

CITY OF SURREY

BY-LAW NO. 16138

This By-law is to ensure that adequate protection of the City of Surrey drainage system is taken during any construction, by the implementation of erosion and sediment control measures.

.....

WHEREAS Section 8(3)(j) of the *Community Charter*, S.B.C. 2003, c.26 authorizes Council to regulate, prohibit and impose requirements in relation to the protection of the natural environment;

AND WHEREAS Council deems it in the best interests of the environmental well-being of the community that the streams, creeks, waterways, watercourses, ditches, storm sewers and drains that make up the drainage system are protected from pollution, obstructions, sediment, and sediment laden water;

NOW THEREFORE the Council of the City of Surrey in open meeting assembled, ENACTS AS FOLLOWS:

PART I

Title

This By-law may be cited as "Erosion and Sediment Control By-law 2006 No. 16138".

Definitions

In this By-law, unless the context otherwise requires, the following words shall have the meanings described:

"City" means the City of Surrey.

"Civil Construction" means all works and services as specified in the executed servicing agreement.

"Construction" means clearing, grubbing, excavating, grading, Civil Construction, and any activity which might cause Sediment or Sediment Laden Water to discharge into the Drainage System including but not limiting to soil deposition or removal, agriculture, land development, construction or repair of any services or utilities, anything constructed, altered, repaired, in or under land.

"Developer" means any Person representing the Owner, by designation or contract in writing satisfactory to the City, if any, of Land for which an application for ESC Permit is made.

“Discharge” means to release

"Drainage System" means all rivers, streams, creeks, waterways, watercourses, ditches, channels, drainage works, and drains located in the City on private or public property, by which surface or ground water or any other liquid are conveyed.

"ESC Facilities" means all erosion and sediment control works, measures, facilities and methods constructed or installed to reduce the likelihood of Sediment and Sediment-Laden Water reaching the Drainage System during all stages of Construction.

"ESC Permit" means the erosion and sediment control permit issued by the City to the Owner and/or Developer pursuant to the terms and conditions of this By-law.

"ESC Plan" means the erosion and sediment control plan specified in Part IV of this By-law, which is a requirement for an ESC Permit.

"ESC Supervisor" means an engineer, biologist, geoscientist, applied scientist, or technologist who is registered and in good standing in British Columbia with a professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association, and who is trained in designing and implementing ESC Plans, and who is responsible for inspecting, monitoring and reporting on the ESC Facilities constructed and installed pursuant to the ESC Plan.

"General Manager of Engineering" means the officer appointed by Council, pursuant to the Surrey Officers By-Law, 1993, No. 11640 as amended, as head of the Engineering Department, or his authorized representative.

"Guidelines" means the 1993 edition of the document entitled "Land Development Guidelines for the Protection of Aquatic Habitat", co-published by the Ministry of Environment, Lands and Parks and the Department of Fisheries and Oceans Canada, as amended

"Land " means land, with or without improvements so affixed to the land as to make them in fact and law a part of it.

"Maintenance Stage" means the one-year period following the date of issuance of the certificate of completion issued by the City in accordance with the Subdivision By-law, 1986, No. 8830, as amended, where the Owner and/or Developer is responsible for the maintenance and upkeep of Civil Construction.

"Notice to Comply" means a written method of issuing a violation pursuant to the By-law or ESC Permit

"Owner" means a Person registered in the records of the Land Title Office as the fee simple owner of Land.

"Professional Engineer" means a Person who is registered or licensed as a Professional Engineer under the *Engineers and Geoscientists Act*, R.S.B.C. 1996, c. 116, as amended, in the province of British Columbia.

"Person Responsible" means any Person, Owner, Developer, contractor, occupant, leaseholder, where Construction occurs pursuant to the ESC Permit.

"Person" means an individual, association, corporation, firm, body politic, co-partnership, or similar organization, and their heirs, executors, successors and assigns or other legal representatives, whether acting alone or by a servant, agent or employee.

"Significant Rainfall Event" means any precipitation event which meets or exceeds the intensity of 25mm of total rainfall depth in a 24 hour period.

"Substantial Completion" means the stage of Construction at which a minimum of 90% of all Construction is complete and the Land is ready for use, or is being used for the purpose intended.

"Sediment or Sediment Laden Water" means any sediment, rock, gravel, sand, soil, silt, clay, earth, Construction or excavation wastes, or other substances whether or not suspended in water.

"TSS" means total suspended solids measured in milligrams per litre, determined as non-filterable residue (1.5 micron filter) weighed in dry condition.

