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ORDINANCE NO. 3632

AN ORDINANCE OF THE CITY OF EDMONDS, WASHINGTON, AMENDING THE EDMONDS COMMUNITY DEVELOPMENT CODE, CHAPTER 19.10 ENTITLED EARTH SUBSIDENCE AND LANDSLIDE HAZARD AREAS, PROVIDING A SAVINGS CLAUSE, AND FIXING A TIME WHEN THE SAME SHALL BECOME EFFECTIVE.

WHEREAS, the Earth Subsidence and Landslide Hazard Area is an area of Edmonds that has been geologically active for thousands of years, and

WHEREAS, although public improvements have enhanced the overall stability of property in the area, there remains both an underlying risk of deep seated earth movement and a potential for earth movement based on other factors such as inclement weather, steep slopes, seismic events, acts of man, failures of utility lines and many other factors, and

WHEREAS, the City's policy since 1983 has been to permit development of property in the area consistent with the full extent of the property rights and obligations of its citizens, so long as that development shoulders all costs and liabilities, both current and potential, relating to development of the property, including full investigation of site conditions by competent professionals, design for conditions and notification to the City and the Building Department, neighboring property owners and future purchasers of the property of all risks associated with development and the measures taken to mitigate such risks, NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF EDMONDS, WASHINGTON, DO
ORDAIN AS FOLLOWS:

Section 1. Chapter 19.10 Earth Subsidence and Landslide Hazard Areas is hereby repealed, provided, however, that in the event that a court of competent jurisdiction should strike down the enactment of Chapter 19.10 as provided in Section 2 below, or any portion thereof, Chapter 19.10 Earth Subsidence and Landslide Hazard Areas or any part thereof parallel to the portion struck down, shall be and remain in effect to the extent necessary to prevent any gap in regulation.

Section 2. The Edmonds Community Development Code is hereby amended by the addition of a new Chapter 19.10 Earth Subsidence and Landslide Hazard Areas to read as follows:

Chapter 19.10

**BUILDING PERMITS - EARTH SUBSIDENCE AND
LANDSLIDE HAZARD AREAS**

Sections:

- 19.10.000** Statement of purpose and application.
- 19.10.010** Section amendments.
- 19.10.020** Definitions.
- 19.10.030** Minimum required application submissions.
- 19.10.040** Site posting notice, disclosures, declarations, covenants and waivers.
- 19.10.050** Site bonds, contractor general public liability insurance.
- 19.10.060** Review to determine compliance with engineering practice and best available science.
- 19.10.070** Issuance and denial of permits.
- 19.10.080** Site access, professional/special inspection monitoring during construction and final geotechnical report.

19.10.000 Statement of purpose and application.

A. This chapter has been enacted in order to provide both substantive and procedural provisions relating to the issuance of permits within designated earth subsidence and landslide hazard areas of the city. It shall be the policy of the city that no permit shall be issued for any site which is found to be unsuitable for improvement due to excessively steep slopes, unsatisfactory foundation support, instability or unsuitable topography for the particular permit requested for issuance. When development occurs on an unstable site, an unreasonable risk of danger may exist to the public, to public improvements or to adjacent property owners. If such a site can be stabilized through the construction of on-site improvements, that risk may be reduced.

B. The construction of professionally designed structures addressing the risks of earth movement, and employing feasible attendant measures (including but not limited to: drainage improvements, specially designed foundations, retaining walls, removal of overburden and other improvements designed to minimize the risk of earth movement, prevent avoidable damage to structures, safeguard adjacent properties, limit risk to inhabitants, and to stabilize the structure in the event of movement) may mitigate and reduce the risk of earth movement on individual properties. Nothing herein shall relieve an owner of any obligation imposed by the State Building Code or City ordinance to take all reasonable and practical measures available to reduce or eliminate the risk or hazard.

C. The IRC/IBC, as promulgated by the state of Washington and required to be adopted by the city, does not specify a standard regarding lot stability. Since the city's request for an interpretation of the uniform building code by the state building code council to designate an acceptable level of lot stability was denied, and because the city wishes to comply with state law requiring that the issuance of building permits be a ministerial and not a discretionary act, the provisions of this chapter have been adopted in order to provide reasonable certainty in the permit issuance process. The purpose of these provisions is not to lessen the minimum requirements of the current adopted building code, but rather to define its requirements for city implementation.

D. These provisions have been adopted in order to establish a policy that permits shall not be issued for any site where a substantial risk of earth subsidence and landslide hazard exist unless:

1. The risks can be defined with reasonable scientific certainty and found to be within acceptable limits as determined in accordance with this chapter.

2. Any hazard associated with the site is scientifically ascertained and fully disclosed through the permit process.

3. Notice of any risk is given to future purchasers through the land records of Snohomish County.

4. Any risks associated with construction and habitation are assumed by the builder and future owners of the site.

5. Adequate indemnification is provided by the builder, and the owner of, the site in order that the general public not assume or bear any portion of the costs or liability associated with the builder's investigation, design and construction as well as the continuing maintenance of the site by the property owner.

E. Notwithstanding any contrary provision of this ordinance or the IRC/IBC, all applications for permits received for any site, any portion of which lies within an earth subsidence and landslide hazard area, shall be governed by the provisions of this chapter. In addition to all other requirements of these sections, the restrictions and provisions of this chapter shall apply to all building, grading, fill and excavation permits (herein "permits"). Minor permits such as plumbing, mechanical, re-roof and interior alterations are exempt from the requirements of this chapter.

