

## RESOLUTION NO. 3454, as Amended

**A RESOLUTION** of the Port Commission of the Port of Seattle adopting new sections of the Airport Building Code, repealing certain sections of the Airport Building Code, amending certain sections of the Airport Building Code and amending Resolution No. 3445.

**WHEREAS**, The Port Commission wishes to adopt new sections of the Airport Building Code required to execute its code administrative authority; and

**WHEREAS**, The Port Commission wishes to amend certain sections of the Airport Building Code to better protect the public building health, welfare & safety as well as better serve the needs of the Airport Building Department, the Port and Port tenants; and

**WHEREAS**, The Port Commission wishes to repeal certain sections of the Airport Building Code that no longer serve the needs of the Airport Building Department, the Port and Port tenants;

**NOW, THEREFORE, BE IT RESOLVED** by the Port Commission of the Port of Seattle that:

**Add a new title for section 13.06.040 and a new title for Appendix A to Chapter 13.06 Airport Building Code to read as follows:**

**Chapter 13.06 Building Code**

**Sections:**

**13.06.010 Uniform Building Code**

**13.06.020 Copy on File**

**13.06.030 Permit Fees Adopted**

**13.06.040 Penalties for violations of State Building Code.**

**Appendix A Airport Building Department – Table 1-A Building Permit Fees**

**Amend section 13.06.020 “Copy on File” to read as follows:**

**Section 13.06.020 Copy on File**

At least ~~one (1) copy~~ two (2) copies of the 1997 editions, fourth printing, of the Uniform Building Code and Uniform Building Code Standards (three volumes), ~~identified in SMC 13.06.010~~, shall be on file in the Airport Building Department office ~~of the city clerk.~~ (Ord. 92 1033, § 3)

**Repeal subsections A, items 1, 2, 3, 4, 5, 6, 7 and 8 of section 13.06.020 in its entirety as follows:**

**~~13.06.030 Permit fees adopted.~~**

A. Table 1-A of the 1997 Edition of the Uniform Building Code is not adopted and the table of fees set forth at Appendix A to this chapter is hereby adopted, and all references to Table 1-A within the said Uniform Building Code shall be deemed to be references to Appendix A, subject to the following:

1. Appendix A shall apply to permits for the installation of underground fuel storage tanks, fuel tank piping and vapor extraction systems. In addition to the permit fee, a plan review fee of sixty five percent (65%) of the permit fee shall be required.
2. The permit fee for the removal of an underground fuel storage tank (UST) system, other than a farm or residential UST of capacity less than one thousand one hundred (1,100) gallons, shall be two hundred fifty dollars (\$250.00) for the first tank and one hundred (\$100.00) for each additional tank if inspected at the same time.
3. The permit fee for installing a moved residential structure, including new or relocated manufactured homes and mobile homes, onto a new site shall be two hundred fifty dollars (\$250.00), which will include plan review.
4. The permit fee for the re-roofing of a residential structure shall be forty five dollars (\$45.00).
5. For the purpose of determining permit fees, buildings shall be assigned a minimum valuation based upon Table 1-C.
6. Permits issued under the provisions of this chapter for new single family residential construction, additions, remodels, carports and garages and other structures associated with single family uses shall expire one (1) year from the date of issue. A six (6) month extension may be granted by the building official. The fee for renewal, beyond the extension that may be granted, shall be equal to one half the original building permit fee.
7. Commercial building permits shall expire two (2) years from the date of issue.
8. Other fees, including, but not limited to, plan review, drainage plan review, and inspections, shall be as set forth in the City schedule of license fees, permit fees, and other fees and charges adopted by resolution.

✓ **Repeal Subsection B of section 13.06.020 in its entirety as follows**

B. A new Table 1-B, establishing fire sprinkler fees, is added to Chapter 1 of the Uniform Building Code, as follows:

**TABLE 1-B**

**FIRE SPRINKLER PERMIT FEE SCHEDULE**

**SINGLE-FAMILY DWELLINGS**

New single family dwelling \_\_\_\_\_ \$175.00  
Addition to existing system \_\_\_\_\_ \$110.00

**MULTIFAMILY AND COMMERCIAL**

Contract amount:  
\$250 or less \_\_\_\_\_ \$45.00  
251 — 1,000 \_\_\_\_\_ \$45 plus 4%

\_\_\_\_\_ of cost over \$250  
 1,001—5,000 \_\_\_\_\_ \$75 plus 1.5%  
 \_\_\_\_\_ of cost over \$1,000  
 5,001—50,000 \_\_\_\_\_ \$135 plus 1.4%  
 \_\_\_\_\_ of cost over \$5,000  
 50,001—250,000 \_\_\_\_\_ \$765 plus 1%  
 \_\_\_\_\_ of cost over \$50,000  
 250,001—1,000,000 \_\_\_\_\_ \$2,765 plus .8%  
 \_\_\_\_\_ of cost over \$250,000  
 1,000,001 and up \_\_\_\_\_ \$8,765 plus .4%  
 \_\_\_\_\_ of cost over \$1,000,000

Plan review for fire sprinkler permits shall be computed at 50% of the permit fee as based on the contract amount.

Plan review for revisions or modifications \_\_\_\_\_ \$50/hr.

Inspection or plan review not specified elsewhere \_\_\_\_\_ \$50/hr.

✓ **Repeal Subsection C of section 13.06.020 in its entirety as follows:**

~~C. A new Table 1-C, establishing minimum valuation for buildings for the purposes of calculating permit fees, is established as follows:~~

**TABLE 1-C**

**BUILDING VALUATION**

~~The determination of value or valuation under any of the provisions of this code shall be made by the Building Official. For the purposes of determining the Value to be used in computing the building permit fees and building plan review fees, building valuation shall be based on the most recent "Building Valuation Data" as printed in the Building Standards magazine, published by the International Conference of Building Officials, or the contract price, whichever is higher. Valuation for purposes of determining a demolition permit fee shall be based upon the contract price or the fair market value of the demolition work, with a minimum fee of \$150.00. In addition to the regional modifier, the valuation shall be reduced by the following multipliers:~~

- ~~1. Residential additions \_\_\_\_\_ .70~~
- ~~2. Residential remodels \_\_\_\_\_ .30~~
- ~~3. Residential decks \_\_\_\_\_ .20~~
- ~~4. Commercial tenant improvements \_\_\_\_\_ .30~~

✓ **Repeal subsections D, E, F, G, I, J and K of section 13.06.030 in its entirety including Table 18-1-D as follows. :**

~~D. Addition to Section 403.7 of the Uniform Building Code. There is hereby added to the Uniform Building Code an additional requirement under Section 403.7 to read as follows:~~

~~4. All elevator shafts shall be pressurized with a supply of air from the outdoors to a minimum of 0.15 inch of water column in a fire alarm mode.~~

~~E. Amendment of Section 403.1 of the Uniform Building Code. Section 403.1 the Uniform Building Code is hereby amended to read as follows:~~

~~403.1 Scope. This section applies to all Group B office buildings and Group R, Division 1 Occupancies, each having floors used for human occupancy located more than 65 feet above the lowest level of fire department vehicle access. Such buildings shall be of Type 1 or 2 F.R. construction and shall be provided with an approved automatic sprinkler system in accordance with Section 403.2.~~

~~F. Section 904.2.1 of the Uniform Building Code is hereby amended to read as follows:~~

~~Section 904.2.1 Where Required. An automatic fire extinguishing system shall be installed in the occupancies and locations as set forth in this section.~~

~~In addition to the requirements of the Uniform Building Code and the Uniform Fire Code, there is hereby established a minimum requirement for the installation of fire sprinkler systems. All structures, excluding single family residential buildings, shall have a fire sprinkler system installed, which meets or exceeds all of the parameters contained within this Chapter, Uniform Building Code and the Uniform Fire Code when the gross floor area is 6,000 square feet or more. For purposes of determining gross floor area, the installation of area separation walls will not be considered as creating separate buildings. It is provided however that existing structures are exempt from this provision provided:~~

