## MAINTENANCE PLANNING GUIDELINES

2006

**ACTIVITY:** Drainage (R316)

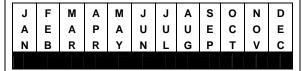
**ACTION:** Channel Control

### **MAJOR & MINOR**

**DEFINITION:** The time and expenses incurred for the installation, repair and maintenance of roadway drainage ditches, structures, and all slide repairs. This includes installing and maintaining pavement drainage systems.

**PURPOSE:** To maintain and/or install channel control devices such as dikes, deflectors, riprap, gabion baskets, or other control measures.

**SCHEDULING:** As needed.



## **RECOMMENDED EQUIPMENT:**

- Dump Trucks
- Backhoe
- Excavator
- Loader
- Dragline
- Traffic Control Equipment; (See EPG 616.23 Traffic Control for Field Operations)

## **RECOMMENDED MATERIAL:**

- Riprap
- Gabion Baskets, Ajax, & Rock
- Fill Dirt
- Seed
- Mulch

#### **RECOMMENDED PROCEDURE:**

- 1. Obtain Corps of Engineers permit, as required.
- 2. Call Dig Rite and check for MoDOT utilities.
- 3. Place traffic control devices as needed.
- 4. Remove debris from channel.
- 5. Install channel control devices.
- 6. Clean up work area.
- 7. Install erosion control devices as necessary
- 8. Seed and mulch as necessary.
- 9. Remove traffic control devices.

**SAFETY:** Wear all appropriate PPE. Refer to the Safety Policies, Rules & Regulations – Employee Handbook.

**OTHER CONSIDERATIONS:** Requires planning well in advance to obtain Corps of Engineers permit.

**REFERENCES:** Missouri Standard Specifications for Highway Construction Section; 802, 803, 803 805, 806. Missouri Standard Plans 806.10.

# R316 - Channel Control



(1) Indian Creek -- Howell County Roadway Embankment Scour Upstream End



(2) Indian Creek – Upstream Full Flow Condition



(3) Indian Creek – Upstream of Triple Box Culvert at Route AM



(4) Ajax Blocks



(5) Ajax Installation with Silt Blanket



(6) Ajax Installation - Continued



(7) Completed Installation of Ajax Blocks



(8) Ajax Blocks Performing Under Full Flow Conditions



(9) Erosion under structure



(10) Preliminary Grading for Gabions