F. All applications for 19.10 ECDC permits shall disclose within the geotechnical report whether or not any part of the site lies within, or adjacent to an earth subsidence and landslide hazard area or within a critical area as defined by the city's environmentally critical areas title. The building official may require preliminary investigation by a geotechnical engineer for any applicant whose property lies within or lies adjacent to a known earth subsidence landslide hazard area, or within a known hazard area, or areas with steep slopes or unusual topography or which has a history of earth movement in order to assist the building official in determining whether these provisions should be applied.

G. Nothing in this chapter should or shall be interpreted to guarantee issuance of a permit with respect to any property unless the requirements of the IRC/IBC as amended and interpreted by this chapter have been met.

19.10.010 Section amendments.

The provisions of this section amend the 2003 edition of the IRC/IBC and all subsequent revisions adopted by RCW 19.27.031 as the state building code as previously amended by Chapter 19.05 ECDC. All prior substantive amendments have received the approval of the state building code council. All provisions of the IRC/IBC which conflict with this chapter shall be deemed amended hereby, and any ambiguity created, shall be resolved in favor of the specific provision or general intent of said chapter. In addition to the amendments of the IRC/IBC by its alteration, improvement and correction to incorporate the chapter, the following specific code provisions are amended and the substantive and procedural requirements of Chapter 19.10 ECDC are amended by the correction and alteration of the following sections of the IRC/IBC:

A. Chapter 1 Administration.

1. Section R105.1.1 Permit Review Applicability. Any permit requested for a site lying in whole or in part within an earth subsidence and landslide hazard area as defined by ECDC 19.10.020(F) shall be processed and acted upon in accordance with the provisions of Chapter 19.10 ECDC.
2. Section R105.2 Work exempt from a permit. ECDC 19.00.010 exemptions A, B, D, E, F, G, J, K, M, and P and ECDC 19.05.010 exemptions, A, C, and D shall not apply in any area designated as an earth subsidence and landslide hazard area as defined in ECDC 19.10.020(F).
3. Section R105.3.2 Time limitation of permit application.
 - a. Applications, for which no permit is issued within two (2) year following the date of application, shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official.
 - b. The building official may not extend the time for action by the applicant on an expired application. In order to renew action on an expired application, the applicant shall submit a new application, revised plans based on current adopted codes and pay new plan review fees as well as any outstanding peer review fees incurred to date.
4. Section R105.5 Permit expiration and extension.
 - a. Every permit issued under the provisions and development standards of Chapter 19.10 ECDC shall expire by limitation

two (2) years after issuance, except as provided in ECDC 19.00.005(A)(6)(b).

- b. Prior to expiration of an active permit the applicant may request in writing an extension for a third and final year. If the plans and specifications for the permit extension application are the same as the plans and specifications submitted for the original permit application and provided there has been at least one (1) required progress inspection conducted by the city building inspector prior to the extension, the permit shall be extended. Permit fees shall be charged at a rate of one half the original building permit fee to extend the permit.
 - c. The maximum amount of time any building permit may be extended shall be a total of three (3) years. At the end of any three (3) year period starting from the original date of permit issuance, the permit shall become null and void and a new building permit shall be required, with full fees, in order for the applicant to complete work. The issuance of a new permit shall negate all previous vesting of zoning or building codes. Whenever an appeal is filed and a necessary development approval is stayed in accordance with the Land Use Petition Act, the time limit periods imposed under this section shall also be stayed until final decision.
 - d. The building official shall reject requests for permit extensions if modifications or amendments to the applicable zoning and building codes have occurred since the original issuance of the permit, and modifications or amendments would significantly promote public health and safety if applied to the project through the issuance of a new permit.
5. Section R105.5.1 Recommence work on an expired permit.
- a. In order to recommence work on an expired permit, a new permit application with full fees shall be submitted to the building official.
 - b. New permit applications shall be reviewed under current zoning and building codes in effect at the time of complete application submittal. If a new permit is sought to recommence work on an expired permit, the new permit shall be vested under the codes in effect at the time of complete application for the new permit, not the expired permit. When additional plan review is required, plan review fees shall be charged. When applicable peer review and peer review fees shall be assessed.

6. Section R106.3.3.1 Phased approval.
 - a. The building official may require sequencing of construction phases or activities such as the installation of shoring or temporary erosion control remedies and/or drainage systems, well in advance of grading or foundation construction on a time frame consistent with geotechnical recommendations and peer review. As part of the sequencing process, the building official may impose permit conditions that address site work sequencing to include but not limited to: limiting all excavation, drainage systems and foundation installation to the dryer season between May 1st and September 30th.
 - b. When permit conditions such as groundwork are limited by the building official on a particular project, the applicants' geotechnical engineer may submit a letter detailing geotechnical recommendations that portions of work may progress. The letter shall include a detailed work schedule submitted by the general contractor specifying work to be done, timeline, provisions for monitoring and equipment to be used. Any such recommendation shall be based upon best available science and be consistent with standard geotechnical engineering practice. The building official may require a peer review prior to a decision which provides concurrence regarding at least the following issues:
 - i. duration of work,
 - ii. type of equipment to use,
 - iii. additional temporary erosion and sediment control provisions required, and
 - iv. applicability of special inspections, and similar issues.
 - c. The building official may issue partial permits for phased construction before the entire plans and specifications for the whole building or structure have been approved provided peer review approval has been granted. Phased approval means separate permits for grading, shoring, and foundation may be issued separately, provided concurrent approval is granted by the planning manager, city engineer, and city public works director, when applicable. No phased approval permit shall be issued unless approved civil plans detailing the construction of all site improvements (including, but not limited to: curbs, gutters, sidewalks, paved streets, water lines, sewer lines, and storm drainage) have been signed as approved by the city engineer. With such phased approval, a performance bond shall be posted with the city pursuant to Chapter 17.10

ECDC, to cover the estimated cost of construction to city standards for the improvements.

