



## **STANDARDS FOR SURVEY**



## Section 1 – Township of Wilmot Right-of-Way Property Line to Property Line

City of Kitchener standard survey codes shall be used. Please note, digital engineering drawings shall correspond with City of Kitchener CAD Standard Manual.

- Curbs to be delineated by showing back of curb location and edge of pavement location @ 15 metre intervals.
- Detail pickup to front of all buildings; however, include approximately 3.0 metres Minimum behind front of property line if no buildings are present (i.e., agricultural fields)
- Edge of pavement to be picked up independently in absence of curb/gutter.
- Shoulder (if any) to be picked up
- Ditch (if any) to be picked up
- Road material changes (if any) to be illustrated (i.e. pavement to gravel)
- Centreline elevations to be picked up at approx. 15.0 metre intervals starting approximately at STA. = 1+000.
- Back of curb and shots to be taken at approx. parallel positions to centreline shot locations. Stationing to progress up-chainage south to north and east to west.
- All driveway ramps to be shown (old style “concrete & curb”, and new style “drop curb and asphalt”)
- Include cross-sections of all driveways and/or property entrances.
- Bus stop pads, etc. (note material)
- All vegetation other than ground cover (note hedge & bush size)
- All trees and stumps (Township and private) that shows the centre of trunk and includes a measurement of the tree’s diameter at 1.3 m above ground level.
- All signposts, guardrails, handrails, footbridges, bollards, barricades, parking meters, fences, etc.
- Retaining walls, etc. (note: material type and width)
- Footsteps, footbridges
- Utility poles, light poles, signal light poles, etc.
- Any bridge structures crossing overhead are to show columns & abutments
- If road is passing on a bridge, show expansion joints, edge of bridge and side barriers
- All permanent or semi-permanent garbage receptacles, planters, bench seats, etc.
- Monuments, statues, plaques, etc.
- Survey bars, benchmark plates, cut crosses, etc.
- Significant berms or swales
- Boulders & cobbles & rip-rap, and other erosion control devices
- Creeks and Ponds (will mainly be on public lands but applies to creeks on private property also)
  - o edge of water
  - o berms
  - o retaining walls
  - o rip-rap and other gabions

- concrete lined channels
- dams
- current velocity reducer dams
- fish ladders
- headwalls, pipe outlets
- pipe inlets
- intentionally placed cobbles
- boulders
- note obvious wildlife habitats e.g. swan's nest
- any other erosion – control equipment
- Bush lines of forests (edge of bush or edge of canopy) (both when requested)
- ALL - sidewalks (note material if other than concrete)
  - access roads (note if other than asphalt)
  - parking areas (note if other than asphalt, show curbs if any) label as such
  - aprons (note material) label as such
  - graveled or stone dust areas
- Any permanent or semi-permanent structures e.g. bus stop shelters, playground equipment, pumphouses, etc. note description
- Railroad tracks, track bed (if any), and signals with gate (if any)

## **Section 2 – Required Level of Detail Pick-up to Front of Building/House**

### **2.1 Private Property**

- All structures permanent and semi-permanent. Note municipal address number and description if other than single family residence (building name, company name, apartments, garage, shed, etc.) if plaza or mall – note mall's name)
- All vegetation other than ground cover (note hedge and bush size)
- All sidewalks (note if other than concrete)
- All driveways (note if other than asphalt)
- Parking areas (note if other than asphalt) show curbs if existing – label as such
- Aprons (note material) label as such
- Graveled or stone dust areas
- Signs
- Gates or other restricted admission devices
- Fences, handrails, guardrails, bollards, barricades, footbridges, porches, etc.
- All steps
- Retaining walls (note: material type and width)
- Any poles of any kind (poles that are permanent or semi-permanent)
- Any permanent or semi-permanent garbage receptacles, planters, bench seats, etc.
- Electrical outlets
- Monuments, statues, fountains, plaques, etc.

- Significant berms or swales, ditches etc.
- Boulders
- Gas pumps and islands, etc.
- Bush line of forests
- Pressurized storage vessels
- Hazardous material storage vessels
- Rip-rap and other erosion control devices
- Private in-ground lawn sprinkler equipment

## **2.2 Downtown Area**

- All structures, permanent and semi-permanent. Note municipal address number and description if other than single family residence (building name, company name, apartments, garage, shed, etc. if plaza or mall – note mall’s name)
- Major vegetation (big trees)
- Sidewalks (up to building)
- All driveway – up to building
- Parking areas
- Fences

## **Section 3 – Utilities Based in Ground**

Everywhere within survey limits (unless noted)

- All catchbasins and drains
- All manholes – note if other than sewer
- All telecommunications and hydro structures above ground
- All telecommunications and hydro structures below ground. Show structure perimeter and access hatches and cooling grates
- All sewer catchbasin and manholes inverts
- If CCTV is required contact: The Township Engineering for assistance with obtaining information.
- If catchbasins or manholes are blocked due to water or debris, note as such, and contact The Township Engineering to coordinate Operation’s Staff assistance as required.
- All water/gas valves (including all water service curb stops) provide “dip” measurement to top nut of valve or extension.
- All culverts (on Township property)
- All drainage inlets/outlets, headwalls, etc.
- On cross streets or side easements with sewers that feed in to sewer system being surveyed – show location and inverts of the next manhole or catchbasin beyond drawing limits.( same for water valve info if possible)
- If manhole or catchbasin is larger than normal size – document dimensions in field book.
- Gasmain and watermain vent devices

- Hydrants
- Utility meters on Township property
- Handwells (note: size, use, including gas meters at side and front of structures)