

CAPITAL REGION MUNICIPAL ENGINEERS

INSPECTION PROTOCOL

1. PRE-CONSTRUCTION

1. Preconstruction meeting with Township and Contractor is required. The meeting agenda will include but not be limited to:
 1. Items requiring testing and inspection.
 2. Required submittals, and the process for review and approval of submittals.
 3. Compaction and materials testing:
 1. Entity that will perform the tests and inspections.
 2. Procedure for submitting reports.
 4. Name and contact information for site representative.
 5. Confirm that contractor and all subcontractors have approved plans.
 6. Utility and authority approvals required before start of construction.
2. All inspection protocols and procedures must be reviewed with the Contractor and Owner/Developer prior to start of construction.
3. Preconstruction meeting is required for all subcontractors that will be performing work covered by these inspection protocols.
4. 48 hour advance notice is required when scheduling inspections.
5. Confirm that all applicable permits have been issued.

2. CONSTRUCTION PHASE

1. Construction sequence must be followed.
2. Erosion and Sediment Pollution Control measures must be installed and maintained as shown on the plan and as specified in the construction sequence.
3. Inspection and acceptance by the Township is required for each item of construction before construction may proceed on subsequent items.
4. Items requiring inspection:
 1. Streets
 1. Subgrade: proof roll inspection prior to placing subbase.
 2. Subbase: proof roll inspection prior to placing base course.
 3. Pavement courses: inspection prior to starting a pavement course; inspection of placement in progress.
 4. Curb: inspection of alignment and forms prior to starting; inspection of placement in progress.
 5. Trench Backfill: utilities and storm drainage pipes.
 6. Storm Drainage Facilities (inlets, manholes).
 7. Utilities: inspection and acceptance before wearing course is placed.

2. Stormwater Detention Facilities

1. Connection of pipe to inlet boxes, before backfilling.
2. Inspection of pipe in place, prior to starting backfilling.
3. Detention Basin: anti-seep collar installation, before backfilling; clay core construction, before backfilling.
4. Compaction testing of embankments

5. Inspection Checklist:

1. Subgrade
 1. Material
 2. Compaction. Proof roll must be done with a fully loaded triaxle dump truck.
 3. Cross slope
2. Subbase
 1. Material. Delivery tickets and certification required.
 2. Depth
 3. Compaction. Proof roll must be done with a fully loaded triaxle dump truck.
 4. Cross slope
3. Pavement
 1. Material. Delivery tickets and certification required.
 2. Temperature
 3. Depth
 4. Compaction
 5. Cross slope
 6. Utility completion and acceptance before wearing course is placed.
4. Subsurface Utilities
 1. Installed before pavement base course
 2. Laterals installed before curb is placed
 3. Laterals not to be located in driveways
5. Curb
 1. Location and alignment of forms
 2. Location and depth of driveways
 3. Concrete material.
 1. Delivery tickets and certification required
 2. Test cylinders
 3. Air entrainment testing
 4. Rebar in driveway locations
 5. Placement and finishing of concrete
 6. Curing
 7. Saw-cut joints
 8. Removal of overpour

6. Pavement base drain and underdrain
 1. Depth, alignment and width of excavation
 2. Geotextile: material, placement
 3. Aggregate: material; placement
 4. Installed before subbase

7. Inlets/Manholes
 1. Surveyed/staked location and elevation
 2. Alignment of box, risers and top units
 3. Type and size of top unit
 4. Mortar bed between sections
 5. Pipes mortared outside and mortared flush with inside wall of box
 6. Concrete bottom flush with pipe bottom

8. Storm pipe
 1. Smooth interior, where specified
 2. Combination storm/underdrain, where specified
 3. Depth, alignment and width of excavation
 4. Aggregate backfill: material, width, depth
 5. Basin Outlet Structures
 6. Traffic Control Signs
 7. Pavement Markings

9. Stormwater Infiltration BMPs
 1. Infiltration area must be protected from compaction and heavy equipment, before, during and after excavation and construction.
 2. Location, depth and dimensions according to plan.
 3. Inspection of open excavation required before backfilling begins.
 4. Materials: geotextile; aggregate; storage pipe; specified vegetation.

3. FINAL INSPECTION

1. As-built plans required.
2. Sign-off acceptance required from utilities and authorities.