B. Chapter 2 Definitions.

1. Section R 202 and IBC 202, are hereby amended to include the definitions set forth in ECDC 19.10.020, incorporated by this reference as fully as if herein set forth.

C. Chapter 4 Foundations.

1. Section R 401.1 General Exception 3. Any permit requested for a site lying in whole or in part within an earth subsidence and landslide hazard area shall be processed and acted upon in accordance with the provisions of Chapter 19.10 ECDC.

D. IBC Chapter 16 Structural design.

1. Section IBC 1601.1.1 Scope. Setting forth the requirements of Chapter 19.10 ECDC, incorporated by this reference as fully as if herein set forth.

E. IBC Appendix J Grading.

1. Section IBC Appendix J 101.1.2 Scope. Setting forth the requirements of Chapter 19.10 ECDC, incorporated by this reference as fully as if herein set forth.

19.10.020 Definitions.

The following terms, when used within this chapter, shall have the following definitions:

A. "Architect" shall mean a person licensed to practice architecture by the state of Washington.

B. "Best available science" shall be determined in accordance with the criteria established in WAC 365-195-900, et seq.

C. "Bluff" shall mean any slope ten (10) feet in height or greater inclined at greater than 1 unit vertical in 1 unit horizontal or 100% slope.

D. "Building Official" shall mean the building official of the city of Edmonds.

E. "Director" shall mean the director of development services as well as any authorized representative of the director.

F. "Earth Subsidence and Landslide Hazard Area" shall mean any area of the city which, by reason of excessively steep slopes, unsatisfactory foundation support, stability or topography has a risk of earth subsidence and landslide hazard in excess of normal allowances. The earth subsidence and landslide hazard area is a subcategory of landslide hazard area (a geologically hazardous area) as defined in city of Edmonds environmentally critical areas title. The hazard area designated as the North Edmonds Earth Subsidence Landslide Hazard Area in the 2007 report of Landau Associates and as may be amended in future adopted earth subsidence and landslide hazard maps are hereby incorporated by this reference and made a part of this chapter as fully as if herein set forth and may be provided in a summary text form. Future adopted landslide hazard maps shall be incorporated by reference upon adoption by ordinance.

Areas designated on the adopted North Edmonds Earth Subsidence and Landslide Hazard Areas Map, or any future adopted landslide hazard map as having a risk of earth subsidence or landslide hazard, areas with slopes as designated in ECDC 23.80.020, areas which exhibit geologic characteristics of earth movement, or any other area identified as having a history of earth movement shall be presumed to have such risk and shall be considered to be an earth subsidence and landslide hazard area. Applicants for permits in such areas shall submit a geotechnical report and complete plan set submittal as required by this chapter to the building official for review.

The presumption of risk shall be rebuttable and the decision of the director or building official that any area lies within, or adjacent to, such earth subsidence and landslide hazard area shall be appealable as a staff decision to superior court in accordance with the Land Use Petition Act.

Copies of the reports and maps shall be maintained in the offices of the building official and shall be available for inspection during all normal working hours. Individual copies of the reports and map may be obtained by the public upon the payment of the cost of reproduction.

G. "General Contractor" shall mean a bonded, insured and registered contractor in the state of Washington. A general contractor shall maintain state required bonding and shall carry general public liability insurance in the minimum amount of one million dollars. The general contractor shall have a current valid state contractor's license with the state of Washington and a city of

Edmonds resident or non-resident business license, whichever is applicable.

H. “Geologist” means a practicing geologist licensed in the state of Washington with at least four (4) years experience as a licensed geologist in responsible charge, including experience with landslide evaluation.

I. “Geotechnical Engineer” means a practicing, geotechnical/civil engineer licensed as a professional civil engineer in the state of Washington who has at least four (4) years of professional employment as a geotechnical engineer in responsible charge, including experience with landslide evaluation.

J. “Landslide Hazard Area” means areas mapped or otherwise defined by the city of Edmonds as environmental critical areas or geologically hazardous areas.

K. “Land Surveyor” means a person who holds a Washington State land surveyor’s license.

L. “Lead Design Professional” means the person designated by the applicant to oversee and coordinate the permit review process on behalf of the applicant.

M. “Plan Set Submittal” means a complete application pursuant to ECDC 19.00.015 including:

1. Vicinity Map.
2. Topography map and survey.
3. Civil plans including; grading, temporary erosion and sediment control, storm drainage, utilities and site improvements.
4. Tree cutting/land clearing plans.
5. Geotechnical report.
6. Architectural and structural plans with design calculations, stamped and signed by licensed design professionals of the state of Washington.

N. “Site” means the entire area within the boundaries, as described in a legal description, of the property that is to be developed under the permit for which the applicant has applied.

O. “Stable” shall mean that the risk of damage to the proposed development, or to adjacent properties, from soil instability is minimal subject to the conditions set forth in the reports developed under the requirements of ECDC 19.10.030 and the proposed development will not increase the potential for soil movement.

