

REPORT TO: Council FOR: Community Development

Standing Committee

REPORT FROM: Community Planning & Infrastructure

PRESENTED: March 7, 2017 FILE:

SUBJECT: Trees and Soils Management Bylaws (currently Site Alteration Bylaw) Update

Recommendation:

That Council approve the following resolutions:

THAT Council receive the update from Community Planning & Infrastructure dated March 7, 2017 on the draft Tree Management Bylaw and draft Soils Management Bylaw for discussion and provide staff with feedback prior to public engagement.

1. Objective:

The purpose of this report is to present an update on the draft Tree Management Bylaw and draft Soils Management Bylaw (currently combined in a single Site Alteration Bylaw) for discussion and direction on the main components proposed.

2. Background:

Local governments have authority under the Community Charter and the Local Government Act to protect, regulate, prohibit, and impose requirements in relation to trees and the movement of soils. The broad objective of such bylaws is to protect and maintain the integrity of green infrastructure and sensitive ecosystems, and prevent their degradation through the regulation of activities which may have impact on these natural assets.

The District currently regulates tree removal and soils movement through Site Alteration Bylaw No. 1886, 2005, as amended. The bylaw is both vague and ambiguous in certain areas and is therefore challenging to interpret, implement and enforce. Furthermore, the permit fees fall significantly short of offsetting the staff time required to adequately administer the bylaw, leaving the District inadequately resourced in this regard, and negatively affecting application processing times and post-application follow up.

As a result of these challenges, as well as the higher rates of land development within the District, the number of incidences of unpermitted works in 2016 were unprecedented, being the highest since adoption of the bylaw, increasing to 15 infractions within the year from an historic average of approximately 1 to 2 infractions per year. This has resulted in further drain on staff time.

Furthermore, based on staff's review of tree and soils regulations across 30 municipalities, the bylaw falls below the average standards set across local governments.

3. Project Information:

This project presents an opportunity to update and improve the tools through which the District regulates trees and soils throughout the community, to provide clear guidelines and requirements, and to establish a framework to ensure adequate resourcing is in place to administer the bylaw and uphold the standards therein.

The proposed draft bylaws are preliminary and in early stages (Attachments 1 and 2). In the proposed approach, the topics of trees and soils have been decoupled into separate bylaws, specifically the Tree Management Bylaw and the Soils Management Bylaw. The topics are largely independent, so this decoupling is common practice in most municipalities and increases clarity for both staff and the public.

The following describes the main components of the proposed draft bylaws.

Scope / Exemptions

The proposed bylaws provide improved clarity on the scope of what is being regulated and when a permit is required (or not). The exemptions are more explicit, and have been expanded in an effort to exempt minor works. In general, tree removal proposed on average residential lots (i.e. less than half an acre in size, and already developed) continues to be exempt from requiring a permit. Soil deposit or removal is exempted from a permit if it is less than 30 cubic metres (approximately three truck loads) on one property, within a 12 month period.

Fee Structure

Approximately half of the municipalities reviewed apply soil volumetric fees, as well as fees per tree proposed for removal. The intent of the proposed fee structure is to capture the actual costs of administering the bylaws such that staffing and the level of service provided is aligned with Council's strategic goals, and such that customer service can be provided efficiently and effectively.

The proposed fees include a reduction to the flat permit fee from \$250 to \$150, as well as the application of a new \$5 fee per tree (defined as greater than 20 cm diameter) proposed to be cut and \$0.35 per cubic metre of soil displaced.

This fee framework as proposed is based on average values observed across the municipalities reviewed, and is sufficient only to recover staff costs. Staff reviewed data on every Site Alteration Permit issued in Squamish over the last five years. When the new fee structure was applied to the historic data, the annual collected fees were sufficient to cover one additional FTE to administer the program.

The proposed fee structure is critical to achieving the level of service, scrutiny and environmental protection Council wishes to achieve.

Tree Replacement

In line with District policy, the draft Tree Management Bylaw introduces the requirement for tree replacement. For each tree removed or proposed to be cut that is greater than 20 cm diameter, replacement trees are required at a ratio of 2:1.

The draft Tree Management Bylaw also introduces a definition for Significant Trees, defined as any tree having a diameter greater than 80 cm. The replacement criteria for Significant Trees are either one tree that is 6 metres tall, or six trees that are 3 metres tall, for each Significant Tree removed.

For properties unable to accommodate the required number of replacement trees, cash in lieu may be accepted, subject to approval by the General Manager, at a value of \$500 per tree removed, or \$1500 per Significant Tree removed. These funds shall be placed into a proposed Environmental Reserve Fund, whose main function shall be the acquisition of lands designated as having a high value of environmental sensitivity (as per the District's Environmentally Sensitive Areas mapping). A new bylaw will be required to establish such a fund.

4. Implications:

a) **Budget:**

The proposed fee structure will generate modest yet sufficient funds to cover the cost of staff resourcing to effectively and efficiently administer the bylaws and meet Council's strategic priorities. At this time, this is anticipated to be the equivalent of one full time position.

b) **Organizational Impact:**

Currently, the District's goals around customer service are not being met with respect to administration of the Site Alteration Bylaw. This project will improve clarity on requirements and standards, and establish a realistic fee structure to ensure adequate administration of bylaw. This will increase efficiency, decrease wait times, and increase accountability of both staff and permit holders.

Policy:

The following key policies within the District Official Community Plan (OCP) Bylaw No. 2100, 2009 are pertinent to this project:

- 16 7 The District will prepare and implement regulatory bylaws to address soils removal and deposition, tree preservation, and riparian area protection.
- 16 17 Where possible, the District shall seek public ownership of designated environmentally sensitive lands.
- 16 37 The District of Squamish shall work in co-operation with federal and provincial agencies to ensure that developments:
 - b. control soil erosion and sediment in runoff;
- 22 25 The District will encourage the preservation of forested areas and stands of trees within the municipality.
- 22 26 The District will consider partnering with provincial agencies and local organizations to restore tree stands and forested areas that contribute to wildlife habitat and ecosystem health throughout the community.

- 22 27 The District will require all development applications that remove significant amounts of forested areas or tree stands to provide a re-planting plan as part of the development approvals process.
- 12 Step Pledge to reduce GHG emissions
 - 11. Maintain and encourage healthy urban forests and tree management.

c) Environment:

This project complies with District environmental policies. Subsequent to bylaw adoption, this project will contribute to the reduction of GHGs. This project will improve the effectiveness through which the integrity of green infrastructure and sensitive ecosystems is protected and maintained.

d) Council Priority and Strategic Plan Alignment:

This project aligns with the 2016 Council Strategic Plan Update by supporting the following goals and action items.

Priority Areas:

Open and Transparent Government

Customer service is solution / outreach driven

Environment

- <u>Strategic Action Item:</u> Site Alteration Bylaw Rewrite/Environmental Protection Bylaw
- Municipal bylaws and policies protect natural places, and support responsible public access to wild natural places

This project is aligned with the following Guiding Principles:

- Forward-Thinking and Responsive Corporation
- Future-Focused Environmental Stewardship

e) Citizen Engagement

Staff have liaised with the District's Communications team to develop a public engagement strategy based on the IAP2 participation spectrum. Staff intend to engage with community and stakeholder groups at the IAP2 level of Consult. Examples of this include web based info sharing, online surveying, focus groups with stakeholders, and information boards with feedback forms at municipal hubs such as City Hall or Brennan Park Recreation Centre.

While engagement will initially be at the IAP2 level of "Consult", if a topic warrants deeper engagement, staff can respond accordingly at any time during the process.

A letter has gone out to land developers and qualified professionals to provide notification of the Council discussion and advise that the District will be seeking feedback on the draft bylaws.

f) Implementation

Upon direction from Council, staff will further refine the proposed draft bylaws as required and schedule public engagement. Staff will then present the results of the public engagement to Council.

5. Attachments:

- 1. Draft Tree Management Bylaw
- 2. Draft Soils Management Bylaw
- 3. Companion Draft Amendment to Fees & Charges Bylaw
- 4. Companion Draft Amendment to Land Development Procedures Bylaw
- 5. Companion Draft Amendment to the Municipal Ticket Information System Bylaw

6. <u>Alternatives to Staff Recommendation:</u>

THAT Council provide additional feedback for further refinement of the draft Tree Management Bylaw and draft Soils Management Bylaw, and that a revised version of each be brought back to Council prior to scheduling public engagement.

