CLEARING & GRADING DEVELOPMENT STANDARDS

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DEVELOPMENT SERVICES DEPARTMENT

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Director

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CHAPTER CG1 – GENERAL REQUIREMENTS

CG1 – 01 PURPOSE

The purpose of the Clearing and Grading Standards is to provide the minimum design and construction standards for land alteration, clearing, grading, and erosion control work. The clearing and grading code (Chapter 23.76 of the Bellevue City Code (BCC)), and the city's National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Discharges from Small Municipal Separate Storm Sewers in Western Washington provide the authority for and are the basis for these development standards.

Although these standards are intended to apply to land disturbing activities, not all the standards will apply in all situations. Compliance with these standards does not relieve the professional civil engineer or contractor from the responsibility of applying conservative and sound professional judgment. These are minimum standards and are intended to assist, but not substitute for, competent work by engineers and contractors. The Development Services Department (DSD) may, at its sole discretion, due to special conditions and/or environmental constraints, require more stringent requirements than would normally be required under these standards.

CG1 – 02 CODE AUTHORITY

The standards imposed by this document are under authority of the City of Bellevue clearing & grading code (Bellevue City Code Chapter 23.76); the City of Bellevue land use code (Bellevue City Code Chapter 20); the Bellevue utilities code (Bellevue City Code Chapter 24); and/or the City of Bellevue civil violations code (Bellevue City Code Chapter 1.18).

CG1 – 03 RESPONSIBILITY FOR IMPLEMENTING STANDARDS

The clearing & grading permit holder (permittee) is responsible for implementing these standards. Project engineering and design must conform to the City of Bellevue codes and standards, including the clearing & grading code and these development standards. Compliance with codes and standards does not relieve the designer of the responsibility to apply sound professional judgment to protect the health, safety, and welfare of the general public.

Site conditions and environmental constraints may require a greater level of protection than would normally be required by city codes and standards. Design elements of any proposed project may have to be revised to comply with the requirements of these standards, or any other City of Bellevue permit conditions, codes and regulations.

CG1 - 04 DEFINITIONS

The following terms as used in this document shall be defined and interpreted as follows:

Applicant: the individual, partnership, association, or corporation applying for a permit to do work under the clearing and grading code, including the property owner, and any employee, agent, consultant or contractor acting on behalf of the applicant, and any successor in interest.

Best management practices (BMPs): shall have the meaning set forth in Chapter 23.76.030 of the Bellevue City Code, now or as hereafter amended.

Building site: shall have the meaning set forth in Chapter 20.50 LUC, now or as hereafter amended.

Clearing: the act of destroying or removing vegetation by any means, including chemical, mechanical, or by hand.

Clearing and Grading Permit: the written permission of the Director to the permittee to proceed with the act of clearing and grading within the provisions of the clearing and grading code. The clearing and grading permit includes the associated approved plans and any conditions of approval as well as the permit form itself.

Code: unless noted otherwise, "code" refers to the clearing and grading code.

Critical Area: shall have the meaning set forth in Chapter 20.25H LUC, now or as hereafter amended.

Director: The Director of the Development Services Department or his/her designee or other person designated by the City Manager.

Engineered fill: Soil fill which is wetted or dried to near its optimum moisture content, placed in lifts of 12 inches or less and each lift compacted to a minimum percent compaction as specified by a geotechnical engineer.

Excavation: the removal of material such as earth, sand, gravel, rock, or asphalt.

Fill: earth, sand, peat, gravel, rock, asphalt, concrete or other solid material used above or below the ordinary-high water mark to increase the ground surface elevation or to replace excavated material.

Filling: any act by which fill is deposited or placed.

Geotechnical Engineer: a Professional Engineer currently registered in the State of Washington, qualified by reason of experience and education in the practice of geotechnical engineering, and designated by the owner as the geotechnical engineer of record for the project.

Grading: any excavating or filling or combination thereof.

Ground water: water in a saturated zone or stratum beneath the surface of the land or below a surface water body.

Heavy rain: rainfall at a rate greater than or equal to 0.03 inches per 6 minutes or 0.30 inches per hour

Illicit discharge: Any direct or indirect non-storm water discharge to the storm and surface water system, except as expressly allowed by the storm and surface water utility code (BCC 24.06).

Impervious surface: A hard surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A hard surface area which, causes water to run off the surface in greater quantities or at an increased rate of flow from the

flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater. Open, uncovered retention/detention facilities shall not be considered as impervious surfaces for purposes of determining whether the thresholds for application of minimum requirements are exceeded. Open, uncovered retention/detention facilities shall be considered impervious surfaces for purposes of runoff modeling.

Land disturbing activity: Any activity that results in movement of earth, or a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling, and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered a land disturbing activity. Vegetation maintenance practices are not considered land-disturbing activity

Landslide: the movement of a mass of rocks and/or earth down a slope.

Landslide deposit: a large mass of earth and/or rock that has moved physically downslope by gravity and broken into discrete fragments.

Live crown: means the crown of a tree containing live foliage

Modular block wall: a wall constructed of manufactured modular wall units acting as a protective facing for an exposed soil face or as a gravity retaining wall.

Minimum Requirements (MRs): the regulation contained in BCC 24.06.065 and applicable engineering standards, which describe requirements for storm water management for development and redevelopment as required by the NPDES Permit.

New development: Land disturbing activities, including Class IV – general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

Permanent erosion control: permanent improvements, such as landscaping or drainage control structures that cover the soil such that erosion is minimized or eliminated.

Permit: unless noted otherwise, refers to the clearing and grading permit - see clearing and grading permit.

Permittee: the property owner to whom the clearing and grading permit is issued. The property owner may be a person(s), partnership, association, or corporation. See Property owner.

Potential slide block (failure envelope): the area near the surface of a slope between the toe of the slope and a line extended upward at two feet horizontal to one foot vertical from the toe to the surface of the ground above the slope, or as otherwise determined by a geotechnical engineer.

Property owner: any individual, company, partnership, joint venture, corporation, association, society, or group that owns or has a contractual interest in the subject property or has been authorized by the owner to act on his/her behalf, including but not limited to an agent, contractor, operation, applicant, or developer. See "Permittee."

Rainy season: that period from October 1st through April 30th unless the Director modifies these dates based on weather patterns and forecasts.

Receiving waters: waters of the state which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington to which runoff is discharged via a point source or sheet flow.

Reinforced fill or reinforced soil: soil fill, designed by an engineer that includes reinforcement consisting of metal or synthetic materials in bars, strips, grids or sheets.

Redevelopment: On sites that are substantially developed, (i.e. has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing practices.

Replaced impervious surfaces: For structures, the removal and replacement of any exterior impervious surfaces or foundation. For other impervious surfaces, the removal down to bare soil or base course and replacement

Responsible person(s): one, multiple, or all of the following person(s) (if applicable): Property owners, agents, contractors, operators, developers, applicants, occupants of property, or any person(s) causing or contributing to a violation of the provision of the clearing and grading code, these standards or related manuals

Retaining wall: a wall designed to resist the lateral displacement of soil or other materials.

Rockery or rock wall: one or more courses of rocks stacked against an exposed soil face to protect the soil face from erosion and sloughing. The bottom course of rocks bears on the foundation soils and the upper rocks bear partially or entirely on the rocks below. The face inclination of a rockery varies from near vertical to about 1H:4V. A rockery or rock wall is not considered a retaining wall.

Runoff: Water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also "stormwater"

Significant tree: shall have the meaning set forth in Land Use Code Part 20.50 now or as hereafter amended

Site: shall have the meaning set forth in Land Use Code Part 20.50 now or as hereafter amended

Slide or Landslide: the movement of a mass of loosened rocks and/or earth down a slope.

Soil: unaggregated or uncemented deposits of mineral and/or organic particles or fragments derived from the breakdown of massive rocks or decay of living matter.

Storm and Surface Water System: the entire system within the city, both public and private, naturally existing and manmade, for the drainage, conveyance, detention, treatment or storage of storm and surface waters. Facilities directly associated with buildings or structures such as foundation drains, rockery/retaining wall drains, gutters and downspouts or groundwater are not considered parts of the Storm and Surface Water System.

Stormwater: runoff during and following precipitation and snowmelt events, including surface runoff and drainage. See also "runoff."

Uncontrolled fill: fill which has been placed under unknown conditions or without any controls such as geotechnical inspection or monitoring.

Unstable slopes: those sloping areas of land which have in the past exhibited, are currently exhibiting, or will likely exhibit mass movement of earth.

Wall drain: a drainage system behind retaining walls, rockeries, rock walls or modular block walls used to collect water moving through the soil or rock behind the wall or rockery.