- ~~a. There is no increase in floor area, or~~
- ~~b. The area to be improved does not exceed 50% of the total floor area including mezzanines, or~~
- ~~c. There is no change of occupancy or use, and~~
- ~~d. A fire alarm system, meeting all applicable requirements for the occupancy, is installed.~~

~~G. Amendment of Section 904.2.9 of the Uniform Building Code. Section 904.2.9 of the Uniform Building Code is hereby amended to read as follows:~~

~~Group R, Division 1 Occupancies. An automatic sprinkler system shall be installed throughout apartment houses three or more levels in height or containing 5 or more dwelling units, in congregate residences three or more stories in height and having an occupant load of 50 or more and in hotels three or more levels in height or containing 10 or more guest rooms. Residential or quick response standard sprinklers shall be used in the dwelling units and guest room portions of the building. The sprinkler system shall comply with the requirements of Uniform Building Code Standard Numbers 9-1 and 9-3.~~

~~H. Section 1003.3.3.3 of the Uniform Building Code is hereby adopted as contained therein and the amended Section 1003.3.3.3 of the Washington State Building Code is not adopted.~~

I. Section 1806.3 of the Uniform Building Code is hereby amended to read as follows:

**Bearing Walls.** Bearing walls shall be supported on masonry or concrete foundations or piles or other approved foundation system, which shall be of sufficient size to support all loads. Where a design is not provided, the minimum foundation requirements for stud bearing walls shall be as set forth in Table 18-1-C and Table 18-1-D, unless expansive soils of a severity to cause differential movement are known to exist.

**EXCEPTIONS:**

1. A one-story wood or metal frame building not used for human occupancy and not over 400 square feet (37.2 M<sup>2</sup>) in floor area may be constructed with walls supported on a wood foundation plate when approved by the building official.
2. The support of buildings by posts embedded in earth shall be designed as specified in Section 1806.8. Wood posts or poles embedded in earth shall be pressure treated with an approved preservative. Steel posts or poles shall be protected as specified in Section 1807.9.

J. A new Table 18-1-D establishing minimum reinforcement requirements for Group R-3 and U-1 foundations as an alternate to an engineered design, is added to Chapter 18 of the Uniform Building Code, as follows:

**Table No. 18-1-D Prescriptive Foundation Design for Residential R-3 and U-1**

**Note:** Foundation walls must not be subjected to more than 30 PCF equivalent fluid pressure (well drained soil) nor surcharge.

	Material Type <sup>8</sup> Wall Height <sup>2,6</sup> Min. Wall Thickness Sill Plate Anchorage <sup>4,5</sup> Required Reinforcing <sup>3</sup>
	Vertical Horizontal
Hollow unit masonry support at top by floor system and at bottom by slab <sup>1,4</sup> or less	8"
1/2" x 10" A.B. at 6" O.C. #4 @ 4' O.C. #4 Bond beam @ top, 2 #4 @ footing	
	Over 4'
Not allowed unless an engineered design is submitted and approved Concrete under wood cripple wall and supported by slab <sup>1</sup>	3' or less 6"
1/2" x 10" A.B. at 6" O.C. #4 @ 18" O.C. #4 @ top and 2 #4 at footing 4' or less" 1/4" x 10" A.B. at 6" O.C. #4 @ 16" O.C. #4 @ top and 2 #4 at footing over 4'	
Not allowed unless an engineered design is submitted and approved Concrete supported at top by floor system and at bottom by slab <sup>1</sup>	9' or less 8"
1/2" x 10" A.B. at 6" O.C. #4 @ 16" O.C. <sup>4,6</sup> #4 @ top 16" O.C. and 2 #4 at footing over 9'	
Not allowed unless an engineered design is submitted and approved	

1. ~~Where there is no slab at bottom of wall as in a crawl space, maximum unbalanced backfill shall be 30" unless an alternate design is approved.~~
2. ~~The floor diaphragm shall be completed before backfilling or the foundations wall sufficiently braced to prevent damage by the backfill.~~
3. ~~This table is not intended to prevent temperature and shrinkage cracks. Reinforcing steel shall be placed within the inside half of the wall and not closer than 3/4" clear from the inside face of the wall. Concrete against earth shall be spaced a minimum of 3" from the soil.~~
4. ~~Solid block first two joist spaces adjacent to anchor bolts where floor joists are parallel to the wall.~~
5. ~~There shall be a minimum of two (2) anchor bolts per foundation (sill) plate with one bolt located within twelve (12) inches of each end of each foundation (sill) plate. Foundation plates and sills shall be the kind of wood specified in Section 2317.4.~~
6. ~~Wall height is measured as the vertical distance from the top of the footing to the top of the concrete wall.~~
7. ~~If the slab is eliminated, a special design is required regardless of the backfill height.~~
8. ~~Minimum 4" perforated footing drains are required at all footings. All roof drains must be tight-lined to a public drainage system or an approved on-site system through smooth non-perforated drain line. The footing drains may connect into the roof drain line downhill from the last roof drain connection and where the invert elevation of the roof drain line is 2" lower than the invert of the footing drain. The roof drain line size must be increased one pipe size where the footing drains connect into it.~~

K. Section 1922.10.3 of the Uniform Building Code is hereby amended to read as follows:

Seismic Zones 2, 3, and 4. Structural plain concrete members are not permitted in buildings located in Seismic Zones 2, 3, and 4.

**EXCEPTIONS:**

1. Footings for buildings of Group R, Division 3 or Group U, Division I Occupancy constructed in accordance with Table 18-1 C and Table 18-1 D.
2. Nonstructural slabs supported directly on the ground or by approved structural systems.

~~(Ord. 98-1026 § 1; Ord. 98-1021 § 2; Ord. 98-1008 § 1; Ord. 98-1004 § 1; Ord. 97-1021 §§ 2, 3; Ord. 97-1020 § 1; Ord. 95-1022 § 4; Ord. 92-1033 § 3)~~

**Adopt a new section 13.06.030 to read as follows:**

**13.06.030. Miscellaneous Provisions**

**A. Permit Fees Adopted.** Table I-A as indicated below is adopted. For purposes of determining permit fees, buildings and structures shall be assigned a valuation based on the definition in Subsection B of this Section.

**B. Determination of Value or Valuation.** Valuation will be determined by the criteria given in the second paragraph of Section 107.2 and in the definition under Section 223. Note that in addition to the 'contract price' or 'construction cost,' valuation includes the expenses associated with the design and associated documentation, including soils reports and various other reports and non-structural (e.g., energy, mechanical and plumbing) and structural calculations."

**C. Revision to State of Washington Building Code Amendment to WAC 51-40-1003.** Delete State amended Section 1003.3.3.3 and substitute Section 1003.3.3.3 as published in the Uniform Building code™, 1997 Edition, Fourth Printing, published by the International Conference of Building Officials."