7. Staff Review

Prepared By:

Caroline Ashekian, MSc, RPBio, Environmental Coordinator

Reviewed By:

Chris Wyckham, P.Eng., Director of Engineering
Gary Buxton, General Manager of Community Planning and Infrastructure
Robin Arthurs, General Manager of Corporate Services, Recreation and Culture
Christine Mathews, CPA, CGA, CFO

CAO Recommendation:

That the recommendation of the Engineering Department be approved.

Linda Glenday, CAO

District of Squamish

Tree Management Bylaw No. XXXX, XXXX

A bylaw to regulate the protection of trees

WHEREAS the Community Charter authorizes Council to enact bylaws to preserve and protect trees within the District, and to prohibit and regulate their cutting down and removal, and to require their replacement (Sections 8.3.c; 16, 17, 50 to 52, 258, 260 and 264);

AND WHEREAS the Council of the District of Squamish considers it in the public interest to provide for the protection and retention of trees within the municipality and for the regulation of their cutting down, removal, and replacement;

THEREFORE the Council of the District of Squamish, in open meeting assembled, enacts the following to replace the existing Site Alteration bylaw No. 1886, 2005.

1. Repeal

The District of Squamish Site Alteration bylaw No. 1886, 2005 and all amendments thereto are hereby repealed.

2. Interpretation

In this bylaw:

Applicant means	the owner of a parcel of land	d, or a person authorized by the owner to
-----------------	-------------------------------	---

make application under this bylaw.

Certified Tree Risk Assessor

Means a QP who has also completed the Tree Risk Assessment Course and

passed the Tree Risk Assessment Exam under the authority of the

International Society of Arboriculture (ISA), and, for the purposes of this bylaw, will not serve as the faller for trees the QP has assessed as a hazard

tree(s).

Council means the elected officials of the District.

Development Approval means the approval of an application for a zoning amendment, a subdivision,

a development permit, a development variance permit, or a building permit.

Diameter means the diameter of the trunk of a tree, measured 1.4 metres above the

level of the natural ground at the base of the tree.

District means the District of Squamish.

Drip Line means a line around a tree formed by the intersection of the ground and a

vertical line extending down from the outermost branches of the tree.

Environmentally Sensitive

Area (ESA)

means those areas identified in the District's OCP as Environmentally Sensitive

Areas (ESA).

Floodway means an area designated to be preserved for the passage of floodwater as

defined by Figures 8-1 to 8-5 in the Integrated Flood Hazard Management

Plan.

General Manager means the person holding the position of General Manager, and any person

appointed to act in the place, or under the direction, of the General Manager.

Habitat Restoration Project means all of those measures necessary to restore, enhance, or create healthy

ecosystems, including the reestablishment of native vegetation and fish and wildlife habitat on disturbed or denuded sites, and may include the restoration of the appropriate hydrology and soils on a site. May be referred to as "restoration project" in this bylaw, however, does not include any

restoration works that are required as compensation for any works associated

with a development approval.

Hazard Tree means a tree, identified in writing by a Certified Tree Risk Assessor, as in such

a condition that there is a substantial likelihood that all or part of the tree will

fail, resulting in the risk of personal injury or property damage.

Significant Tree means any tree having a diameter of \geq 80 cm.

High Water Mark means the visible high water mark of a stream where the presence and action

of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the stream characteristics distinct from that of its banks, in vegetation as well as in the nature of the soil itself,

and includes the active floodplain (refer to District's OCP).

Invasive Species means any invasive plant species that has the potential to pose undesirable or

detrimental impacts on people, animals or ecosystems. Also includes species listed in Schedule A of the BC Weed Control Regulation and Schedule A of this

bylaw.

OCP District of Squamish Official Community Plan, as amended from time to time.

Other Material	means	
	a) wood waste as defined herein;	
	b) land clearing waste, consisting of stumps, brush and logs or any other waste derived from land clearing activities;	
	c) any fill material that contains invasive plant species, including seeds and root fragments of these species.	
Owner	means the owner of land, as defined in the Community Charter, or a duly authorized agent or representative.	
Parcel	means any parcel, block, or other area in which land is held or into which land is subdivided.	
Permit	means a Tree Management Permit providing written authority for the removal or replacement of trees, granted by the General Manager pursuant to this bylaw.	
Person	means any human being as defined by statute, firms, labour organizations, partnerships, associations, corporations, legal representatives, trustees, and receivers, and includes owners and applicants, as described within this bylaw.	
Qualified Professional (QP)	 a) an applied scientist or technologist who is in good standing in British Columbia with an appropriate professional organization and includes, without limitation, a professional Biologist, Agrologist, Arborist, Forester, Geoscientist, Engineer, or Technologist, and, b) the individual is acting within that individual's area of expertise. 	
Ravine	as defined by the District's OCP.	
Replacement Tree	means a tree required to be planted and maintained in accordance with this bylaw.	
Retained Tree	means a tree identified in a Tree Management Permit as a tree which is not permitted to be cut, removed, or damaged.	
Riparian Assessment Area (RAA)	as defined by the District's OCP.	

Soil

means the entire mantle of natural material above bedrock, including but not

limited to sand, gravel, rock, silt, clay, blasted bedrock, peat or topsoil.

Stockpile means a man-made accumulation of soil held in reserve for future use,

deposit or removal.

Top of the Ravine Bank

Wetland

Means an order to the person responsible for unauthorized works to Stop Work Order

immediately stop the bylaw contravention and to immediately cease and desist from unauthorized works until the contravention is remedied to the satisfaction of and within the timeframe specified by the General Manager.

as defined by the District's OCP.

Topsoil means the surface horizon of soil which contains organic material and is

capable of supporting plant growth.

Tree means a woody perennial plant usually having a single trunk or stem which has a diameter of at least 20 centimetres (8 inches) when measured from a height of 1.4 metres above the natural grade of the land; this size threshold

does not apply if the tree is located within an ESA.

Tree Removal Plan means a plan showing the legal boundaries of one or more parcels of land and

delineating specific locations, species, age classes, and diameter at 1.4m [above the natural grade of the land] of all trees proposed to be removed and the locations and species of all vegetation proposed to be removed if

proposed vegetation removal is within a RAA, a wetland, or an ESA.

Tree Replacement Plan means a plan delineating the locations and species of Replacement Trees to

be planted in accordance with this bylaw.

Tree Retention Area means any part of a parcel of land(s) that is proposed to be or is designated as a Tree Retention Area, and without limitation includes any ESA, Ravine and

RAA and those trees within the parcel that are proposed for retention.

means an area six (6) metres in width adjacent to the whole of a Tree Tree Retention Buffer Area

Retention Area.

means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation and various kinds of biological activity which are adapted to

a wet environment. Wetlands can be subdivided into two broad categories:

a) Organic wetlands: organic wetlands are more simply referred to as peatlands. Peatlands contain more than 40 cm of peat

accumulation on which organic soils develop.

b) Mineral wetlands: mineral wetlands are found in areas where an excess of water collects on the surface and which for geomorphic, hydrologic, biotic, edaphic (factors related to soil), or climatic reasons

produce little or no organic matter or peat.

means hog fuel, sawdust, shavings, edgings, or other wood waste which results from the manufacturing process or any other type of processing of lumber or other wood products.

3. Application of the bylaw

This bylaw applies to all lands under the jurisdiction of the District of Squamish.

4. Exemptions

4.1 Tree removal exemptions

- a) Land parcels that are zoned residential, that are \leq 0.5 acre (0.2 hectare) in size, and that are being used in accordance with their zoning (a residential dwelling exists on the parcel);
 - i) This exemption does not apply on parcels:
 - a. With Japanese Knotweed present on site;
 - b. With Significant tree(s) on site;
 - c. That have a slope greater than 20 percent, or;
 - d. Are located within a floodway;
 - e. If Replacement Trees have been previously planted on property.
- b) Land and the trees on it if forestry practices on the land are governed by a tree farm licence, permit or other authority or tenure under the Forest Act;
- c) Land and trees on it if section 21 of the Private Managed Forest Land Act applies to the land;
- d) Tree cutting or removal that is undertaken by a utility, on land owned or held by the utility, and done for the purpose of safety, maintenance or operation of the utility's infrastructure;
- e) Works undertaken by the District;
- f) Notwithstanding 4.1 (a) (i), hazard trees are exempt, subject to provision of a hazard assessment report completed by a certified tree risk assessor and submitted to the General Manager. Replacement trees may be required at the discretion of the General Manager.

