

Pre-Con

Frequently Asked Questions

General

- 1) Permits are required for all work in the public ROW.
- 2) All pipe, water, sewer and storm, shall be inspected prior to backfill
- 3) An inspection request shall be sent to *EIRequest* no later than 7:30 am the day of the requested inspection. Inspection requests shall be sent in daily. No work shall be performed on site without submitting an inspection request. Failure to submit an inspection request may result in the issuance of a Stop-Work Order and utility work may be subject to removal at the request of the Engineer.
- 4) Lot grading for commercial and single family lots shall be in strict accordance with approved plans. The Inspector will ensure that positive drainage, without ponding water, is evident for the complete project or lot area.
- 5) All construction shall be complete and in move-in condition prior to requesting a Final ROW Inspection (Certificate of Occupancy).

Concrete

- 1) For all concrete work within the COD ROW, the air temperature shall be 35 Degrees F and rising. The subgrade shall not be frozen. Blankets or other approved methods are required to cover any newly poured concrete if freezing temps are forecasted within 72 hours after the pour.
- 2) All sidewalks within the public ROW, City or NCDOT, shall have the forms and sub-grade inspected by an Engineering Inspector prior to placing concrete.
- 3) Sidewalks shall have a ½" expansion joint every 50' and a contraction joint (tool joint) at a minimum depth of 1" every 5'. Cold joints with existing concrete shall be separated by expansion material. Details 402.02
- 4) Public sidewalk constructed along the back edge of curb, with no verge, shall be 6' wide and 6" thick for the entire length.
- 5) New construction curb-cuts (curb ramps) shall be installed according to the latest Pedestrian Rights-of-Way Accessibility Guideline (PROWAG). The location, size and slope of the curb ramps shall be determined by the developer's Engineer prior to placement of the curb and gutter. The curb ramp forms shall be inspected by a COD Engineering Inspector prior to placing concrete.
- 6) Curb contraction joints (tool joints) shall be placed at 10' intervals and expansion joints at 90' intervals and adjacent to all rigid objects and cold joints in the curb line.
- 7) All joints in curb line shall be sealed with approved NCDOT sealant prior to backfill of curb, including contraction joints (tool joints). Details 402.01.
- 8) All curb and sidewalk replacements shall have the sub-grade inspected by an Engineering Inspector prior to placing new concrete.
- 9) When curb or sidewalk replacement is necessary, the section removed shall be 5 lf in length with at least a 5 lf section remaining or the entire length shall be replaced.
- 10) If forms are inspected and a rainfall occurs before the concrete is placed, you shall submit an inspection request through *EIRequest* to have the forms and subgrade re-inspected.
- 11) Sidewalk located on NCDOT road shall be inspected by a City of Durham Engineering Inspector before placing concrete.

Water

- 1) All water service connections shall be wet taps.
- 2) Water lines shall be inspected by an Engineering Inspector before backfilling.
- 3) Failure to submit an inspection request could result in the issuance of a Stop-Work Order and utility work could be subject to removal at the request of the Engineer.
- 4) Water lines shall be backfilled before performing a hydrostatic test.
- 5) Water lines shall be filled using a backflow prevention device (jumper).
- 6) Water pressure tests shall begin before noon. The test section shall not be more than 2,000 lf. If the area to be tested is more than 2,000 lf, additional tests will be required.
- 7) Water pressure tests are 2 hours in duration at 200 psi.
- 8) The waterline shall be chlorinated for 24 hours before the initial water sample can be taken.
- 9) 2 water samples will be taken from each test section after the chlorinated lines have been blown off. Two consecutive passing bacteria tests are required before a waterline can tie into existing City infrastructure.
- 10) All blow-offs installed shall be a minimum of 2".
- 11) For all water meters larger than 1", the contractor should check with water management to determine the distance for the meter setters.
- 12) All OC boxes and sanitary sewer manholes shall have plastic inserts.
- 13) Hydrant meters for temporary water can be obtained from Customer Billing Service on the 1st floor of City Hall.
- 14) Fire Service lines to the turn up in the riser room shall be inspected and pressure tested by an Engineering Inspector
- 15) Water samples shall pass before installing water services.

Sewer

- 1) All sewer lines shall be inspected by an Engineering Inspector before backfilling.
- 2) Failure to submit an inspection request could result in the issuance of a Stop-Work Order and utility work could be subject to removal at the request of the Engineer.
- 3) Public sewer lines shall be 401 Protecto lined or an equivalent approved material if plans call for DIP sewer line. Private sanitary sewer lines that could reasonably be expected to become public shall be 401 Protecto lined or an equivalent approved material if plans call for DIP sewer line.
- 4) All Sewer lines shall be pressure tested.
- 5) PVC lines shall be tested by a mandrel pull.
- 6) All drops shall be outside drops.
- 7) All sewer services shall tie into the sewer main, except in the case of a stub or cul-de-sac.
- 8) A sewer service may tie into a manhole at the end of a cul-de-sac, with permission from the Engineer.

Storm

- 1) Waffle type boxes or neoplastic are not allowed for storm drainage structures, public or private.
- 2) All storm drain piping 12" or larger, Public or Private shall be inspected by an Engineering Inspector prior to backfilling.
- 3) All storm water castings shall meet structural and weight requirements with the City of Durham, stamping included (638.02)

Grading and Asphalt

- 1) ABC shall be allowed to set up for 3 days, after final grading, before proof-rolling.
 - a. Contractors are encouraged to pre-proof-roll an area before requesting an official proof-roll from an Engineering Inspector.
- 2) Curb (concrete) shall cure for 3 days before backfilling will be allowed
- 3) Curb joints shall be sealed with approved NCDOT approved sealant before backfilling
- 4) Curb shall be properly backfilled before proof-roll ABC for asphalt.
- 5) A proof-roll shall be performed using a tandem truck with a minimum weight of 60,000 lbs. A weigh ticket from a certified weighmaster shall be required to verify weight at the time of the proof-roll.
- 6) If a rainfall occurs after a proof-roll, but before asphalt is placed, another proof-roll shall be scheduled by submitting an inspection request through EIRrequest.
- 7) Asphalt paving and patching: air temperature shall be 40 degrees for surface mix and 35 degrees for base and intermediate.
- 8) The subgrade shall not be frozen.
- 9) All asphalt patching shall adhere to City of Durham details in the 2018 Street Details or 2012 Street Repair Guide (available on City of Durham website). Detail 408.01
- 10) Paving shall not commence until an Inspector has verified that the area is clean, dry and tack has been properly applied (when applicable).
- 11) Contractor shall provide cores for each facility paved within three days of paving.

Release of Water meters

- 1) Please see flow chart for the release of water meters.
- 2) As-built drawings shall be submitted prior to the release of water meters for commercial projects or residential developments.
- 3) All new sanitary sewer and public storm sewer shall be CCTV'ed with a report sealed by a Professional Engineer and a DVD submitted to the City prior to the utility walk-thru.
- 4) After As-built submittal, a walk-thru of the project shall be conducted at the end of construction or end-of-phase construction, with the owner's representative, City Engineering Inspections personnel, and associated City forces. The contractor will be available with a crew to exercise all valves, hydrants, manholes, etc., during the walk-thru. At the conclusion, a punch list will be generated. These items will be addressed and verified "complete" by the Engineering Inspector prior to the release of water meters.
- 5) As-built drawings shall be approved prior to the issuance of a CO (Certificate of Occupancy). Alternatively, an escrow may be provided to cover the completion of the as-builts. Escrow amount to be determined by the City.