**Repeal Appendix A, Building Code Fees in its entirety as follows:**

**Appendix A—Building Permit Fees**

**Total Valuation**

**Permit Fee**

\$1.00 to \$25,000.00	\$50.00 for the first \$2,000.00 plus \$8.50 for each additional \$1,000.00, or fraction thereof, to and including \$25,000.00
\$25,001.00 to \$50,000.00	\$252.00 for the first \$25,000.00 plus \$6.50 for each additional \$1,000.00, or fraction thereof, to and including \$50,000.00
\$50,001.00 to \$100,000.00	\$414.50 for the first \$50,000.00 plus \$4.50 for each additional \$1,000.00, or fraction thereof, to and including \$100,000.00
\$100,001.00 to \$250,000.00	\$639.50 for the first \$100,000.00 plus \$3.50 for each additional \$1,000.00, or fraction thereof, to and including \$250,000.00
\$250,001.00 to \$500,000.00	\$2,043.00 for the first \$250,000.00 plus \$5.60 for each additional \$1,000.00, or fraction thereof, to and including \$500,000.00
\$500,001.00 to \$1,000,000.00	\$3,233.75 for the first \$500,000.00 plus \$4.75 for each additional \$1,000.00, or fraction thereof, to and including \$1,000,000.00
Over \$1,000,000.00	\$5,608.75 for the first \$1,000,000 plus \$3.65 for each additional \$1,000.00, or fraction thereof

**Other Inspections and Fees:** 1. ~~Inspections outside the normal business hours (minimum 2 hours) \$75.00 per hour~~  
 2. ~~Reinspection fees assessed under provisions of Section 305.8 \$50.00 per hour~~  
 3. ~~Inspections for which no fee is specifically indicated (minimum 1 hour) \$50.00 per hour~~  
 4. ~~Additional plan review required by changes, additions or revisions To plans (minimum 1 hour) \$50.00 per hour~~  
 5. ~~For use of outside consultants for plan checking and inspections, or both~~  
 Actual Cost

Adopt a new section 13.06.040 to read as follows:

**13.06.040 Penalties for violations of State Building Code.** Failure to comply with the Port of Seattle Building Code shall be considered a violation of its provisions.

Adopt a new Table 1-A, Building Permit Fees to read as follows:

## AIRPORT BUILDING DEPARTMENT Table 1-A Building Permit Fees\*

Total Valuation	Permit Fee
\$1.00 to \$500	\$23.50
\$501.00 to \$2,000.00	\$23.50 for the first \$500.00 plus \$3.05 for each additional \$100.00, or fraction thereof, to and including \$2,000.00.
\$2,001.00 to \$25,000.00	\$69.25 for the first \$2,000.00 plus \$14.00 for each additional \$1,000.00, or fraction thereof, to and including \$25,000.00.
\$25,001.00 to \$50,000.00	\$391.25 for the first \$25,000.00 plus \$10.10 for each additional \$1,000.00, or fraction thereof, to and including \$50,000.00.
\$50,001.00 to \$100,000.00	\$643.75 for the first \$50,000.00 plus \$7.00 for each additional \$1,000.00, or fraction thereof, to and including \$100,000.00.
\$100,001.00 to \$500,000.00	\$993.75 for the first \$100,000.00 plus \$5.60 for each additional \$1,000.00, or fraction thereof, to and including \$500,000.00.
\$500,001.00 to \$1,000,000.00	\$3,233.75 for the first \$500,000.00 plus \$4.75 for each additional \$1,000.00, or fraction thereof, to and including \$1,000,000.00
\$1,000,001.00 and up	\$5,608.75 for the first \$1,000,000.00 plus \$3.15 for each additional \$1,000.00, or fraction thereof

\* Note that where grading or excavation operations are proposed and are not part of a project that requires a building permit, fees shall be as established in Appendix Table A-33-A on page 1-409 in the 1997 edition of the UBC

PERMITS: The fee for each Building or Plumbing and/or Mechanical permit shall be as set forth in the Table above. When plan review is required, then an application fee is due for the plan review—see the next section. When the permit fee is to be paid, there are three potential categories of permits and associated fees although only one form will be used for any of these cases:

- o A separate permit fee for either of Building, Mechanical or Plumbing when only one of these activities is being proposed. Usually this type will be associated with an alteration, repair or remodel or an existing space. (Only one form is required for any of these individual cases.)
- o A separate permit fee for the Building construction and a separate permit fee for the Mechanical and Plumbing work together associated with the building. (But all contractors will be included on only one form.)



- A separate permit fee for the Building **construction** and a separate permit fee for either the Mechanical or Plumbing work associated with the building work. (But the individual contractors will be included on only one form.)

**PLAN REVIEWS:** When UBC Section 106.3.2, UMC Section 113.2 and/or UPC Section 103.2.2 requires submittal documents as described therein, separate plan review fees shall be paid at the time of submitting the submittal documents for plan review. Plan review fees are separate fees from the permit fees and are in addition to the permit fees. There will be up to two potential plan review fees to be paid, either separately or collectively:

- For the Building Permit, said plan review fee shall be 65% of the building permit fee based on the total valuation of the work to be done. See UBC Sections 107.2 and 223 for details.  
For the Mechanical and/or Plumbing Permit, said plan review fee shall be 50% of the building permit fee based on that portion of the total valuation that represents either the two disciplines together (the usual case for new construction); or for one or the other separately (the usual case for alterations, additions or remodels).

**Other Inspections and fees:**

1. Inspections outside of normal business hours (minimum charge – two hours) ..... \$ 47 . per hour<sup>1</sup>
2. Re-inspection fees assessed under provisions of Section 305.8 ..... \$47.00 per hour<sup>1</sup>
3. Inspections for which no fee is specifically indicated (minimum charge – one-half hour) ..... \$ 47 . per hour<sup>1</sup>
4. Additional plan review required by changes, additions or revisions to plans (minimum charge – one-half hour) ..... \$ 47 . per hour<sup>1</sup>
5. For use of outside consultants for plan checking and inspections, or both ..... Actual costs<sup>2</sup>

**Repeal Chapter 13, Energy Conservation, pages 1-139 of the 1997 UBC in its entirety.**

**Adopt a new Chapter 13, Energy Code to read as follows:**

**"Chauter 13 Energy Code**

The Washington State Energy Code. 1997 Edition. as amended by the Washington State Building Code Council on November 14, 1997 is hereby adopted. At least two (2) copies of the Washington State Energy Code shall be on file in the Airport Building Department office."

**Repeal section 1205 – "Alternate Ventilation When Applicable", pages 1-136 of the 1997 UBC in its entirety.**

**Adopt a new section 1205 to read as follows:**

**Section 1205 Ventilation and Indoor Air Quality Code**

The Washington State Ventilation and Indoor Air Quality Code. 1997 Edition. as amended by the Washington State Building Code Council on November 14, 1997 is hereby adopted. At least two (2) copies of the Washington State Ventilation and Indoor Air Quality Code shall be on file in the Airport Building Department office.

**Adopt Appendix Chapter 33, Excavation and Grading of the 1997 Uniform Building Code, volume 1, pages 1-407 through 1-412, (See Attachment) except subsection 1 and subsection 6 of section 3306.2.**

**Amend section 3306.1 to read as follows:**

**Section 3306.1 Permits Required.** Except as specified in Section 3306.2 of this section, no person shall do any grading, or clearing (i.e., the cutting or removal of vegetation or other organic plant material by physical, mechanical, chemical or any other means) without first having obtained a grading permit from the Building Official.

<sup>1</sup> Or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved

<sup>2</sup> Actual costs include administrative and overhead costs.

**Amend section 3306.2, subsections (2) – (9), to read as follows:**

1. ~~2.~~ An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation or exempt any excavation having an unsupported height greater than 5' (1524 mm) after the completion of such structure.
2. ~~3.~~ Cemetery graves.
3. ~~4.~~ Refuse disposal sites controlled by other regulations.
4. ~~5.~~ Excavations for wells or tunnels or utilities.
5. ~~7.~~ Exploratory excavations under the direction of soil engineers or engineering geologists.
6. ~~8.~~ An excavation that (1) is less than 2 feet (610 mm) in depth or (2) does not create a cut slope greater than 5 feet (1524 mm) in height and steeper than 1 unit vertical in 1 ½ units horizontal (66.7% slope.)
7. ~~9.~~ A fill less than 1 foot (305 mm) in depth and placed on natural terrain with a slope flatter than 1 unit vertical in 5 units horizontal (20% slope), or less than 3 feet (914 mm) in depth, not intended to support structures, that does not exceed 50 cubic yards (38.3 m<sup>3</sup>) on any one lot and does not obstruct a drainage course.