PART II

PROHIBITION OF DISCHARGE

1. No Person shall cause, or permit another Person to cause, Sediment or Sediment-Laden Water to Discharge, into the Drainage System greater than 75 milligrams per litre of TSS.

2. No Person Responsible pursuant to an ESC Permit shall cause Sediment or Sediment Laden water to be Discharged, greater than the TSS amount specified in the approved ESC Plan.

PART III

ESC PERMIT

3. All Construction on Land of **less than 2000m²** shall comply with Part II Section 1 and utilize the best management practices for erosion and sediment control set attached hereto in Schedule "B". However, should a Person wish to utilize the TSS limit for a Significant Rainfall Event, as specified in an approved ESC Plan, an ESC Permit will be required.
4. All applications for proposed Construction on Land of **2000m² or larger**, shall be submitted with a complete ESC Permit application to the City. No Construction shall occur until the City has issued an ESC Permit.
5. An application for an ESC Permit must:
 - (a) Be made in the form set out in Schedule "A" to this By-law;
 - (b) Be signed by the Owner and Developer;
 - (c) Have attached an ESC Plan;
 - (d) Name an ESC Supervisor as identified in the Letter of Undertaking attached hereto as Schedule "D";
 - (e) Include a non-refundable fee as specified in Surrey Fee-Setting By-law, 2001, No. 14577, as amended; and
 - (f) Include a security deposit in cash, certified cheque, or an irrevocable Letter of Credit drawn on a Canadian chartered bank and payable to the City, for a term of at least one (1) year, in the minimum amount of \$10,000 or 120% of the estimated cost for the installation, maintenance, monitoring and removal of the ESC Facilities as specified in the approved ESC Plan, whichever the greater, or as determined by the General Manager of Engineering.
6. An ESC Permit application may be waived by the General Manager of Engineering considering but not limiting to the following factors:
 - (a) Construction timing and schedule;
 - (b) The size of a proposed building or structure;
 - (c) Soil conditions;
 - (d) Existing ground cover (trees, gravel, etc.);
 - (e) Topographical conditions; and
 - (f) Location of proposed Construction with respect to the perimeter of the Land.

An ESC Permit application that is waived shall still utilize the best management practices for erosion and sediment control attached hereto in Schedule "B", and shall meet the requirements in Part II Section 1.

7. The ESC Permit will be valid for a minimum of one year following the date of issuance, and will expire upon Substantial Completion.
8. Subject to Section 26, the security deposit submitted with the ESC Permit application is to secure the full and proper compliance with the provisions of the ESC Permit and of this By-law. In the event, that the Owner, Developer, Person Responsible, have not complied with the provisions of this By-law or fulfilled all the terms and conditions expressed in the ESC Permit the necessary funds from the security deposit may be drawn down, at the City's option, and the money used either by the City or its agents to protect the Drainage System from Sediment or Sediment-Laden Water in adherence with the terms and conditions of this By-law. Notwithstanding, the City is under no obligation to initiate or complete remedial works in or under the Land.
9. If the amount of the security deposit is insufficient for the City to complete the ESC Facilities, the Owner and Developer jointly and severally will pay any deficiency to the City on demand.
10. When the Owner, Developer, and Person Responsible complies with the provisions of this By-law and fulfill the terms and conditions expressed in the ESC Permit, the City will return the security deposit at such a time as the Construction has reached Substantial Completion and the ESC Facilities have been removed to the acceptance of the General Manager of Engineering.
11. The security deposit may be reduced, by the General Manager of Engineering, by a maximum amount of 50% from time to time after the Civil Construction is complete, provided that the installed ESC Facilities comply with the ESC Plan. It is the responsibility of the Owner and/or Developer to provide satisfactory proof to the General Manager of Engineering that the ESC Facilities comply with the ESC Plan.
12. For Construction that does not reach Substantial Completion at the end of a Maintenance Stage, the security deposit shall be released provided that the ESC Facilities comply with the ESC Plan and individual land siltation controls are in place to the acceptance of the General Manager of Engineering.

PART IV

ESC PLAN

13. The ESC Facilities and ESC Plan must be designed in accordance with the Guidelines, best management practices for erosion and sediment control as attached hereto in Schedule "B", and in accordance with Section 15.

