

Standard Development Construction Practices for Works on York Region Roads



1. It is the responsibility of the Owner/ Developer or his Consultant responsible for administering the contract to notify their Contractor(s) to be familiar with and understand the foregoing conditions below. Contractors are expected to have sufficient knowledge, experience and equipment for working on Regional Roads.
2. **No start-up** of road construction projects will be permitted after November 15th or prior to March 31st without special exemption and permission from York Region's Development Engineering Section.
3. **Winter Work:** Any approved development construction within the Regional road allowance, between **November 15th and March 31st** in any given year, will be considered winter work. Any work (new or ongoing) in the road allowance between these dates may not commence or continue without the written consent of the Region's Supervisor of Development Construction. This written consent may be revoked by the Region at any time. **At the Region's discretion, any non-conforming work, in accordance with Provincial and Regional specifications, shall be removed and replaced at the developer's expense, or other measures implemented as determined by the Region.**

Prior to demobilizing for the winter (the "Winter Shut-Down"), the following requirements must be met:

- (a) All excavations must be backfilled;
- (b) The Site must be left clean, tidy and safe;
- (c) Road subgrade and/or road granulars shall not be exposed during the Winter Shut-Down, unless approved in advance by the Region upon written request from the Contractor. The Work shall be scheduled such that the asphalt base course is completed on any completed road granular base prior to the Winter Shut-Down. Gravel or milled pavement surfaces will not be permitted for the traveled roadway during the Winter Shut-Down period;
- (d) Roadways must have temporary or permanent pavement markings and appropriate traffic signage installed in accordance with the Ontario Traffic Manual (OTM), to be maintained at all times and all construction work areas shall be properly protected from the traveled lanes during winter shutdown;
- (e) Cut or fill slopes left without vegetative cover or erosion control blankets shall be treated before the on-set of winter with hydraulic mulch ground cover;
- (f) Positive flow for all storm culverts shall be maintained. If the Contractor is unable to complete the construction of the storm system within the allotted construction window, then additional measures to allow for positive drainage will be implemented by the contractor. This includes the provision of additional creek channelization and/or sand bags as needed to divert the flow to existing culverts or channels and maintain flow; and
- (g) Catchbasins and maintenance hole grates shall be adjusted to match the grade of asphalt, ensuring positive drainage and limiting snow removal hazards.

Repairs to the roadway, interim drainage conditions, erosion control, signage and delineation shall be performed by the Contractor, as required, throughout the Winter Shut-Down period as required at the sole discretion of the Region.

The Region will perform snow clearing and de-icing operations for roads which are open to the public during the Winter Shut-Down period.

The Contractor shall be responsible for snow clearing, snow removal, and de-icing of any areas in which they have elected to perform work during the Winter Shut-Down period. Snow in these areas shall be removed from the right-of-way and must not impede with Regional efforts to keep traveled lanes clear of snow/winter debris.

4. All traffic control devices and signage must be maintained in their proper locations, cleaned, weighted down by sandbags only, and maintained throughout the duration of the Contract. Regional forces will not reinstate temporary signage displaced by winter maintenance operations. The Contractor shall ensure that all construction signs affected by winter maintenance operations are immediately cleaned and reinstated or replaced. A safety log shall be kept ensuring that all temporary safety measures have been inspected regularly and are in good working condition. The Region may request this log at any time.

5. Unless otherwise specified, Ontario Provincial Standards and Specifications and York Region Design Standard Drawings and construction specifications/practices shall be adhered to.
6. A copy of the “**Notice of Project**” shall be submitted to the Development Construction Coordinator at the pre-construction meeting, posted on the contractor safety board on-site and attached to the pre-construction meeting minutes.
7. The Owner/ Developer will ensure that the Regional road surfaces, ditches and boulevards are kept **clear of dust, mud/building and other debris** until the lands represented by this approval are fully developed and assumed by York Region Road Operations. The Owner/Developer acknowledges that the Region will carry out any work deemed necessary at the Owner's expense if such requirements are not carried out within 24 hours of notice being given to the applicant, consulting engineer, Owner or without any notice if, in the opinion of the Commissioner of Corporate Services Department or the designate, it is required immediately. **Repeat infractions will be considered a safety violation and may be subject to invoking a stop work order, revoking of the road occupancy permit and/or the required reapplication of the construction access approval including a safety inspection fee of \$2,500.00, or as outlined in Schedule "A" to By-law No. 2020-04, as amended.**

The Region reserves the right to require a **wheel wash station** if it is deemed necessary for the safety of the public, on per project basis.

