Montana Department of Transportation Research Programs February 2006

EXPERIMENTAL PROJECT

EVALUATION OF HIGH DENSITY POLYETHYLENE PIPE (HDPE) CULVERT IN A MAINLINE APPLICATION

Location:	Highway 59 (P-18), Rosebud County, Glendive District	
Project Name:	Angela North & South	
Project Number:	STPP 18-1(9)18	
Type of Project:	Experimental trial using High Density Polyethylene Pipe (HDPE) culverts in a mainline application	
Principal Investigators:	Craig Abernathy, Experimental Project Manager	

Objective

Determine the effectiveness of three sizes of HDPE culverts in a mainline application.

Experimental Design

Three sizes of diameter pipe will be installed in this project; 750mm (approximately 30"), 900mm (approximately 35") and 1200mm (approximately 47") respectively. The product chosen is the ADS N-12WT IB corrugated watertight, smooth interior polyethylene pipe.



Evaluation Procedures

Installation of all three culverts will be document by Research staff. Semi-annual evaluations will collect information on potential deflection, integrity of the ceramic/polymer seals and interior walls, leakage, flow, discoloration, and other visual distress these products may develop. The evaluation will also document adjacent concrete pipe of the same diameters to compare performance.

Evaluation Schedule

Research will monitor performance for a period of five years semi-annually, with every year up to *ten years (informally). This is in accordance with the Department's "Experimental Project Procedures". Delivery of a construction/installation report, interim, annual or semi-annual reports is required as well as a final project report (responsibility of Research).

2006:	Installation	Research Installation/Construction Report
2006:	Interim	30 Day Post Field Status Report
2007-2011:	Semi-Annual Evaluation	Semi-Annual Reports
2012:	Final Evaluation	Final Report
*2012-2016:	Annual Evaluation	Annual Reports (Informal)

Update: There has been substantial weather delay with this project. Projected time of installation is tentatively scheduled for the spring of 2007.