



# EROSION AND SEDIMENT CONTROL PLAN APPLICATION 2023

Water Quality Services – Monitoring & Compliance

ISC: Unrestricted

## GENERAL PROJECT INFORMATION

This ESC Plan Application is for the purpose of submitting the information required in Schedule A of the *Code of Practice for Erosion and Sediment Control* when a construction activity requires the submission of an ESC Plan under Section 2(1). Submit the ESC Plan to ESC@calgary.ca with *ESC Plan (File number and name)* in the subject line.

### 1.0 Project Information

- 1.1. Project Name
- 1.2. Estimated Start-up Date
- 1.3. Legal Land Location
- 1.4. Address
- 1.5. Community
- 1.6. Overall Site Size (ha)
- 1.7. Stormwater movement
  - Storm Pond
  - Receiving Water Body
  - Outfall

In the event of a release from the site, use the information above to locate where mitigation is required. Ensure sediment releases are properly reported. Specification # 100.2

- 1.8. Consultant File #  
(optional)

### 2.0 Application Type (select one)

For a Stripping and Grading applications only submit the ESC Plan for review when the required land use authorization is known, if the plan is associated with a DP the ESC PTR is present on the DP, and a drawing, confirming the construction boundary was submitted as part of the land use authorization.

- 2.1 Stripping and Grading
  - Development Permit #
  - Development Agreement #
  - Subdivision #
- 2.2 Industrial, Commercial, Institutional, Multifamily
  - Development Permit #
  - Parent Stripping and Grading # DP or DA
- 2.3 Subdivision Development including Offsites and Bareland Condos
  - Construction Drawing #
  - Development Agreement #
  - Parent Stripping and Grading # DP or DA
  - Subdivision #
- 2.4 City of Calgary Projects
  - Development Permit or Liaison #
  - Construction Drawing #
  - City of Calgary ESC Project Number #

### 3.0 Contact Information

	Company Name	Contact Name	Office Phone#	Cell Phone#	Email
3.1	Owner's Rep.				
3.2	Parcel Owner				
3.3	ESC Consultant				
3.4	Site ESC Inspector				
3.5	Site Contact				

## CONSTRUCTION SITE INFORMATION

### 4.0 Unit Product Supply List Either populate below or add a screenshot of the supply list document e.g. Excel spreadsheet. If using Adobe and form fields are above photo, Print to PDF upon application completion to resolve.

**Required ESC Products**

**Quantity (e.g. meters, kg)**

**Earth Moving Controls**

**Units (e.g. volume, lengths, area)**

### 5.0 Construction Drawings and Documents Relevant to Project Implementation

All checked drawings/documents that apply to this project. This section will align with Section 12.0 in the design part of the application.

ESC1

ESC3

ESC5

ESC7

Large Site Safety Plan

ESC2

ESC4

ESC6

ESC8

ESC9 Landscape Plan

ESC10 Phasing Plan and/or Limited Exposure Plan

## 6.0 Erosion and Sediment Controls

Below are the Specifications for the most popular erosion and sediment controls and support practices used in The City of Calgary. Fill out the table for all the products used on the project. These specifications are by no means all-inclusive and we encourage the continued exploration of new management practices for use in our Calgary climate. If you do not see the control you wish to use, populate the blank [Non-Standard Specification](#) sheet.

Some Controls and Practices can be replaced with alternates which can be found in The City of Calgary's [Approved Products List – Erosion and Sediment](#) (APLES). For each control and practices, see the alternates opportunities (APLES Alternates). Some opportunities do not require assistance from the Qualified Designer while others will require input to ensure design variables are incorporated.

### 200.1 Erosion Controls

#### Seeding Specification #200.1.1

C-value	Type and Application Rate	Drawing(s) When Used	Description Where Used	Additional Information
1.0	Check if seed mix is a Calgary Parks Approved Seed Mix			
APLES Alternates				
None				

#### Sodding Specification #200.1.2

C-value	Type	Drawing(s) When Used	Description Where Used	Additional Information
0.01				
APLES Alternates				
None				

#### Existing Cover Specification #200.1.2.a

C-value	Type	Drawing(s) When Used	Description Where Used	Additional Information
	Attach top down photos to show % ground cover and vegetation type			
APLES Alternates				
None				

See Standard Specification 200.1.2.a for C-value

**RECP** Specification #200.1.3

C-value	Blanket Type	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates				
RECP in the APLES with a C-value equal to or lower than above				

Attach: manufacturer's installation information and supporting data for the C-value

**Hydromulch and/or Tackifiers** Specification #200.1.4

C-value	Product Type, Application Rate	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates	Seed added      Seed <b>not</b> added			
Hydromulch and/or Tackifier in the APLES with a C-value equal to or lower than above				

Attach: manufacturer's installation information and supporting data for the C-value

**Compost Blankets** Specification #200.1.5

C-value	Product Type, Application Rate	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates				
None				

Attach: manufacturer's installation information and supporting data for the C-value

**Aggregate Cover** Specification #200.1.6

C-value	Aggregate Size, Application Rate	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates				
None				