Waters of the State: includes those waters as defined as "waters of the United States: in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "water of the state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface water and water courses within the jurisdiction of the State of Washington.

Water Quality Standards: means Surface Water Quality Standards, Chapter 173-201A WAC, Ground Water Quality Standards, Chapter 173-200, WAC, and Sediment Management Standards, Chapter 173-204 WAC

CG1 – 05 ABBREVIATIONS AND ACRONYMS

The following acronyms or abbreviations may appear in this document

Codes and Standards

BCC	Bellevue City Code
BUDES	Bellevue Utility Department Engineering Standards
IBC	International Building Code (current edition adopted by COB)
IRC	International Residential Code (current edition adopted by COB)
LUC	City of Bellevue Land Use Code
RCW	Revised Code of Washington (Laws of the State)
SMMWW	2005 Stormwater Management Manual for Western Washington
WAC	State of Washington Administrative Code

Terms: These abbreviations are used in plans and specifications as defined here:

ATB Asphalt Treated Base
BMP Best Management Practice

BTD City of Bellevue Transportation Department

BUD Bellevue Utility Department

CESCL Certified Erosion and Sediment Control Lead

CKD Cement Kiln Dust COB City of Bellevue

CPESC Certified Professional in Erosion and Sediment Control

CPSWQ Certified Professional in Storm Water Quality

C&G Clearing & Grading

CSWPPP Construction Stormwater Pollution Prevention Plan
DFW Washington State Department of Fish and Wildlife
DNR Washington State Department of Natural Resources

DOE Washington State Department of Ecology

DSD City of Bellevue Development Services Department

EPA Federal Environmental Protection Agency

ESC Erosion and Sediment Control

HPA Hydraulic Project Approval (by DFW)

IBC International Building Code

ISA International Society of Arboriculture

NPDES National Pollutant Discharge Elimination System

NGPE Native Growth Protection Easement

NRCS Natural Resources Conservation Service (Dept. of Agriculture)
NTU Nephelometric Turbidity Unit (A unit of turbidity measurement)

ROW City of Bellevue Right-of-Way SEPA State Environmental Policy Act

TESC Temporary Erosion and Sediment Control

WSDOT Washington State Department of Transportation

CHAPTER CG2 – PERMIT REQUIREMENTS

CG2 – 01 GENERAL

The purpose of clearing & grading permits are to ensure that the proposed work complies with codes enacted to prevent potential adverse impacts associated with land disturbing activities and to provide for and promote the health, safety and welfare of the general public. Permit requirements are provided in section 23.76.035 of the clearing and grading code.

CG2 – 02 CLEARING

The act of clearing means removal or destruction of vegetation. Clearing does not include trimming or pruning that does not result in the death of the vegetation such as mowing grass and minor trimming or pruning of larger plants and trees. Cutting of vegetation to ground level, or near ground level, such that the underlying soils are exposed is considered clearing, as is cutting down or removal of more than one quarter of the live crown of any tree. Destruction of vegetation with chemicals or by burying is also considered clearing.

A clearing and grading permit is required for any project which involves clearing of over 1,000 square feet as measured at ground level. For trees, the cleared area is determined by the area at grade that is disturbed by the process of felling or pruning of the trees. Disturbance includes areas that are cleared to construct roads, trails, pathways, parking areas, etc. that are needed to access and remove or prune trees. It also includes disturbance from foot and equipment traffic during the felling or pruning operations.

CG2 – 03 GRADING

Grading is defined as the removal or placement of material such as earth, sand, peat, gravel, rock, asphalt, concrete, or other solid material earth. A permit is required for grading when the total amount of grading exceeds 50 cubic yards. Total grading is calculated by determining the quantities of fill and excavation separately and adding them together, even if the excavated material is used as fill on the same site.

CG2 – 04 IMPERVIOUS SURFACE

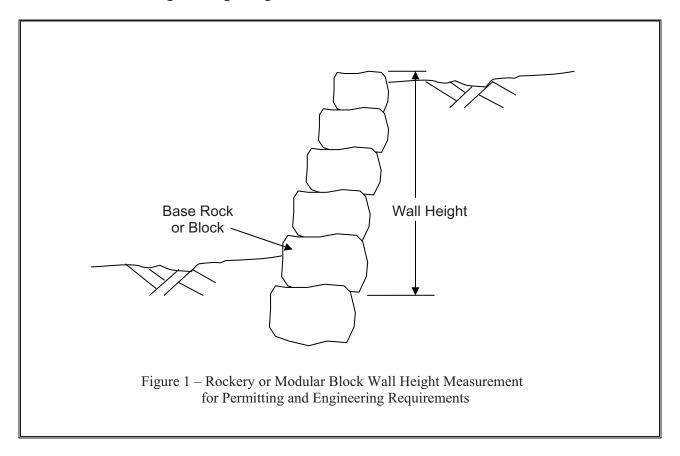
A clearing and grading permit is required for creation or addition of 2,000 square feet or more of new, replaced, or new plus replaced impervious surface area. Impervious surface is defined in Section CG1-04 above, and includes such surfaces as roofs, asphalt pavement, concrete pavement, gravel roads and parking areas, oiled roads or parking areas, and compacted earth.

CG2 – 05 ROCKERIES AND MODULAR BLOCK WALLS

Construction of any rockery or modular block wall over 4 feet in height requires a clearing and grading permit (a separate building permit is not required for rockeries or modular small-block walls). The height is measured from the bottom of the base rock or block to the top of the top rock or block. The base rock or block is the bottom-most rock or block that is not entirely below grade (see Figure 1.).

Shoring, cast-in-place and pre-cast concrete retaining walls, timber retaining walls, and modular large-block (ecology block) walls 3 blocks or more in height (gravity wall with no soil reinforcing) are regulated under the requirements of the current building codes (IBC or IRC) and

require a building permit. A clearing and grading permit may also be required if the associated work involves clearing and/or grading over the thresholds described above.



CG2 – 06 CRITICAL AREAS

A clearing and grading permit is required for any land disturbing activities in any critical area or critical area buffer, when allowed by the Land Use Code. The Land Use Code generally does not allow land disturbing activities in critical areas with some exceptions (see LUC Part 20.25). Critical areas include:

- Streams and the associated buffers
- Wetlands and the associated buffers
- Shorelines and the associated buffers
- Geologic Hazard Areas and the associated buffers
- Habitat Associated with Species of Local Importance and the associated buffers
- Areas of Special Flood Hazard.

Additional requirements or limitations may apply when conducting land disturbing activities in the shoreline (see the Bellevue Land Use Code, Part 20.25E, Shoreline Overlay District, now or hereafter amended). Land disturbing activities in portions of the critical areas, if allowed by the Land Use Code, require environmental review under the State Environmental Policy Act (SEPA) (see the Bellevue Environmental Procedures Code, Chapter 22.02). In-water work will also require a Hydraulic Project Approval (HPA) permit from the Department of Fish & Wildlife (see Section CG5-15).

CG2 – 07 EXEMPTIONS

The clearing and grading code provides exemptions from permit requirements for certain types of activities or situations. An exemption from a clearing and grading permit does not exempt the person doing the work from meeting all applicable City codes. Exemptions to the requirements for a clearing and grading permit apply to the following activities:

- Agricultural crop management of existing farmed areas.
- Routine landscape maintenance, as described in LUC 20.25H.055.C.3.h, as now or hereafter amended.
- Work needed to correct an immediate danger to life or property in an emergency situation as declared by the mayor or the city manager or his/her designee.
- Cemetery graves involving less than 50 cubic yards of excavation, and related filling, per each cemetery plot.
- Routine drainage maintenance of existing, constructed stormwater drainage facilities located outside of a critical area or critical area buffer, including, but not limited to, detention/retention ponds, wetponds, sediment ponds, constructed drainage swales, water quality treatment facilities such as filtration systems, and regional storm facilities that are necessary to preserve the water quality treatment and flow control functions of the facility. This exemption does not apply to any expansion and/or modification to already excavated and constructed stormwater drainage facilities.
- Roadway repairs and overlays within public street rights-of-way for the purpose of maintaining the pavement on existing paved roadways, such that asphalt removal or milling does not expose more than 1,000 square feet of gravel base or subgrade. This exemption does not apply to curbs, gutters, sidewalks, utilities, new traffic calming devices, new roadways, or the widening of the paved surface of existing roadways.