Exemption from the permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

**Adopt a new section 3306.3 to read as follows:**

**3306.3 Permits for quarrying and mining.** The Building Official shall have the authority to issue permits for quarrying and mining operations for specific application to airport construction, and removal of sand, gravel, rock and other natural deposits, together with the necessary buildings, apparatus or appurtenances incident thereto. This permit may authorize rock crushers, concrete-batching plants and asphalt-batching plants and similar equipment in conjunction with such operations or allied uses. The Building Official shall also have the authority to issue permits for the removal of existing stockpiles of previously mined material for the reclamation of land.

The Building Official shall consider the effect of the proposed operation on the city road system and any effect it may have on surface or groundwater drainage and flood control, and shall make such recommendations as are necessary to protect the public interest in this regard.

The Building Official shall also consider the effect of the proposed operation on the current and future land use in the area affected by the proposed operation and shall condition permits as necessary to protect the public interest in this regard.

Quarrying and mining permits are good for the life of any specific job but shall be reviewed annually. Each permit site affected by the proposed operation shall be restored to the current or future proposed land use in accordance with a plan prepared as defined in Section 3309.10. Such restoration shall be completed within the term of the last permit issued before permanent abandonment of the mining or quarrying operation unless the site is subsequently designated with "aviation operations or aviation commercial" Zone classifications.

Such grading shall be considered Engineered Grading and shall comply with the requirements of Section 3309.

**Adopt a new section 3309.10 and subsections 1-6 to read as follows:**

**3309.10 Land Restoration Study.** Prior to the exhaustion of materials or the permanent abandonment of the quarrying or mining operation under a permit as administered in Section 3306.3, a plan shall be submitted by a professional civil engineer licensed in the State of Washington that shows how the property will be restored to a useful condition. The plan shall include the following items:

1. All nonconforming buildings, structures, apparatus or appurtenances accessory to the quarrying and mining operation shall be removed or otherwise dismantled to the satisfaction of the Building Official.
2. Final grades shall be prepared so that the uses permitted at the site can be done. Stockpiles of waste or soil shall be leveled or removed.
3. Grading or backfilling shall be made with non-noxious, nonflammable, noncombustible and non-putrescible solids.
4. Cut or fill slopes that shall be sodded or surfaced with soil of a quality at least equal to the topsoil of the land areas immediately surrounding them, and to a depth of at least four inches.
5. Such topsoil as required by subdivision 4 shall be planted to control against erosion with trees, shrubs, legumes or grasses. Said flora shall be so selected as to be indigenous to the surrounding area.
6. Graded or backfilled areas shall be reclaimed in a manner which will not allow water to collect and permit stagnant water to remain. If natural drainage is not possible, drainage systems shall be designed by the well-established principles of hydrology and hydraulics and shall be constructed or installed before abandonment of the quarrying operation.

**Repeal the title for section 13.08.030 as follows:**

**Chapter 13.08 Mechanical Code**

**Sections:**

**13.08.010 Uniform Mechanical Code.**

**13.08.20 Copy on File**

**~~13.08.030 Amendments and exceptions to the mechanical code~~**

**Amend Section 13.08.010 to read as follows:**

**Section 13.08.010 Uniform Mechanical Code**

"The 1997 Edition of the Uniform Mechanical Code, as published by the International Conference of Building Officials, as amended by the Washington State Building Code Council on November 14, 1997 and published as Chapter 51-41 WAC is adopted, except that Table 3-A of the Uniform Mechanical Code is ~~deleted, except as amended and/or excepted in SMC 13.08.030. (Ord. 98-1021, § 3, Ord. 95-1022, § 5; Ord. 92-1033, § 5)~~"

**Amend Section 13.08.020 to read as follows:**

**13.08.020 Copy on file.**

"At least ~~one (1) copy~~ two (2) copies of the 1997 edition, second printing, of the Uniform Mechanical Code and Uniform Mechanical Code Standards (one volume), shall be on file in the Airport Building Department office. ~~of the city clerk. (Ord. 92-1033, § 3)~~"

**Repeal Section 13.08.030 in its entirety as follows:**

**13.08.030** Amendments and exceptions to the mechanical code:

Table 3A of the Uniform Mechanical Code is excepted from the Code adopted in this chapter. Instead, the following mechanical permit fee schedule is adopted:

**MECHANICAL PERMIT FEE SCHEDULE  
SINGLE-FAMILY DWELLINGS**

New single-family dwelling\* \$150.00  
 New installation\* (existing dwelling with no existing ducting or venting) \$150.00

**ADDITIONS AND REMODELS TO  
SINGLE-FAMILY DWELLINGS**

Each new or replaced appliance\* \$50.00  
 More than two new or replaced appliances\* \$150.00

Gas piping (no equipment or appliances) \$45.00  
 \*Gas piping included under these permits:

**MULTIFAMILY AND COMMERCIAL**

Valuation amount:  
 \$250 or less \$45.00  
 251-1,000 \$45 plus 4%  
 of cost over \$250  
 1,001-5,000 \$75 plus 1.5%  
 of cost over \$1,000  
 5,001-50,000 \$135 plus 1.4%  
 of cost over \$5,000  
 50,001-250,000 \$765 plus 1%  
 of cost over \$50,000  
 250,001-1,000,000 \$2,765 plus .8%  
 of cost over \$250,000  
 1,000,001 and up \$8,765 plus .4%  
 of cost over \$1,000,000  
 Permit costs include the normal plan review associated with the application.  
 Plan review for revisions or modifications \$50/hr.  
 Inspection or plan review not specified elsewhere \$50/hr.

(Ord. 98-1004 § 2; Ord. 95-1022 § 6; Ord. 92-1033 § 5)

**Repeal the title for section 13.08.030 as follows:**

**“Chapter 13.09 Plumbing Code**

**Sections:**

**13.09.010 Uniform Plumbing Code and Plumbing Code Standards.**

**13.09.020 Copy on File**

**~~13.08.030 Amendments and exceptions to the plumbing code~~**

**Amend section 13.09.010 to read as follows:**

**Section 13.09.010 Uniform Plumbing Code and Plumbing Code Standards.**

The 1997 Edition of the Uniform Plumbing Code and the Uniform Plumbing Code Standards, as published by the International Association of Plumbing and Mechanical Officials, as amended by the Washington State Building Code Council on November 14, 1997 and published as Chapter 51-46 and 51-47 WAC is adopted, except that Table 1-1 of the Uniform Plumbing Code is deleted, and except as amended and/or excepted in SMC 13.08.030. (Ord. 98-1021, § 4; Ord. 95-1022, § 7; Ord. 92-1033, § 6)

**Amend section 13.09.020 to read as follows:**

**13.09.020 Copy on file.**

“At least ~~one (1) copy~~ two (2) copies of the 1997 edition, Third printing, of the Uniform Plumbing Code and Uniform Plumbing Code Standards (one volume), shall be on file in the Airport Building Department office, of the city clerk. (Ord. 92-1033, § 3)”

**Repeal section 13.06.030 to read as follows:**

**~~13.09.030 Amendments and exceptions to the plumbing code.~~**

Table 3A of the Uniform Plumbing Code is excepted from the code adopted in this chapter. In its stead, the following plumbing permit fee schedule is adopted:

**~~PLUMBING PERMIT FEE SCHEDULE~~**

~~For issuance of each permit \_\_\_\_\_ \$15.00~~

~~For supplemental permits \_\_\_\_\_ 5.00~~

**~~SINGLE FAMILY DWELLINGS~~**

~~Less than 3000 square feet \_\_\_\_\_ \$135.00~~

~~Over 3000 square feet \_\_\_\_\_ 160.00~~

**~~ADDITIONS AND REMODELS  
TO SINGLE FAMILY DWELLINGS~~**

~~Adding one to five fixtures \_\_\_\_\_ \$35.00~~

~~Adding six to ten fixtures \_\_\_\_\_ 55.00~~

~~Over ten fixtures \_\_\_\_\_ 135.00~~

## Appendix Chapter 33 EXCAVATION AND GRADING

### SECTION 3304 — PURPOSE

The purpose of this appendix is to safeguard life, limb, property and the public welfare by regulating grading on private property.