4.2 Determining whether a parcel is exempt

a) At the discretion of the GM, a QP is required in order to determine whether a parcel is exempt from the bylaw.

5. Prohibitions

- 5.1 No person shall fail to comply with the terms or conditions of this bylaw or a permit issued pursuant to this bylaw.
- 5.2 No person shall remove, conceal, or otherwise interfere with a posted Stop Work Order issued under this bylaw.
- 5.3 No person shall alter, falsify, or otherwise provide misrepresentation for or on a permit or application.
- 5.4 Unless exempted by Subsection 4.1 of this bylaw, no person shall cut any tree, cause the death of any tree by means other than cutting, allow any tree to be cut or allow any person to cause the death of any tree by means other than cutting, except under the authority of a permit issued pursuant to this bylaw.
- 5.5 No person shall carry out any tree damaging activities in respect to any tree including but not limited to:
 - a) Cut or damage the roots of a tree inside its drip line;
 - b) Undermine the structure or roots of a tree inside its drip line.

6. Tree Management Permits

Unless a site is exempt from this bylaw, any person wishing to alter a site through the cutting and removing of trees shall make application for a Tree Management Permit to the General Manager.

6.1 For phased developments, permit applications will be accepted only for works on the current phase. Permits shall be issued as per development phasing, only to the extent of each proposed phase of development.

6.2 Application Information

For permit application information, refer to the Land Development Procedures Bylaw No. 2229, 2012, as amended.

6.3 Permit Fees

For permit fees, refer to the Fees and Charges Bylaw No. 2012, 2007, as amended.

7. Permit Authority

7.1 Tree Removal

7.1.1 On receiving a complete application, signed by the owner, along with full payment of applicable fees, and on being satisfied that the application meets the standards and objectives of this bylaw, the General Manager shall issue a Trees Permit for the removal of trees, and may attach any terms, conditions, restrictions and

requirements to the permit as he or she considers necessary or advisable for the stability and health of the remaining trees in the vicinity.

- 7.1.2 A Tree Management Permit may impose the following terms and conditions:
 - a) Sequence and timing of construction to avoid or mitigate impacts, including but not limited to timelines for completion of the works identified in the permit;
 - b) Co-ordination of geotechnical recommendations by a Qualified Environmental Professional or Professional Engineer;
 - c) Frequency of onsite monitoring of works and associated inspection reports undertaken by a Qualified Professional and submitted to the General Manager;
 - d) Requirements to mitigate impact to bird nesting.
- 7.1.3 Upon issuance, a copy of the Tree Management Permit shall be displayed on the subject property.
- 7.1.4 The General Manager may refuse a Tree Permit for the removal of trees if:
 - a) The application is in contravention with any other bylaw or provincial Act or Regulation or federal Acts;
 - b) The removal would create a hazard to any adjacent property; or
 - c) The General Manager is not satisfied that the standards and requirements of this bylaw are being met, or that they can effectively be met if the tree cutting or removal is carried out as proposed in the application.

7.2 Protection of retained trees

- 7.2.1 Prior to any construction, demolition, excavation, or installation of works and services occurring on the land, the owner must have delineated the tree retention buffer area and installed any required temporary tree protection fencing, and must ensure that all tree retention areas are protected from disruption, injury, or damage.
- 7.2.2 A person must not damage, destroy, or alter an authorized tree protection fence.
- 7.2.3 Every owner must ensure that any required tree protection fence:
 - a) Is maintained in good condition throughout the entire development period; and
 - b) Remains in place until the end of the development period, unless the General Manager is satisfied that the tree protection fence is no longer necessary and has authorized, in writing, its removal at an earlier time.

7.3 Replacement trees

7.3.1 The owner must provide a Tree Replacement Plan prepared by a QP specifying the proposed number, location, species and size of replacement trees and a proposed maintenance regime. The Tree Replacement Plan is subject to approval by the General Manager and must address the following:

- a) The Tree Replacement Plan, the number of which must not be less than two replacement trees for each tree cut or proposed to be cut.
- b) Native species are required as replacement trees, unless other species are recommended by a QP as being appropriate to the location.
- c) The replacement trees must have a height of at least 3.0 metres in the case of coniferous species and in the case of deciduous species must have a caliper of at least 7.0 centimetres measured 1.4 metres above the base of the tree.
- d) Replacement trees must be planted at least 2.5 metres away from another tree or other features on the land (e.g., structures, roads, utility services), measured from drip line.
- e) Timing of planting shall be in accordance with the District Outdoor Water Use Bylaw No. 2254, 2013, as amended.
- 7.3.2 Replacement trees must be watered and maintained at the owner's expense, using practices appropriate to sustaining the health and viability of the tree, unless a permit to cut the replacement tree is obtained.
- 7.3.3 If any replacement tree does not survive, the owner shall replace and maintain its replacement in accordance with Section 7.3.
- 7.3.4 If 10 or more replacement trees are required, the owner must provide security for all replacement trees based on a cost estimate prepared by a Qualified Professional as per the District Landscape Security Policy, as amended, on the basis of the information provided in the Tree Replacement Plan and the General Manager's reasonable estimate of the cost to purchase, plant and maintain the replacement trees per the District Landscape Security Policy, as amended, except for those replacement trees covered by a landscaping bond as part of a Development Permit. Notwithstanding the above, if replacement trees are required to be planted as a result of an offense under this bylaw, then security must be provided for all replacement trees even if the number is less than ten.
- 7.3.5 Upon completion of the tree replacement planting, the owner must have a QP certify, in the form prescribed for that purpose from time to time by the General Manager, that the tree replacement has been completed in accordance with this bylaw.
- 7.3.6 If some or all of the replacement trees cannot be provided on the property on which the trees cut or proposed to be cut are located, or if trees of the required size or species are not available, the Tree Replacement Plan must specify alternatives.

 Subject to approval by the General Manager, the owner may provide to the District \$500 for each tree that is not being replaced, or \$1500 for each Significant tree removed that is not replaced, to be placed into the District Environmental Reserve Fund (Bylaw No. XXXX, XXXX, as amended). In such cases, the owner would not be

obligated to provide security or directly carry out these works subject to payment-in-lieu.

7.4 Significant trees

- 7.4.1 The replacement tree criterion for removal of a Significant tree can be either of the following:
 - i) One (1) tree of the same species removed, 6m in height;
 - ii) Six (6) trees of the same species removed, 3m in height.

8. Maintenance and Security for Tree Management Permits

8.1 Tree removal and Replacement trees

- 8.1.1 Where replacement trees are required as a condition of a permit, the owner or permit applicant shall provide to the District a security deposit, which:
 - a) Shall be in the form of a cash deposit or an automatically renewable, irrevocable letter of credit drawn upon a chartered bank in the form acceptable to the District:
 - b) Shall be in accordance with the District Landscape Security Policy, as amended.
- 8.1.2 Administration and release of the value of the security shall be in accordance with the District Landscape Security Policy, as amended.
- 8.1.3 Should the permit holder fail to comply with the terms and conditions of a permit or a requirement of this bylaw, the District may enter the property and perform the necessary work, and may retain all or a portion of the security deposit to cover the cost of the work.

9. Expiry

A Tree Management Permit shall be valid for a period of 12 months from the date of issue.

10. Reconsideration

- 10.1 If a decision is made by the General Manager with regards to the refusal of a permit, the owner has a right to have Council reconsider the matter.
- 10.2 If an owner would like Council to reconsider a decision, the owner shall deliver written notice to the Chief Administrative Officer within thirty (30) days of receiving notice of the decision.
- 10.3 The owner shall be notified by the Chief Administrative Officer of the date that Council will reconsider the decision.

10.4 Council may confirm, overturn or modify the decision of the General Manager.

11. General

The General Manager is responsible for the administration of this bylaw.

11.1 In reaching a decision under this bylaw, the General Manager may retain the services of an independent QP, at the cost of the owner requesting to cut or remove any trees from property subject to this bylaw, to review the report of a QP retained by the owner in support of an application for a Tree Management Permit in order to verify or reassess any information contained in the original report. The General Manager may also, in his or her sole discretion, rely on either report in determining whether to issue, revoke, place conditions on, or refuse a Tree Management Permit.