CHAPTER CG3 - PERMIT APPLICATION SUBMITTAL

CG3 - 01 GENERAL

CG3 – 01.1 Permit Types

The Director has categorized clearing and grading permits into different types for administrative purposes. A clearing and grading permit may be issued as a separate permit or as a component of another permit. A permit that encompasses more than one permit type is usually referred to as a "combination permit." The clearing and grading component may be included in a building permit, a land use approval, or a right-of-way use permit. Also, a clearing and grading permit may include approvals from other departments or sections, including Land Use, Transportation, Utilities, and/or Fire. For larger projects, such as commercial buildings, construction permits (building and clearing & grading) and Land Use approvals are issued separately.

CG3 - 01.2 Submittal Requirements

Copies of current clearing & grading permit submittal requirements are available at the City Hall Development Services Center between 8 a.m. and 4 p.m., Monday, Tuesday, Thursday and Friday and between 10:00 and 4:00 on Wednesday. Phone: (425) 452-4898 (assistance for the hearing impaired: dial 711). They are also available on the City's website at www.bellevuewa.gov

Clearing & grading permit submittal requirements may be waived or modified only by a clearing & grading reviewer or land use planner on behalf of the Director. Additional submittals may be required by the clearing & grading project reviewer during the course of the project review, including items that were previously waived.

Permit types that require report submittals (such as geotechnical reports) are listed on the Clearing & Grading Permits Submittal Requirements sheet. Requirements for report contents are provided in the submittal requirements package. Additional reports may be required by the clearing & grading project reviewer during the course of the project review. The property owner and their agent are responsible for the accuracy and completeness of all information provided with or affecting the application submittal.

After a clearing & grading permit application has been submitted, any proposed changes to the construction plans must be submitted as a revision to the permit application. Revised plans showing the changes must be submitted to the Development Services Center for review by the relevant reviewing departments. The new plans must be approved by all relevant COB departments prior to issuance of the permit. If revisions are proposed after the permit has been issued, plans with the proposed changes must also be submitted to the Development Services Center for review by the relevant reviewing departments. The revised plans must be approved and issued to the permitted before the changes are constructed in the field.

Procedures for clearing & grading and land use decisions are described in the City of Bellevue Land Use Code Chapter 20.35. Design and construction requirements for clearing & grading permits are detailed in the clearing & grading code (BCC Chapter 23.76).

CG3 – 01.3 Completeness

Clearing and grading permit applications are screened for completeness at intake. Applications that are deemed incomplete by the Permit Technicians are returned to the applicant with a request to include the needed information. If the application is accepted by a Permit Processing technician, and deemed incomplete by any of the reviewers within 28 days of submittal, the application will be labeled "incomplete" in the permit tracking system and the applicant will be sent a revision request for the needed information. No further review will be done by any of the reviewers until the requested information is submitted to a Permit Processing technician. If the permit application is not deemed incomplete within 28 days of application submittal, it will be considered complete.

CG3 – 01.4 Request for Deviation from Clearing & Grading Development Standards

A deviation from the requirements of these standards may be considered by the City for a project design if there are extreme difficulties involved in carrying out the provisions of these standards. A written modification request that addresses the criteria set forth in these standards must be submitted to the project reviewer. The written request must be made on the Alternate Materials, Methods, or Modifications Request Form, and must include plans that are completed by the project design engineer.

The request for deviation from clearing & grading development standards must meet all of the following criteria:

- 1. The deviation is in conformity with the intent and purpose of the clearing & grading code and development standards;
- 2. Such deviation provides equivalent environmental protection; is in the overriding public interest; and meets the objectives of safety, function, and environmental protection;
- 3. The granting of the deviation will not be detrimental to the public health and welfare, and will not create adverse impacts to nearby property, slopes, water bodies, and surrounding environmental systems; and
- 4. The deviation provides the least possible deviation from the requirements of the clearing & grading code and other city codes.

The following information must be included on an "Alternate Materials, Methods, or Modifications Request Form" to request a deviation from clearing & grading development standards:

- 1. Clearly identify the specific sections and requirements of the development standards to be modified;
- 2. Describe the design proposed to mitigate impacts created by the deviation; and
- 3. Submit all relevant review information, such as preliminary approval conditions, vicinity maps, photographs, engineering plans, or sketches to illustrate the impact of applying the deviation to the project.

CG3 – 02 PLANS & DRAWINGS

CG3-02.1 General

Plans and drawings submitted for review must be in accordance with the City's "Standards for Plans & Drawings" requirements. Current copies of these requirements are available at the City Hall Development Services Center. Plans that may be required include:

- Boundary & topographic survey
- Site plan B
- Construction Storm Water Pollution Prevention Plan (CSWPPP)
- Clearing & grading and erosion and sedimentation control (ESC) plan (included with the CSWPPP)
- Road plan
- Final landscape plan
- Street lighting plan
- Turbidity and pH monitoring plan

For each of these plans or drawings, the City provides a submittal requirement sheet that describes in detail what information must be provided. These submittal requirement sheets are available at the Development Services Center and City Hall or on the website at: http://www.bellevuewa.gov/application_packets.htm

CG3 – 02.2 Combining Plans

The site plan identified for the permit should be used as the underlying base map for the clearing & grading plan and the ESC Plan. The site plan, clearing & grading plan, and the ESC plan can be combined on one sheet for smaller projects, provided the elements of each plan can be easily read. For larger projects, the site plan is on a separate sheet and the clearing & grading and ESC plans are combined on a single sheet. If the project is large and complex, the clearing & grading and ESC plans are on separate sheets.

CG3 – 03 WRITTEN REPORTS AND PLANS

CG3 - 03.1 Construction Stormwater Pollution Prevention Plan (CSWPPP)

All new development and redevelopment projects are responsible for preventing erosion and discharge of sediment and other pollutants into receiving waters. A Construction Stormwater Pollution Prevention Plan (CSWPPP) is required for all projects that meet the thresholds for permitting in section 23.76.035 of the clearing and grading code. The CSWPPP must be implemented beginning with initial soil disturbance and until final stabilization. Sediment and Erosion control BMPs shall be consistent with the BMPs contained in these standards

The CSWPPP must include a narrative, drawings, and a turbidity and pH monitoring plan. The required elements of a CSWPPP are described below in Section CG7, Construction Stormwater Pollution Prevention. All BMPs must be clearly referenced in the narrative and marked on the drawings, and a copy of the referenced BMPs must be included in the CSWPPP. The CSWPPP narrative shall include documentation to explain and justify the pollution prevention strategies made for the project. Permitted clearing and grading areas and any other areas required to preserve critical or sensitive areas, buffers, native growth protection easements, or tree retention areas as may be required by the city, must be delineated on the site plans.

Appendix A1, Planning details the required contents of a CSWPPP. A worksheet for completing a CSWPPP is provided in Appendix A3.

For projects that involve clearing less than 7,000 square feet and grading less than 100 cubic yards, the CSWPPP may consist of a completed "CSWPPP Short Form for Small Construction Projects" and a site plan that includes ESC. A blank CSWPPP Short Form for Small Construction Projects is provided in Appendix A3.

The requirement for a turbidity and pH monitoring plan may be waived by the Director, depending on site characteristics, such as topography, soil type, proximity to receiving waters, retention of vegetation, extent of land disturbing activities, or location of critical areas and critical area buffers.

GC3 – 03.2 Geotechnical Report

A geotechnical report must be submitted with most clearing & grading and building permit applications. A geotechnical report & stability analysis requirements sheet is provided in Appendix A3 and is included in the submittal requirements packet. The sheet explains when a geotechnical report is required and what must be included in the report.

Geotechnical report submittal requirements may be waived or modified only by a clearing & grading reviewer or land use planner on behalf of the Director. City reviewers may also require additional geotechnical information submittals during permit review.

Applicants for single family clearing & grading permits that require a site geotechnical report or letter may submit the report for the associated plat or short plat unless specific information regarding the parcel and the proposal is required by the plat conditions or the DSD reviewer.

A new geotechnical report may not be required for a clearing and grading permit application if a prior geotechnical report (no more than 5 years old) for the project on the same property is provided. For projects where the geotechnical report is more than 5 years old and for sites where the original project has changed, the clearing & grading reviewer may require a letter from the geotechnical engineer. The letter must state that the recommendations and conclusions in the report are relevant to the current proposed project, and/or provide additional information as needed.

Geotechnical Report Addendum:

If the original geotechnical report for a proposed project was a "preliminary" geotechnical report, an addendum to the preliminary report must be submitted to the clearing & grading reviewer before the permit can be issued. The geotechnical engineer must review the latest revision to the clearing and grading plans and prepare the geotechnical report addendum that includes:

- 1) New site information discovered since the date of the preliminary report;
- 2) <u>Verification</u> that the proposed project is designed following the recommendations in the preliminary geotechnical report;
- 3) Revised recommendations for construction, based on any new information; and

4) The addendum report must be stamped with the engineer's professional seal and signed.

