

## **EXPERIMENTAL PROJECTS WORK PLAN**

### **CONTECH RIBBED ALUMINUM BOX CULVERT (ABC)**

**Location:** Secondary 325 (C000325) Sta. 23-00, Blaire County, Great Falls District

**Project Name:** Jct. US 2 – North Belknap Crossing

**Project Number:** STPS 325-1(3)0

**Experimental Project No.** MT-12-01

**Type of Project:** Ribbed Aluminum Box Culvert Installation

**Principal Investigator:** Craig Abernathy: Experimental Project Manager (ExPM)

#### **Objective**

Document all phases of the installation practice of the ABC unit. Issues such as special backfill required, installation of reinforcing ribs, equipment required, and construction loading will supplement the report. This project will provide a comparison with the current use of steel structural plate pipe. Monitor and report on long-term performance.

#### **Experimental Design**

Placement of Contech Ribbed Aluminum Box Culvert (ABC). Approximately 46.0m (151 ft.) in length, span of 7.7m (25.2 ft.) and a rise of 2.36m (7.74 ft.). Type VI ribs at 9 inch spacing.

#### **Evaluation Procedures**

Research will document the installation for best practice and any constructions concerns germane to the performance of the ABC product. Semi-annual inspections will report on culvert integrity and any other measurable outcomes. Additional site inspections may supplement the semi-annual visits based on need.

**Construction Documentation:** Will include information specific to the installation events of the ABC unit.

**Post Documentation:** Will entail semi-annual inspections of the culvert and adjacent structures.

### **Evaluation Schedule**

Research will monitor performance for a minimum period of five years 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). A web page will be dedicated to display all reporting from the project.

|            |  |
|------------|--|
| 2012:      | Installation/Construction Report                   |
| 2013-2016: | Semi-Annual Inspections/ Annual Evaluation Reports |
| 2017:      | Final Evaluation/Final Report                      |