12. Inspection and Enforcement

- 12.1.1 The General Manager, his or her designate, and Bylaw Enforcement Officers are authorized at all reasonable times to enter upon and inspect any parcel to determine if:
 - a) Tree removal has occurred contrary to the provisions and conditions of a permit, this bylaw or both;
 - b) Works occurring are in compliance with provisions and conditions of a permit and this bylaw.
- 12.1.2 If tree removal has occurred contrary to the provisions of this bylaw or the provisions and conditions of a permit, the General Manager may take any, all, or any combination of the following actions:
 - a) Issue a notice of violation of the bylaw or permit to any or all persons responsible for the unauthorized works;
 - b) Place notices on a parcel where the bylaw contravention has occurred, stating that the works at that location are contrary to this bylaw or the permit;
 - c) Issue a Stop Work Order
 - d) Order the person responsible to apply for a permit either to remedy the unauthorized works, or to undertake remedial or rehabilitative works necessary to return a parcel to its original condition to the satisfaction of and within the timeframe specified by the General Manager;
 - e) Suspend the permit in whole or in part;
 - f) Revoke the permit;
 - g) Enter upon a parcel where the contravention has occurred and carry out any works required to remedy the contravention at the expense of the person responsible;

- h) Deduct the cost of required remedial works carried out by the District from the security deposit, where a security deposit has been posted in accordance with a permit, or recover the cost of required remedial works as municipal taxes against a parcel where the contravention has occurred and where no security has been deposited or where the security is insufficient to cover the cost of remedial works.
- 12.1.3 In addition to penalties described in Section 14, and any other penalties provided for in this bylaw, if an owner causes or allows works without a permit or contrary to a permit or this bylaw, Council may, after consideration, reject or suspend applications for development with respect to the property for a period of 12 months from the date of discovery of works conducted without a permit or contrary to a permit.
- 12.1.4 Where in this bylaw any activity, matter or thing is required to be done by any person, or is prohibited, in default of it being done or remedied by such person, such activity, matter or thing may be done by the District at the expense of the person in default, and the expense may be recovered from the person as a debt owing to the District. Without limiting the foregoing, where the District provides work or service in relation to land or improvements, any costs incurred by the District that are not recovered from the owner by may be collected in the same manner as for property taxes.
- 12.1.5 Neither failure to enforce any part of this bylaw, nor any error, omission, or other neglect in relation to the enforcement of this bylaw, shall be interpreted as giving rise to a cause of action in favour of any person.
- 12.1.6 Notwithstanding any other penalties, the General Manager will require that the owner provide replacement trees for any tree that has been cut or damaged without a permit or contrary to a permit or this bylaw, including replacement for any tree that has been damaged to the extent that, in the opinion of the General Manager, it is not likely to survive. The number, species and size of replacement trees will be determined by a QP employed or retained by the District at the owner's expense, and will be set out in a Tree Replacement Plan prepared in accordance with Subsection 7.3, except that the replacement ratio must not be less than four (4) replacement trees for each tree cut or damaged to the extent that it is not likely to survive, and not less than eight (8) for Significant trees.
- 12.1.7 If an owner does not comply with a requirement to plant and maintain replacement trees, the Bylaw Inspector may issue a written notice that the District will be entitled to plant and maintain replacement trees at the owner's expense if the owner does not take the required action within 30 days of service of the notice. If the owner does not take the required action within the specified time, the District,

by its employees or others, may enter on the property and take the action at the expense of the owner, or may take action to plant and maintain an equivalent number of replacement trees at an off-site location at the expense of the owner.

13. Insurance and indemnification

13.1 As a condition specified in a permit issued, the person responsible shall agree to indemnify and hold harmless the District, its agents, employees and officers from and against any and all claims, demands, losses, costs, damages, actions, suits or proceedings resulting from works allowed by the permit.

14. Offence

14.1 A person who:

- a) Contravenes, violates or fails to comply with any provision of this bylaw;
- b) Suffers or allows any act or thing to be done in contravention of this bylaw; or
- c) Fails or neglects to do anything required to be done under this bylaw;

commits an offence and upon conviction shall be liable to a fine of not more than Ten Thousand Dollars (\$10,000.00), and where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.

- 14.2 This bylaw may be enforced:
 - a) By a Bylaw Inspector, the Environmental Coordinator, the General Manager, or any District staff as designated by the General Manager;
 - By means of a ticket in the form prescribed for the purpose under the Community Charter, and fines imposed for offences under District's Municipal Ticket Information Bylaw No. 1832, 2004, as amended;
 - c) By proceedings brought under the Offence Act.

15. Severability

If any provision of this bylaw is held to be invalid by the decision of any Court of competent jurisdiction, such invalidity shall not affect the validity of the remaining parts of this bylaw or the bylaw as a whole.

16. Schedules

A. Invasive Species list

Schedule A: Invasive Species list

Annual Sow Thistle Bohemian Knotweed

Bur Chervil
Burdock
Butterfly bush
Canada Thistle
Common Crupina
Common Reed

Common Toadflax
Dalmatian Toadflax
Dense-flowered Cordgrass

Diffuse Knapweed

Dodder

English Cordgrass English ivy Flowering Rush

Garlic Mustard Giant Hogweed Giant Knotweed

Giant Mannagrass/Reed Sweetgrass

Gorse

Himalayan balsam / Policeman's helmet

Himalayan blackberry Himalayan Knotweed Hound's-tongue Japanese Knotweed Jointed Goatgrass

Leafy Spurge
Milk Thistle
North Africa Grass
Perennial Sow Thistle
Purple Loosestrife
Purple Nutsedge
Rush Skeletonweed
Saltmeadow Cordgrass

Scentless Chamomile Scotch broom Smooth Cordgrass Spotted Knapweed Tansy Ragwort Velvetleaf

Wild Oats Yellow archangel Yellow Flag Iris Yellow Nutsedge Yellow Starthistle Sonchus oleraceus Fallopia x bohemica Anthriscus caucalis Arctium minus

Buddleja davidii Cirsium arvense Crupina vulgaris

Phragmites australis subspecies australis

Linaria vulgaris Linaria dalmatica Spartina densiflora Centaurea diffusa Cuscuta spp. Spartina anglica Hedera helix

Butomus umbellatus Alliaria petiolata

Heracleum mantegazzianum

Fallopia sachalinensis Glyceria maxima Ulex europaeus

Impatiens glandulifera Rubus armeniacus

Polygonum polystachyum Cynoglossum officinale

Fallopia japonica Aegilops cylindrica Euphorbia esula Silybum marianum Ventenata dubia Sonchus arvensis Lythrum salicaria Cyperus rotundus Chondrilla juncea Spartina patens Matricaria maritima Cytisus scoparius Spartina alterniflora Centaurea maculosa Senecio jacobaea Abutilon theophrasti

Avena fatua

Lamium galeobdolon Iris pseudacorus Cyperus esculentus Centaurea solstitialis

District of Squamish

Soils Management Bylaw No. XXXX, XXXX

A bylaw to regulate deposit and removal of soil

AND WHEREAS the Community Charter authorizes Council to enact bylaws to regulate the deposit and removal of soil and other material within the municipality (Sections 8.3.m; 12.1; 15.1; 195 and 264);

AND WHEREAS the Council of the District of Squamish considers it in the public interest to establish a permitting system to regulate the deposit and removal of soil and other material within the municipality.

THEREFORE the Council of the District of Squamish, in open meeting assembled, enacts the following to replace the existing Site Alteration bylaw No. 1886, 2005.

1. Repeal

The District of Squamish Site Alteration bylaw No. 1886, 2005 and all amendments thereto are hereby repealed.

2. Interpretation

In this bylaw:

Applicant means	the owner of a parcel of land	d, or a person authorized by the owner to
-----------------	-------------------------------	---

make application under this bylaw.

Bedrock means the hard, solid rock beneath surface materials such as soil and gravel.

Bedrock is consolidated rock, meaning it is solid and tightly bound. Overlying material is often unconsolidated rock, which is made up of loose particles (see

definition of Soil in this bylaw).

Council means the elected officials of the District.

Deposit means to place, store, pile, spill, release, directly or indirectly, fill in a volume

of > 30m³ on a parcel or contiguous parcels of land where that fill did not exist

or stand previously and includes a stockpile.

Development Approval

means the approval of an application for a zoning amendment, a subdivision, a development permit, a development variance permit, or a building permit.

District

means the District of Squamish.

Environmentally Sensitive Area (ESA)

means those areas identified in the District's OCP as Environmentally Sensitive Areas (ESA).