14. The ESC Plan must be designed, signed, and sealed by a Professional Engineer, and reviewed and signed by the appointed ESC Supervisor.
15. The ESC Plan submitted must conform to the City's drafting standards and must include, at a minimum, the following:
 - (a) Three stage silt plan (Clearing and Grubbing, Civil Construction, and through to Substantial Completion) measures for erosion and sediment control during the three stages, and timing of implementation;
 - (b) The designed sediment discharge limit as specified under the City sediment control policy;
 - (c) Pond deactivation methodology, (if required);
 - (d) Lot line(s) and other legal designations of the subject Land(s)
 - (e) Location(s) of any existing underground services, as well as any proposed connections to existing services from the Land;
 - (f) Location(s) of any existing drainage infrastructure and the proposed measures to protect it;
 - (g) Location(s) of any existing and proposed watercourses, ditches, swales or any other body of water within 50m of the Land boundaries, along with the proposed protection measures;
 - (h) Location(s) of any existing/proposed buildings, including residential buildings or ancillary buildings or structures;
 - (i) Existing and proposed contours and relevant spot elevations;
 - (j) Proposed access locations to the Land;
 - (k) Wheel wash facilities (if required);
 - (l) Proposed ESC Facilities to be implemented on site, which shall include source controls as the primary method of erosion and sediment control;
 - (m) Proposed methods to restore disturbed areas following the completion of construction;
 - (n) The location of the City rain gauge to be used for rainfall intensity monitoring;
 - (o) Any and all other details pertaining to the proposed Construction, describing how the ESC Facility will meet the Guidelines;
 - (p) ESC Supervisor monitoring, inspecting, and reporting program, in accordance to the City's sediment control policy; and
 - (q) Provide a detailed cost estimate for the installation, maintenance, and removal of the ESC Facilities.
16. When the General Manager of Engineering is satisfied with the ESC Plan and all provisions of this By-law have been complied with, the General Manager of Engineering may issue an ESC Permit by approving an ESC Permit application with such specific terms and conditions attached thereto as are reasonably necessary to reduce the likelihood of Sediment and Sediment-Laden Water reaching the Drainage System.
17. It is the responsibility of the Owner and/or Developer to ensure that all ESC Facilities described in the ESC Plan are constructed, implemented, installed and maintained for the duration of Construction until Substantial Completion.

PART V

MONITORING AND REPORTING

18. The ESC Supervisor is responsible for inspecting and monitoring the ESC Facilities including reporting requirements as set out hereto in Schedule "C" and the approved ESC Plan.
19. The ESC Supervisor is responsible for immediately notifying the City of termination or when an infraction occurs pursuant to this By-law or ESC Permit.
13. 20. A waterproof copy of any issued ESC Permit posted, in a location visible from outside the Construction on the land, and for the duration of the Construction. In addition, the sign shall clearly state the name and phone number of the appointed ESC Supervisor and the City By-law Office.

PART VI

OFFENCES AND ENFORCEMENT

21. The General Manager of Engineering, a designated staff from the Engineering Department of the City, or any City By-law Enforcement officer may enter upon any Land to carry out field measurements and conduct inspections as are reasonably necessary to ascertain whether there is compliance with the provisions of this By-law or an ESC Permit issued pursuant to this By-law.
22. Upon field measurements, or ESC Facilities inspection where the Owner and/or Developer has failed to maintain the validity of the ESC Permit or meet the provisions of this By-law, the General Manager of Engineering, a designated staff from the Engineering Department of the City, or any City By-law enforcement officer may serve on the Owner, Developer, or ESC Supervisor a Notice to Comply, which requires the Owner and/or Developer to remedy the non-compliance within 24 hours. If in the opinion of the General Manager of Engineering special circumstances exist, the non-compliance shall be remedied on a date the General Manager of Engineering considers reasonable given the circumstances.

Following issuance of a *Notice to Comply*, all Construction on the Land shall cease except for those works necessary to achieve compliance.

23. The *Notice to Comply* must be served on the Owner and/or Developer and/or the named ESC Supervisor by:
 - (a) personal service; or
 - (b) return registered mail to the address of the Owner and/or Developer and/or ESC Supervisor of the ESC Permit as it appears on the ESC permit

application. The Notice to Comply is deemed to have been served on the third day after mailing.