Geotechnical Construction Summary Report

A summary report is required if construction monitoring is provided by the geotechnical engineer. The Geotechnical Construction Summary Report must include:

- 1) Description of the construction techniques used;
- 2) Compaction test results and the results of any analyses of the materials that were used;
- 3) A description of any conditions found in the field that varied from conditions as described in initial geotechnical reports and how the variations affected the project;
- 4) A comparison of the previously approved plans with the as-built improvements;
- 5) Other information which may be deemed pertinent by the geotechnical engineer, the clearing & grading reviewer or the clearing & grading inspector; and

Construction summary reports must be submitted to the clearing & grading inspector prior to the issuance of any Certificate of Occupancy, or final approval by the inspector.

CG3-03.3 Turbidity & pH Monitoring Plan

Turbidity and pH monitoring is required for all projects with land disturbing activities over 7,000 square feet, unless waived by the clearing & grading reviewer on behalf of the Director. The turbidity and pH monitoring plan must be included in the CSWPPP and must include the elements presented in the Turbidity and pH Monitoring Requirements provided in Appendix A3 and included in the submittal requirement packet.

CG3 – 04 APPLICATION FORMS AND OTHER DOCUMENTS

CG3-04.1 Application Forms

Forms required for a complete application may include, but are not limited to, Submittal Requirements form, Application form, and "Bill To" form. These forms are included in the submittal packet as needed for each application type.

CG3- 04.2 Rights of Entry and Construction Easements

Rights-of-entry or temporary or permanent construction easements may be necessary if clearing & grading and construction is planned on easements or on adjacent properties. Copies of all rights-of-entry or offsite construction easements must be submitted to the clearing & grading reviewer prior to the approval of any clearing and grading permit.

Erosion and sedimentation control must be included on the ESC plans for all off-site work, including utility installation in the ROW.

CG3- 04.3 Abatement Security

An abatement security device is collected for permitted clearing and grading projects to correct or eliminate problems related to earth or water resources, either on or off-site, caused by project clearing and grading. An abatement security device is required for all projects that are not individual single-family homes and that involve more than 5,000 square feet of

clearing and/or more than 50 cubic yards of excavation and/or fill. In addition, the Director may require an abatement security device for other projects, including individual single-family homes, that can cause problems related to earth and water resources such as erosion and sedimentation or slope instability. The abatement security device must be established and an original of the signed forms must be submitted to the clearing and grading reviewer before the permit can be issued.

The amount of the abatement security device, usually in the form of an assignment of savings, an irrevocable letter of credit, or a bond, is determined by the clearing & grading reviewer, usually based on an estimate of the erosion control value of the erosion and sediment control BMPs provided by the applicant or the applicant's engineer.

If the City finds it necessary to expend all or part of the abatement security device for corrective work, a stop work order will be issued, prohibiting any additional work until the permitee re-establishes the original amount of the abatement security.

The City will release the abatement security once final clearing and grading approval has been given. Interest from any interest-bearing form of the abatement security device will accrue to the depositor.

CG3 – 05 PROFESSIONAL QUALIFICATIONS

City of Bellevue codes contain minimum standards for professional licensing or certification of engineering, design, and environmental disciplines. The following requirements apply to clearing & grading permit applications.

CG3- 05.1 Engineering

Civil Engineer

Plans for clearing, grading and erosion control shall be prepared and signed by a professional Civil Engineer (PE), licensed in the State of Washington, who has significant professional experience and education in the design of grading, erosion and drainage control, and site development.

Plans prepared for a Single Family Building Permit are generally exempted from the professional engineering requirement. A clearing & Grading reviewer will be able to answer questions regarding engineering requirements.

Geotechnical Engineer

The Geotechnical Engineer must be a professional Civil Engineer (PE), licensed in the State of Washington, and qualified by experience and education in the practice of geotechnical engineering. The applicant must designate the engineer the Geotechnical Engineer of Record for the project.

Change of Engineer

If the Civil Engineer or the Geotechnical Engineer of Record is changed by the applicant during permit application review, the applicant must submit the name and

firm of the new engineer in writing to the clearing & grading reviewer. If the Civil Engineer or the Geotechnical Engineer of Record is changed by the applicant during construction, the permittee must submit the name and firm of the new engineer in writing to the clearing & grading reviewer and to the clearing & grading inspector.

CG3-05.2 Landscape Design

Landscape designs required under the LUC (20.20.520.D) must be executed by a registered Landscape Architect, Washington Certified Nurseryman, or Washington Certified Landscaper.

CG3-05.3 Certified Erosion and Sediment Control Lead (CESCL)

The project certified erosion and sediment control lead (CESCL) must be certified as described in Appendix A2, Standards and Specifications for Best Management Practices, BMP C160, Conditions of Use.

CG3-05.4 Arborist

Project arborists must be certified by the International Society of Arboriculture (ISA).

CG3-05.5 Other Professionals

For professions for which there is no license or certification, a qualified professional is a person who meets the definition in LUC 20.50.042

CHAPTER CG4 – PERMIT ISSUANCE

CG4 – 01 ASSOCIATED PERMITS AND APPROVALS

Clearing and grading permits can generally be issued only in conjunction with, or as part of, one or more permits or approvals. Section 23.76.040.A of the clearing and grading code describes which permits and/or approvals must accompany a clearing and grading permit. Section 23.76.040.B. describes the criteria where a clearing and grading permit can be issued without an accompanying permit or approval.

CG4-01.1 Land Use Approvals

Land Use approvals associated with a clearing & grading permit generally must be issued before the clearing and grading permit can be issued. Land use approvals include the following:

- Design Review
- Conditional use permit
- Planned unit development approval
- Preliminary plat or short plat approval
- Critical Areas land use permit
- Shoreline conditional use permit
- Shorline substantial development permit
- Shoreline management exemption
- Temporary use permit
- Variance

CG4-01.2 Construction Permits

A clearing & grading permit may be issued before an associated building permit is issued provided that a complete and valid building permit application has been submitted. For demolition of a building where clearing grading is required, the demolition permit must be issued before or concurrently with the clearing and grading permit.

Other permit approvals are often required before the clearing and grading permit can be issued or before construction can commence. Additional construction permits that may be required include, but are not limited to, the following:

- 1. Building, Land Use, and Clearing & Grading Permits
 - Clearing & grading permits for stockpiling, mobilization, or preloading
 - Building department permits for demolition, accessory structure (vaults/walls) or shoring
 - Land use permits for off-site construction parking, staging, or stockpiling (temporary use permit)
- 2. Transportation Permits
 - Valid right-of-way use permit application for haul routes, if required, must be submitted before the clearing and grading permit can be issued.
- 3. Utility Permits

- A utility permit is required for abandonment, construction, and connection of utilities.
- A utility system extension agreement must be submitted concurrently with the clearing and grading permit application.

CG4-01.3 Permits from other jurisdictions

The applicant is responsible for determining whether it is necessary to obtain Federal, State and County permits, and for obtaining these permits from the appropriate jurisdiction.

A copy of the conditions of approval for permits issued by other governing agencies may be required by the clearing & grading reviewer prior to clearing & grading permit approval.

Below is a list of common outside permits or approvals that apply to construction projects. Others may also apply.

Forest Practices Approval (issued by DNR)

Approval to discharge construction stormwater to sewer (issued by King County)

Joint Application for Hydraulic Project Approvals (HPA) (issued by DFW)

Approval for use of chemical treatment BMPs (issued by DOE)

Shoreline Management Permits

Exceedance of Water Quality Standards Approvals

Water Quality Certifications

National Pollutant Discharge Elimination System (NPDES) Permit (issued by DOE)

Removal or abandonment of any underground storage tanks

Well abandonment (issued by King County)

CG4 - 02 VESTING AND EXPIRATION OF PERMITS AND APPLICATIONS

CG4-02.1 Projects Requiring Only Clearing and Grading Permits

- 1. Vesting Date. An application for an independent clearing and grading permit vests to the clearing & grading code (BCC Chapter 23.76), the storm and surface water utility code (BCC Chapter 24.06), and the corresponding development and engineering standards. The application vests on the date that a complete clearing and grading permit application is submitted consistent with the requirements of BCC 23.76.035.E.
- 2. Expiration of Vested Status.
 - a. Before issuance, an application for clearing and grading permit expires as follows:
 - i. An application for a clearing and grading permit for which no permit is issued within one year following the date of application expires by limitation. Plans and other data submitted for review may then be returned to the applicant or destroyed in accordance with state law. The Director may, prior to expiration, extend the time for action by the applicant for a period of not more than 180 days.
 - ii. An application for a clearing and grading permit may be cancelled for inactivity if an applicant fails, without reasonable justification, to respond to the department's written request for revisions or corrections within 90 days. The Director may extend the response period beyond 90 days if the applicant