Floodway

means an area designated to be preserved for the passage of floodwater as defined by Figures 8-1 to 8-5 in the Integrated Flood Hazard Management Plan.

General Manager

means the person holding the position of General Manager, and any person appointed to act in the place, or under the direction, of the General Manager.

Habitat Restoration Project

means all of those measures necessary to restore, enhance, or create healthy ecosystems, including the reestablishment of native vegetation and fish and wildlife habitat on disturbed or denuded sites, and may include the restoration of the appropriate hydrology and soils on a site. May be referred to as "restoration project" in this bylaw, however, does not include any restoration works that are required as compensation for any works associated with a development approval.

High Water Mark

means the visible high water mark of a stream where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the stream characteristics distinct from that of its banks, in vegetation as well as in the nature of the soil itself, and includes the active floodplain (refer to District's OCP).

Invasive Species

means any invasive plant species that has the potential to pose undesirable or detrimental impacts on people, animals or ecosystems. Also includes species listed in Schedule A of the BC Weed Control Regulation and Schedule A of this bylaw.

OCP

District of Squamish Official Community Plan, as amended from time to time.

Other Material

means

- a) wood waste as defined herein;
- b) land clearing waste, consisting of stumps, brush and logs or any other waste derived from land clearing activities;
- c) any fill material that contains invasive plant species, including seeds and root fragments of these species.

Owner means the owner of land, as defined in the Community Charter, or a duly

authorized agent or representative.

Parcel means any parcel, block, or other area in which land is held or into which land

is subdivided.

Permit means a Soils Management Permit providing written authority for soil removal

or deposit, granted by the General Manager pursuant to this bylaw.

Person means any human being as defined by statute, firms, labour organizations,

partnerships, associations, corporations, legal representatives, trustees, and receivers, and includes owners and applicants, as described within this bylaw.

Preload means the placement of fill material for the purposes of soil compaction.

Qualified Professional (QP) means:

 a) an applied scientist or technologist who is in good standing in British Columbia with an appropriate professional organization and includes, without limitation, a professional Biologist, Agrologist, Arborist, Forester, Geoscientist, Engineer, or Technologist, and,

b) the individual is acting within that individual's area of expertise.

Ravine as defined by the District's OCP.

Removal means to remove soil (including material resulting from rock blasting) from a

parcel or contiguous parcels of land on which it exists or has been deposited.

Riparian Assessment Area

(RAA)

as defined by the District's OCP.

Soil means the entire mantle of natural material above bedrock, including but not

limited to sand, gravel, rock, silt, clay, blasted bedrock, peat or topsoil.

Stockpile means a man-made accumulation of soil held in reserve for future use,

deposit or removal.

Means an order to the person responsible for unauthorized works to Stop Work Order

immediately stop the bylaw contravention and to immediately cease and desist from unauthorized works until the contravention is remedied to the satisfaction of and within the timeframe specified by the General Manager.

Top of the Ravine Bank as defined by the District's OCP.

Topsoil means the surface horizon of soil which contains organic material and is

capable of supporting plant growth.

Wetland

means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation and various kinds of biological activity which are adapted to a wet environment. Wetlands can be subdivided into two broad categories:

- a) Organic wetlands: organic wetlands are more simply referred to as peatlands. Peatlands contain more than 40 cm of peat accumulation on which organic soils develop.
- b) Mineral wetlands: mineral wetlands are found in areas where an excess of water collects on the surface and which for geomorphic, hydrologic, biotic, edaphic (factors related to soil), or climatic reasons produce little or no organic matter or peat.

Wood waste

means hog fuel, sawdust, shavings, edgings, or other wood waste which results from the manufacturing process or any other type of processing of lumber or other wood products.

3. Application of the bylaw

This bylaw applies to all lands under the jurisdiction of the District of Squamish.

4. Exemptions

4.1 Soil removal and deposit

- a) The deposit or removal of 30 m³ of clean (free from contamination and/or wood waste) soil on a site per 12 month period.
- b) This exemption does not apply to deposit or removal:
 - i) on slopes greater than 30 percent;
 - ii) within 30 metres of the crest or toe of slopes steeper than 30 percent;
 - iii) on parcels located in a floodway;
 - iv) Soils containing invasive species.
- c) Contaminated site remediation works are exempt from this bylaw, provided that documentation from the Land Remediation Section, Environmental Management Branch, provincial Ministry of Environment, has been provided to the General Manager.

4.2 Determining whether a parcel is exempt

a) At the discretion of the GM, a QP is required in order to determine whether a parcel is exempt from the bylaw.

5. Prohibitions

- 5.1 No person shall fail to comply with the terms or conditions of this bylaw or a permit issued pursuant to this bylaw.
- 5.2 No person shall remove, conceal, or otherwise interfere with a posted Stop Work Order issued under this bylaw.
- 5.3 No person shall alter, falsify, or otherwise provide misrepresentation for or on a permit or application.

Notwithstanding the exemption in Section 4.1(a):

- 5.4 No person shall deposit soil or other material on, or remove soil or other material from, lands in the District unless that person has first obtained a permit or approval under Section 6 in accordance with the provisions of this bylaw, unless the requirement for a permit is specifically exempted under Subsection 4.1 (a) or Subsection 4.1 (c) of this bylaw.
- 5.5 Any soil or other material deposited without a permit under Section 6 shall be removed from the land by the owner of the land or their agent at their cost. Failure to remove such soil or other material shall constitute an offence under this bylaw.
- At the District's discretion, the owner of the land upon which soil or other material has been deposited without a permit may apply to the District for a permit, and the deposited material may remain in place until a permit decision is made.
- 5.7 No person shall cause the transport or deposit of invasive species (Schedule A) during a soil removal or deposit operation.
- 5.8 In addition to any terms and conditions contained in a permit under this bylaw, no person shall deposit or remove soil unless in accordance with the following requirements:
 - a) The slope or any part of an exposed face of any deposited soil shall not be greater than the angle of repose necessary for stability of the soil in question;
 - b) The deposited soil shall be graded in such a manner that positive gravity drainage is assured throughout, and a drainage system shall be installed which is of sufficient capacity and extent to ensure that groundwater and surface run-off will not drain into adjoining lands at greater rates after commencement of the deposit operations than prior to the commencement of the deposit operations;
 - c) Unless a retaining wall is used, where soil is deposited within six (6) metres of a property line the deposited soil shall be graded in such a manner so that the slope of the deposit closest to the property line is not steeper than 15 percent;

- d) No soil shall be deposited within three (3) metres of a property line unless the zoning allows a zero lot line setback, or a parcel has received a variance permit to allow the proposed development to extend to the property line;
- e) No soil or other material shall be deposited over any dedicated highway or registered statutory right-of-way without first obtaining the approval, in writing, of the authority having jurisdiction over such highway or right-of-way, and a copy of such written approval has been be filed with the General Manager;
- f) No soil or other material shall be deposited in the immediate vicinity of any utilities or services which may be damaged by any settlement resulting from such deposit without first obtaining the approval, in writing, of the authority having jurisdiction over such utility or service, and a copy of such written approval has been filed with the General Manager;
- g) No soil or other material shall be deposited over wells or private sewage disposal systems;
- h) No soil or other material shall be deposited in wetlands, and;
- i) The deposited soil or other material shall not obstruct a designated floodway or transfer flood risk onto an adjacent property (as determined by a suitable QP).

6. Soils Management Permits

Unless a site is exempt from this bylaw, any person wishing to alter a site through the removal or deposit of soil shall make application for a Soils Management Permit to the General Manager.

For phased developments, permit applications will be accepted only for works on the current phase. Permits shall be issued as per development phasing, only to the extent of each proposed phase of development.

6.1 Application Information

For permit application information, refer to the Land Development Procedures Bylaw No. 2229, 2012, as amended.

6.2 Permit Fees

For permit fees, refer to the Fees and Charges Bylaw No. 2012, 2007, as amended.

