MAINTENANCE PLANNING GUIDELINES

2/2014

ACTIVITY: Pipe Culvert Repairs (R319)

ACTION: Clean & Repair Box Culverts

MAJOR & MINOR

DEFINITION: The time and expenses incurred from removing and replacing pipe culverts. Includes time and expenses incurred for installing a new lining in an existing culvert and cleaning and repairing culverts.

PURPOSE: To clean, repair, and fill voids of box culverts and restore roadway drainage.

SCHEDULING: As needed.



RECOMMENDED EQUIPMENT:

- Trucks
- Loader, Backhoe, or Excavator
- Concrete Mixer
- Compressor/Breakers
- Water Tank w/Trash Pump
- Traffic Control Equipment, Reference (See EPG 616.23 Traffic Control for Field Operations).

RECOMMENDED PROCEDURE:

- 1. Contact Dig Rite and others to mark utilities
- 2. Place traffic control devices as needed.

CLEAN OUT

1. Remove drift and debris as needed.

REPAIR

1. Remove bad concrete, form, and pour concrete.

FILL VOIDS

- 1. Fill large voids and eroded outlet areas with quarry run rock and if needed grout with concrete.
- 2. Internal voids along the barrel sides and bottom should be mudjacked.
- 3. Remove traffic control devices.

RECOMMENDED MATERIAL:

- Concrete
- Water
- Quarry Run Rock
- Form Material
- Cement
- Agricultural Lime

SAFETY: Refer to the <u>Comprehensive Safety Program sharepoint portal</u>. Wear all appropriate PPE. Refer to the <u>Risk Based Assessment</u> for additional information

OTHER CONSIDERATIONS: Check if Corps of Engineers permit is needed.

REFERENCES: N/A