In the event that the Region must rectify any deficiencies, make any remedies or must carry out the cleanup of roads from mud, dust, refuse or debris, the Owner acknowledges that the **Region shall invoice the Owner, for each occurrence, a minimum of \$2,500.00 or twice the actual cost to perform the work, whichever is greater, as outlined in Schedule "A" to By-law No. 2020-04, as amended.**

8. **Prior to starting any development construction work** within the Regional Road allowance, please contact the following Development Construction Coordinator, 1-877-464-9675 or email to arrange for a pre-construction meeting prior to construction:
 - Ivan Gonzalez; 1-877-464-9675 ext. 75759; email: ivan.gonzalez@york.ca
Municipality Area: City of Vaughan
 - Wyatt Werner; 1-877-464-9675 ext. 73114; email: wyatt.werner@york.ca
Municipality Area: City of Richmond Hill, Township of King
 - Nasir Mahmood; 1-877-464-9675 ext. 76929; email: nasir.mahmood@york.ca
Municipality Area: Town of Newmarket, Town of East Gwillimbury, Town of Georgina, Town of Aurora
 - Joshua Ashfield; 1-877-464-9675 ext. 78012; email: joshua.ashfield@york.ca
Municipality Area: Town of Whitchurch-Stouffville, City of Markham
9. It is the responsibility of the Owner/Developer or his Consultant for inspections to ensure that the contractor's **locates are staked out prior to any construction** and all utilities are relocated to the approved design grades and location.
10. Prior to any related development construction activity on the Region Road allowance, the Owner/ Developer or designate shall apply to the Region to obtain a **Road Occupancy Permit (ROP)**. The Road Occupancy Permit application is now online only and can be obtained at www.york.ca/roadpermits. Specific traffic control measures such as temporary traffic lights are to be approved by Traffic Safety and Permit prior to implementation. For general inquiries please contact 1-877-464-9675, x75700 or permits@york.ca.
11. If the Region deems necessary, **portable variable messaging signs (PVMS)** shall be provided at least 1 week prior to start of development related road widenings and any other road works in the Region right of way to warn the public of potential traffic delays.
12. It is the responsibility of the Owner/Developer or his Consultant to ensure that all emergency services, public transportation routes and school bus services, including York Region Roads Operations Dispatch (trn_roads_operations_dispatch@york.ca), are notified of any partial or full Regional road closures at least 2 weeks prior to start of development.

13. All existing Regional and local Municipal sanitary and storm infrastructure in the Regional Right-of-way is to be video inspected and condition assessed prior to commencement and post construction. Video and pictures of the existing site conditions to be submitted to the Construction Coordinator at the pre-construction meeting.
14. All new sewer infrastructure installed within the Regional Right-of-way require a **post-construction video inspection** submitted to the Region, attention: Development Construction Coordinator prior to any security reductions/releases. This includes any extension to existing infrastructure (e.g., road culverts and sewer extensions).
15. **Construction accesses** onto Regional roads are not permitted unless written approval is granted by the Region, provided the Owner/ Developer apply for approval to the York Region Development Engineering Division. Temporary "truck entrance" signs must be installed on the shoulder of the Regional right-of-way and visible from all approaches. Reference shall be made to the Book 7, Ontario Traffic Manual: Temporary Conditions for details on the use and placement of signs. The Owner shall be responsible for the costs of obtaining, erecting and maintaining these signs until the construction access is decommissioned. **Construction accesses shall be constructed as per York Region Drawing No. DS-217. The mud mat is to be fully paved for the entire width of the Regional boulevard (15.0 m typ.), when the hauling operations exceed 75,000 cu.m. total or 40 truck trips per day, whichever is greater.** Truck route is to be monitored and cleaned by the contractor/consultant/builder/developer as required and non-compliance will result in the work being completed by York Region's forces and/or full closure of the access and revoking of the Road Occupancy Permit at the full expense of the Owner/ Developer per By-Law 2020-04, as amended. After completion of the works, the construction access shall be removed and the road, curbs, ditches and boulevard restored to the satisfaction of the Development Construction Coordinator or designate.