7. Permit Authority

7.1 Soil removal and deposit

- 7.1.1 On receiving a complete application, signed by the owner, along with full payment of applicable fees, and on being satisfied that the application meets the standards and objectives of this bylaw, the General Manager shall issue a Soils Management Permit for the removal and/or deposit of soil, and may attach any terms, conditions, restrictions and requirements to the permit as he or she considers necessary or advisable for the protection of property, infrastructure and the natural environment. Permit conditions will be in keeping with Schedule B, Soil Removal and Deposit Performance Standards.
- 7.1.2 A Soils Management Permit may impose the following terms and conditions:
 - a) Sequence and timing of construction to avoid or mitigate impacts, including but not limited to timelines for completion of the works identified in the permit;
 - b) Co-ordination of geotechnical recommendations by a Qualified Environmental Professional or Professional Engineer;
 - c) Frequency of onsite monitoring of works and associated inspection reports undertaken by a Qualified Professional and submitted to the General Manager.
- 7.1.3 Upon issuance, a copy of the Soils Management Permit shall be displayed on the subject property.
- 7.1.4 A permit will not be issued if in the opinion of the General Manager the proposed soil removal or deposit may:
 - a) Contravene any District bylaw, or provincial or federal law;
 - b) Create mud and / or dust, leaving the parcel, or which may constitute a nuisance to any other public or private parcel or the community at large;
- 7.1.5 Management of dirt, dust and debris
 - a) Dirt, dust, debris, and other substances, which as a result of a soil deposit or removal operation shall be contained on site, unless specifically approved under permit.
 - b) Dirt, dust, debris and other substances deposited on public roads shall be removed on a daily basis by the permit applicant via means other than washing the material into District drainage infrastructure and / or natural watercourses or wetlands.
 - c) Where the dirt, dust, debris, and other substances cause a hazard they shall be managed or removed as directed by the General Manager.
 - d) Damage to District infrastructure (e.g., curbs) as a result of the soil deposit/removal works shall be repaired by the permit holder.
 - e) Should the permit holder fail to perform the necessary cleaning work, the District may perform this work, the cost of which shall be paid forthwith to the District by the person responsible for the removal. The District may recover the cost by drawing

on the security deposited with the District. Where the security is drawn upon for these purposes, the applicant will replenish the security to the amount required under Subsection 8.2 within fifteen (15) days.

8. Maintenance and Security for Soils Management Permits

8.1 Soil removal and deposit

- 8.1.1 An application for a Soils Management Permit for soil removal and/or deposit must include a security deposit in cash, certified cheque, or an Irrevocable Letter of Credit in a form acceptable to the District in the amount of \$5 per cubic metre of soil proposed to be deposited or removed, or other amount to the satisfaction of the General Manager.
- 8.1.2 The security deposit submitted at the time of permit issuance is required to secure the full and proper compliance with the provisions of the permit and this bylaw. If the applicant has not complied with or is in contravention of the provisions of the bylaw or any of the terms and conditions expressed in the permit, then the District may realize on any letters of credit and, at its option, may either hold the security deposit until the applicant has complied with the provisions of the bylaw or the terms and conditions expressed in the permit or use the security deposit to rectify the contravention or non-compliance work. For such purpose the District may enter upon the permit lands or any part thereof and carry out the works required to rectify the contravention or non-compliance.
- 8.1.3 If the security deposit is not sufficient for the District to rectify the contravention or non-compliance, the owner or owners of the permit lands will pay any deficiency to the District on demand.
- 8.1.4 If any letter of credit will expire prior to the applicant complying with the provisions of this bylaw and the performance of all of the terms and conditions expressed in the permit the applicant will deliver to the District, at least thirty (30) days prior to its expiry, a replacement letter of credit on like terms. If the applicant fails to do so, the District may realize the letter of credit and hold the security deposit in lieu thereof.
- 8.1.5 Where the security deposit is drawn upon for any reason, the applicant will, within fifteen (15) days, replenish the security deposit to the amount required in Subsection 8.1.1 of this bylaw.
- 8.1.6 If the applicant complies with the provisions of the bylaw and performs all of the terms and conditions expressed in the permit, the District will, not earlier than sixty (60) days after the earlier of the expiration of the permit and the completion of the

- soil removal or deposit operation, return the cash deposit or the letter of credit to the applicant upon request.
- 8.1.7 Should the permit holder fail to comply with the terms and conditions of a permit or a requirement of this bylaw, the District may enter the property and perform the necessary work, and may retain all or a portion of the security deposit to cover the cost of the work.

9. Expiry

A Soils Management Permit shall be valid for a period of 12 months from the date of issue.

10. Reconsideration

- 10.1 If a decision is made by the General Manager with regards to the refusal of a permit, the owner has a right to have Council reconsider the matter.
- 10.2 If an owner would like Council to reconsider a decision, the owner shall deliver written notice to the Chief Administrative Officer within thirty (30) days of receiving notice of the decision.
- 10.3 The owner shall be notified by the Chief Administrative Officer of the date that Council will reconsider the decision.
- 10.4 Council may confirm, overturn or modify the decision of the General Manager.

11. General

The General Manager is responsible for the administration of this bylaw.

11.1 In reaching a decision under this bylaw, the General Manager may retain the services of an independent Qualified Professional, at the cost of the owner requesting to remove or deposit soil, from property subject to this bylaw, to review the report of a Qualified Professional retained by the owner in support of an application for a Soils Management Permit in order to verify or reassess any information contained in the original report. The General Manager may also, in his or her sole discretion, rely on either report in determining whether to issue, revoke, place conditions on, or refuse a Soils Management Permit.

12. Inspection and Enforcement

- 12.1.1 The General Manager, his or her designate, and Bylaw Enforcement Officers are authorized at all reasonable times to enter upon and inspect any parcel to determine if:
 - a) Soil/deposit or removal works have occurred contrary to the provisions and conditions of a permit, this bylaw or both,

- b) Works occurring are in compliance with provisions and conditions of a permit and this bylaw.
- 12.1.2 If soil removal or deposit has occurred contrary to the provisions of this bylaw or the provisions and conditions of a permit, the General Manager may take any, all, or any combination of the following actions:
 - a) Issue a notice of violation of the bylaw or permit to any or all persons responsible for the unauthorized works;
 - b) Place notices on a parcel where the bylaw contravention has occurred, stating that the works at that location are contrary to this bylaw or the permit;
 - c) Issue a Stop Work Order
 - d) Order the person responsible to apply for a permit either to remedy the unauthorized works, or to undertake remedial or rehabilitative works necessary to return a parcel to its original condition to the satisfaction of and within the timeframe specified by the General Manager;
 - e) Suspend the permit in whole or in part;
 - f) Revoke the permit;
 - g) Enter upon a parcel where the contravention has occurred and carry out any works required to remedy the contravention at the expense of the person responsible;
 - h) Deduct the cost of required remedial works carried out by the District from the security deposit, where a security deposit has been posted in accordance with a permit, or recover the cost of required remedial works as municipal taxes against a parcel where the contravention has occurred and where no security has been deposited or where the security is insufficient to cover the cost of remedial works.
- 12.1.3 In addition to penalties described in Section 0, and any other penalties provided for in this bylaw, if an owner causes or allows works without a permit or contrary to a permit or this bylaw, Council may, after consideration, reject or suspend applications for development with respect to the property for a period of 12 months from the date of discovery of works conducted without a permit or contrary to a permit.
- 12.1.4 Where in this bylaw any activity, matter or thing is required to be done by any person, or is prohibited, in default of it being done or remedied by such person, such activity, matter or thing may be done by the District at the expense of the person in default, and the expense may be recovered from the person as a debt owing to the District. Without limiting the foregoing, where the District provides work or service in relation to land or improvements, any costs incurred by the

- District that are not recovered from the owner by may be collected in the same manner as for property taxes.
- 12.1.5 Neither failure to enforce any part of this bylaw, nor any error, omission, or other neglect in relation to the enforcement of this bylaw, shall be interpreted as giving rise to a cause of action in favour of any person.

13. Insurance and indemnification

13.1 As a condition specified in a permit issued, the person responsible shall agree to indemnify and hold harmless the District, its agents, employees and officers from and against any and all claims, demands, losses, costs, damages, actions, suits or proceedings resulting from works allowed by the permit.

14. Offence

14.1 A person who:

- a) Contravenes, violates or fails to comply with any provision of this bylaw;
- b) Suffers or allows any act or thing to be done in contravention of this bylaw; or
- c) Fails or neglects to do anything required to be done under this bylaw;

commits an offence and upon conviction shall be liable to a fine of not more than Ten Thousand Dollars (\$10,000.00), and where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.

- 14.2 This bylaw may be enforced:
 - a) By a Bylaw Inspector, the Environmental Coordinator, the General Manager, or any District staff as designated by the General Manager;
 - b) By means of a ticket in the form prescribed for the purpose under the Community Charter, and fines imposed for offences under District's Municipal Ticket Information Bylaw No. 1832, 2004, as amended;
 - c) By proceedings brought under the Offence Act.

