

## **Activity 128 Horizontal/Vertical Drains**

### Description

Activity 128 involves inspecting, cleaning and repairing drain pipes associated with draining underground water from slides or unstable ground. Perform this activity to ensure that the drain pipes are operating properly to drain the affected areas.

### General Information

Refer to discussion in the General Instructions section preceding Activity 120 in this section of the *Maintenance Guide* for additional information including environmental and traffic control recommendations and other important considerations.

Periodically inspect these facilities to ensure proper operation, particularly in the Fall after rains have replenished the ground water supply.

Clean, repair, or replace drain pipes that may be obstructed or not operating properly.

Request needed assistance and guidance from the District Manager and the Region Geologist or the Region Technical Center.

### Equipment

Select equipment as needed for the work and situation. It may be appropriate to acquire the services of a sewer or drain cleaning firm to clean obstructed pipes or the services of a drilling firm to replace failed pipes.

### Materials

Materials may include:

- Devices to control erosion and sedimentation.
- Materials to repair or replace damaged or failed sections.

### Work Method

1. Implement appropriate traffic control.
2. Implement appropriate methods of erosion, sediment control or pollutants and contaminants control.
3. Remove debris from drain pipes.
4. Repair or replace damaged or failed sections of drain pipes.
5. Remove traffic control.
6. To prevent environmental damage, clean tools and equipment using Best Management Practices.
7. Dispose of removed or waste material at an appropriate location.

### Measurement of Accomplishment, Expenditure Account, and Charge Activity

Measurement is lineal feet cleaned, repaired, or replaced. Expenditure account type is Highway EA; use a sub job appropriate for the crew performing the work.

- Charge Activity 128 for all work.