In the event that any site has an underlying risk of movement based upon deep-seated earth movement or large-scale earth failure which is not susceptible of correction by on-site improvements, such hazard shall not render a site proposed for single-family residences to be presumed unstable for the purpose of this provision if the geotechnical engineer of record and recommendation of any peer reviewer confirm the risk of probability of earth movement is thirty (30) percent or less within a twenty-five (25) year period.

In order to meet the definition of stable the geotechnical report shall include identified hazards for the property and the mitigation measures proposed to reduce or correct the hazards along with measures taken to mitigate potential impacts from the remaining hazards, including, all on and off site measures taken to correct or reduce the risk. These shall be fully disclosed to the applicant and future owners, heirs and assigns in the covenant required to be executed in accordance with provisions of this chapter, in which case the defined risk may be approved as an acceptable condition.

P. “Steep Slope” shall be defined and calculated pursuant to Chapter 23.80 ECDC.

Q. “Storm Event” means one (1) inch or greater precipitation in a twenty-four (24) hour period as reported by the National Oceanic and Atmospheric Administration (NOAA).

R. “Structural Engineer” means a person licensed to practice structural engineering by the state of Washington.

S. “Structural Fill” shall mean any fill placed below structures, including slabs, where the fill soils are intended to support loads without unacceptable deflections or shearing. Structural fill should be clean and free draining and should be placed above unyielding native site soils compacted in accordance with an approved geotechnical report prepared utilizing best engineering science.

19.10.030 Minimum required application submittals.

A. The applicant shall submit a complete plan set submittal and permit application and specifications for the proposed development as defined in ECDC 19.10.020(M) and this chapter.

B. An Earth Subsidence and Landslide Hazard area permit submittal checklist shall be adopted at the direction of the director and shall be provided to all persons inquiring regarding building permit applications or development permits in the designated earth subsidence and landslide hazard area of North Edmonds. The submittal checklist shall include but not be limited to the requirements contained in city public handouts, written policies, adopted maps, reference maps, summary reports, minimum geotechnical report guidelines, and the following:

1. North Edmonds Earth Subsidence and Landslide Hazard map.
2. Vicinity map.
3. Topographic map and survey.
4. Civil plans (i.e., grading, temporary erosion and sediment control, storm drainage, utilities and site improvements).
5. Tree cutting/land clearing plan.
6. Geotechnical report.
7. Owner and professional declarations.
8. Detailed architectural and structural plans with structural calculations and specifications.
9. Bonds, covenants and contractor public liability insurance in accordance with the detailed requirements stated below.

If any item in the checklist is inapplicable to a particular project, a letter or a report shall be provided to the director stamped by the appropriate licensed design professional, with sufficient information or data to demonstrate why the item is inapplicable. The director may utilize appropriate licensed consultants to determine if generally accepted engineering practice requires submission of an application requirement. When consultants are used to determine if generally accepted engineering practice requires submission of an application requirement the cost of review shall be paid by the applicant.

C. A copy of the North Edmonds Earth Subsidence and Landslide Hazard map shall be included in the submittal checklist materials.

D. The vicinity map shall be suitable for locating the site and include information related to existing conditions on or near the site, based on the topographic map and survey and shall designate

all known landslide masses, or debris flows or mud flows on or near the site which could threaten proposed structures within 100 feet, as referenced, noted, described or discussed in the geotechnical report.

E. The applicant shall submit a topographic map and survey prepared and stamped by a licensed land surveyor, prior to studies and evaluations by the geotechnical engineer, and shall show:

1. Map scale, north arrow, legal description, tax account parcel numbers, easements, lot property lines.
2. Existing grade contour lines, at two (2) foot intervals.
3. All distances between existing structures on the site and approximate distances of existing habitable structures on adjacent sites within 50 feet of property lines (all adjacent sites which could affect or be affected by the proposed development shall be shown).
4. Lowest footing or basement slab elevation of existing and proposed structures on the property and on adjacent properties to the extent that such information is reasonably available and, proposed finish floor elevations.
5. The location of existing sanitary sewers, storm water drainage facilities, septic tanks, drain fields, wells, piezometers, private drainage systems, underground storage tanks, subsurface drains, and other sewer/drainage facility components on, and adjacent to, the site to the extent such information is reasonably available.
6. The location of all existing underground utilities on, and adjacent to, the site including, but not limited to; telephone, cable television, gas, electric and water utilities, vaults, fire hydrants and other cables, wires, meters and drainage pipes to the extent that such information is available.
7. A separate topographical drawing shall be submitted showing proposed grade contours at two (2) foot intervals. This drawing shall include bottom of proposed footing elevations including all stepped footing elevations.

F. Civil engineered plans shall be prepared and stamped by a state of Washington licensed civil engineer pursuant to the provisions of Chapter 18.30 ECDC and current adopted City Stormwater Manual. Geotechnical report recommendations affecting civil plans shall be incorporated into the design and detailed on the plans and shall include:

1. Storm drainage plan with storm drainage calculations.
2. Provisions for building pad and foundation drainage.
3. Temporary erosion and sediment control with drainage and maintenance provisions, and/or other sediment control assemblies.
4. Permanent erosion control with drainage and maintenance provisions.
5. Fill/soil stockpile limitation provisions, specific location, height, protection and maintenance.
6. Slope protection plans, rockeries, retaining walls, ecology blocks, keystone block walls, soldier pile walls, and soil nail walls.
7. Utilities and site improvements.
8. Grading plans, temporary and permanent shoring plans, top and toe of slope setbacks, driveway slope.