15. Severability

If any provision of this bylaw is held to be invalid by the decision of any Court of competent jurisdiction, such invalidity shall not affect the validity of the remaining parts of this bylaw or the bylaw as a whole.

16. Schedules

- A. Invasive Species list
- B. Soil Removal and Deposit Performance Standards

Schedule A: Invasive Species list

Annual Sow Thistle Bohemian Knotweed

Bur Chervil
Burdock
Butterfly bush
Canada Thistle
Common Crupina
Common Reed

Common Toadflax
Dalmatian Toadflax
Dense-flowered Cordgrass

Diffuse Knapweed

Dodder

English Cordgrass
English ivy
Flowering Rush
Garlic Mustard

Garlic Mustard Giant Hogweed Giant Knotweed

Giant Mannagrass/Reed Sweetgrass

Gorse

Himalayan balsam / Policeman's helmet

Himalayan blackberry Himalayan Knotweed Hound's-tongue Japanese Knotweed Jointed Goatgrass

Leafy Spurge
Milk Thistle
North Africa Grass
Perennial Sow Thistle
Purple Loosestrife
Purple Nutsedge
Rush Skeletonweed
Saltmeadow Cordgrass
Scentless Chamomile

Scotch broom
Smooth Cordgrass
Spotted Knapweed
Tansy Ragwort
Velvetleaf
Wild Oats

Yellow archangel Yellow Flag Iris Yellow Nutsedge Yellow Starthistle Sonchus oleraceus Fallopia x bohemica Anthriscus caucalis Arctium minus

Buddleja davidii Cirsium arvense Crupina vulgaris

Phragmites australis subspecies australis

Linaria vulgaris
Linaria dalmatica
Spartina densiflora
Centaurea diffusa
Cuscuta spp.
Spartina anglica
Hedera helix

Butomus umbellatus Alliaria petiolata

Heracleum mantegazzianum

Fallopia sachalinensis Glyceria maxima Ulex europaeus

Impatiens glandulifera

Rubus armeniacus

Polygonum polystachyum Cynoglossum officinale

Fallopia japonica Aegilops cylindrica Euphorbia esula Silybum marianum Ventenata dubia Sonchus arvensis Lythrum salicaria Cyperus rotundus Chondrilla juncea Spartina patens Matricaria maritima Cytisus scoparius Spartina alterniflora Centaurea maculosa Senecio jacobaea Abutilon theophrasti

Avena fatua

Lamium galeobdolon Iris pseudacorus Cyperus esculentus Centaurea solstitialis

Schedule B: Soil Removal and Deposit Performance Standards

The standards set out in this Schedule B shall apply to all soil removal and deposit within the District whether or not a permit is required or issued.

- 1. **Best management practices:** Soil removal or deposit shall be conducted by persons responsible to ensure that no hazard to human or animal life shall exist within the parcel and to or from the parcel upon which the removal or deposit is occurring.
- 2. *Other bylaws:* Persons responsible and all activity associated with soil removal or deposit shall comply with applicable federal, provincial and District laws, bylaws, regulations and policies in effect during the removal or deposit.
- 3. **Damage control:** Soil removal or deposit shall not encroach upon, undermine, damage or endanger any drainage facility, natural watercourse, wetland, aquifer, highway or other public or private parcel, or where a permit has been issued, encroach into any non-encroachment area so prescribed in the permit. Persons responsible who, in the course of soil removal or deposit, cause, or allow to be caused, any such damage shall promptly repair the damage to the satisfaction of the General Manager.
- 4. **Debris control:** Persons responsible shall take all necessary measures to contain dust, dirt, mud or other debris generated by the soil removal or deposit on the parcel.
- 5. **Road maintenance:** Dirt, mud, or debris deposited on public roads or in roadside ditches from the transfer of soil to or from a parcel shall be removed on a daily basis or as deemed necessary by the General Manager.
- 6. **Waterways:** All drainage facilities, natural watercourses, wetlands or ground water aquifers shall be kept free of silt, clay, sand, rubble, debris, gravel, and all other matter or thing originating from any soil removal or deposit which might cause fouling or obstruction to the facilities, watercourses, wetlands or aquifers.
- 7. *Operating times:* Soil removal or deposit shall be undertaken in accordance with the "Construction Hours" provision of the District Noise Regulation Bylaw, No. 2312, 2014, as amended.
- 8. **Washing, crushing, screening:** No person shall use washing, crushing or screening equipment as part of soil removal or deposit unless the person has obtained applicable regional and/or provincial environmental approvals and the parcel upon which the washing, crushing or screening equipment is to be located is zoned to permit washing, crushing or screening uses.

- 9. Fencing: All hazards or potential hazards arising from soil removal or deposit shall be adequately fenced or otherwise made inaccessible to the public or other unauthorized persons or animals, and suitable weather-proof signs shall be mounted and maintained at intervals of not greater than 75 metres around the perimeter of the removal or deposit site with clear, legible wording to indicate any hazard, the nature of the operation, the presence of the excavation and prohibiting the presence of the public or other unauthorized persons.
- 10. No soil removal or deposit shall be undertaken within 7.5 metres of any highway, right-of-way or utility easement without first obtaining written consent from the District or the authority having jurisdiction over the right-of-way or easement. The General Manager may, at any time, require evidence of such consent.
- 11. *Organic soil:* Unless prior written approval to do otherwise has been granted by the General Manager, organic soil shall:
 - Not be removed, deposited or stockpiled when the organic soil is saturated or powdery dry;
 - b) Be stockpiled at heights not greater than 4.0 metres and bermed with slopes no steeper than 2:1 (Horizontal: Vertical);
 - Be stockpiled so that vegetation cover is established on the stockpile as soon as possible but no later than 30 days after handling and be fertilized and irrigated as required to maintain the vegetation cover;
 - d) Be stockpiled in such way that allows weed control at all times, which control can be by mechanical or chemical means;
 - e) Be stockpiled in such way that prohibits travel upon by any vehicles or heavy machinery;
 - Be stockpiled without any mixing of foreign matters, such as hog fuel, gravel or other organic matters;
 - g) For highly organic soils such as peat, be monitored during dry periods to correct accelerated decomposition and excessive heat build-up; and
 - h) Be stockpiled to allow runoff from the stockpile to be diverted into catchment ponds or silt traps prior to discharge into natural watercourses or ditches or alternatively, a three metre wide buffer zone may be provided, if approved by the General Manager, along the perimeter of the downslope sides of the stockpile.
- 12. **Remediation and restoration:** Unless otherwise specified in a permit or approval under Section 6, upon completion of soil removal or deposit, every person responsible shall at a minimum cover all removal or deposit surfaces with at least 0.20 meters of topsoil and sod and/or plant a suitable rooted ground cover.
- 13. **Adjacent structures:** Deposit shall not occur adjacent to a building or structure unless the building or structure is capable of withstanding the additional loads caused by the deposit, as determined by an engineer. Footings or other improvements which may be affected by

- any removal shall be underpinned or otherwise protected against settlement and shall be protected against soil movement in accordance with a plan prepared and supervised by an engineer.
- 14. *Slope:* The slope of any part of an exposed face, during soil removal or after the soil removal is completed, shall not be greater than the angle of repose necessary for maintaining stability of the soil in question and the slope shall be retained in accordance with good engineering practice.
- 15. Water table: The removal or deposit shall not result in lowering the effective water table at wells on any other parcel without the written consent of the owner of that parcel. The General Manager may, at any time, require evidence of consent. Furthermore, soil removal or deposit shall not cause the groundwater table to rise on an adjoining parcel or other public or private property so as to cause flooding or malfunctioning of a septic disposal system or contamination of a well.
- 16. **Drainage:** The removal or deposit shall not interfere with, or impact the established above or below ground drainage pattern of any adjoining parcel or any other public or private property. Where necessary, measures consistent with good engineering practice will be implemented to ensure that any interference or impact is prevented. The General Manager must approve soil removal or deposition that has the potential to create standing water.
- 17. **Settlement:** Where the natural subsoil is compressible, there shall be no deposit in the immediate vicinity of any utility or service which might be damaged by any settlement resulting from the deposit without first obtaining written consent from the authority having jurisdiction over the utility or service. The General Manager may, at any time, require evidence of consent.
- 18. *Invasive species:* Invasive species (see Schedule A) shall not be transported to or deposited on a soil deposit site.