## 200.2 Sediment Controls

### Wattles/Logs/Barriers Specification #200.2.1

P-value	Product Type and Size	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates				
Qualified Designer Support Required				

Attach: manufacturer's installation information and supporting data for the P-value

### Buffer Strips Specification #200.2.1.a

P-value	Type	Drawing(s) When Used	Description Where Used	Additional Information
Slopes 0-10% (0.6)				
Slopes 11-24%(0.8)				
APLES Alternates				
None				

### Sediment Containment Systems Specification #200.2.2

P-value	Containment System Type	Drawing(s) When Used	Description Where Used	Additional Information
Attach: <a href="#">Sediment Containment System Data</a>				
APLES Alternates				
None				

### Diversion Channels Specification #200.2.3

P-value	Max and Min % Slope, Cover Type(s)	Drawing(s) When Used	Description Where Used	Additional Information
1.0				
APLES Alternates				
None				

**Diversion Berms** Specification #200.2.4

P-value	Height and Composition, Cover Type(s)	Drawing(s) When Used	Description Where Used	Additional Information
1.0				
APLES Alternates				
None				

**Surface Texturing** Specification #200.2.5

P-value	Texturing Type(s)	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates				
APLES with a P-value equal to or lower than above				

**Silt Fence** Specification #200.2.6

P-value	Configuration	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates				
None				

**200.3 Support Practices**

**Stabilized Access** Specification #200.3.1

P-value	Number Present	Drawing(s) When Used	Description Where Used	Additional Information
1.0				
APLES Alternates				
APLES listed the stabilized access section				

**Storm Inlet Controls** Specification #200.3.2

P-value	Number Present	Drawing(s) When Used	Description Where Used	Additional Information
APLES Alternates				
APLES listed the inlet control section				

**Supplemental Control and Practice Information**

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### Non-Standard Control (Only if Required)

A non-standard control is a control or practice that is not found in the present version of the Standard Specifications – ESC such as rip rap and cable concrete. To use a non-standard control, populate this section of the application. [Click here](#) if an additional copy of a Non-Standard Control is required or if more space is needed.

Name and Type of Control		Description of Control or Practice		
P-value	Number Present	Drawing(s) When Used	Description Where Used	Additional Information
Design Limitations and Requirements		Installation Method		
Inspection Requirements	Maintenance Requirements	Winter Operations	Removal Requirements	

Attach: manufacturer's installation information (including drawing specification) and supporting data for the C or P-value



## 7.0 Stockpile Stabilization Requirements

When soil is being added to or removed from a stockpile, any face that has been undisturbed for more than 30 days must be stabilized.

Duration of stockpile placement	Identify controls to be put in place when there is inactivity on any faces
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Short term (less than 30 days) sediment control

Long term (30 days or more) erosion control

Material Stockpiled (topsoil, subsoil)	Volume	Estimated Length of time in place
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Check if no stockpiles are proposed on the site. (Trench excavations are exempt from this section of the application, follow Section 100.9 of the *Standard Specifications ESC*)

## 8.0 Idle Site Management *Specification #100.18.1*

Idle site management is required for any idle exposed areas in accordance with the requirements listed below. These requirements may apply to the entire site, if the entire site is idle, or parts of the site if only parts are the site are idle.

Overall Site Size in Ha	Short Term Inactive for 30-365 days	Long Term Cover – Install when exposed areas(s) will be inactive for 365+ days
Check relevant box		
Small Site (0-2ha)	Mandatory Short-Term Cover not required	Product Details: Include relevant application rates, product type, seed type etc.  If vegetation grown from seed is being used as the long-term cover, the vegetation must be established at 365 days, not installed at 365 days.
Medium Site (2+ - 10ha)	1) Install Short Term Cover Type and Application Rate:  <b>or</b>  2) Comply with the attached Water Retention Plan (ESC2 or ESC6)	
Large Sites (10+ha)	1) Short Term Cover Type and Application Rate:  <b>or</b> 2) Comply with the Water Retention Plan (ESC2 or ESC6) <b>and</b> the Limited Exposure Plan (ESC10)	

These cover requirements are for areas that are idle, and which do not have a cover already installed on them in the approved ESC Plan for the drawing being followed. Designers must populate both short-term and long-term cover in the table above. It is up to site staff to choose which option they will follow for short term inactive sites.

## DESIGN REVIEW INFORMATION

### 9.0 Attachments/Supporting Documents

#### Mandatory Attachments

9.1 Site Photos and Map

Attached (In Appendix)

9.2 RUSLE Calculations

Attached (In Appendix)

9.3 Inspection Sheet

Attached

#### Check to Confirm the Following Documents are Provided

#### Site Specific Attachments

9.4 Sediment Containment System Information

Attached (In Appendix)

No sediment containment systems are proposed for the site

9.5 Manufacturers Information

(Manufactures erosion and sediment control information includes data on how P-value or C-value was derived)

Attached (some values used may also come from the *Standard Specifications – ESC*) (In Appendix)

All C and P-values come from the *Standard Specifications – ESC*

9.6 Geotechnical Data

(Data on soil structure and texture, sieve analysis, % organic matter, and nomograph)

Attached (In Appendix) Site K-value is:

or

Default use of 0.079 K-value

9.7 Permission Letters Relevant to ESC

When water exits a construction site and it does not go to the stormwater system, including surface drainage facilities, or a public street, the Owner or Developer is responsible for obtaining required permissions from adjacent land owners prior to any of the aforementioned discharges occurring.