Any existing accesses such as old residential/commercial driveways/farm accesses, etc. to the Regional Road cannot be used as a construction access without expressed approval by the Region.

16. One lane of traffic in each direction on Regional roads **must be kept open** between the hours of 9:30 a.m. and 3:30 p.m. or as otherwise permitted by the ROP permit conditions. This is provided that the proper signage and flag persons are present to protect the workers and direct traffic safely through the work zone as per Occupational Health and Safety Act and Regulations for Construction Projects and Book 7 Ontario Traffic Manual Temporary Conditions. At all other times, all existing lanes of traffic shall be kept open.

Loading and unloading of materials and equipment shall take place off the travelled portion of road wherever possible. Otherwise, loading and unloading of material and equipment shall only take place between the hours of 9:30 a.m. and 3:30 p.m. provided that proper signage and warning signs are present to protect the workers and direct traffic safely. All steel track equipment or other equipment that may cause damage to the road surface is not permitted for unloading off a Regional Road. **Any damages to the existing Regional Road surface due to unloading activities shall be reinstated in its entirety at the Owners cost and at the sole discretion of the Region.**

Truck queuing on Regional Roads is not permitted at any time for the duration of the construction phase of the project.

17. All drainage works require **Erosion and Sediment Controls (ESC)** satisfactory to the approval agencies during construction periods. Prior to and during construction, procedures and controls need to be in place for the minimization of erosion and migration of sediment which might occur during construction. The Owner/ Developer shall ensure routine inspections, as well as after every major storm event, for the ESC control devices to maintain their efficiency as per design and field conditions. **Cleanup/hydrovac of existing infrastructure, including manholes, catchbasins, culverts, etc., may be required after ESC failures.** The Owner/ Developer or their consultants responsible for inspections are to ensure the contractor adheres to best construction practices and the TRCA / LSRCAs' "Erosion & Sediment Control Guideline for Urban Construction" (current version) in all regulated areas. The Region is to be copied on all ESC reports.

