



YORK REGION SEWAGE WORKS PROJECT REPORT

MARCH 15, 2024



We acknowledge that York Region is located on the traditional territory of many Indigenous Peoples, including the Anishinaabeg, Haudenosaunee, Huron-Wendat and Métis peoples and the treaty territories of the Haudenosaunee, Mississaugas of the Credit First Nation and Williams Treaties First Nations. Today, this area is home to many diverse Indigenous Peoples, and we recognize their history, spirituality, culture and stewardship of this land. We also acknowledge the Chippewas of Georgina Island First Nation as our closest First Nation community.

The Region of Durham exists on lands that the Michi Saagiig Anishinaabeg inhabited for thousands of years prior to European colonization. These lands are the traditional and treaty territories of the Nations covered under the Williams Treaties, including the Mississaugas of Scugog Island First Nation, Alderville First Nation, Hiawatha First Nation, Curve Lake First Nation and the Chippewa Nations of Georgina Island, Beausoleil and Rama. We honour, recognize and respect Indigenous Peoples as rights holders and stewards of the lands and waters on which we have the privilege to live.

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| Acronym | Definition |
|---------|---|
| °C | degree(s) Celsius |
| AACE | Association for the Advancement of Cost Estimates |
| AADT | Annual Average Daily Traffic |
| AAQC | Ambient Air Quality Criteria |
| ADF | Average Day Flow |
| ANSI | Area of Natural and Scientific Interest |
| APU | Assessment of Past Uses |
| APEC | Area of potential environmental concern |
| ARA | Aquatic Resource Area |
| AST | Aboveground storage tank |
| BHR | Built heritage resource |
| BLO | Open Bluff Community |
| BTEX | Benzene, Toluene, Ethylbenzene and Xylenes |
| CAAQS | Canadian Ambient Air Quality Standards |
| CAC | Criteria Air Contaminant |
| CHER | Cultural Heritage Evaluation Report |
| CHL | Cultural heritage landscape |
| CHVI | Cultural heritage value or interest |
| CIAR | Construction Impact Assessment Report |
| CIPP | Cured-In-Place Pipe |
| CNR | Canadian National Railway |
| cm/s | Centimetres per second |
| COC | Contaminant of concern |
| COPC | Contaminant of potential concern |
| CPP | Concrete pressure pipe |
| CUM | Mineral Cultural Meadow Ecosite |
| CUT1 | Mineral Cultural Thicket Ecosite |
| DFO | Fisheries and Oceans Canada |
| DWF | Dry-weather flow |
| EAA | <i>Environmental Assessment Act</i> |
| EASR | Environmental Activity and Sector Registry |
| EC | Electrical conductivity |
| e.g. | Exempli gratia (for example) |
| ELC | Ecological Land Classification |
| ECA | Environmental Compliance Approval |
| ECCC | Environment and Climate Change Canada |
| EPBTBM | Earth pressure balance tunnel boring machine |
| ERIS | Environmental Risk Information Services |
| ESA | Environmental Site Assessment |

| Acronym | Definition |
|-----------------|---|
| FOD4 | Dry-fresh deciduous forest ecosite |
| FOD4-2 | Dry-fresh white ash deciduous forest type |
| FOM4 | Fresh white cedar mixed forest ecosite |
| FTA | United states federal transit administration |
| GBR | Geological baseline report |
| GIS | Geographic information system |
| ha | Hectare |
| HDPE | High-density polyethylene |
| HIA | Heritage Impact Assessment |
| HDD | Horizontal directional drilling |
| HREB | Holland river east branch |
| HVA | Highly vulnerable aquifers |
| i.d. | Inner diameter |
| ID | Identification |
| I&I | Inflow and infiltration |
| IAA | Impact assessment act |
| IPS | Influent pumping stations |
| km | Kilometre(s) |
| km ² | Square kilometre(s) |
| km/h | Kilometre(s) per hour |
| L | Litre(s) |
| L/s | Litre(s) per second |
| LAM | Local area municipality |
| LSRCA | Lake Simcoe Region Conservation Authority |
| LSW | Locally significant wetland |
| m | Metre(s) |
| m/s | Metre(s) per second |
| m ² | Square metre(s) |
| mags | Metre(s) above ground surface |
| mamsl | Metre(s) above mean sea level |
| masl | Metre(s) above sea level |
| mbgs | Metres (s) below ground surface |
| MCM | Ministry of Citizenship and Multiculturalism |
| MECP | Ministry of the Environment, Conservation and Parks |
| MH | Maintenance hole |
| Minister | Minister of the Ontario Ministry of The Environment, Conservation and Parks |
| MNRF | Ministry of Natural Resources and Forestry |
| MTBM | Microtunnel boring machine |

| Acronym | Definition |
|----------------------|--|
| MTO | Ministry of Transportation |
| MTR | Material testing report |
| MUP | Multi-use path |
| NFPA | National fire protection association |
| NHIC | Natural Heritage Information Centre |
| O. Reg. | Ontario regulation |
| OCP | Organochlorine pesticides |
| OGS | Ontario geological survey |
| OHA | Ontario heritage act |
| OHSA | Occupational Health and Safety Act |
| OPSS | Ontario Provincial Standards Specification |
| ORAC | Oak Ridges Aquifer Complex |
| ORM | Oak Ridges Moraine |
| ORMC | Oak Ridges Moraine Conservation |
| ORMCP | Oak Ridges Moraine Conservation Plan |
| ORP | Other regulated parameters |
| o.d. | Outer diameter |
| OWRA | <i>Ontario Water Resources Act</i> |
| PAC | Programmable automation controller |
| PAH | Polycyclic aromatic hydrocarbon |
| PCA | Potentially contaminating activity |
| PCB | Polychlorinated biphenyl |
| PCTL | Precast concrete tunnel lining |
| PHC | Petroleum hydrocarbons |
| Phase One Property | Markham Collector Sanitary Sewer (Y2) |
| Phase One Study Area | Lands within 250 m of the phase one property |
| PIF | Peak instantaneous flow |
| PPS, 2020 | Provincial policy statement |
| PPV | Peak particle velocity |
| PS | Pump station |
| PSW | Provincially significant wetland |
| PTTW | Permit to take water |
| RRCA | Rogers Reservoir Conservation Area |
| RSA | <i>Railway safety act</i> |
| RSC | Record of site condition |
| RMS | Root mean square |
| ROW | Right-of-way |
| SAM1-2 | Duckweed mixed shallow aquatic type |
| SAR | Species at risk |

| Acronym | Definition |
|---------|---|
| SARA | Species At Risk Act |
| SPBTBM | Slurry pressure balance tunnel boring machine |
| SEC | Southeast collector |
| SOE | Support of excavation |
| SPS | Sewage pumping station |
| SWH | Significant wildlife habitat |
| SWM | Stormwater management |
| TBM | Tunnel boring machine |
| TDH | Total dynamic head |
| TRCA | Toronto and Region Conservation Authority |
| TSS | Total suspended solids |
| TSSA | Technical Standards and Safety Authority |
| VOC | Volatile organic compound |
| WHPA | Wellhead Protection Area |
| WPCP | Water Pollution Control Plant |
| WRC | Water Reclamation Centre |
| WWF | Wet-weather flow |
| YDSS | York Durham Sewage System |
| YRT | York Region Transit |
| ZOI | Zone of influence |