

The following checklist has been compiled to assist the applicant in preparing their application for approval under the Conservation Authorities Act and Ontario Regulation 41/24. This checklist is valid for a period of six months following issuance. The level of detail required in the application will depend on the proposed works, as well as the natural hazards and environmental conditions on site. We recommend that applicants contact Conservation Halton staff prior to submitting the application to determine what level of detail is deemed appropriate.

This checklist **<u>must be returned</u>** with the Permit application indicating in the appropriate spaces that all required information has been provided.

GENERAL DEVELOPMENT APPLICATIONS

PROJECT TITLE:	DATE:
LOCATION:	

			Provided
General Submission Requirements			
Application Form	Completed and signed application form. At a minimum, the landowner must sign the form. If an agent is representing the landowner, the agent must also sign the form.		
Application Fee	Non-refundable administrative fee as per category on the fee schedule attached to permit application.		
Electronically Submitted	All materials submitted electronically either through email or digital transfer.		
Project Description	Description of, and rationale for, the proposed works including discussion of other alternatives considered. If a replacement structure is proposed, details regarding the current conditions of the existing structure are requested.		
Photographs	Photographs of the watercourse, valley slope, adjacent vegetation and/or representative vegetation communities (if applicable) during ice-free conditions.		
Drawings	Digital drawings and () hard copy sets of all drawings, folded to 8½" x 11", in standard metric scale. See 'Drawing Requirements' section.		
Reports	Digital reports and () hard copy of reports listed under 'Technical Study Requirements'.		

		Applicable	Provided
Qualified Persons	Where a drawing or report is required to be prepared by a P.Geo., P.Eng., OALA, or OLS, it must be stamped, dated and signed.		
	Drawing Requirements		
Digital Copies	Technical drawings and plans provided in pdf format unless requested otherwise (i.e. the most recent version of AutoCAD). GIS data and mapping should be submitted in an acceptable ESRI format and be properly georeferenced to real world coordinates (i.e., NAD83, UTM, Zone 17). It is highly desirable that mapping related data be submitted in ArcGIS Geodatabase format, containing all spatial, attribute, metadata and spatial joins/data rules. ESRI shape file format is an acceptable alternative.		
Topographic Survey	A detailed topographical survey. An OLS must complete the survey. The survey must note the benchmark and vertical datum utilized and must include a number of spot elevations that would allow the survey to be compared to the topographic information provided on Conservation Halton's mapping. Staff require the following information to be on the survey: Feature * Associated Allowances/Setbacks Watercourse(s) Flood plain(s) Regulatory storm flood plain elevation is Conservation Halton staked top of bank 7.5m 15m Otherm Stable top of bank 7.5m 15m Otherm Meander Belt 7.5m 15m Otherm Meander Belt 7.5m 15m Otherm Meander Belt 15m 15m 30m		
Building Openings	Geodetically referenced elevations provided by a professional Engineer for all building openings at or below grade.		

		Applicable	Provided
Plan View(s)/Site Plan	 Plan view(s) showing existing conditions and proposed development conditions including: Detailed grading (clearly illustrate how the proposed works will blend in with the undisturbed areas) Limit of work/disturbance Watercourse (bankfull width) Location of boreholes Location of regulated features, regulation limits and applicable setbacks, specifically: 		
Aerial Photograph(s)	Plan view of the proposed works and limits of disturbance (or other, specifically), superimposed over top of a recent aerial photograph of the site. Please specify date of imagery.		
Cross-sectional and Profile Views	Existing and proposed cross-sectional and/or profile views of the intended works. Drawings should be representative of the existing and proposed grades as shown on the plan view drawings. Specifically, Conservation Halton requires the following be represented through appropriate cross sections/profile views:		
Architectural Drawings	 Existing and proposed floor plans and elevation drawings. Please include: Existing and proposed sizing calculations of the proposed structure(s) Finished floor elevation(s) 		
Floodproofing Details	Proposed floodproofing details. For Guidance, please refer to Appendix 6: Floodproofing of the of Natural Resources & Forestry (MNRF) Technical Guide – River and Stream Systems: Flood Proofing Hazard Limit.		
Structural Drawings	 Proposed structural drawings stamped, dated and signed by the qualified P.Eng. Where structures are proposed within the floodplain, the drawings must be accompanied by a letter from the structural engineer stating that the structure will be able to withstand the depths, velocities, hydrostatic and hydrodynamic pressures associated with the Regulatory design storm event. Where structures are proposed within the erosion hazard, the drawings must be accompanied by a letter from the geotechnical engineer stating that the structures design and location is in accordance with the geotechnical slope stability assessment that has been reviewed and accepted by Conservation Halton. 		