9.8 Large Site Safety Plan

(For sites > 65ha)

Attached (In Appendix)

Not Applicable

**Supplemental Information** e.g. Support why attachments weren't supplied or what other attachments (not noted above) were supplied

## 10.0 Research for Drawing Development

10.1 Project Description [What will be present on the site at completion of the project](#)

10.2 Site Visit

10.2.1 Site Visit Date [\(recent\)](#)

10.2.2 Visit Limitations

10.2.3 Present Cover and  
Practices

10.3 Protected Areas

10.3.1 Adjacent Properties

10.3.2 Critical Areas

10.3.3 Low Impact  
Developments  
[Specification #100.15](#)

10.4 Reference Documents

10.5 Project Specific Information

## 11.0 Drawing Requirements

The goal of the ESC Plan is to keep soil on the construction site where it will not impact human health, safety, the environment, infrastructure, or adjacent properties. Follow the Drawing Requirement Section in the *2022 Instruction Manual for Erosion and Sediment Control Plan Applications*.

## 12.0 Construction Drawing Requirements

Check the drawings that are relevant to this application

Check Relevant Drawings	Drawing Code	Drawing Title	Stripping and Grading	Subdivision, Off-sites, Bareland Condos	Multifamily, Industrial, Commercial, Institutional	Linear Projects
<input type="checkbox"/>	ESC1	Before Stripping and Grading Commences	Mandatory		* Site Dependent	* Site Dependent
<input type="checkbox"/>	ESC2	Water Management Plan and Rough Grading	Mandatory		* Site Dependent	* Site Dependent
<input type="checkbox"/>	ESC3	Post Stripping and Grading	Mandatory		* Site Dependent	* Site Dependent
<input type="checkbox"/>	ESC4	Cut and Fill <b>or</b> Cut and fill Doesn't Exceed 2 Meters <input type="checkbox"/>	Likely Mandatory	Site Dependent	Site Dependent	Site Dependent
<input type="checkbox"/>	ESC5	Before Development Commences		Mandatory	Mandatory	Mandatory
<input type="checkbox"/>	ESC6	Water Management Plan and Underground Work		Mandatory	Mandatory	Mandatory
<input type="checkbox"/>	ESC7	Above Ground Work		Mandatory	Mandatory	Mandatory
<input type="checkbox"/>	ESC8	Development Completion		Mandatory unless Subdivision	Mandatory	Mandatory
<input type="checkbox"/>	ESC9	Landscaping Plan		Site Dependent	Mandatory	Mandatory
<input type="checkbox"/>	ESC10	Limited Exposure Plan	Site Dependent	Site Dependent	Site Dependent	Site Dependent

\*Site Dependent – Stripping and Grading information is only required if not previously approved and if the site requires stripping and grading activities. Call 311 to discuss with an Environmental Compliance Specialist.

Other drawings and/or information on why drawings were not supplied (e.g. additional water management plans)

If the construction site is large and more than one drawing is required to show a stage of construction, label multiple drawings with capital letter codes (e.g. ESC5A, ESC5B). If the drawings codes have intermediate stabilization stages, such as a secondary Water Management Plan associated with above ground work, label multiple drawings with lowercase letter codes (e.g. ESC7a, ESC7b). If there are multiple drawings and multiple stages label drawings with the relevant capital and lowercase letter codes (e.g. ESC7Aa, ESC7Ab, ESC7Ba, ESC7Bb).

### 13.0 ESC Authentication

13.1 Project Name

13.2 Development Number

13.3 Municipal Site Address

The undersigned agrees and certifies that all requirements in this application have been reviewed and properly identifies as part of this submission. The undersigned confirms the application complies with the *Standard Specifications – ESC* and that the creation of the erosion and sediment control plan has been undertaken by a professional with experience in the design and implementation of erosion and sediment controls who holds a designation as a Certified Professional in Erosion and Sediment Control (CPESC) or is a Professional Engineer (P. Eng.), Professional Licensee (P.L.(Eng.)), or a Professional Agrologist (P. Ag.).

Signature

Date Authenticated

Permit to Practice/Professional Stamp or Number

### 14.0 City of Calgary Office Use

City of Calgary Authorization

Date Approved

The personal information on this form is being collected under the authority of The City of Calgary Stormwater Bylaw Section 15(3) and amendments thereto. It will be used for review, approval, and inspection purposes and may be communicated to relevant City Business Units. The name of the applicant and nature of the information will be available to the public. Please send inquiries by mail to the FOIP Program Administrator, Water Services #413, PO Box 2100, Station M, Calgary, Alberta, T2P 2M5 or contact us by phone at 311.