18. It is the responsibility of the Owner/ Developer or their Consultant responsible for inspections to ensure that an elevation detail of the existing aerial plant is submitted when overhead cabling is present. **Cables shall not be less than 5.0 m** clearance from the proposed finished grade to the lowest point of the aerial cable as per 3.2.5.6.-Access Route Design, Ontario Building Code Standards.
19. Any **dewatering** discharge activity requires an approved application. Applications are available online by completing the form at www.york.ca/seweruse or contacting 1-877-464-9675 extension 75067 at Public Works Department, Environmental Services.
20. **Tunnel shafts and auger pits** shall be located at the bottom of the ditch line and back slope of the ditch, or beyond the toe of slope in a fill area. All open excavations shall be protected with barricades with proper crash attenuation measures in place within the Regional road allowance. **No torpedo is to be used** under any of the Regional paved road at any time unless written approval is granted.
21. Steel Liners are required to be installed for watermain, sanitary sewer and sanitary forcemain crossing Regional Road within ultimate pavement area and extend a minimum of 1.0 m beyond the ultimate edge of pavement or ultimate back of curb. Steel liners shall have a minimum cover of 2.1 m below centre line of road. Steel Liners are not required when watermain, sanitary sewer or sanitary forcemain crossing of Regional Road is installed via directional drilling.
22. **Trenches** proposed across Regional roads shall be backfilled with unshrinkable fill as per OPSS 1359 material specification for unshrinkable backfill up to road subgrade. Placement shall be a minimum of 1.0 m beyond the existing edge of pavement or back of curb. The trench shall be covered for a minimum of 24 hours with steel plates of sufficient strength to support traffic, prior to restoration of granular and asphalt make up. **The steel plates shall be recessed** into a 300 mm wide by 50 mm deep step joint provided in the existing pavement. If the sewer or watermain within the Regional right-of-way is less than 1.2 m in depth, insulation shall be installed with 50 mm of SM insulation or approved equal, in accordance with OPSD 1109.030 & OPSS MUNI 1605, and self-compacting 19 mm ($\frac{3}{4}$ "") crushed granular material in lieu of unshrinkable fill shall be placed. **The use of High Performance or other rounded granular stone is not permitted.** No traffic is permitted on the granular backfill unless it is protected by approved road plates or asphalt pavement as specified.
23. Where the stability, safety or function of the existing roadway or underground facilities may be impaired due to the contractor's method of operations, the contractor shall provide such protection as may be required. This protection may include **sheathing, shoring and the driving of piles** where necessary, to prevent damage to existing adjacent services or proposed works. Construction for shoring, bracing and protection schemes shall conform to the specifications of OPSS MUNI 404 and OPSS MUNI 539 current version. Additionally, all works shall be carried out in conformity with the Occupational Health and Safety Act and Regulations for Construction Projects. The Consulting Engineer responsible for inspections and/or York Region Development Engineering Division staff **shall notify the Ministry of Labour**, if in their opinion, unsafe conditions exist on site in accordance with Ontario Regulation for Construction Projects and the Owner fails to rectify said unsafe conditions in a timely manner.
24. In urban sections, **all subdrains** shall be 150 mm diameter perforated pipe (OPSS 405) wrapped in nonwoven geotextile (OPSS 1860). In rural sections, subdrains will be required where granular base does not connect with the ditch invert. Ditch inverts shall be at a lower elevation than the granular base to ensure positive drainage. All rural subdrains shall be 150 mm diameter perforated pipe (OPSS 405) wrapped in nonwoven geotextile (OPSS 1860) with rodent gates installed at all outlets spaced at 50.0 m to 70.0 m intervals.
25. **All curb returns** to Regional curb and gutter to be constructed in accordance with the Regional standard curb return drawing number DS-216, OPSS MUNI 353 and OPSS MUNI 1350 current versions for all standard entrances unless otherwise approved. Curb returns in rural sections shall be offset 0.5 m from the edge of travelled portion of the road.
26. When determined by the Region, **catchbasin lids** on existing maintenance holes shall be replaced with a **maintenance hole cover** OPSD 401.01 and the new catchbasin with frame & grate shall be OPSD 400.110.

27. **Granular road base** on Regional Roads shall be installed as per OPSS 314 and MUNI 1010 and shall be a minimum of 450 mm Granular 'B Type 1' and 150 mm Granular 'A' or match existing depths, whichever is greater, or as approved by the Region. All granular material placed under pavement shall be compacted to 100% of the maximum dry density. All other native materials shall be compacted to 95% of the maximum dry density. The results of the compaction tests and analysis shall be monitored by the geotechnical consultant on a **full-time basis**, and reports shall be submitted to the York Region, Development Engineering Division, and attention: Development Construction Coordinator. **Recycled granular material will not be accepted.**

28. **All new asphalt shall be:**

- **Base course** – minimum of 100 mm (2 lifts of 50 mm) Superpave 19.0 PGAC 64-28 Category 'D' Roadway, compacted to between 91.0% to 96.5% of MRD
 - The maximum RAP content allowed in SP 19.0 hot-mix asphalt is 15%.
 - The use of recycled shingle tabs in any mix is not permitted.
 - The use of slag as an aggregate in any mix is not permitted.
 - 4.8% PGAC content
 - 5.0% PGAC content is to be used instead of 4.8% when the base course asphalt will be exposed over one or more winter periods.
- **Top course** – minimum of 50 mm Superpave 12.5 FC-1 PGAC 64-28 Category 'D' Roadway. Compacted to between 92.0% to 97.5% of MRD
 - No RAP to be used in SP 12.5 top course asphalt
 - 5.0% PGAC content
- **Tack coat** required between lifts, on existing asphalt, at step joints and on areas specified by the Geotechnical Engineer and/or Development Construction Coordinator in accordance with OPSS 310
- The Contractor shall use a **material transfer vehicle** that has on-board mixing capabilities, and a minimum storage capacity of 25 tonnes. A material transfer system such as a shuttle buggy (Roadtec SB-2500C Shuttle Buggy ® or approved equivalent) shall be used (note: delete this requirement if scope of work is relatively small i.e., paving small areas)
- **Joint heaters** shall be used in the construction of longitudinal joints to eliminate the occurrence of cold joints
- **Longitudinal and transverse step joints** between the new hot mix asphalt (HMA) pavement and the previously paved pavement shall be constructed by trimming the previously paved pavement edge to a straight, clean, vertical surface of at least 50 mm
- All mixed designs to be submitted to York Region's Development Construction Coordinator **at least 48hrs prior to commencing paving operations**
- A **pre-paving meeting** shall be scheduled by the Owner/ Consultant at the discretion of York Region's Development Construction Coordinator
- The results of the **compaction tests and analysis** shall be submitted to the York Region, Development Engineering Division, Attention: Development Construction Coordinator. The Region requires copies of original asphalt material tickets and summaries to verify material type and quantities
- All asphalt placed shall be in accordance with OPSS 310, MUNI 1101, MUNI 1151 current versions.
- Placing of Hot Mix Asphalt must adhere to OPSS-310.07.06.02 Operational Constraints