		Applicable	Provided
Existing Vegetation	A vegetation inventory (including scientific names) and Tree Preservation Plan. Tree protection fencing location and details must be illustrated on the drawings. Recommend that Conservation Halton's <i>Guidelines for Landscaping and Rehabilitation Plans (2024)</i> be followed available at <u>www.conservationhalton.ca</u> .		
Proposed Vegetation	Details on restoration, including a locally native, non-invasive seed mix for disturbed areas as well as compensatory trees and/or shrubs must be indicated on the drawings (including scientific names). Follow Conservation Halton's <i>Guidelines on Landscaping and Restoration</i> (2024) Plans, available at www.conservationhalton.ca. unless as directed below:		
Erosion and Sediment Control Plans	Details regarding sediment and erosion control measures, staging/stockpiling, phasing, site dewatering, equipment, materials, access to and from work area, monitoring, site supervision, etc. See <i>Erosion & Sediment Guidelines for Urban Construction</i> prepared by the Greater Golden Horseshoe Area Conservation Authorities (www.sustainabletechnologies.ca) for additional guidance.		
	Above plan is to be prepared by a qualified professional (i.e. CISEC, CPESC or an approved equivalent).		
	Technical Study Requirements		
Studies pertaining to flooding and erosion hazards must be completed in accordance with the Ministry of Natural Resources & Forestry (MNRF) Technical Guidelines (MNR, 2002) and current CH Guidelines.			
Hydraulic Analysis	A hydraulic analysis by a qualified P.Eng to verify that the proposed works will not increase flooding risks to life or property. The analysis must verify that there will be no increased flood levels on adjacent properties and no increased on-site flood risks. The assessment must be completed for the full range of rainfall events (typically 2, 5, 10, 25, 50, 100 year and Regional Storm). A hard copy and digital copy of all models must be provided and must be accompanied by a summary table of pre and post development flood elevations. The source of the hydraulic model must be specified. A plan view drawing showing the existing and proposed flooding hazard limit as well as the location of hydraulic cross-sections overlain on an existing topographic mapping and/or grading plan (if grading changes are proposed) must be provided, with vertical datum specified.		
Meander Belt or Stream Erosion Assessment	A meander belt or stream erosion assessment by a qualified P.Geo. or P.Eng.to establish the limits of the erosion hazard associated with the watercourse. Multiple methodologies should be utilized for comparison to determine the most appropriate setback.		

		Applicable	Provided
Geotechnical Assessment (Slope Stability)	A geotechnical slope assessment by a qualified P.Eng. The scope of the study must be determined through the completion of the Slope Stability Rating Chart (Table 4.2, MNRF, Understanding Natural Hazards and Technical Guide for River and Stream Systems: Erosion Hazard Limit). Where the location of stable top of bank is required, staff will require plan and cross-sectional views that illustrate, at a minimum, the site's topographical information, location of watercourse, toe of slope, staked top of bank, recommended toe erosion allowance, recommended stable slope allowance and analyzed long term stable top of bank For structures on the valley wall geotechnical analysis and resulting factor of safety for bearing capacity, overturning and sliding, must be provided. Structural details, including foundation, depth of embedment, buttressing, tie-backs, drainage etc. must be discussed and accompanied by cross-sectional and profile drawings.		
Geotechnical Assessment (Soil Investigation)	A geotechnical assessment by a qualified P.Eng for the purposes of mitigation of geotechnical risks at the site by providing recommendation for items such as foundations, excavation limits, design parameters and construction. Indication of groundwater levels and potential for construction dewatering is required to determine if additional hydrogeological study is warranted.		
Hydrogeological Assessment	A hydrogeological assessment by a qualified P.Eng or P.Geo. to study the potential impacts to surface/groundwater interactions The assessment must provide adaptive management, mitigation and monitoring strategies with considerations for discharge (i.e. quantity of water), construction phasing, etc.		
Hydrologic Evaluation	Assessment of the impact of hydrologic changes to wetlands using a multi-disciplinary approach by Qualified Person(s).		
On-Title Agreement	As a result of the works proposed, you will be required you to enter into an on-title agreement with Conservation Halton stating that you acknowledge you are aware that the structures are susceptible to flooding and/or erosion, that you will notify future landowners and tenants of this fact, The on-title agreement will be prepared upon review of submitted drawings.		

Other Requirements		
Fisheries Act	If works are proposed in/near water, the Alteration, Disruption or Destruction (H/ Please refer to the Fisheries and Ocear Questions can be directed to DFO by pl <u>FisheriesProtection@dfo-mpo.gc.ca</u> .	e proponent is responsible for avoiding Harmful, ADD) to fish and fish habitat under the <i>Fisheries Act</i> . ns Canada (DFO) website for additional information. hone 1 855 852-8320 or email
Endangered Species	The Ministry of Environment, Conservation and Parks (MECP) may have concerns with respect to species listed on the Species at Risk in Ontario list as it pertains to the Endangered Species Act (ESA) Please contact MECP and DFO directly to determine if there is potential for Species at Risk on, or adjacent, to your project site. The MECP will determine if detailed project information will be required to begin the ESA approval process: SAROntario@ontario.ca	
Timing Windows	Timing Windows Please be advised that regulatory agencies such as the MECP and DFO (mentioned above), as well as other agencies such as the MNRF (<u>scp.aurora@ontario.ca</u> or <u>scp.guelph@ontario.ca</u>) may have seasonal timing restrictions which dictate when in-water work can occur. Please be sure to contact regulatory agencies as appropriate.	
Prepared by:		Signature:

Additional Design Considerations

• The time of year that work is proposed may impact permit requirements for in-water works. Seasonal Design Considerations (SDCs) associated with works to occur during times of higher expected flow (e.g. freshet) may include enhanced ESC measures or increased monitoring and mitigation measures. Changes in work schedules may require a revised permit to address SDCs