24. The City may notify the Department of Fisheries and Oceans Canada and the British Columbia Ministry of Environment of the issuance of any *Notice to Comply*.
25. If the Owner and/or Developer fails to comply with the Notice to Comply, the City may, notwithstanding Section 8, utilize all or part of the security deposit to take whatever action the City deems necessary to protect the Drainage System. The City may concurrently pursue any other legal remedy it may believe is necessary including issuing violation tickets.
26. Prosecution of the Owner and/or Developer pursuant to Section 26 of this By-law does not exempt the Owner and/or Developer from remedying the non-compliance within 24 hours or as set out in the *Notice to Comply*.
27. All Person who commit an offence against this By-law shall be subject to a violation ticket in the amount and for offences prescribed in Surrey Municipal Ticket Information Utilization By-law, 1994, No. 12508, as amended.
28. Any Person who violates a provision of their ESC Permit or this By-law commits an offence punishable on summary conviction and shall be liable to a fine of not less than Two Thousand (\$2,000) Dollars and not more than Ten Thousand (\$10,000) Dollars for each day on which an offence exists or is continuing, together with such costs as a court of competent jurisdiction may order. For the purposes of enforcing any judgment of a court or collecting any fine levied hereunder, the provisions of the *Offence Act*, R.S.B.C. 1996 c. 338, as amended, shall apply.
29. Where an offence is a continuing offence, each day that the offence continues shall constitute a separate and distinct offence with the same minimum and maximum fines applying as set out in Section 27 and Section 28 above.

PART VII

General Provisions

30. In the event that any particular provision or part of a provision of this By-law is found to be invalid or unenforceable, it shall be severed and the validity of the remaining provisions shall not be affected.
31. The schedules attached to this By-law shall be deemed to be an integral part of this By-law and enforceable as part of this By-law.

32. In this By-law, wherever the singular or the masculine is used, the same shall be construed as meaning the plural or feminine or body corporate or politic where the context or the parties hereto so require.

READ A FIRST TIME on the 30th day of October, 2006.

READ A SECOND TIME on the 30th day of October, 2006.

READ A THIRD TIME on the 30th day of October, 2006.

APPROVED BY THE MINISTRY OF ENVIRONMENT on the 22nd day of February, 2007.

RECONSIDERED AND ADOPTED on the 12th day of March, 2007.

Mayor

City Clerk

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SCHEDULE "A"
ENGINEERING DEPARTMENT
Forming part of Erosion and Sediment Control By-law 2006 No. 16138

EROSION AND SEDIMENT CONTROL PERMIT APPLICATION

Part 1. LAND OWNER

Name:

Address:

Telephone:

Part 2. DEVELOPER

Name:

Address:

Telephone:

Part 3. EROSION AND SEDIMENT CONTROL SUPERVISOR

Name:

Address:

Telephone:

Part 4. IDENTIFICATION OF LAND WHERE CONSTRUCTION WILL OCCUR

Civic Address:

Legal

Description:

Size of Land (approximate area)

Expected Start date: __/__/__

Parcel:

Expected Finish date: __/__/__

(boxes must be ✓ checked before submission)

- ESC Plan is attached which conforms to the City's drafting standards and includes the minimum requirements as set out on the reverse of this application.
- Confirmation of Commitment by ESC Supervisor is attached and signed by the ESC Supervisor.
- Non-refundable fee paid.
- Security Deposit paid by cash cheque, or letter of credit

I hereby declare that the above information is correct and true as well as all information provided on the ESC Plan attached and submitted herewith. I guarantee to construct the ESC Facilities in accordance with the ESC Plan. I am aware of the provisions of the Erosion and Sediment Control By-law, and I will abide by all applicable provisions of said By-law and such other terms and conditions as may be imposed under this application for an ESC Permit.

Dated _____

Signature of Land Owner _____

Signature of the Developer _____

Office Use Only

ISSUED BY THE CITY on _____ by _____
PERMIT NO. _____ (Authorized Signatory of City)

REVERSE OF **EROSION AND SEDIMENT CONTROL PERMIT APPLICATION**

The ESC Plan must be prepared, signed, and sealed, by a Professional Engineer, and reviewed and signed by the appointed ESC Supervisor.

The ESC Plan must conform to the City of Surrey's drafting standards and must include, at a minimum, the following information:

- (a) Three stage silt plan (Clearing and Grubbing, Civil Construction, and Maintenance Period), measures for Erosion and Sediment Control during the three stages, and timing of implementation;
- (b) The designed sediment discharge limit as specified under the sediment control policy;
- (c) Pond deactivation methodology; (if required);
- (d) Property line(s) and other legal designations of the subject property or properties;
- (e) Location(s) of any existing underground services, as well as any proposed connections to existing services from the site;
- (f) Location(s) of any existing drainage infrastructure and the proposed measures to protect it;
- (g) Location(s) of any existing watercourses, ditches, swales or any other body of water within 50m of the site boundaries, along with the proposed protection measures;
- (h) Location(s) of any existing/proposed buildings or ancillary buildings or structures;
- (i) Existing and proposed contours and relevant spot elevations;
- (j) Proposed site access locations;
- (k) Wheel wash facilities, (if required);
- (l) Proposed ESC Facilities to be implemented on site, which shall include source controls as the primary method of ESC;
- (m) Proposed methods to restore disturbed areas following the completion of construction;
- (n) The location of the City rain gauge to be used for rainfall intensity calculation;
- (o) Any and all other details pertaining to the proposed Construction, describing how the ESC Facility discharge will adhere to the Guidelines;
- (p) ESC Supervisor monitoring, inspecting, and reporting program, in accordance to the City's sediment control policy; and
- (q) Provide a detailed cost estimate for the installation, maintenance, and removal of the ESC Facilities.