G. In lieu of the procedural requirements of Chapter 18.45 ECDC a tree cutting/land clearing plan shall be submitted when significant trees are proposed to be removed. A significant tree is a tree with a trunk diameter of six inches or greater measured 4 feet from the ground. No significant tree shall be removed until the permit is approved.

A detailed landscape plan may also be required in order for the city to evaluate long-term erosion control measures. The plan shall comply with all requirements of the ECDC relating to tree clearing and critical areas review, if applicable. The director may require the project geotechnical engineer's concurrence regarding an approval of a tree cutting/land clearing plan when slope stability is at issue.

H. Included in the permit submittal checklist shall be general and specific soils and geotechnical information, details or analysis required pursuant to IBC 1802. The applicant shall retain a geotechnical engineer to prepare a report and evaluation of the subsurface soil conditions on the site to include:

1. The geotechnical report shall be prepared in accordance with generally accepted geotechnical engineering practices, under the supervision of, and signed and stamped by, the geotechnical engineer. A geologist may be required to be part of the geotechnical consulting staff. The report shall reference the Landau Associates Summary Report (2007) as a technical

document reviewed as part of the geologic analysis for the project and discuss all items listed in the permit submittal checklist and shall make specific recommendations concerning development of the site.

2. The opinions and recommendations contained in the geotechnical report shall be supported by field observations and, where appropriate or applicable, by literature review, conducted by the geotechnical engineer. The report shall be based on best available science.

3. The report shall include an analysis of material gathered through appropriate explorations, such as borings or test pits to a minimum depth of 6 feet below the proposed lowest footing or pile, an analysis of soil characteristics conducted by or under the supervision of, the engineer in accordance with the standards adopted by the American Society of Testing and Materials (ASTM) or other applicable standards. The report must provide subsurface data to support the engineer's conclusions regarding slope stability.

4. If the evaluation involves geologic evaluations or interpretations, the report shall be reviewed and approved by a geologist. It shall be the responsibility of the geotechnical engineer to assure that the geologist meets the qualifications listed in the definition section. A letter of concurrence from the geologist shall be included in the report.

5. Based upon the North Edmonds Landslide Area Geology and Slide Mechanisms map and table found in the Landau Associates Summary Report (2007), any lot which contains any portion of any hazard zone or is adjacent thereto, (regardless of whether the proposed building pad is located within any hazard area) shall specifically consider within the geotechnical report, the following types of typical hazard zones and shall specifically note if the hazard is, or is not, present on the site. The report shall address hazards from encroaching landslide materials, hazards from ground failure in material that has not previously failed, and hazards from ground failure in previously failed material. For each landslide hazard identified on a property, the geotechnical engineer shall identify the types of specific processes associated with the hazard and include design features to reduce such hazards and mitigate impacts.

6. For properties containing or adjacent to bluffs, the geotechnical engineer shall, as a part of the building permit process provide analysis of the rate of retreat of the bluff prepared by a geologist

and estimate the bluff retreat amount and regression rate for periods of twenty-five (25) and 125 years. The geotechnical engineer shall address the effects of bluff retreat on the stability of structures and/or improvements. A structure is defined as:

- a. A building intended for human habitation,
- b. A building, structure or other improvement, whose stress or weight, collapse or movement would endanger public safety in the event of slope failure and,
- c. Any improvement on the site which is necessary to mitigate danger to public safety or provide stability.

If the bluff retreat rate analysis shows that the rate of retreat of the bluff is such that any structure or improvement constructed pursuant to the building permit would be unreasonably endangered or reasonably could be anticipated to be endangered by landslide or earth subsidence during its normal useful life, the application shall be denied.

7. Geotechnical letter addressing the provisions of Chapter 23.80 ECDC.

I. The applicant shall submit, consistent with the findings of the geotechnical report, detailed structural plans with corresponding calculations prepared and stamped by the structural engineer of record. When architectural plans incorporate such structural details said plans shall be stamped and signed by the structural engineer of record. All other architectural plans may be prepared by an architect, designer, builder or lay person.

J. The applicant shall submit documentation of required bonds, frozen funds or adequate instrument of credit. The applicants shall submit a copy of the contractor's general public liability insurance pursuant to ECDC 19.10.050.

K. The applicant shall submit declarations, disclosures, covenants and waivers as required by ECDC 19.10.040.

19.10.040 Site posting notice, disclosures, declarations, covenants and waivers.

A. Notices of permit submittal application with the city shall be posted pursuant to ECDC 20.91.010B(b). Such notices shall be conspicuously posted and maintained at each street frontage at the applicant's expense and direction. Notice of permit issuance or denial shall be conspicuously posted as required above. Upon each posting a ten (10) day appeal period shall commence. Appeals shall be heard at Snohomish County Superior Court in accordance

with the Land Use Petition Act, and no other appeal shall be permitted.

B. At permit application submittal, the applicant shall submit a written declaration with the permit application that includes the statement that the accuracy of all information is warranted by the owner/applicant in a form which relieves the city and its staff from any liability associated with reliance on such submittals.

The declaration shall also state that the owner/applicant understands and accepts the risk of developing in an area with potential unstable soils and that the owner/applicant will advise in writing any prospective purchasers of the site, or any prospective purchasers or residential lessees of structures or portions of a structure on the site of the slide potential of the area.