### SECTION 3305 — SCOPE

This appendix sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedure for issuance of permits; and provides for approval of plans and inspection of grading construction.

The standards listed below are recognized standards (see Sections 3503 and 3504).

1. Testing.
  - 1.1 ASTM D 1557, Moisture-density Relations of Soils and Soil Aggregate Mixtures
  - 1.2 ASTM D 1556, In Place Density of Soils by the Sand-Cone Method
  - 1.3 ASTM D 2167, In Place Density of Soils by the Rubber-Balloon Method
  - 1.4 ASTM D 2937, In Place Density of Soils by the Drive-Cylinder Method
  - 1.5 ASTM D 2922 and D 3017, In Place Moisture Contact and Density of Soils by Nuclear Methods

### SECTION 3306 — PERMITS REQUIRED

**3306.1 Permits Required.** Except as specified in Section 3306.2 of this section, no person shall do any grading without first having obtained a grading permit from the building official.

**3306.2 Exempted Work** A grading permit is not required for the following:

1. When approved by the building official, grading in an isolated, self-contained area if there is no danger to private or public property.
2. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation or exempt any excavation having an unsupported height greater than 5 feet (1524 mm) after the completion of such structure.
3. Cemetery graves.
4. Refuse disposal sites controlled by other regulations.
5. Excavations for wells or tunnels or utilities.
6. Mining, quarrying, excavating, processing or stockpiling of rock, sand, gravel, aggregate or clay where established and provided for by law, provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property.
7. Exploratory excavations under the direction of soil engineers or engineering geologists.
8. An excavation that (1) is less than 2 feet (610 mm) in depth or (2) does not create a cut slope greater than 5 feet (1524 mm) in

height and steeper than 1 unit vertical in 1<sup>1</sup>/<sub>2</sub> units horizontal (66.7% slope).

9. A fill less than 1 foot (305 mm) in depth and placed on natural terrain with a slope flatter than 1 unit vertical in 5 units horizontal (20% slope), or less than 3 feet (914 mm) in depth, not intended to support structures, that does not exceed 50 cubic yards (38.3 m<sup>3</sup>) on any one lot and does not obstruct a drainage course.

Exemption from the permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

### SECTION 3307 — HAZARDS

Whenever the building official determines that any existing excavation or embankment or fill on private property has become a hazard to life and limb, or endangers property, or adversely affects the safety, use or stability of a public way or drainage channel, the owner of the property upon which the excavation or fill is located, or other person or agent in control of said property, upon receipt of notice in writing from the building official, shall within the period specified therein repair or eliminate such excavation or embankment to eliminate the hazard and to be in conformance with the requirements of this code.

### SECTION 3308 — DEFINITIONS

For the purposes of this appendix, the definitions listed hereunder shall be construed as specified in this section.

**APPROVAL** shall mean that the proposed work or completed work conforms to this chapter in the opinion of the building official.

**AS-GRADED** is the extent of surface conditions on completion of grading.

**BEDROCK** is in-place solid rock.

**BENCH** is a relatively level step excavated into earth material on which fill is to be placed.

**BORROW** is earth material acquired from an off-site location for use in grading on a site.

**CIVIL ENGINEER** is a professional engineer registered in the state to practice in the field of civil works.

**CIVIL ENGINEERING** is the application of the knowledge of the forces of nature, principles of mechanics and the properties of materials to the evaluation, design and construction of civil works.

**COMPACTION** is the densification of a fill by mechanical means.

**EARTH MATERIAL** is any rock, natural soil or fill or any combination thereof.

**ENGINEERING GEOLOGIST** is a geologist experienced and knowledgeable in engineering geology.

**ENGINEERING GEOLOGY** is the application of geologic knowledge and principles in the investigation and evaluation of naturally occurring rock and soil for use in the design of civil works.

**EROSION** is the wearing away of the ground surface as a result of the movement of wind, water or ice.

**EXCAVATION** is the mechanical removal of earth material.

**FILL** is a deposit of earth material placed by artificial means.

**GEOTECHNICAL ENGINEER.** See "soils engineer."

**GRADE** is the vertical location of the ground surface.

**Existing Grade** is the grade prior to grading.

**Finish Grade** is the final grade of the site that conforms to the approved plan.

**Rough Grade** is the stage at which the grade approximately conforms to the approved plan.

**GRADING** is any excavating or filling or combination thereof.

**KEY** is a designed compacted fill placed in a trench excavated in earth material beneath the toe of a proposed fill slope.

**PROFESSIONAL INSPECTION** is the inspection required by this code to be performed by the civil engineer, soils engineer or engineering geologist. Such inspections include that performed by persons supervised by such engineers or geologists and shall be sufficient to form an opinion relating to the conduct of the work.

**SITE** is any lot or parcel of land or contiguous combination thereof, under the same ownership, where grading is performed or permitted.

**SLOPE** is an inclined ground surface the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

**SOIL** is naturally occurring superficial deposits overlying bedrock.

**SOILS ENGINEER (GEOTECHNICAL ENGINEER)** is an engineer experienced and knowledgeable in the practice of soils engineering (geotechnical) engineering.

**SOILS ENGINEERING (GEOTECHNICAL ENGINEERING)** is the application of the principles of soils mechanics in the investigation, evaluation and design of civil works involving the use of earth materials and the inspection or testing of the construction thereof.

**TERRACE** is a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.

## SECTION 3309 — GRADING PERMIT REQUIREMENTS

**3309.1 Permits Required.** Except as exempted in Section 3306 of this code, no person shall do any grading without first obtaining a grading permit from the building official. A separate permit shall be obtained for each site, and may cover both excavations and fills.

**3309.2 Application.** The provisions of Section 106.3.1 are applicable to grading. Additionally, the application shall state the estimated quantities of work involved.

**3309.3 Grading Designation.** Grading in excess of 5,000 cubic yards (3825 m<sup>3</sup>) shall be performed in accordance with the approved grading plan prepared by a civil engineer, and shall be designated as "engineered grading." Grading involving less than 5,000 cubic yards (3825 m<sup>3</sup>) shall be designated "regular grading" unless the permittee chooses to have the grading performed as engineered grading, or the building official determines that special conditions or unusual hazards exist, in which case grading shall conform to the requirements for engineered grading.

**3309.4 Engineered Grading Requirements.** Application for a grading permit shall be accompanied by two sets of plans and specifications, and supporting data consisting of a soils engineering report and engineering geology report. The plans and specifications shall be prepared and signed by an individual licensed by

the state to prepare such plans or specifications when required by the building official.

Specifications shall contain information covering construction and material requirements.

Plans shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations. The first sheet of each set of plans shall give location of the work, the name and address of the owner, and the person by whom they were prepared.

The plans shall include the following information:

1. General vicinity of the proposed site.
2. Property limits and accurate contours of existing ground and details of terrain and area drainage.
3. Limiting dimensions, elevations or finish contours to be achieved by the grading, and proposed drainage channels and related construction.
4. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams and other protective devices to be constructed with, or as a part of, the proposed work, together with a map showing the drainage area and the estimated runoff of the area served by any drains.
5. Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners that are within 15 feet (4572 mm) of the property or that may be affected by the proposed grading operations.
6. Recommendations included in the soils engineering report and the engineering geology report shall be incorporated in the grading plans or specifications. When approved by the building official, specific recommendations contained in the soils engineering report and the engineering geology report, which are applicable to grading, may be included by reference.
7. The dates of the soils engineering and engineering geology reports together with the names, addresses and phone numbers of the firms or individuals who prepared the reports.