29. **Single Unit Residential Driveway** construction makeup:

Min. 300 mm of Granular 'A'

Min. 50 mm HL-3 top asphalt

Multiple Unit Residential/Condominium/Commercial/Industrial Driveway construction makeup:

Min. 450 mm of Granular 'A'

Min. 100 mm HL-8 base asphalt

Min. 50 mm HL-3 HS top asphalt

30. All asphalt tapers and road widening(s) require a **fully paved shoulder** with full depth asphalt for all rural cross-sections. Typical paved shoulder width is 2.5 m, following a granular rounding to the edge of top of slope.

31. All asphalt joints shall include a minimum 500 mm wide by 50 mm depth **step joint** into the existing top course asphalt. Depending on specific site conditions, the width of the step joint may be required to **be increased at the Region's discretion beyond 500 mm** to ensure proper cross-fall from the existing road cross-section and ensure a stable joint into the existing pavement. In any case, the Development Construction Coordinator shall be contacted in advance for an on-site field inspection and consultation prior to any paving. All joints will require rout and seal as per material specification OPSS-1212 and construction specification OPSS-341, DensoBand (OPSS.MUNI 1103) or approved equivalent.
32. All permanent durable pavement markings shall be installed in accordance with Regional Specifications and conform to OPSS 710, OPSS 1712, OPSS 1713, OPSS 1714 & OPSS 1750.
33. All new **curb drops** to follow OPSD 600.040 concrete barrier curb and gutter standard. Concrete **sidewalk ramps** at intersections to be AODA compliant in accordance with standard drawing DS-119, 120 and 121 and/or as shown in the approved electrical drawings.
34. Any existing driveways, curb drops or ramps that are not proposed/approved **shall be removed** and replaced with full curb as per OPSD 600.040 in urbanized areas or replaced with proper ditch sloping in rural areas, with 100 mm topsoil and sod to stabilize the restoration. Existing driveways cannot be used as construction accesses without approval from the Region as this is a change of the driveway's use.
35. No landscaping, hoarding, fencing, signs, steps, stairs, canopy, sprinkler systems, temporary accesses or any other **encroaching structures are to be permitted** within the Regional road allowance without written approval or encroachment permit from York Region Development Engineering Division.
36. All **grassed areas** disturbed during construction on the Regional Road right-of-way shall be restored with 100 to 200 mm of topsoil and sod placed (staked on slopes and ditches) to the bottom of the granular 'A' shoulder rounding or as required by the Development Construction Coordinator, in accordance with OPSS 803 current version. **All revegetated areas to be maintained periodically or as required (grass watering, grass cutting and boulevard maintenance) by the applicant until final release of securities and assumption by the Region.**
37. Final **restoration works** are to be completed within 6 months of asphalt placement and non-compliance may result in work completed by York Region forces at the expense of the owner with the project application securities used or withheld to ensure payment and final work.
38. Approved drawings, including engineering, underground, landscaping, electrical and detailed traffic management plans **must be adhered to at all times** unless otherwise directed by the Development Construction Coordinator. All works on Regional right-of-way shall be carried out as per the approved drawings and Regional standards/guidelines, OPSS & OPSD drawings & regulatory specifications, policies and/or as required by the Region's Development Construction Coordinator or designate.
39. **New intersections and/or new legs of an existing intersection are not to be opened to any use** until all traffic control measures are installed, including all illumination, signalization, pavement markings, and signage. For new signalized intersections, a signal inspection shall be scheduled by York Region Electrical prior to energization. Final approval for opening shall be determined by York Region Electrical Construction Coordinators and Traffic Operations Technologists. New intersections are to be barricaded to prevent access until specific permission has been given by the Region.
40. **Regulatory and hazard warnings signs** as per OTM Book 5 and Book 6 shall be shown on the approved drawings and/or as required on site by the Development Construction Coordinator and/or the Electrical Construction Coordinator. All permanent signage in the Region's right-of-way shall be installed on minimum **100 mm x 100 mm pressure treated wooden posts** and as per OTM/York Region standards.
41. The approach ends of a **raised median** on the Regional road shall have the typical "Keep Right" sign and object marker as per the Region specification E-7.01, installed immediately after the median construction. Right in/right