The owner applicant shall also acknowledge that he, she or they understand and accept the need for future monitoring and maintenance of the property as described in the final geotechnical report when future monitoring and maintenance may affect slope stability over time. While an application may reference the reports of prior public consultants to the city, all conclusions shall be those of the owner/applicant and his or her professionals.

C. The plan set submittal shall include a disclosure letter from the geotechnical engineer and civil engineer who prepared the geotechnical report and civil plans, stating that in his or her judgment the plans and specifications submitted for the project conform to the recommendations in the geotechnical report, and that the risk of damage to the proposed development, or to adjacent properties, from soil instability will be minimized subject to the conditions set forth in the report; and the proposed development will not increase the potential for soil movement.

Minimized shall mean that the applicant has utilized best available science and commonly accepted engineering and architectural practice to minimize, to the extent possible, the risks associated with development of the property.

The geotechnical engineer shall review the erosion and sediment control plan and provide a statement about the adequacy of the plan with respect to site conditions and report findings. The geotechnical engineer's statement shall also include an identification of landslide hazards applicable to the site, the on-site measures taken to correct or reduce the hazards, as applicable, and measures taken to mitigate potential impacts from the remaining hazards.

For sites where the hazards are not mitigated or where the risks from deep-seated or large-scale earth movement cannot be practically reduced by individual lot owners, the geotechnical engineer shall prepare a statement identifying what design measures will be taken to mitigate the risk to structures, adjacent properties, and inhabitants in the event of deep-seated or large-scale movement. The statement shall specify any risks from earth movement that are not fully mitigated by design measures and render an opinion as to whether the site will be stable within the meaning of the ordinance following installation of all proposed improvements. The statement will clarify to current and future owners what measures were installed to reduce risks and what hazards could not be addressed by individual lot development.

D. Further recommendations signed and sealed by the geotechnical engineer shall be provided should there be additions or exceptions to the original recommendations based on the plans, site conditions or other supporting data. If the geotechnical engineer who reviews the plans and specifications is not the same engineer who prepared the geotechnical report, the new engineer shall, in a letter to the director accompanying the plans and specifications, express agreement or disagreement with the recommendations in the geotechnical report and state that the revised plans and specifications conform to the new recommendations.

E. The plan set submittal shall include a disclosure letter or notation on the design drawings by the structural engineer of record stating that; he has reviewed the geotechnical report(s), that he understands its recommendations, has explained or has had explained to the owner/applicant, the risk of loss due to slides on the site, and that he has incorporated into the design the recommendations of the report and established measures to reduce the potential risk of injury or damage that might be caused by any risk of earth movement referenced in the report. The statement shall note any risks, hazards, potential problems from earth movement that are not fully mitigated by design measures.

F. The owner shall execute a covenant, (in a form provided by the city) to be submitted with the application (with necessary fee) to be filed with the Snohomish County Auditor. The director shall cause such completed covenant to be so filed. A copy of the recorded covenant shall be forwarded to the owner. This covenant shall be a covenant running with the land, which shall at a minimum include:

1. A legal description of the property.

2. A statement explaining that the site is in a potential earth subsidence and landslide hazard area, that the risk associated with the development of the site is set forth in permit file No. _____ with the city of Edmonds building department, that conditions or prohibitions on development may have been imposed by the city in the course of permit issuance, and referencing any features in the design which will require maintenance or modification to address anticipated soil changes. The covenant may incorporate by reference the statements and conditions to be observed in the form proposed by the owner/applicant's geotechnical engineer, geologist, architect and/or structural engineer as approved after the review set forth in ECDC 19.10.060.

3. A statement waiving and promising to indemnify and hold harmless the city of Edmonds, its officers and employees from any claims the owner/applicant and his/her successors or assigns may have for any loss or damage to people or property either on or off the site resulting from soil movement and arising from or out of the issuances of any permit(s) authorizing development on the site, as well as due to any act or failure to act by the indemnitor, its agents or successors, in interest under or following issuance of the permit.

4. The date of permit issuance and permit number authorizing the development.

19.10.050 Site bonds and contractor general public liability insurance.

A. Site bonding requirements.

1. A surety bond, in an amount to be determined by the director, executed by a surety company authorized to do business in the state of Washington shall be posted by the owner/applicant or general contractor to assure the restoration of any areas on the site, or in the surrounding area, disturbed or damaged by slides during construction, and to ensure completion of the work authorized by the permit, or, if the work is not completed, to assure that the site will be restored to a safe and stable condition at least equal to the safety and stability of the site prior to commencement of work under the permit. The bond will be exonerated upon occupancy approval of the building permit by the building official.

2. In lieu of the surety bond, the owner/applicant or general contractor may propose to file a cash deposit or an instrument of credit with the director in an amount equal to that which would be required in the surety bond, and similarly conditioned.

B. Public liability insurance. The general contractor of record shall carry general public liability insurance effective through final occupancy in the minimum amount of one million dollars, and which shall name the city as an additional named insured, against the injury, death, property damage and/or loss arising from or out of the city's involvement in the permitting process for the project.

C. Homeowner insurance. The city strongly recommends that each property owner maintain policies of liability insurance, adequate to provide sufficient funds, to indemnify and hold harmless third parties in the event of earth subsidence or landslides emanating from or across the owner's property.