- provides and adheres to a reasonable schedule for submitting the full revisions.
- iii. In addition to the extension allowed above, the Director may extend the life of an application if any of the following conditions exist:
 - A. Compliance with the State Environmental Policy Act is in progress; or
 - B. Any other city review is in progress; provided the applicant has submitted a complete response to city requests or the Director determines that unique or unusual circumstances exist that warrant additional time for such response, and the Director determines that the review is proceeding in a timely manner toward final city decision; or
 - C. Litigation against the city or the applicant is in progress, the outcome of which may affect the validity or the provisions of any permit issued pursuant to such application.
- iv. In no event may the Director extend the application for a period of more than 180 days following the conclusion of the applicable condition described above.
- b. After permit issuance, the clearing and grading permit expires as follows:
 - i. The permit expires if the authorized work is not begun within one year from the date of permit issuance, or if work is abandoned for over 180 days.
 - ii. If the authorized work is continually performed, the permit expires one year from the date of issuance unless a different time frame is specified on the permit or an extension is granted. Two one-year extensions may be granted by the Director; provided, that conditions which were relevant to issuance of the permit have not changed substantially and no material detriment to the public welfare will result from the extension. The two one year extensions are usually automatically granted upon issuance of the permit.
 - iii. If the clearing and grading permit is revoked by the Director or otherwise cancelled, the vested status of the clearing and grading permit expires on the date of revocation or cancellation.

CG4-02.2 Projects Requiring Prior Discretionary Land Use Permit or Approval

- 1. Vesting Date. The vesting date for a clearing and grading permit requiring a prior discretionary land use permit or approval is contingent on the level of engineering detail provided by the applicant as described below:
 - a. Engineering Details Provided. For applicants that satisfy the clearing and grading submittal requirements, and also satisfy the Storm and Surface Code submittal requirements for site development engineering, the vesting date to the clearing and grading code, the storm and surface water utility code, and the corresponding development and engineering standards, is the date of issuance of the discretionary land use decision.
 - b. Conceptual Details Provided. For applicants that choose not to provide submittal requirements for site development engineering, the vesting date to the clearing and grading code, the storm and surface water utility code, and the corresponding development and engineering standards, is the date that a complete building permit is submitted.
- 2. Expiration of Vested Status.

- a. Clearing and Grading Permit Vested with a Discretionary Permit or Approval. The vested status of a clearing and grading permit with a vesting date established pursuant to CG4 02.2 1.a above, runs with the vested status of the underlying land use permit or approval and expires according to the terms of the administration and enforcement section of the land use code (LUC 20.40.500).
- b. Clearing and Grading Permit Vested with a Complete Building Permit Application. The vested status of a clearing and grading permit with a vesting date established pursuant to paragraph CG4 02.2 1.b above, expires as follows:
 - i. Before Building Permit Issuance. The vested status of the clearing and grading permit runs with the vested status of the building permit application and expires according to the terms of the construction code administration (BCC 23.05.090.H).
 - ii. After Building Permit Issuance. The vested status of the clearing and grading permit runs with the vested status of the issued building permit and expires according to the terms of the construction code administration (BCC 23.05.100.E). The vested status of the clearing and grading permit is automatically extended for the life of the building permit. If the building permit expires, or is revoked or cancelled, then the vested status of a clearing and grading permit also expires, or is revoked or cancelled.

CG4-02.3 Projects Requiring Building Permits and No Prior Discretionary Land Use Permit or Approval

- 1. Vesting Date. A clearing and grading permit for a project that requires building permits and no prior discretionary land use permit or approval, vests to the clearing and grading code, the storm and surface water utility code, and the corresponding development and engineering standards, on the date that a complete building permit application is submitted.
- 2. Expiration of Vested Status.
 - a. Before Building Permit Issuance. The vested status of the clearing and grading permit runs with the vested status of the building permit application and expires along with the building permit application.
 - b. Post Building Permit Issuance. The vested status of the clearing and grading permit runs with the vested status of the issued building permit and expires along with the building permit. The vested status of the clearing and grading permit shall be automatically extended for the life of the building permit. If the building permit expires, or is revoked or cancelled, then the vested status of a clearing and grading permit shall also expire, or be revoked or cancelled.

CHAPTER CG5 - STANDARDS FOR CLEARING & GRADING

CG5 - 01 GENERAL

Clearing & grading within the City of Bellevue is subject to the requirements and restrictions in these standards, the clearing & grading code, and all other applicable City of Bellevue codes. Land disturbing activities that require a clearing and grading permit are listed in Section Chapter CG-02, Permit Requirements. Projects that do not meet these thresholds are subject to the above mentioned codes, but are not subject to the review and inspection associated with larger projects.

Vegetative cover plays an extremely important role in controlling erosion on construction sites. In most cases, existing, natural vegetation provides the greatest protection of soil surfaces from erosive forces. Grading can have adverse affects on the environment by loosening of soil and making it more susceptible to erosion, changing drainage patterns, possibly reducing the stability of slopes, and creating an inhospitable environment for new plant growth through removal of organic material and compaction.

Bellevue's Comprehensive Plan policies seek to preserve and maintain natural vegetation and existing grades, where possible, for erosion and sedimentation control and water quality and quantity control. As such, clearing and grading for other than approved development proposals is generally prohibited.

CG5 – 02 PRESERVING NATURAL VEGETATION

Preserve existing vegetation on sites in areas where no construction activity is planned or will occur at a later date. BMPs C101, C102, C103 and C104 provide methods of preserving and protecting vegetation that will provide erosion and sediment control during construction. Areas where vegetation is to be preserved must be shown on the ESC plan.

CG5 – 03 CLEARING AND GRADING AROUND TREES TO BE PRESERVED

The City of Bellevue Land Use codes require that certain trees be retained as a condition of approval on many development projects. Trees are required to be preserved for several reasons, including maintaining the urban forest, reducing stormwater runoff and erosion, providing habitat for wildlife, and for aesthetic reasons.

Trees can be impacted during construction and often the damage is not seen for several months or years after construction. Proper tree protection can benefit not only the tree by reducing stress during construction, but also the developer and property owner by reducing long term costs associated with future maintenance. BMP T101 in Appendix A3 identifies management practices to employ during construction to assure successful tree protection.

CG5 – 04 PROTECTION OF SOILS FOR ON-SITE STORMWATER MANAGEMENT

On-site stormwater management can include several stormwater BMPs that use the native soils for infiltration, dispersion, and retention of stormwater. Such BMPs include bioretention, pervious pavement, and amended soils. These BMPs are designed using, among other variables, the measured infiltration capacity of site soils. Soil infiltration capacity can be adversely affected during construction from compaction of the soil and clogging from sediment; therefore,

care must be taken to protect native soils in areas where on-site stormwater BMPs are to be constructed. These areas must be shown on the ESC plan, and appropriate erosion and sediment control methods must be included in the CSWPPP. BMPs C101, C102, C103, C104 and T101 may be appropriate for providing erosion and sediment control for on-site soils. Completed on-site stormwater facilities must also be protected until the site is stabilized.

CG5 – 05 CLEARING AND GRADING FOR PLATS AND SHORT PLATS

Section 23.76.040 of the clearing and grading code limits land disturbing activities under permits issued for preliminary plat or short plat approvals to infrastructure construction only, and does not allow for clearing or grading of building sites. Section 23.76.042 of the clearing and grading code allows the Director to approve clearing of building sites, provided certain criteria are met. The criteria are listed in section 23.76.042.A. For approval to clear building sites during plat infrastructure construction, a written request must be sent to the clearing and grading reviewer during review of the clearing and grading permit application.

CG5 – 06 GRADING ADJACENT TO SENSITIVE AND CRITICAL AREAS

Heavy equipment is not allowed in buffers for wetlands, streams, and slopes unless approved in advance by DSD. Constructed slopes must be graded and compacted in a manner that protects adjacent sensitive and critical areas during and after construction. On the clearing & grading plans and on the ESC plan, the applicant must show the dimensions for construction access that will be used to construct proposed walls, rockeries, and roadway embankments located adjacent to sensitive and protected areas. Include these access areas in the disturbance limits for the project.

CG5 - 07 GRADING AROUND STRUCTURES

Final site grading must direct drainage away from all building structures, as directed by the IBC or the IRC.

CG5 – 08 EXCAVATION AND FILLING

All movement of earth materials must be done in a manner that will minimize erosion and sedimentation. Soil stockpiles, exposed slopes, and disturbed areas must be covered in accordance with BMP C123. Excavation and filling are limited to the area inside of the grading limits that are shown on the approved clearing and grading permit plans.