**3309.5 Soils Engineering Report.** The soils engineering report required by Section 3309.4 shall include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective measures, including buttress fills, when necessary, and opinion on adequacy for the intended use of sites to be developed by the proposed grading as affected by soils engineering factors, including the stability of slopes.

**3309.6 Engineering Geology Report.** The engineering geology report required by Section 3309.4 shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinion on the adequacy for the intended use of sites to be developed by the proposed grading, as affected by geologic factors.

**3309.7 Liquefaction Study.** The building official may require a geotechnical investigation in accordance with Sections 1804.2 and 1804.5 when, during the course of an investigation, all of the following conditions are discovered, the report shall address the potential for liquefaction:

1. Shallow ground water, 50 feet (15 240 mm) or less.
2. Unconsolidated sandy alluvium.
3. Seismic Zones 3 and 4.

**3309.8 Regular Grading Requirements.** Each application for a grading permit shall be accompanied by a plan in sufficient clarity to indicate the nature and extent of the work. The plans shall give the location of the work, the name of the owner and the name of the person who prepared the plan. The plan shall include the following information:

1. General vicinity of the proposed site.
2. Limiting dimensions and depth of cut and fill.
3. Location of any buildings or structures where work is to be performed, and the location of any buildings or structures within 15 feet (4572 mm) of the proposed grading.

**3309.9 Issuance.** The provisions of Section 106.4 are applicable to grading permits. The building official may require that grading operations and project designs be modified if delays occur which incur weather-generated problems not considered at the time the permit was issued.

The building official may require professional inspection and testing by the soils engineer. When the building official has cause to believe that geologic factors may be involved, the grading will be required to conform to engineered grading.

**SECTION 3310 — GRADING FEES**

**3310.1 General.** Fees shall be assessed in accordance with the provisions of this section or shall be as set forth in the fee schedule adopted by the jurisdiction.

**3310.2 Plan Review Fees.** When a plan or other data are required to be submitted, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be as set forth in Table A-33-A. Separate plan review fees shall apply to retaining walls or major drainage structures as required elsewhere in this code. For excavation and fill on the same site, the fee shall be based on the volume of excavation or fill, whichever is greater.

**3310.3 Grading Permit Fees.** A fee for each grading permit shall be paid to the building official as set forth in Table A-33-B. Separate permits and fees shall apply to retaining walls or major drainage structures as required elsewhere in this code. There shall be no separate charge for standard terrace drains and similar facilities.

**TABLE A-33-A--GRADING PLAN REVIEW FEES**

50 cubic yards (38.2 m <sup>3</sup> ) or less	No fee
51 to 100 cubic yards (40 m <sup>3</sup> to 76.5 m <sup>3</sup> )	\$23.50
101 to 1,000 cubic yards (77.2 m <sup>3</sup> to 764.6 m <sup>3</sup> )	37.00
1,001 to 10,000 cubic yards (765.3 m <sup>3</sup> to 7645.5 m <sup>3</sup> )	49.25
10,001 to 100,000 cubic yards (7646.3 m <sup>3</sup> to 76 455 m <sup>3</sup> )	\$49.25 for the first 10,000 cubic yards (7645.5 m <sup>3</sup> ), plus \$24.50 for each additional 10,000 yards (7645.5 m <sup>3</sup> ) or fraction thereof.
100,001 to 200,000 cubic yards (76 456 m <sup>3</sup> to 152 911 m <sup>3</sup> )	\$269.75 for the first 100,000 cubic yards (76 455 m <sup>3</sup> ), plus \$13.25 for each additional 10,000 cubic yards (7645.5 m <sup>3</sup> ) or fraction thereof.
200,001 cubic yards (152 912 m <sup>3</sup> ) or more	\$402.25 for the first 200,000 cubic yards (152 911 m <sup>3</sup> ), plus \$7.25 for each additional 10,000 cubic yards (7645.5 m <sup>3</sup> ) or fraction thereof.
Other Fees:	
Additional plan review required by changes, additions or revisions to approved plans	\$50.50 per hour* (minimum charge—one-half hour)

\*Or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

**TABLE A-33-B—GRADING PERMIT FEES<sup>1</sup>**

50 cubic yards (38.2 m <sup>3</sup> ) or less	\$23.50
51 to 100 cubic yards (40 m <sup>3</sup> to 76.5 m <sup>3</sup> )	37.00
101 to 1,000 cubic yards (77.2 m <sup>3</sup> to 764.6 m <sup>3</sup> )	\$37.00 for the first 100 cubic yards (76.5 m <sup>3</sup> ) plus \$17.50 for each additional 100 cubic yards (76.5 m <sup>3</sup> ) or fraction thereof.
1,001 to 10,000 cubic yards (765.3 m <sup>3</sup> to 7645.5 m <sup>3</sup> )	\$194.50 for the first 1,000 cubic yards (764.6 m <sup>3</sup> ), plus \$14.50 for each additional 1,000 cubic yards (764.6 m <sup>3</sup> ) or fraction thereof.
10,001 to 100,000 cubic yards (7646.3 m <sup>3</sup> to 76 455 m <sup>3</sup> )	\$325.00 for the first 10,000 cubic yards (7645.5 m <sup>3</sup> ), plus \$66.00 for each additional 10,000 cubic yards (7645.5 m <sup>3</sup> ) or fraction thereof.
100,001 cubic yards (76 456 m <sup>3</sup> ) or more	\$919.00 for the first 100,000 cubic yards (76 455 m <sup>3</sup> ), plus \$36.50 for each additional 10,000 cubic yards (7645.5 m <sup>3</sup> ) or fraction thereof.
Other Inspections and Fees:	
1. Inspections outside of normal business hours	\$50.50 per hour <sup>2</sup> (minimum charge—two hours)
2. Reinspection fees assessed under provisions of Section 108.8	\$50.50 per hour <sup>2</sup>
3. Inspections for which no fee is specifically indicated	\$50.50 per hour <sup>2</sup> (minimum charge—one-half hour)

<sup>1</sup>The fee for a grading permit authorizing additional work to that under a valid permit shall be the difference between the fee paid for the original permit and the fee shown for the entire project.

<sup>2</sup>Or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.



**SECTION 3311 — BONDS**

The building official may require bonds in such form and amounts as may be deemed necessary to ensure that the work, if not completed in accordance with the approved plans and specifications, will be corrected to eliminate hazardous conditions.

In lieu of a surety bond the applicant may file a cash bond or instrument of credit with the building official in an amount equal to that which would be required in the surety bond.

**SECTION 3312 — CUTS**

**3312.1** General. Unless otherwise recommended in the approved soils engineering or engineering geology report, cuts shall conform to the provisions of this section.

In the absence of an approved soils engineering report, these provisions may be waived for minor cuts not intended to support structures.

**3312.2** Slope. The slope of cut surfaces shall be no steeper than is safe for the intended use and shall be no steeper than 1 unit vertical in 2 units horizontal (50% slope) unless the permittee furnishes a soils engineering or an engineering geology report, or both, stating that the site has been investigated and giving an opinion that a cut at a steeper slope will be stable and not create a hazard to public or private property.

**SECTION 3313 — FILLS**

**3313.1** General. Unless otherwise recommended in the approved soils engineering report, fills shall conform to the provisions of this section.

In the absence of an approved soils engineering report, these provisions may be waived for minor fills not intended to support structures.

**3313.2** Preparation of Ground. Fill slopes shall not be constructed on natural slopes steeper than 1 unit vertical in 2 units horizontal (50% slope). The ground surface shall be prepared to receive fill by removing vegetation, noncomplying fill, topsoil and other unsuitable materials scarifying to provide a bond with the new fill and, where slopes are steeper than 1 unit vertical in 5 units horizontal (20% slope) and the height is greater than 5 feet (1524 mm), by benching into sound bedrock or other competent material as determined by the soils engineer. The bench under the toe of a fill on a slope steeper than 1 unit vertical in 5 units horizontal (20% slope) shall be at least 10 feet (3048 mm) wide. The area beyond the toe of fill shall be sloped for sheet overflow or a paved drain shall be provided. When fill is to be placed over a cut, the bench under the toe of fill shall be at least 10 feet (3048 mm) wide but the cut shall be made before placing the fill and acceptance by the soils engineer or engineering geologist or both as a suitable foundation for fill.

