Underground Stormwater Management with Chamber Systems
TYPES OF UNDERGROUND STORMWATER SYSTEMS
CATCH BASIN INSERTS
HYDRODYNAMIC SEPARATOR

- Oil and floatables
- Active separation zone
- Sediment
UNDERGROUND DETENTION
WHAT TO LOOK FOR
Ponding? Leaves? Sediment? Trash?
Catch Basin Inserts
Separators
Underground Detention
NOTES:
1. INSPECTION PORTS MAY BE CONNECTED THROUGH ANY OF (2) CHAMBER CORRUGATION VALLEYS CONTAINING A STIFFENING RIB.
2. ALL SCHEDULE 40 FITTINGS TO BE SOLVENT CEMENTED.

NYLOPLAST 12" [300 mm] INLINE DRAIN BODY W/ 12" [300 mm] SOLID HINGED COVER AND FRAME (SEE NYLOPLAST DWG# 7003-110-044 FOR PAVED APPLICATIONS / SEE DWG# 7003-110-045 FOR UNPAVED APPLICATIONS)

MC-4500 CHAMBER

NOMINAL 3/4 - 2 INCH [19 mm - 51 mm] CLEAN CRUSHED ANGULAR STONE

ADS 601 NON-WOVEN GEOTEXTILE (OR EQUAL)

CONNECTION DETAIL

CORE 4.5" [114 mm] Ø HOLE IN CHAMBER (4.5" [114 mm] HOLE SAW REQ'D)

ANY OF (2) VALLEY LOCATIONS CONTAINING STIFFENING RIBS

CONCRETE COLLAR

PAVEMENT

GRANULAR WELL GRADED SOIL / AGGREGATE MIXTURES

4" [100 mm] SCHED 40 PVC COUPLING

4" [100 mm] SCHED 40 PVC

4" [100 mm] SCHED 40 PVC
Underground Detention

BEFORE
INSPECTION & MAINTENANCE
Catch Basin Inserts
Catch Basin Inserts

- Inlet
- Filter
- Hooks
Separators
Separators
Underground Detention
Underground Detention

Jet-Vac Operation
Underground Detention

Wrap Chambers in Non-Woven Filter Fabric

Between Stone & Chamber

Inspection Ports

Manhole Access Point
Underground Detention

AFTER
Underground Stormwater Management with Chamber Systems

Step 1) Inspect Isolator Row for sediment
A) Inspection ports (if present)
   I. Remove lid from floor box frame
   II. Remove cap from inspection riser
   III. Using a flashlight and ladder rod, measure depth of sediment and record results on maintenance log.
   IV. If sediment is at or above 3 inches proceed to Step 2. If not proceed to Step 3.
B) All Isolator Rows
   I. Remove cover from manhole at upstream end of isolator row
   II. Using a flashlight, inspect down isolator row through outlet pipe
      1. Mirrors on poles or cameras may be used to avoid a confined space entry
      2. Follow OSHA regulations for confined space entry if entering manhole
   III. If sediment is at or above the lower row of sliver wall holes (approximately 3 inches) proceed to Step 2. If not proceed to Step 3.

Step 2) Clean out Isolator Row using the JetVac process
A) A fixed culvert cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable
B) Apply multiple passes of JetVac until backflush water is clean
C) Vacuum manhole sump as required

Step 3) Replace all caps, lids and covers, record observations and actions

Step 4) Inspect & clean basins and manholes upstream of the StormTech system

Additional Notes
1. Inspect every 6 months during the first year of operation. Adjust the Inspection Interval based on previous observations of sediment accumulation and high water elevations.
2. Conduct Jetting and vacuuming only when inspection show that maintenance is necessary
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QUESTIONS?