CG5 – 09 ENGINEERED FILL AND REINFORCED FILL

Engineered fill and reinforced fill must be placed and compacted as specified by the project geotechnical engineer. During construction, the compacted soils must be monitored and/or tested by the geotechnical engineer. The monitoring and/or testing must include an evaluation of the subgrade onto which the fill is to be placed; evaluation and approval of fill soil type, moisture content and lift thickness; placement of reinforcing elements; and moisture and density testing. The engineer's field testing reports must be submitted to the clearing & grading inspector daily. Areas of engineered and/or reinforced fill must be shown on the grading plans.

CG5 – 10 SOIL AMENDMENTS

Cement kiln dust (CKD) may not be used as a bulking agent for site dewatering, for stabilizing or lowering the moisture content on-site or fill soils. Cement may be used if appropriate pH

testing is conducted, water treatment is provided as needed to meet water quality standards, and dust control is implemented during cement application and mixing. Cement treatment must be approved by the clearing and grading reviewer before cement application.

If polymers are to be added to soils to prevent dust or to control erosion, approval must be obtained from the Washington State Department of Ecology (Ecology). Runoff from polymer treated areas must be collected in a sediment pond. The effluent must be tested and treated before being released to the storm drain or to the sanitary sewer.

CG5 – 11 ROCKERIES AND MODULAR BLOCK WALLS

CG5-11.1 General

Rockeries and modular block walls are treated similarly with respect to height, permit requirements, drainage, and setback requirements. Rockeries and modular block walls over 30 inches in height are considered structures in the Land Use Code and are; therefore, not allowed in structure setbacks (LUC 20.20.025. D.). An exception is allowed if there is no feasible alternative to location or height, based on the existing grade. For the purpose of determining wall height in setbacks, walls are measured from finished grade to the top of the rockery or modular block wall. Where rockeries or modular block walls are stepped or tiered in a structure setback, there must be at least 30 inches of separation between the segments. The separation must be measured from the face of one rockery at its base at grade to the face of the next rockery at its base at grade (see Figure 2).

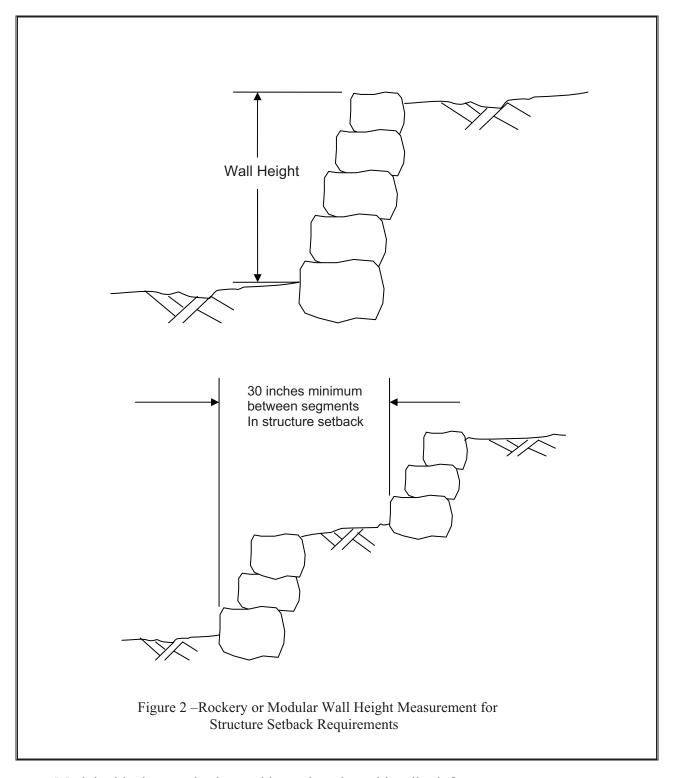
GC 5-11.2 Rockeries

Rockeries or rock walls serve as a protective facing against an exposed cut soil face in native soils or as a protective system against the face of engineered fill or reinforced fill. Rockeries are not considered to be retaining walls, and, as such, are not allowed where the soil face is uncontrolled fill over 4 feet in height. In no case are rockeries allowed to exceed 12 feet in height. Rockeries over 4 feet in height are required to be designed by a geotechnical, civil, or structural engineer and must include a wall drain. The locations of rockeries must be shown on the grading plan and must include the top and bottom elevations at the ends, the midpoint and at the maximum height.

CG5-11.3 Modular Block Walls

Modular block walls are walls constructed of manufactured concrete units acting as a protective facing for an exposed soil face, as a facing for a reinforced soil mass, or as gravity retaining walls. Modular blocks are manufactured in two general sizes; small blocks, such as Keystone[®] and Allan Block[®], which typically weigh less than 120 pounds, and large blocks such as Lock-Block_® and Redi-Rock[™] where the standard units weigh between 1,000 and 5,000 pounds. Large blocks are commonly referred to as ecology blocks.

The safe height of modular block walls, when used as a protective facing for exposed soils (cut face in native soils or engineered fill), is limited because the soil pressure tends to push the wall over. The safe height of an unreinforced modular block wall depends on the size and weight of the blocks, the batter of the wall face, and the properties of the protected soil. In any case, all modular block walls over 4 feet in height must be designed by a geotechnical, civil, or structural engineer and must include a wall drain.



Modular blocks can also be used in conjunction with soil reinforcement to create a reinforced soil retaining wall. In this case, the reinforced soil acts as the retaining mass, and the blocks act as a protective facing that is attached to the soil mass by the reinforcing elements (typically geogrids). These walls are generally over 4 feet in height and must be designed by a geotechnical, civil, or structural engineer and must include a wall drain.

Large blocks can be configured to form a gravity retaining wall using the mass of the blocks alone (no soil reinforcing). In this case, walls 3 blocks or more in height require a building permit and are regulated under the requirements of the current building codes (IBC or IRC). Large block walls less than 3 blocks high, and large block walls over 4 feet in height with soil reinforcing, are reviewed under a clearing and grading permit.

CG5 – 12 WALL DRAINS

Wall drains are required to be installed behind retaining walls, rockeries, rock walls or modular block walls over 4 feet in height to collect water moving through the soil or rock. The purpose of the drain is to prevent water from building up behind the structure and causing excessive hydrostatic pressures that may result in failure of the structure. A wall drain typically consists of a minimum 4-inch diameter perforated pipe bedded in washed rock and located at the base of the rockery or wall. If a collection pipe is used, it must discharge to an appropriate drainage location. A wall drain can also be designed to use granular material without a collection pipe; however, it must provide sufficient relief of hydrostatic pressure and it must discharge to a location that does not cause damage to nearby property. Wall drains must be included in the rockery or wall design provided by the geotechnical, civil, or structural engineer. The location of all wall drains and their point of discharge must be shown on the clearing and grading plans.

CG5 – 13 TEMPORARY SHORING

Temporary shoring for the protection of existing utilities, roadways or adjacent structures may be necessary during construction. Design and construction of temporary shoring must meet the requirements and standards of the IBC. Shoring locations and details must be shown on the clearing & grading plans.

CG5 – 14 BLASTING

Use and storage of explosive materials requires a permit from the COB Fire Department, and is also subject to restrictions in the COB Noise Ordinance. Coordinate with the clearing & grading inspector and the clearing & grading reviewer a minimum of one week prior to the proposed blasting. Notification of the adjacent property owners may be required.

CG5 – 15 BULKHEADS

A bulkhead is a wall or embankment adjacent to a water body used for holding back earth. A "normal protective" bulkhead is constructed at or near the ordinary high water mark to protect a single-family residence and is for protecting land from erosion. A bulkhead cannot be constructed for the purpose of creating land. Where an existing bulkhead is being replaced, it cannot be constructed further waterward of the existing bulkhead than is necessary for construction of new footings. Design and location of bulkheads must conform to the LUC Shoreline Overlay District (20.25E) requirements.

CG5 – 16 IN-WATER WORK

Anyone who plans to conduct any construction activity that will use, divert, obstruct, or change the natural flow or bed of state waters must do so under the terms of an HPA permit issued by the Washington Department of Fish and Wildlife. An HPA permit normally specifies a window of time to complete the work, called a "fish window," to minimize the impact on fish residing in or migrating through the work area. In-stream work may require that a stream by-pass be

installed to route the stream around the work area during construction. Shoreline work typically requires a silt curtain to separate the work area from other areas of the lake and minimize the spread of sediment that becomes suspended by the activity in the lake.

In-water work will also typically require permits from the City of Bellevue. Required permits include a land use approvals, such as a shoreline or critical areas permits; a clearing and grading permit; and possibly a building permit if a structure, such as a dock or pier, is included in the project.

