

Routine Hydraulic Cleaning Standard Operating Procedures

1. Watershed mapping provided by GIS will be used to schedule line sections for routine hydraulic cleaning.
2. Cleaning will be initiated at the line sections furthest upstream in the watershed and continue downstream to junction manholes (locations where lines come together at a manhole) in a systematic approach. Crews will not move downstream to the next line section until each line section at a junction manhole has been cleaned.
3. Line segment cleaning will begin in the downstream manhole of a line section and move upstream to a termination point (typically a manhole).
4. Where applicable, approved traffic control practices will be implemented when performing operations.
5. Controls should be established at the downstream manhole (where cleaning activities are occurring) to ensure debris does not escape to the next line section downstream. The vacuum of the rodder/vacuum truck will provide a means by which to retrieve debris from cleaning activities. With use of the standard jet rodder truck a screened basket will be placed in the downstream line section of the manhole to retrieve debris. Placement of the basket will not require entrance to the manhole. **At no time should a crew member enter the manhole without following proper confined space entry procedures.**
6. Select a cleaning nozzle that best fits the application for cleaning the specific line sections.
7. With initiation of the cleaning activities the nozzle should be propelled up the line section to a termination point identified prior to the start of the cleaning operation. This is typically a manhole with the cover removed so that a member of the crew can verify that the line section has been cleaned in its entirety. Depending on the amount of debris in the line section, an entire section of line may not become clean with the first attempt. Experience and manufacturer's recommendations will be the guide with respect to the pump pressures necessary to achieve proper water velocity for cleaning.
8. The hose and nozzle should be reeled in until the nozzle is just outside the downstream manhole so that the debris can be collected with the vacuum unit.
9. The steps in Nos. 1 – 8 will be repeated until visual inspection identifies that no debris is present.
10. The Hydraulic Cleaning/Camera Report Form for the line section cleaned will be completed.
11. The GIS mapping will be annotated (by highlighting) to reflect that the line section has been cleaned.
12. Crews will move to the next line section.

Routine Closed Circuit Television (CCTV) Inspection Standard Operating Procedures

1. Watershed mapping provided by GIS will be used to schedule line sections for routine CCTV inspection.
2. Typically, routine hydraulic cleaning activities will have preceded CCTV inspection.
3. CCTV inspection will begin in the upstream manhole of a line section and move downstream to the next manhole in the line section. If field conditions warrant that operations be initiated at the downstream manhole, CCTV inspection crew members shall verify that the existing flows will allow for CCTV activities.
4. Where applicable, approved traffic control practices will be implemented when performing operations.
5. Operation and maintenance of the CCTV equipment will be per manufactures recommendations.
6. A VHS tape or DVD will be made of each line section televised.
7. The Hydraulic Cleaning/Camera Report Form for the line section televised will be completed.
8. The GIS mapping will be annotated (by highlighting) to reflect that the line section has been televised.
9. Crews will move to the next line section.