out access controlled by a raised median requires a “one way” regulatory control sign as per Book 5, which must be installed prior to the opening of the access.

42. Approved **emergency accesses** to Regional roads are to be in place prior to any building permits being issued for the subdivision. **All gates, bollards etc. shall be located on private property/local municipal lands.** Temporary construction accesses shall be closed off permanently on the Regional road prior to the first residential occupancy or if the Owner/ Developer can demonstrate to the Region that there is no residential use. Temporary sales access use shall be for sales access only and be relocated to the new adjacent road (if applicable) once constructed and open to public traffic.
43. It is the responsibility of the Owner/Developer to **protect all existing survey monumentation** on or adjacent to the site that may be destroyed/ disturbed during construction. Should these monuments be damaged in any way, the owner shall have the survey monuments replaced by an Ontario Land Surveyor prior to the reduction or release of any security.
44. All **landscape features** including retaining walls, steps/stairs, footings and columns, fencing, sprinkler systems, etc. to be located on the Private Property and/or behind 0.3 m reserve, will require an Ontario Land Surveyor's Certificate in confirmation, **along with a copy of the survey/drawing/sketch** submitted prior to reduction or release of any security. OLS must certify that all 0.3 m reserves through accesses (ie: new intersections or driveways) have been lifted prior to public use.
45. **Interlocking concrete paving stones** must be supported on 125 mm concrete base (including wire mesh and spacing of drainage holes) as per York Region standard SS-100.
46. The Owner/ Developer or their Consulting Engineer responsible for inspections shall advise the Contractor that the integrity of the above and below ground Regional road facilities shall be properly located and maintained. Any above/below ground infrastructure damaged during construction is to be reported to the appropriate Regional Development Construction Coordinator, and the repair may require the work to be completed by the Region at the Owner's expense.
47. All **construction correspondence** is to be directed to the York Region Construction Coordinator, Development Engineering Division, and must specify the appropriate **Regional approval and file numbers.**
48. Prior to any **security release or reduction** of the development security deposit, all applicable requirements listed in the “York Region Security Release and Reduction List of Requirements” (current version) shall be submitted to the attention of the appropriate Development Construction Coordinator for Regional clearance. A final inspection must be conducted by the Region and Owner's/Developer's consultant prior to any security reduction or release.
49. The Owner/Developer agrees to **indemnify** the Region, and its employees, elected officials, contractors and agents against any and all actions, causes of action, suites, claims and demands whatsoever which may arise either directly or indirectly by reason of undertaking any of the Owner/ Developer's work with respect to the development approvals and construction.
50. The Owner/ Developer must retain a Consulting Engineer or Consultant to ensure compliance of all work within the Region's right-of-way. The Region **at any time may request a copy of the daily construction reports or other timing/scheduling as required** at the sole discretion of the Region.
51. It is a condition of Regional Approval that the Owner/ Developer or their Consultant (responsible for inspections and compliance) **is liable with respect to all work done on Regional property.** This liability shall extend to such time as the works have been granted final compliance, including all invoices paid, land conveyances and listed Region requirements are completed to the Region's satisfaction prior to reduction or release of any security.