19.10.060 Review to determine compliance with engineering practice and best available science.

A. The city shall require professional peer review of the plan set submittals accompanying the permit application by a civil engineer, geotechnical engineer, geologist, and/or structural engineer as may be necessary and determined by the building official or director, in order to determine whether the plan set submittals were prepared in accordance with generally accepted engineering practice or the practice of the particular engineering or design specialty and are based upon best available science. The full cost of such peer review shall be paid in full by the owner/applicant within thirty (30) days of billing by the city. Failure to make timely payments shall result in a stay of city plan review services on the application.

B. This requirement may be selectively waived at the discretion of the director provided the applicable project geotechnical engineer, civil engineer or structural engineer provides written concurrence, determination, details, facts and/or data that individual site conditions warrant an exemption from outside peer review. Once waived, the building official shall not be required to inquire further into the adequacy of any report, plans, or data, but rather may rely upon the submittals as warranted by the owner/applicant as reviewed by the city's consultant. Nothing herein shall relieve the owner/applicant of the obligation to submit a complete application fulfilling all the requirements of this chapter and the IRC/IBC.

C. The final recommendation of the peer review regarding whether a submittal complies with generally accepted practice and/or is based on best available science shall be binding upon the building official. Such recommendation may be appealed to Superior Court under the Land Use Petition Act.

19.10.070 Issuance and denial of permits.

A. Permit Issuance. The following requirements must be satisfied before a permit will be issued:

1. An approved geotechnical report has been submitted and approved.
2. Plans and specifications have been submitted incorporating the recommendations of the geotechnical report and said plans have been approved.
3. The required declarations, disclosures, covenants and waivers have been submitted and approved.
4. Required bonds, cash deposits and public liability insurance have been posted with the city.
5. When peer review has been required, all submittals have been determined to have been prepared in accordance with generally accepted engineering practice.
6. Peer review concurrence for permit issuance has been received by the building official.
7. All other provisions of ECDC Titles 16, 18 & 20 have been reviewed and approved by the appropriate city official.

B. Permit denial. The following criteria shall result in the denial of issuance of permit:

1. Building, grading and excavation permits for construction on land which the director finds to be unsuitable for improvement due to excessively steep slopes, unsatisfactory foundation support, instability or unsuitable topography, or
2. The resulting development would increase the potential of soil movement resulting in an unacceptable risk of damage to adjacent properties or an unreasonable risk of damage to the proposed development, or
3. Excessive flooding, seepage, high water table, or inadequate drainage, or
4. If the bluff retreat rate analysis shows that the rate retreat of the bluff is such that any structure or improvement would be unreasonably endangered or reasonably could be anticipated to be

endangered by landslide or earth subsidence during its normal useful life, the application shall be denied. A structure is defined as:

- a. A building intended for human habitation,
- b. A building, structure or other improvement, whose stress or weight, collapse or movement would endanger public safety in the event of slope failure and,
- c. Any improvement on the site which is necessary to mitigate danger to public safety or provide stability, or

5. Other hazardous conditions posing an unreasonable risk to public health, safety, or welfare, or

6. Where the noted site dangers or geologic hazards are not minimized to the extent possible by the use of best available science and generally accepted engineering and architectural practice, or

7. If the applicant's geotechnical engineer determines that there is a greater chance than thirty (30) percent in a 25 year period that landslide damage on site will occur.

C. In making a determination of permit denial, the director shall consider not only the land which is the subject of the application, but in addition, the surrounding area which would be adversely affected if the permit were granted. Permit denial shall be made in writing to the owner/applicant when the site cannot be rendered stable as defined in ECDC 19.10.020(O). This decision and other preliminary determinations as referenced herein shall be appealable to Snohomish County Superior Court in accordance with the Land Use Petition Act. No other appeal shall be permitted. The appeal period shall commence upon the date of mailing of any preliminary or final decision, or upon posting, if posting is the only notice a party with standing receives under the terms of this chapter.

D. Prohibitions. Because of the relationship of groundwater to stability, the discharge of collected surface water or storm water to the ground surface or subsurface is prohibited on sites within the earth subsidence and landslide hazard area. In addition, the following construction, buildings, or improvements are hereby prohibited within the earth subsidence and landslide hazard area:

1. Swimming pools or hot tubs.
2. Ponds or other artificial impoundments of water.
3. Watering or irrigation systems.

4. Temporary or permanent stockpile of fill on top or bottom of slopes.

5. Rockeries.

E. Waiver. The prohibitions established in paragraph D above shall apply unless the property owner requests a waiver based upon the written analysis of a geotechnical engineer which clearly establishes that the proposed improvement will have no reasonable likelihood of triggering or otherwise contributing to any landslide hazard or earth subsidence risk either on the site or in the neighboring earth subsidence or landslide hazard area.

In any review or appeal of the director's or building official's denial of a waiver to construct an otherwise prohibited improvement, the burden of proof shall always be upon the applicant to establish by a clear preponderance of the evidence, that no such risk will be created by the improvement. Any geotechnical engineering report provided in any review shall consider not only the risk incurred due to or during construction of the otherwise prohibited improvement, but also the potential impacts due to failure to maintain the improvement, damage through reasonably foreseeable events such as earthquakes or other acts of God, or the reasonably foreseeable negligence of the owner or future owners. The director may utilize peer review consultants.

19.10.080 Site access, professional/special inspection monitoring during construction and final geotechnical report.

A. Site clearing and grading. The owner/applicant or contractor shall secure the building official's approval before entering an earth subsidence and landslide hazard area site with excavating or other grading and clearing equipment to clear, remove trees or grade for any purpose including the creation of access to the site.