**3313.3** Fill Material. Detrimental amounts of organic material shall not be permitted in fills. **Except** as permitted by the building official, no rock or similar irreducible material with a maximum dimension greater than 12 inches (305 mm) shall be buried or placed in fills.

**EXCEPTION:** The building official may permit placement of larger rock when the soils engineer properly devises a method of placement, and continuously inspects its placement and approves the fill stability. The following conditions shall also apply:

1. Prior to issuance of the grading permit, potential rock disposal areas shall be delineated on the grading plan.

2. Rock sizes greater than 12 inches (305 mm) in maximum dimension shall be 10 feet (3048 mm) or more below grade, measured vertically.

3. Rocks shall be placed so as to assure filling of all voids with well-graded soil.

**3313.4** Compaction. All fills shall be compacted to a minimum of 90 percent of maximum density.

**3313.5** Slope. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes shall be no steeper than 1 unit vertical in 2 units horizontal (50% slope).

**SECTION 3314 — SETBACKS**

**3314.1** General. Cut and fill slopes shall be set back from site boundaries in accordance with this section. Setback dimensions shall be horizontal distances measured perpendicular to the site boundary. Setback dimensions shall be as shown in Figure A-33-1.

**3314.2** Top of Cut Slope. The top of cut slopes shall not be made nearer to a site boundary line than one fifth of the vertical height of cut with a minimum of 2 feet (610 mm) and a maximum of 10 feet (3048 mm). The setback may need to be increased for any required interceptor drains.

**3314.3** Toe of Fill Slope. The toe of fill slope shall be made not nearer to the site boundary line than one half the height of the slope with a minimum of 2 feet (610 mm) and a maximum of 20 feet (6096 mm). Where a fill slope is to be located near the site boundary and the adjacent off-site property is developed, special precautions shall be incorporated in the work as the building official deems necessary to protect the adjoining property from damage as a result of such grading. These precautions may include but are not limited to:

1. Additional setbacks.
2. Provision for retaining or slough walls.
3. Mechanical or chemical treatment of the fill slope surface to minimize erosion.
4. Provisions for the control of surface waters.

**3314.4** Modification of Slope Location. The building official may approve alternate setbacks. The building official may require an investigation and recommendation by a qualified engineer or engineering geologist to demonstrate that the intent of this section has been satisfied.

**SECTION 3315 — DRAINAGE AND TERRACING**

**3315.1** General. Unless otherwise indicated on the approved grading plan, drainage facilities and terracing shall conform to the provisions of this section for cut or fill slopes steeper than 1 unit vertical in 3 units horizontal (33.3% slope).

**3315.2** Terrace. Terraces at least 6 feet (1829 mm) in width shall be established at not more than 30-foot (9144 mm) vertical intervals on all cut or fill slopes to control surface drainage and debris except that where only one terrace is required, it shall be at midheight. For cut or fill slopes greater than 60 feet (18 288 mm) and up to 120 feet (36 576 mm) in vertical height, one terrace at approximately midheight shall be 12 feet (3658 mm) in width. Terrace widths and spacing for cut and fill slopes greater than 120 feet (36 576 mm) in height shall be designed by the civil engineer and approved by the building official. Suitable access shall be provided to permit proper cleaning and maintenance.

Swales or ditches on terraces shall have a minimum gradient of 5 percent and must be paved with reinforced concrete not less than

3 inches (76 mm) in thickness or an approved equal paving. They shall have a minimum depth at the deepest point of 1 foot (305 mm) and a minimum paved width of 5 feet (1524 mm).

A single run of swale or ditch shall not collect runoff from a tributary area exceeding 13,500 square feet (1254.2 m<sup>2</sup>) (projected) without discharging into a down drain.

**3315.3 Subsurface Drainage.** Cut and fill slopes shall be provided with subsurface drainage as necessary for stability.

**3315.4 Disposal.** All drainage facilities shall be designed to carry waters to the nearest practicable drainage way approved by the building official or other appropriate jurisdiction as a safe place to deposit such waters. Erosion of ground in the area of discharge shall be prevented by installation of nonerosive down-drains or other devices.

Building pads shall have a drainage gradient of 2 percent toward approved drainage facilities, unless waived by the building official.

**EXCEPTION:** The gradient from the building pad may be 1 percent if all of the following conditions exist throughout the permit area:

1. No proposed fills are greater than 10 feet (3048 mm) in maximum depth.
2. No proposed finish cut or fill slope faces have a vertical height in excess of 10 feet (3048 mm).
3. No existing slope faces steeper than 1 unit vertical in 10 units horizontal (10% slope) have a vertical height in excess of 10 feet (3048 mm).

**3315.5 Interceptor Drains.** Paved interceptor drains shall be installed along the top of all cut slopes where the tributary drainage area above slopes toward the cut and has a drainage path greater than 40 feet (12 192 mm) measured horizontally. Interceptor drains shall be paved with a minimum of 3 inches (76 mm) of concrete or gunitite and reinforced. They shall have a minimum depth of 12 inches (305 mm) and a minimum paved width of 30 inches (762 mm) measured horizontally across the drain. The slope of drain shall be approved by the building official.

## SECTION 3316 — EROSION CONTROL

**3316.1 Slopes.** The faces of cut and fill slopes shall be prepared and maintained to control against erosion. This control may consist of effective planting. The protection for the slopes shall be installed as soon as practicable and prior to calling for final approval. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted.

**3316.2 Other Devices.** Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety.

## SECTION 3317 — GRADING INSPECTION

**3317.1 General.** Grading operations for which a permit is required shall be subject to inspection by the building official. Professional inspection of grading operations shall be provided by the civil engineer, soils engineer and the engineering geologist retained to provide such services in accordance with Section 3317.5 for engineered grading and as required by the building official for regular grading.

**3317.2 Civil Engineer.** The civil engineer shall provide professional inspection within such engineer's area of technical specialty, which shall consist of observation and review as to the establishment of line, grade and surface drainage of the develop-

ment area. If revised plans are required during the course of the work they shall be prepared by the civil engineer.

**3317.3 Soils Engineer.** The soils engineer shall provide professional inspection within such engineer's area of technical specialty, which shall include observation during grading and testing for required compaction. The soils engineer shall provide sufficient observation during the preparation of the natural ground and placement and compaction of the fill to verify that such work is being performed in accordance with the conditions of the approved plan and the appropriate requirements of this chapter. Revised recommendations relating to conditions differing from the approved soils engineering and engineering geology reports shall be submitted to the permittee, the building official and the civil engineer.

**3317.4 Engineering Geologist.** The engineering geologist shall provide professional inspection within such engineer's area of technical specialty, which shall include professional inspection of the bedrock excavation to determine if conditions encountered are in conformance with the approved report. Revised recommendations relating to conditions differing from the approved engineering geology report shall be submitted to the soils engineer.

**3317.5 Permittee.** The permittee shall be responsible for the work to be performed in accordance with the approved plans and specifications and in conformance with the provisions of this code, and the permittee shall engage consultants, if required, to provide professional inspections on a timely basis. The permittee shall act as a coordinator between the consultants, the contractor and the building official. In the event of changed conditions, the permittee shall be responsible for informing the building official of such change and shall provide revised plans for approval.

**3317.6 Building Official.** The building official shall inspect the project at the various stages of work requiring approval to determine that adequate control is being exercised by the professional consultants.

