN ARE INTENDED FOR USE IN THOSE INSTALLATIONS WHERE OUT OF CONTROL VEHICLES ARE LIKELY TO TRAVERSE THE PIPE RUNNER, OR WHERE THE REQUIREMENTS OF ASTM A307 "RIPRAP" ARE NOT SATISFACTORY.

GENERAL NOTES:

- PROVIDE SAFETY END TREATMENTS (SET) SHOWN HEREIN FOR PAYMENT AS A FUNCTION OF 10 FT.

- PIPE RUNNERS ARE DESIGNED FOR A TRAVEERING LOAD OF 1,800 POUNDS AT YIELD ACCELERATED BY RESEARCH REPORT 280-1. "SAFETY TREATMENT OF ROADSIDE CROSS-DRAINAGE STRUCTURES".

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