All ESC Facilities must be designed in accordance with the 1993 edition of the document entitled "Land Development Guidelines for the Protection of Aquatic Habitat", co-published by the Ministry of Environment, Lands and Parks and the Department of Fisheries and Oceans Canada, as amended, and best management practices as approved by the General Manager of Engineering, to limit the amount of Sediment and Sediment-Laden Water discharged into the Drainage System.

SCHEDULE "B"

Forming part of Erosion and Sediment Control By-law 2006 No. 16138

EROSION AND SEDIMENT CONTROL

As part of the City's effort to control sediment discharge from construction sites, Persons will be expected to adhere to best management practices (BMPs) including but not limited to the ones outlined below:

- (a) Retain existing vegetation and ground cover where possible;
- (b) Restrict vehicle access and utilize wheel wash pads at access points;
- (c) Install silt fencing around stockpiles and at the toe of disturbed slopes;
- (d) Completely cover temporary stockpiles or spoiled material with polyethylene or tarps and surround with silt fence;
- (e) Install and maintain filter fabric bags inside any catch basins, lawn basins, exposed manholes or any other open storm sewer access points collecting runoff from the building site;
- (f) Divert runoff away from cleared areas by use of low berms;
- (g) Convey surface runoff through swales designed to minimize flow velocity and erosion while maximizing settling;
- (h) Where possible, collect runoff into suitable sediment settling facility or facilities prior to discharge off-site;
- (i) Unless deemed unnecessary, a sediment pond should be designed, installed and maintained according to the Land Development Guidelines for the Protection of Aquatic Habitat;
- (j) Keep all sand, gravel, spoiled material and concrete mix off of the paved surfaces;
- (k) During excavation, holes requiring dewatering should be pumped to a vegetated area or suitable settling facility which will prevent sediment-laden water from accessing the Drainage System;
- (l) Regularly sweep roads; and
- (m) Re-vegetate, cover or mulch disturbed areas as soon as practically possible.

SCHEDULE "C"

Forming part of Erosion and Sediment Control By-law 2006 No. 16138

DETAILS OF THE INSPECTING, MONITORING, AND REPORTING REQUIREMENTS OF THE ESC SUPERVISOR

Inspecting, Monitoring, and Reporting

Inspecting, Monitoring and Reporting intervals will be specified in the approved ESC Plan.

Inspecting

The ESC Supervisor shall keep detailed notes for each site visit in a logbook which shall contain the following minimum information:

- (a) Water turbidity levels;
- (b) TSS concentrations, (samples measured as per the City's sediment control policy);
- (c) Observed ESC Facilities conditions; and
- (d) Details of any remedial measures undertaken or recommendations made.

The logbook must be made available to the City upon request.

Monitoring

The ESC Supervisor must monitor and record in the logbook the maintenance of the ESC Facilities. Maintenance may include, but not be limited to, the removal and proper disposal of accumulated sediment and the replacement of ESC Facilities if they deteriorate or fail to operate efficiently or as designed.

The ESC Supervisor must also visually monitor any receiving waters, including watercourses, ditches, swales or bodies of water up to 50 meters outside of the Construction area.

SCHEDULE "D"

Forming part of Erosion and Sediment Control By-law 2006 No. 16138

CONFIRMATION OF COMMITMENT BY ESC SUPERVISOR

To: The City Engineering Department

Date: _____

Address (Print)

Dear Sir or Madam:

Re:

Address of Project (Print)

Legal Description of Project (Print)

I _____, confirm that I have been retained by _____.
(ESC Supervisor's Name) (Owner/Developer)

I am an engineer, biologist, geoscientist, applied scientist, or technologist who is registered and in good standing in British Columbia with a professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association, and am trained in designing and implementing ESC Plans, and am responsible for inspecting, monitoring and reporting in accordance with the requirements of the City Erosion and Sediment Control By-law 2006, No. 16138.

I also acknowledge the responsibility to notify the addressee of this letter of the date I cease to be retained by the Owner and/or Developer.

Yours truly,

ESC Supervisor

Professional Seal (*if applicable*)

C.C. - _____
(Owner/Developer)