The building official may condition such access approval if site conditions are warranted and when discretionary approval permits are required. As part of the approval process the building official may impose conditions that address site work issues; such measures could include but are not limited to limiting all excavation and drainage installation to the dryer season between May and the end of September, or sequencing activities such as the installation of drainage systems well in advance of construction.

Requests for early site access in advance of building permit approval or in the time period between October 1st and April 30th

for any purpose shall be submitted to the building official accompanied by written concurrence of the owner/applicant's geotechnical engineer of record.

The building official may utilize peer review consultants to determine whether the request is based on generally accepted engineering practice and is reasonable with regard to time-frame to complete the work, types of equipment proposed to perform the work, length of exposure of slopes, and adequacy of site monitoring and temporary erosion control measures. When such peer review is utilized the applicant is responsible for the peer review fee.

B. Reporting authority. The owner/applicant shall retain a geotechnical engineer to monitor the site during construction. The owner/applicant shall preferably retain the geotechnical engineer who prepared the final geotechnical report in the plan set submittal and who has reviewed the approved plans and specifications.

If a different geotechnical engineering consultant is retained by the owner/applicant, the new geotechnical engineer shall submit a letter to the director stating that he or she has read all reports and recommendations and reviews to date and state whether or not he or she agrees with the opinions and recommendations of the original geotechnical report and peer review comments. Further recommendations, signed and sealed by the new geotechnical engineer, and supporting data, shall be provided should there be exceptions or changes to the original recommendations that would effect the approved plans.

C. Construction monitoring, special inspections.

1. Inspection requirements. During the period from October 1st to April 30th, when on site, the owner/applicant or designated erosion sedimentation control (ESC) site supervisor shall perform erosion and sedimentation control inspections. Records of installed ESC facilities shall be maintained by the erosion and sedimentation control supervisor and copies of all ESC records shall be provided to City inspectors upon request.

ESC facilities on inactive sites (sites where no work will be performed for more than three (3) consecutive days) shall be inspected weekly by the erosion and sedimentation control supervisor. During all other times of the year, weekly inspections by the ESC site supervisor are required and shall be recorded.

2. Weekly field reports. The geotechnical engineer shall monitor, during construction, compliance with the recommendations in the geotechnical report including; site excavation, shoring, temporary erosion control, soil support for foundation, piles, sub drainage installation, soil compaction and other geotechnical aspects of the construction. Unless otherwise approved by the director, the specific recommendations contained in the geotechnical report shall be implemented by the owner/applicant. Omissions or deviations from the approved geotechnical report and civil plans shall be highlighted to the city in a separate report. All reports shall be submitted to the city on a weekly basis for review. Failure to submit required reports may result in the issuance of a stop work order.

3. Storm events. During all work periods, special inspections shall be performed after storm events as defined in ECDC 19.10.020(Q). The storm event report shall be provided within one week of the event.

D. Final construction report. The geotechnical engineer of record shall prepare a final written report to be submitted to the building official, stating that based upon his or her professional opinion, site observations and final site grading that the completed development substantially complies with the recommendations of the geotechnical report and with all geotechnical related permit requirements as shown on the approved plans.

Substantially complies means that the completed development offers at least the level of stability and safety, on and off site, as was afforded by the original recommendations and report. Recommendations to the owner/applicant shall be included in the report for future monitoring and maintenance of the property including drainage, tightlines, catch basins, berms, retaining wall drainage, hazard mitigation improvements, slopes, bluffs, vegetation, and permanent erosion control that effect slope stability over time. Occupancy of the residence shall not be granted until the report has been reviewed and accepted by the building official.

Section 3. Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

Section 4. Effective Date. This ordinance, being an exercise of a power specifically delegated to the City legislative body, is not subject to referendum, and shall take effect five (5) days after passage and publication of an approved summary thereof consisting of the title.

APPROVED:

MAYOR GARY HAAKENSON

ATTEST/AUTHENTICATED:

CITY CLERK, SANDRA S. CHASE

APPROVED AS TO FORM:
OFFICE OF THE CITY ATTORNEY:

BY _____
W. SCOTT SNYDER

FILED WITH THE CITY CLERK:	03/16/2007
PASSED BY THE CITY COUNCIL:	03/20/2007
PUBLISHED:	03/28/2007
EFFECTIVE DATE:	04/02/2007
ORDINANCE NO. <u>3632</u>	

SUMMARY OF ORDINANCE NO. 3632

of the City of Edmonds, Washington

On the 20th day of March, 2007, the City Council of the City of Edmonds, passed Ordinance No. 3632. A summary of the content of said ordinance, consisting of the title, provides as follows:

AN ORDINANCE OF THE CITY OF EDMONDS, WASHINGTON, AMENDING THE EDMONDS COMMUNITY DEVELOPMENT CODE, REPEALING CHAPTER 19.05 EARTH SUBSIDENCE AND LANDSLIDE HAZARD AREAS, AND ENACTING IN ITS PLACE CHAPTER 19.10 EARTH SUBSIDENCE AND LANDSLIDE HAZARD AREAS, PROVIDING A SAVINGS CLAUSE, AND FIXING A TIME WHEN THE SAME SHALL BECOME EFFECTIVE.

The full text of this Ordinance will be mailed upon request.

DATED this 21st day of March, 2007.

CITY CLERK, SANDRA S. CHASE