CG5 – 17 DRAINS

Drains covered under this section include the underground portions of downspout drains, yard drains, retaining wall drains; french drains, interceptor drains, and footing (foundation) drains where these drains are not covered under the Bellevue Utilities Surface Water Engineering Standards or the City of Bellevue plumbing code (BCC 23.60).

Pipes for the drains covered in this section must be smooth wall polyethylene (PE) meeting ASTM F810 or a more durable standard, or smooth wall polyvinyl chloride (PVC) meeting ASTM D2729 or a more durable standard. Pipes must be a minimum of 4 inches in diameter with cleanouts at 50' intervals, and at all changes of direction totaling 135 degrees or more. Use of corrugated HDPE pipe is not permitted due to difficulty with cleaning and problems with buckling, crushing and cracking. The locations of all drains must be shown on the grading plan.

CG-17.1 Surface-water and Downspout Drains

Surface-water and downspout drains collect water from the ground surface or roof areas and convey it to an appropriate stormwater discharge location such as a rain garden, infiltration trench, municipal storm drain or other storm outfall. The pipes for these drains are solid (non-perforated), but may convey water from a perforated subsurface drain and/or may discharge to an outfall using a perforated pipe, such as in an infiltration trench or level spreader. Wherever a subsurface drain connects to a surface-water or downspout drain, the perforated portion of the pipe must be at least 1 foot vertically upgradient from the connection. Use outlet protection as necessary to reduce water velocity and prevent scour.

CG5-17.2 Subsurface Drains

Subsurface drains collect water from below the ground and include footing (foundation) drains, wall drains, french drains, and interceptor drains. The purpose and use of these drains, excepting foundation drains and deep excavation drains, are described in BMP C205. Foundation drainage requirements for residences are provided in the IRC, Section R405. Wherever a subsurface drain connects to a surface-water or downspout drain, the perforated portion of the pipe must be at least 1 foot vertically upgradient from the connection.

CG5 – 18 UNDERGROUND UTILITY LINES

When constructing underground utility lines, no more trench should be opened than can be completed in a single day. Excavated material must be placed on the uphill side of the trench where consistent with safety and space considerations. Temporary trench dewatering devices must be discharged into a sediment trap or pond. Trenches must be filled at the end of each day unless otherwise allowed by the Director.

Generally cable, gas, and electric utility installations within new plats are included in the plat infrastructure permit and the locations of the proposed utilities must be shown on the plat engineering plans. Installation of private utilities on a single family lot for new home construction is included in the combination permit for the single family dwelling, and must be shown on the site plan.

A clearing & grading permit is required for installation of private utilities not connected with plat infrastructure construction or construction of a new building, if the installation involves clearing over 1,000 square feet and/or grading over 50 cubic yards. Clearing and grading approval for installation of underground utilities in the public right-of-way is required if the clearing and grading thresholds are exceeded. For utility installations that are entirely within the right-of-way, the clearing and grading approval can be included on the right-of-way use permit.

CG5 – 19 RESTRICTIONS ON CLEARING AND GRADING

CG5-19.1 Temporary Restrictions

Rainy Season Restrictions

From October 1st through April 30th, clearing and grading may be permitted to continue or to be initiated, only if the Director grants specific approval per Section 23.76.093.C. of the clearing and grading code. If a clearing and grading permit is issued and the city subsequently issues three stop work orders (or fewer as provided as a condition of the project permit) for insufficient erosion and sedimentation control, the permit will be suspended until the dry season. If the third violation occurs during the dry season, the permit will be suspended until weather conditions are favorable and effective erosion and sedimentation control is in place.

Suspension of Work

When clearing and grading is suspended during the rainy season or interrupted at any time of the year, due to heavy rain or for other reasons, the permittee must stabilize the site and maintain the erosion and sedimentation control BMPs

Heavy Rain

Clearing and grading, including hauling of fill or excavated material, may be temporarily stopped during periods of heavy rain. Heavy rain is defined as a rate greater than or equal to 0.03 inches per 6 minutes or 0.30 inches per hour

CG5-19.2 Noise Restrictions

The City of Bellevue noise control ordinance applies to all commercial and multifamily construction and new single-family homes. Construction noise outside the allowable hours is prohibited per BCC 9.18.040. To be considered a violation, the construction-related noise must be audible across a property line or at least 75 feet from the source. Any violation is a civil noise infraction and the City may assess a monetary penalty to the individual creating the noise. A citation will be issued and a \$250 fine imposed on the first infraction. Construction-related noise violations are called into 911. Reports of noise violations to the police department are communicated to the Code Enforcement Division and may result in a stop work order.

Construction-related noise <u>is allowed</u>:

- 7:00 a.m. 6:00 p.m. on weekdays
- 9:00 a.m. 6:00 p.m. on Saturdays

Construction-related noise is not allowed:

- Outside of allowable hours
- Sundays or the following holidays:
 - New Years Day
 - Martin Luther King Day
 - President's Day
 - Memorial Day
 - 4th of July

- Labor Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

CG5 – 20 INTERRUPTION, SUSPENSION, OR ABANDONMENT OF WORK

If site work is interrupted or suspended, the permittee must stabilize the site and maintain the erosion and sediment control BMPs. Inspections must be conducted by the permittee on a regular basis and after each significant storm event. BMPs that are not functioning properly must be repaired, and additional BMPs must be installed as necessary to control erosion.

Any site where work has been abandoned must be stabilized with permanent erosion and sediment control. Any areas that are not covered by existing vegetation or permanent improvements such as buildings, parking lots, driveways, decks, walkways, and patios must be permanently stabilized. Permanent stabilization includes turf or sod (BMP C124), placing topsoil (BMP C125) followed by planting and/or seeding (BMP C120), installing permanent erosion control blankets or mats (BMP C122), mulching, or a combination of these practices that will result in permanent stabilization of the soil. Seeded areas must be stabilized using tackifier, turf reinforcement mats, mulch, hydromulch, or erosion control blankets/mats until the seed has established adequate cover to minimize erosion and remain stable during the wet season. Permanent mulch must be limited to small areas with minimal slope and must be heavy enough to remain in place during successive wet seasons. Permanent mulch includes gravel and compost. Compost must be placed in a layer at least 4 inches thick. Wood based mulch, such as hog fuel, sawdust, and chipped wood should not be used as permanent erosion control except in very small areas. Straw is not to be used as permanent erosion control.

CG5 – 21 POST-CONSTRUCTION SOILS

For sites that must comply with Minimum Requirement #5, as set forth in BCC 24.06.065, all soils in disturbed areas that have not been covered by impervious surface, incorporated into a drainage facility or engineered as structural fill or slope must be amended with organic matter. Amended soils must meet the specifications of BMP T5.13, as a part of permanent site stabilization.

CHAPTER CG6 – SLOPES

CG6 – 01 GENERAL

Slope is defined as ground that forms a natural or artificial incline. For the purposes of these standards, slope is calculated using the percent method. Slope percent is defined as 'rise divided by run', or the ratio of the vertical grade change (the elevation change) to horizontal distance divided by one hundred. For example, a slope with a 10 foot elevation change over a 25 foot horizontal distance, has a 40% slope.

Constructed or artificial slopes are limited to a gradient of 50% unless a geotechnical engineering report and slope stability analysis is provided and shows that a factor of safety of at least 1.5 for static loads and 1.1 for dynamic loads can be met. Cut and fill slopes (temporary and permanent) must be set back from property boundaries as far as necessary to protect adjacent properties and to prevent damage.

CG6 - 02 TOPOGRAPHY

Topographic surveys shall be stamped by a currently licensed Land Surveyor or the Civil Engineer of Record. Only the area proposed for or adjacent to the land alteration must be surveyed, however, the survey should extend at least 100 feet beyond the property boundaries if feasible. Slopes shall be measured based upon a current field or aerial topographic survey in 2 foot contour intervals accurate to within 1 foot of elevation.

CG6 – 03 GEOTECHNICAL REQUIREMENTS

The geotechnical engineer must perform a preliminary review and evaluation of the stability of natural, temporary, and permanently constructed slopes on or adjacent to the property to be developed. If, in the opinion of the City, the review indicates that the stability of the slopes are reduced by the proposed development, or that the natural slopes may have a factor of safety of less than 2.0 in the static case or 1.5 in a dynamic (seismic) case, then the geotechnical engineer must perform additional, more detailed review and evaluation of the stability of the slope.

A more detailed review and evaluation is also required if the applicant proposes development on a steep slope, a landslide hazard area, the associated buffers or the associated structure setbacks. The standards for slope stability analysis are provided in the Geotechnical Report and Stability Analysis Submittal Requirements sheet provided in Appendix A3.