**3317.7 Notification of Noncompliance.** If, in the course of fulfilling their respective duties under this chapter, the civil engineer, the soils engineer or the engineering geologist finds that the work is not being done in conformance with this chapter or the approved grading plans, the discrepancies shall be reported immediately in writing to the permittee and to the building official.

**3317.8 Transfer of Responsibility.** If the civil engineer, the soils engineer, or the engineering geologist of record is changed during grading, the work shall be stopped until the replacement has agreed in writing to accept their responsibility within the area of technical competence for approval upon completion of the work. It shall be the duty of the permittee to notify the building official in writing of such change prior to the recommencement of such grading.

## SECTION 3318 — COMPLETION OF WORK

**3318.1 Final Reports.** Upon completion of the rough grading work and at the final completion of the work, the following reports and drawings and supplements thereto are required for engineered grading or when professional inspection is performed for regular grading, as applicable.

1. An as-built grading plan prepared by the civil engineer retained to provide such services in accordance with Section 3317.5 showing original ground surface elevations, as-graded ground surface elevations, lot drainage patterns, and the locations and elevations of surface drainage facilities and of the outlets of subsurface drains. As-constructed locations, elevations and details of subsurface drains shall be shown as reported by the soils engineer.

Civil engineers shall state that to the best of their knowledge the work within their area of responsibility was done in accordance with the final approved grading plan.

2. A report prepared by the soils engineer retained to provide such services in accordance with Section 3317.3, including locations and elevations of field density tests, summaries of field and laboratory tests, other substantiating data, and comments on any changes made during grading and their effect on the recommendations made in the approved soils engineering investigation report. Soils engineers shall submit a statement that, to the best of their knowledge, the work within their area of responsibilities is in accordance with the approved soils engineering report and applicable provisions of this chapter.

3. A report prepared by the engineering geologist retained to provide such services in accordance with Section 3317.5, including a final description of the geology of the site and any new infor-

mation disclosed during the grading and the effect of same on recommendations incorporated in the approved grading plan. Engineering geologists shall submit a statement that, to the best of their knowledge, the work within their area of responsibility is in accordance with the approved engineering geologist report and applicable provisions of this chapter.

4. The grading contractor shall submit in a form prescribed by the building official a statement of conformance to said as-built plan and the specifications.

**3318.2 Notification of Completion.** The permittee shall notify the building official when the grading operation is ready for final inspection. Final approval shall not be given until all work, including installation of all drainage facilities and their protective devices, and all erosion-control measures have been completed in accordance with the final approved grading plan, and the required reports have been submitted.

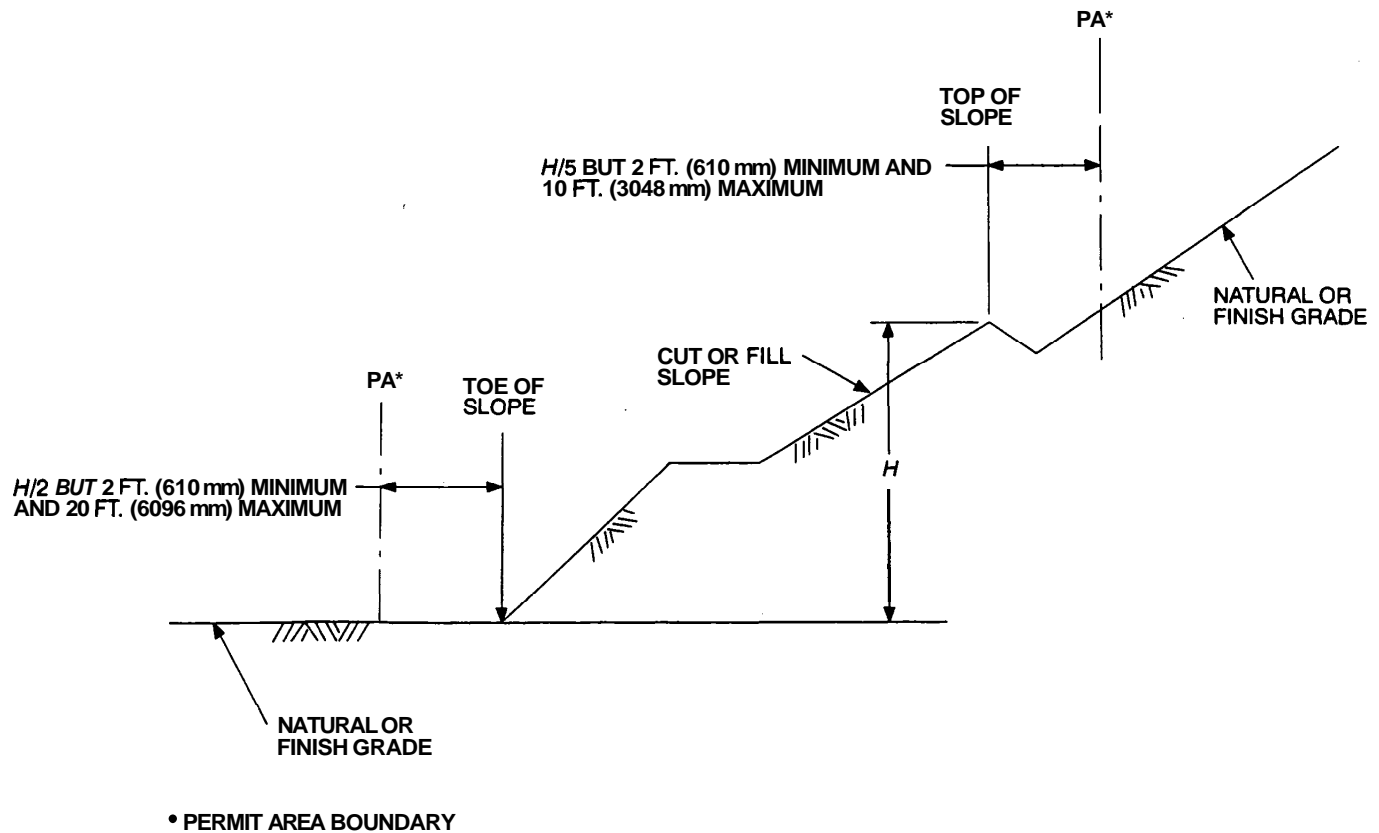


FIGURE A-33-1--SETBACK DIMENSIONS

**MULTIFAMILY AND COMMERCIAL**

Contract amount:

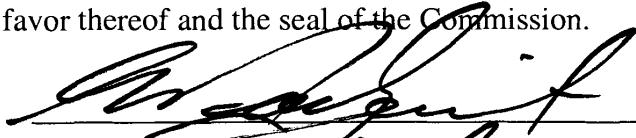
\$250 or less \_\_\_\_\_ \$30.00  
251 - 1,001 \_\_\_\_\_ \$30 plus 4% of cost over \$251  
1,001 - 5,000 \_\_\_\_\_ \$60 plus 1.5% of cost over \$1,001  
5,001 - 50,000 \_\_\_\_\_ \$120 plus 1.4% of cost over \$5,001  
50,001 - 250,000 \_\_\_\_\_ \$750 plus 1% of cost over \$50,001  
250,001 - 1,000,000 \_\_\_\_\_ \$2,750 plus .8% of cost over \$250,001  
1,000,001 and up \_\_\_\_\_ \$8,750 plus .4% of cost over \$1,000,001

Permit costs include the normal plan review associated with the application.

Plan review for revisions or modifications \_\_\_\_\_ \$50/hr.

—(Ord. 92-1033

ADOPTED by the Port Commission of the Port of Seattle at a regular meeting thereof,  
held this 26<sup>th</sup> day of June 2001, and duly authenticated in open session by the  
signatures of the Commissioners voting in favor thereof and the seal of the Commission.

  
\_\_\_\_\_  
Bob Edwards  
\_\_\_\_\_  
Patricia Davis  
\_\_\_\_\_  
Paige Miller  
\_\_\_\_\_

Port Commission