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CGS CULVERT PERMITS & CONTRACTOR SUBMISSION REQUIREMENTS

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PRESENTATION OVERVIEW

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- Regulated Features and Tests
- Definition of "Development" under CA Act
- CGS Draft Permit Process
- Outstanding Submission Requirements from Contractor
 - 1. ESC Plan
 - 2. Flow Management Plan
 - 3. Other Development Activities
 - 4. Laydown and Stockpile Areas

REGULATED FEATURES AND TESTS

Conservation Authorities Act

Ontario Regulation 156/06 (current), Ontario Regulation 41/24 (effective April 1, 2024)

Regulated Features

- 1. Areas adjacent to lakes
- 2. River or stream valleys
- 3. Wetlands
- 4. Hazardous Lands (unstable soils)

AREA OF CULVERT PROJECT

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REGULATED FEATURES AND TESTS

Conservation Authorities Act

Ontario Regulation 156/06 (prior April 1, 2024) Ontario Regulation 41/24 (effective April 1, 2024)

Tests

- 1. Flooding
- 2. Erosion
- 3. Health and Safety of Persons
- 4. Damage or Destruction of Property
- 5. Unstable Soil or Bedrock





Riverbank erosion threatening a public works yard (Source: TRCA, 2014).

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"DEVELOPMENT" AS PER CAACT

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"Development Activity" means,

(a) the construction, reconstruction, erection or placing of a building or structure of any kind,

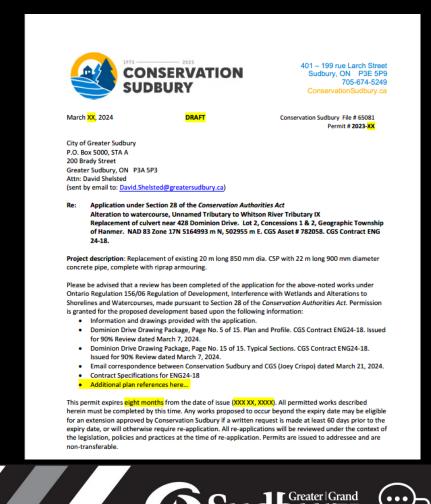
(b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,

(c) site grading, or

(d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

CGS DRAFT PERMIT PROCESS

- Review proposed design including pipe sizing, invert elevations, bank restoration, etc.
- Issue DRAFT permit based on the Design
- Additional information on construction specifics required from contractor prior to issuance of final permit
 - 1. ESC plan
 - 2. Flow management plan
 - 3. Other development activities
 - 4. Laydown areas



CONTRACTOR SUBMISSION REQUIREMENTS 1: ESC Plan

1. Sediment control plans for all stages of the project. Control measures must be overlaid on the construction drawings and must include a text explanation.

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Plans are to include (at a minimum):

- Layout of proposed measures (site specific),
- Reference to installation standards,
- Timing of implementation, maintenance, and removal, and
- Commitment for monitoring and adaptive management.

1: ESC Plan

Resource:

TRCA Erosion and Sediment Control Guide for Urban Construction <u>https://sustainabletechnologies.ca/app/uploads/2020/01/ESC-</u> Cuide for Urban Construction EUMAL adf

Guide-for-Urban-Construction FINAL.pdf

Appendix B1: Erosion Control Practices

Practices
Minimized or phased land clearing
Vegetated filter strips
Slope drains
Interceptor swales
Surface roughening
Mulching
Seeding
Outlet protection
Rolled erosion control products
Chemical stabilization



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Figure B1-6: Track walking applied to bare soil

1: ESC Plan

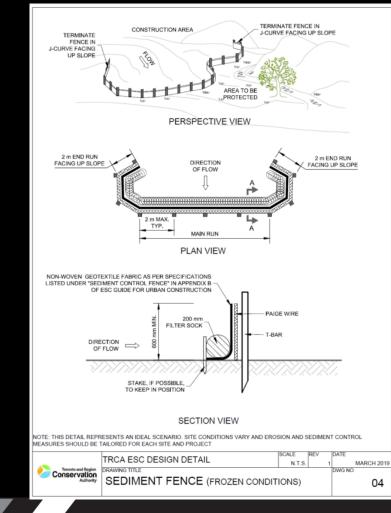
Resource:

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Guide-for-Urban-Construction FINAL.pdf

Appendix B2: Sediment Control Practices





CONTRACTOR SUBMISSION REQUIREMENTS 2: Flow Management Plan

2. Flow management plan, including coffer dam and dewatering details. Plans must be overlaid on the construction drawings and must include a text explanation.

How are you going to manage water reporting to the work site from upstream? (Temporary by-pass)

How are you going to manage water from within the work site? (Dewatering)



2: Flow Management Plan

Temporary By-Pass

Factors to consider in selection of by-pass plan:

- Size of watershed / watercourse
- Intermittent or permanent flow?
- Sensitivity of the downstream receiver?
- Duration of the work (2 days / 2 weeks / 2 months)?
- Potential upstream area of impact?

How flow will be diverted around the site without impacting upstream or downstream flooding or erosion?

Plans must generally include:

Flow rate, height of coffer dams, coffer dam layout and construction details, contingency plan for unanticipated storm event

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2: Flow Management Plan

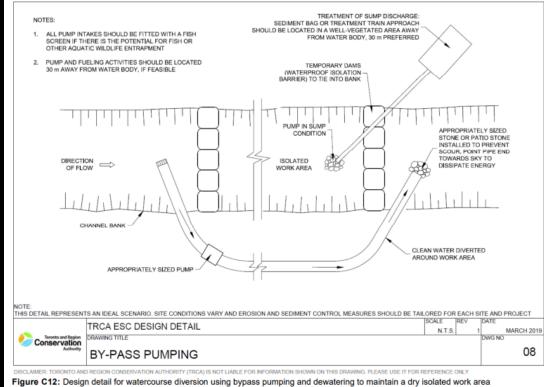
Resource:

TRCA Erosion and Sediment Control Guide for Urban Construction https://sustainabletechnologies.ca/app/uploads/2020/01/ESC-Guide-for-Urban-Construction_FINAL.pdf

APPENDIX C: BEST MANAGEMENT PRACTICES FOR IN AND NEAR WATER WORKS

Temporary By-Pass & Dewatering

- Both elements need to consider ESC and Energy Attenuation
- Keep clean water clean





3: Other Development Activities

3. Information on any development activities within the Regulated Area that are not included in the tender package. Development includes the temporary or permanent placement of structures or materials as well as site grading.

- Widening of road platform
- Grading of channel banks to facilitate equipment access
- Construction of working pad





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CONTRACTOR SUBMISSION REQUIREMENTS 4: Laydown and Material Stockpile Areas

4. Location of laydown areas and temporary material stockpiles, if applicable, and associated sediment control measures (as required).

• Ideally placed outside of flood hazard, outside of wetland & away from top of bank.



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QUESTIONS AND FOLLOW UP

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Conservation Sudbury

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