Once the City considers a slope stability study to be complete and accurate, the information within the report shall be considered the best available information until such time as a new slope stability report for the area is completed.

CG6 – 04 FOUNDATION CLEARANCES FROM SLOPES

Constructed slopes should be set back from buildings a sufficient distance to protect building foundations from slope drainage, erosion and shallow failure. Chapter 1805.3 of the International Building Code (IBC) provides clearance, setback and elevation requirements for foundations on or adjacent to slopes.

CG6 – 05 SLOPE DRAINAGE

Cut slopes shall be provided with surface and subsurface drainage as necessary for permanent erosion control and stability. Any drains must be designed by a civil engineer and must discharge it at a location approved by the Director in consultation with the Bellevue Utilities department.

CHAPTER CG7 - CONSTRUCTION STORMWATER POLLUTION PREVENTION

CG7 – 01 GENERAL

The purpose of this chapter is to provide guidance for complying with local, state, and federal environmental laws and for protecting water and earth resources, fish and wildlife habitat, and public health and safety from the potential adverse impacts associated with clearing and grading private and public land in the city. The erosion and sediment control BMPs include Chapters 3 and 4 of Volume II of the 2005 Stormwater Management Manual for Western Washington (SMMWW) plus additional BMPs that reflect local regulations and practices. Chapter 3 of the SMMWW presents a step-by-step method for site planning and developing a CSWPPP. Chapter 4 of the SMMWW contains BMPs for construction stormwater control and site management.

The SMMWW uses the terms "local permitting authority", "local government" or "local permitting agency". For the purpose of these standards, those terms refer to the City of Bellevue.

CG7 – 02 PLANNING

Appendix A1 contains information consistent with Chapter 3 of Volume II of the 2005 Stormwater Management Manual for Western Washington. Chapter 3 provides guidelines and procedures for developing a CSWPPP, including 12 elements to be considered in developing a CSWPPP. Requirements for the narrative and drawings are listed, and a worksheet is included to aid in developing the CSWPPP.

For projects that require a clearing and grading permit and that involve clearing of less than 7,000 square feet and grading less than 100 cubic yards, the City of Bellevue will allow a simpler CSWPPP consisting of a small project short form and a site plan with a simple ESC plan. The CSWPPP Short Form for Small Construction Projects, along with a list of the site plan requirements is provided in Appendix A3 of these standards.

CG7 – 03 STANDARDS AND SPECIFICATIONS FOR BEST MANAGEMENT PRACTICES

Appendix A2 of these standards is consistent with Chapter 4 of Volume II of the 2005 Stormwater Management Manual for Western Washington. Chapter 4 provides BMPs for source control (Section 1) and for Runoff, conveyance, and treatment (Section 2). Appendix A3 includes additional BMPs that reflect local regulations and practices. These BMPs are to be used in combination to satisfy each of the 12 elements listed in Chapter 3.

CHAPTER CG8 – INSPECTION

CG8 – 01 INSPECTION BY THE PERMITTEE

In accordance with Element #12 of the SWMMWW, the permittee is required to inspect, maintain, and repair all erosion and sediment control BMPs to assure continued performance of their intended function. Site inspections must be conducted by a person who is knowledgeable in the principles and practices of erosion and sediment control, and who is on-site or on-call at all times. Site inspections must be conducted at least once every calendar week, and the inspector must summarize the results of each inspection in an inspection report that is entered into the log book. For construction sites of one acre or larger that discharge stormwater to the waters of the state, a Certified Erosion and Sediment Control Specialist (CESCL or CPESC) must be identified in the CSWPPP.

Whenever inspection and/or monitoring reveals that the BMPs identified in the CSWPPP are inadequate, due to the actual discharge of or potential to discharge a significant amount of any pollutant, appropriate BMP or design changes shall be implemented as soon as possible.

The Director shall specify inspection and testing requirements applicable to a given project prior to permit issuance; however, the Director may require additional inspection, testing, or professional analysis and recommendations when conditions exist that were not covered in the permit application documents or were not sufficiently known at the time of permit issuance.

CG8 – 01.1 Recordkeeping and Reporting

A log book must be maintained for all on-site construction activities and must include a record of the implementation of the CSWPPP, any updates to the CSWPPP and the ESC Plan, site inspections, and the results of any stormwater quality monitoring. A Construction Emergency Contact Sheet must also be kept in the log book and updated regularly. A copy of a construction emergency contact sheet for is provided in Appendix A3

Updating of the CSWPPP must be shown on the CSWPPP and on the ESC plan, and must be recorded in the log book. Revisions to the CSWPPP must be recorded within 48 hours of implementing the revisions.

Site inspections must be recorded on a site inspection form and placed in the log book within 24 hours of the inspection. An example site inspection form with instructions is included in Appendix A3. The inspection report must include the information provided in the instructions.

Turbidity and pH monitoring must be conducted and reported as described in the "Turbidity and pH Monitoring Requirements" provided in Appendix A3. An example data sheet is provided with the turbidity monitoring requirements sheet.

CG8 – 02 INSPECTION BY THE CITY

All projects with a clearing and grading permit are subject to city inspections to ensure compliance with the permit. As a condition of permit issuance, the applicant must grant right of entry for such inspections and city emergency corrective measures.

At a minimum, city inspections are required before clearing, grading, or construction and during construction to verify proper installation and maintenance of required erosion and sediment controls, and upon completion of construction. The Director will specify other stages of work when city inspection is required.

The permittee must call in to request routine inspections (425-452-6875). The City of Bellevue uses an automated telephone answering system called *interactive voice response* (IVR) to schedule inspections. The system is accessible 24 hours a day, seven days a week and provides real-time information. Clearing & grading inspections can be scheduled up to 3 days in advance, and the permittee can call until 6 a.m. to schedule a same-day inspection in most cases. Inspections can also be requested on-line using MyBuildingPermit.com.

Normal inspection time for clearing and grading inspectors is 8:00 am to 3:30 pm Monday through Friday, unless the inspector is working overtime to meet routine called in inspections. When inspections are requested outside of those times, special arrangements and additional fees are required. When off-hours inspections are required, the permittee must contact the Inspector or the Inspector's Supervisor at least 72 hours prior to the expected inspection, the date and time will need to be definite. When it is confirmed that the inspection staff is available to perform the inspection, the contractor will be contacted by the inspector to coordinate the inspection time, exchange contact information, etc. A fee will be charged for the off-hours inspection. The amount of the fee is based on the inspection time and date. Inspection time performed, subject to these additional fees, will be posted by the Development Services Inspector in the City's permit tracking system under the permit for which the inspection was performed. All fees are required to be paid within five (5) days of the scheduled off-hours inspection.

CG8 – 03 FINAL APPROVAL

The permittee or contractor must notify the clearing & grading inspector when site construction completed and ready for final inspection. Final clearing & grading approval will be given upon completion of the following tasks:

- All permanent erosion control measures are installed (or bonded for, in the case of plats);
- All items on the final clearing & grading check list are completed; and
- All of the necessary reports have been submitted to the City.

CHAPTER CG9 – VIOLATIONS

CG9 – 01 GENERAL

BCC 1.18.075 states what actions constitute civil violations of chapters BCC 24.06 and BCC 23.76, provides enforcement procedures for violations of these chapters and violations relating to illicit discharges, and specifies how penalties will be assessed

CG9 – 02 ENFORCEMENT PROCESS

BCC 1.18.075.E. provides for an enforcement process with escalating enforcement actions for violations of the related codes and standards. For a first violation that does not result in an emergency situation, is not an illicit connection, or otherwise does not require issuance of a notice of violation, the city must attempt to secure voluntary correction from the responsible party. A request for voluntary compliance may be presented in the form of a written correction notice or a stop work order. These documents must include a description of the violation, a description of the corrective action required to bring the property into compliance, and a date by which the corrective action must be completed. The correction notice or stop work order must be personally served on the responsible person(s), posted conspicuously on the premises, or mailed to the responsible person(s) with delivery confirmation.

Enforcement for a repeat violation where the initial enforcement action was issuance of a correction notice may result in issuance of a stop work order, a voluntary correction agreement, or a notice of violation, depending on the severity of the violation. Posting of a stop work order requires that no further work be done on the property until the code violations have been corrected and the stop work order has been removed by the city. Issuance of a notice of violation will result in the responsible person(s) being scheduled to appear before the hearing examiner not less than 10 calendar days after the notice of civil violation is issued. The procedures for a hearing are provided in BCC 1.18.050. Rules for the assessment of penalties are provided in BCC 1.18.075.G.