## STORM DRAIN VIDEO INSPECTION REQUIREMENTS

Development Services Department - Public Works Inspection 400 S. Vicentia Avenue, Corona Ca, 92882 – Phone (951)279-3511



## Video requirements

Before final lift of roadway paving, the storm drain system (8" and larger pipe), including the main line, laterals, and interiors of storm structures in all public and private right of way and storm drain easements, shall be flushed and visually inspected by means of closed-circuit television (CCTV). If this is done after the final pavement and asphalt cuts are done, pavement repairs shall be done per moratorium requirements.

- 1. The Public Works Inspector shall be notified 48 hours prior to and must be onsite during video operations.
- 2. Subdrain lines must be televised to demonstrate it is clear of sediment and debris.
- 3. Video inspection will be done one section (structure to structure) at a time. The camera will pan the interiors of all structures and when in the pipe, will stop at each joint to rotate 360 degrees to pan the entire joint.
- 4. Sections of pipe from structure to structure shall be audibly and visually identified in the video using the same nomenclature as on the improvement plans (e.g., "SDMH #2 to SDMH #3" or "STA 10+55"). Each video file must be labeled with the following information: Date, Project #, the Locations and Types of Structures.
- 5. The camera shall stop at all structures, connections, or defects (sags, bad joints, etc.) for a period or at least 10 seconds and shall be noted on the log sheet. The camera will be panned or tilted towards the connection or defect so that any portion of the connection or defect that is visible from within the pipe or structure can be completely inspected.
- 6. The following videoed observations shall be considered defects in the construction of the storm drain system and will require corrections prior to acceptance:
  - Off grade 0.08' or more deviation from grade
  - Joint separations
  - Offset or improperly constructed joints.
  - Cracked or damaged pipe, or evidence of the presence of an external object bearing upon the pipe (rock, root, etc.)
  - Debris or other foreign objects
  - Other obvious deficiencies when compared to the approved plans and specifications, these standards and the city design and construction standards.
- 7. If repairs are done, the section will need to be videoed again to confirm satisfactory repair work.

## Camera requirements:

- 1. The camera shall be specifically designed, constructed for such inspection and capable of producing high quality video to allow a clear color picture of the entire periphery of the pipe.
- 2. The camera shall be operative in 100% humidity conditions without causing the camera to fog and shall have a minimum of 330 lines of resolution but must be capable of discerning small, hairline cracks and other minor defects.
- 3. The camera shall move through the line in a downstream direction at a moderate rate, stopping when necessary to permit proper documentation and cannot be pulled at a speed greater than 30 feet per minute.
- 4. The camera shall be self-propelled, or manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the storm drain conditions shall be used to move the camera through the line.

## **Documentation**

- Recording playback shall be at the same speed that it was recorded. The format shall be in common digital video files (MP4, AVI, WMV, MKV). Accompanying audio shall provide a description of what is encountered.
- Each video file shall have displayed the number of feet from the starting structure for each segment.