DESCRIPTION
This work shall consist of inspecting the interior of underdrain pipe having a nominal inside diameter of 4 inches or 6 inches at locations directed by the Engineer, and furnishing a video record of the inspection.

MATERIALS
None specified.

CONSTRUCTION DETAILS

A. Equipment Description

1. Video Inspection/Recording Equipment. Furnish video inspection/recording equipment that is specifically designed for continuous viewing and recording of images of the interior walls of pipes and fittings having a nominal inside diameter of 4 inches or 6 inches and capable of providing a true-color image of the entire pipe periphery. Additional requirements:
   a. A camera with a minimum horizontal resolution of 400 television lines, as determined from manufacturer’s specifications
   b. A Super VHS or Hi8 video cassette recorder
   c. A centering device to keep the camera centered in the pipe during inspection
   d. A camera/lighthead/push rod system capable of extending 400 feet into the pipe and negotiating 4 inch or 6 inch “T” pipe connections
   e. An electronic distance counter capable of measuring the amount of rod dispensed within plus or minus 1½ feet per 400 feet
   f. The capability of displaying the amount of rod dispensed and a minimum of 30 alpha-numeric text characters across by 10 lines down on the video record
   g. Audio input

2. Video Cassettes. Furnish new, high grade video cassettes for all original recordings and copies of original recordings.

3. Power Source. Furnish an appropriate power source to operate all inspection equipment.

B. Inspection Procedure. All paving must be completed in the inspection area, prior to inspecting.

Inspect at each location in accordance with the following procedure:

1. Record a title screen for 25 to 35 seconds, consisting of the route number, town, county, contract number, date of inspection, and station and offset of point of entry.
2. Insert the camera 7 feet into the pipe outlet, adjust the contrast and clarity of the video image, and set the electronic distance counter to zero.
3. Display the route number, date of inspection, station and offset of point of entry, and amount of rod dispensed at locations on the video that do not interfere with the observation of pipe distress.

4. Begin recording with the video cassette recorder in SP mode.

5. Advance the camera through the pipe at a maximum rate of 15 feet per minute, maintaining proper image contrast and clarity.

6. Audibly document any problems incurred while conducting the inspection. Document observed pipe distress as outlined in Step 7 below.

7. In areas where obstructions, rips, separations, crushed sections, or improper connections are observed, do the following:
   a. Stop advancing the camera;
   b. Adjust the camera to provide a clear image of the distressed area(s);
   c. Audibly document the location, type, severity, and extent of each distress.

8. Repeat Steps 5 through 7 until either there is refusal to further movement, the end of the pipe segment is reached, or for a maximum inspection length of 400 feet.

9. Stop recording and retract the camera.

10. Provide the Engineer with the original video recording and a copy of the original video, in Super VHS or Hi8 format, and a transmittal letter within 48 hours after the completion of the inspection.

Recording of inspection runs at multiple locations on a single video cassette is permitted, provided that each run is totally contained on the video cassette.

METHOD OF MEASUREMENT
This work will be measured as the number of linear feet of underdrain recorded, as determined from the electronic distance counter, and accepted by the Engineer.

BASIS OF PAYMENT
The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the inspection, and to provide the original video record and a copy of the original video record.