DRAFT CONTENT FOR:

District of Squamish

Bylaw Amendment to

Fees and Charges Bylaw No. 2012, 2007

1. Tree Management Permit Fees

- a) For tree removal, the permit application fee shall be \$150 plus \$5 for every tree proposed to be cut.
- b) Institutional and community projects (non-profit) such as habitat restoration projects and invasive species removal works are exempt from the permit fees associated with number of trees removed (e.g., a tree removal application would be subject to the \$150 fee, and not the \$5 fee per tree).

2. Soils Management Permit Fees

- a) For soil removal or deposit, the permit application fee shall be \$150 plus \$0.35 for every cubic metre proposed for removal or deposit. For pre-load, the soil volumetric fee will only be charged for the installation of pre-load, not for its removal.
- b) Within a permit application, the soil volume fee will only apply to the first 200,000 m³ proposed for deposit or removal on the permit application parcel.
- c) Institutional and community projects (non-profit) such as habitat restoration projects and invasive species removal works are exempt from the volumetric permit fees associated with soil removal / deposit (e.g., a soil removal application would be subject to the \$150 fee, and not the \$0.35 per cubic metre fee).

DRAFT CONTENT FOR:

District of Squamish

Bylaw Amendment to

Land Development Procedures Bylaw No. 2229, 2012

1. Tree Management Permits

1.1 Application Information: General

All applications for a permit to cut a tree(s) must include the following:

- a) Address or legal description of the property or properties on which the proposed works are located.
- b) A description of the proposed works, including a map of the haul route and schedule.
- c) Copy of the Certificate of Title for the property, current within 30 days, including copies of any non-financial charges against the title.
- d) A civil plan, to scale (1:500, or as appropriate to the site), as per the methods detailed in the Subdivision and Development Control Bylaw No. 2373, 2015, as amended, of the property or properties identifying property lines, topography, site access, drainage, existing and proposed grading, existing and proposed buildings, structures, roads and rights-of-way, wetlands, watercourses and the present natural boundary and associated Riparian Assessment Areas, ESAs, and
 - The locations, species, age class and size (caliper and canopy) of all trees proposed to be cut and all retained trees (as determined by Qualified Professional).
- e) An erosion and sediment control plan (prepared by a Qualified Professional), prepared in accordance with the Subdivision and Development Control Bylaw No. 2373, 2015, as amended. The temporary erosion and sediment control plan to be implemented must control the run-off of sediment laden water into nearby wetlands and / or watercourses, or any District drainage infrastructure.
- f) The General Manager may require an assessment of any risks to public health and safety and/or adjacent properties associated with the proposed tree removal.

g) A schedule of independent environmental monitoring and weekly reporting to the District throughout the duration of the proposed works, or at a reporting schedule and/or content as determined at the discretion of the General Manager.

1.2 Application Information: Tree Removal

All applications for a permit to cut a tree(s) must include the following, and all items must be prepared by a Qualified Professional with expertise appropriate to that item:

- a) Where the base of a tree is located on more than one property, the application for a permit must be endorsed in writing by the owners of each property on which the tree is situated.
- b) Tree Replacement Plan, complete with map identifying locations, species and size of proposed replacement trees.
- c) The Tree Removal Plan and Tree Replacement Plan must include any other information requested by the General Manager (and prepared by a Qualified Professional), as he or she considers is necessary to adequately describe the nature and extent of proposed tree cutting.
- d) Where the site of proposed removal of any trees on any land that is located within a Riparian Assessment Area, the Tree Removal Plan, the Tree Replacement Plan and Tree Retention Plan shall include a detailed survey (prepared by a Qualified Professional) denoting the top of bank, the top of any ravine bank, and the high water mark of any such watercourse as applicable in accordance with Development Permit Area 11.
- e) A statement prepared by a Qualified Professional regarding the treatment (e.g., on-site chipping) and disposal location of removed trees and any tree removal debris.
- f) A bird nesting survey, prepared by a Qualified Professional, if trees are proposed to be cut during the bird nesting window. The nesting window is dependent upon the bird species present on site, but typically is from March 1 to August 31.

2. Soils Management Permits

2.1 Application Information: General

All applications for a permit to deposit and/or remove soil must include the following:

- a) Address or legal description of the property or properties on which the proposed works are located.
- b) A description of the proposed works, including a map of the haul route and schedule for trucking of soil.

- c) Copy of the Certificate of Title for the property, current within 30 days, including copies of any non-financial charges against the title.
- d) A civil plan, to scale (1:500, or as appropriate to the site), as per the methods detailed in the Subdivision and Development Control Bylaw No. 2373, 2015, as amended, of the property or properties identifying property lines, topography, site access, drainage, existing and proposed grading, existing and proposed buildings, structures, roads and rights-of-way, wetlands, watercourses and the present natural boundary and associated Riparian Assessment Areas, ESAs, and
 - A statement of the estimated total volumes of all soil proposed for deposit and/or removal and, in the case of deposit, the estimated total volume of the deposit to remain on the site after preload is removed (prepared by a Qualified Professional);
 - ii. The location of the site from which soil is to be removed and the location of the site to which soil is to be deposited, and the composition of the soil.
- e) An erosion and sediment control plan (prepared by a Qualified Professional), prepared in accordance with the Subdivision and Development Control Bylaw No. 2373, 2015, as amended. The temporary erosion and sediment control plan to be implemented must control the run-off of sediment laden water into nearby wetlands and / or watercourses, or any District drainage infrastructure.
- f) The General Manager may require an assessment of any risks to public health and safety and/or adjacent properties associated with the proposed soil deposit/removal works.
- g) A schedule of independent environmental monitoring and weekly reporting to the District throughout the duration of the proposed works, or at a reporting schedule and/or content as determined at the discretion of the General Manager.

2.2 Application Information: Soil Removal and Deposit

All applications for a permit to remove and/or deposit soil must include the following, and must be prepared by a Qualified Professional with expertise appropriate to that item:

- a) A civil works plan
- b) A confirmation from a Qualified Professional that the soil intended for deposit is free from any invasive species for any soil originating from outside the Squamish-Lillooet Regional District boundaries.

- c) A confirmation from a Qualified Professional that the machinery used in the deposit operation, including machinery used in hauling, is free from any invasive species, and a description of the method used to make this determination
- d) A traffic and road impact assessment, if requested by the GM.
- e) Certification by a QP that a floodway will not be obstructed through the deposit of soil, if requested by the GM.
- g) Any further and other information that the General Manager considers is necessary to adequately describe the nature, extent, and impacts of the proposed soil removal or deposit operation.

DRAFT CONTENT FOR:

District of Squamish

Bylaw Amendment to

Municipal Ticket Information Bylaw No. 1832, 2004

1. Tree Management Bylaw

- 1.1 A person who:
 - a) Contravenes, violates or fails to comply with any provision of this bylaw;
 - b) Suffers or allows any act or thing to be done in contravention of this bylaw; or
 - c) Fails or neglects to do anything required to be done under this bylaw;

commits an offence and upon conviction shall be liable to a fine of not more than Ten Thousand Dollars (\$10,000.00), and where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.

- 1.2 This bylaw may be enforced:
 - a) By a Bylaw Inspector, the Environmental Coordinator, the General Manager, or any District staff as designated by the General Manager;
 - By means of a ticket in the form prescribed for the purpose under the Community Charter, and fines imposed for offences under District's Municipal Ticket Information Bylaw No. 1832, 2004, as amended;
 - c) By proceedings brought under the Offence Act.

2. Soils Management Bylaw

- 2.1 A person who:
 - a) Contravenes, violates or fails to comply with any provision of this bylaw;
 - b) Suffers or allows any act or thing to be done in contravention of this bylaw; or
 - c) Fails or neglects to do anything required to be done under this bylaw;

commits an offence and upon conviction shall be liable to a fine of not more than Ten Thousand Dollars (\$10,000.00), and where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.

2.2 This bylaw may be enforced:

- a) By a Bylaw Inspector, the Environmental Coordinator, the General Manager, or any District staff as designated by the General Manager;
- b) By means of a ticket in the form prescribed for the purpose under the Community Charter, and fines imposed for offences under District's Municipal Ticket Information Bylaw No. 1832, 2004, as amended;
- c) By proceedings brought under the Offence Act.