

# CITY OF SEATAC PLANNING COMMISSION MEETING

City Council Chambers, SeaTac City Hall, 4800 S. 188<sup>th</sup> Street August 15, 2017, 5:30 p.m.

#### **MEETING AGENDA**

- 1) Call to Order/Roll Call 5:30 p.m.
- 2) Public Comment: Public comment will be accepted on items not scheduled for a public hearing
- 3) Approval of minutes of August 1, 2017 regular meeting (EXHIBIT A)
- 4) Briefing: Multifamily Housing Design Standards (EXHIBIT B)
- 5) Worksession: Comprehensive Plan Amendments (EXHIBITS C & C1)
- 6) Worksession: Miscellaneous Code Amendments (EXHIBITS D & D1)
- 7) CED Director's Report
- 8) Planning Commission Comments (including suggestions for next meeting agenda)
- 9) Adjournment

#### A quorum of the City Council may be present

The Planning Commission consists of seven members appointed by the Mayor and confirmed by the City Council. The Commission primarily considers plans and regulations relating to the physical development of the city, plus other matters as assigned. The Commission is an advisory body to the City Council.

All Commission meetings are open to the public and comments are welcome. Please be sure to be recognized by the Chair prior to speaking.

EXHIBIT A DATE: 08/15/17

# CITY OF SEATAC PLANNING COMMISSION Minutes of August 1, 2017 Regular Meeting

**Members present:** Tej Basra, Roxie Chapin, Tom Dantzler, Pam Pollock, Jim Todd, Stanley

Tombs

**Members absent:** None

**Staff present:** Steve Pilcher, Planning Manager; Jeff Robinson, CED Director

#### 1. Call to Order

Chair Todd called the meeting to order at 5:37 p.m.

#### 2. Public Comment

Earl Gipson, SeaTac, advised the Commission that the City Council's Land Use and Parks Committee met the previous week and agreed to a modification of language in the proposed S. 154<sup>th</sup> St. Station Area regulations regarding bicycle parking. (Mr. Pilcher provided Commission members with a copy of the revised language). Mr. Gipson asked the Commission for its concurrence with the new language.

Moved and seconded to support the proposed change. Passed 6-0.

#### 3. Approval of Minutes

Move and second to approve the minutes of the July 18, 2017 meeting as written. **Passed 6-0.** 

#### 4. Welcome of new Members

New Commission members Tej Basra and Stanley Tombs were welcomed to the Commission.

#### 5. Worksession on Miscellaneous Code Amendments

Planning Manager Steve Pilcher reminded the Commission these proposals had been introduced at the previous meeting. He stated that a few changes made in the last two weeks, primarily in the titles to the various sections, in order to more accurately describe the various proposals. He highlighted a few other changes, including additional language added to the Preliminary Site Plan section to clarify the vesting rights that apply upon approval. He also indicated that since staff is commencing an effort to overhaul the MultiFamily Housing Design Standards, the proposed changes to SMC 15.510.230 (#5 in the packet) will be deferred to that effort.

Mr. Pilcher also noted that a new item had been added to the list, at the request of Commissioner Dantzler: #14, which ensures that development incentives apply within the Angle Lake Station

Overlay District. Mr. Dantzler noted that a similar reference needs to be made in SMC 15.515.100.

Mr. Pilcher asked the Commission for direction on the issue of single family residential parking. Currently, the Zoning Code limits allowable parking within the front yard to no more than 800 sq. ft. or 50% of the front yard area, whichever is less. Staff had suggested the 800 sq. ft. limitation be eliminated. After discussion, the Commission agreed to move forward with the code amendment as drafted by staff.

Mr. Pilcher then reviewed the proposed changes to SMC 16A; these are primarily procedural in nature. The Commission agreed moving forward with the changes as drafted.

The Commission discussed the proposed new definitions of "erosion hazard area" and "landslide hazard area", which are recommended additions to the Critical Area regulations. There were concerns regarding the impact of regulations upon properties. Staff was asked to provide examples of similar definitions from other cities' regulations.

#### 6. Worksession on Subdivision Code amendments

Mr. Pilcher reminded the Commission that staff has been working on an overhaul of the Subdivision Code, primarily to eliminate unnecessary provisions and provide an overall streamlining of the code. The draft presented has undergone internal review, except for the last three chapters. Once a complete draft is prepared, staff plans to reach out to the stakeholders (surveyors and engineers doing a lot of work in the City, King County MasterBuilders, etc.) to receive their input.

In particular, Mr. Pilcher asked the Commission for their input on the current code requirement that long subdivisions (10 or more lots) be required to provide common open space and also provide landscape buffers between their sites and other uses.

The Commission indicated that raising the minimum lot threshold to 25 would be an appropriate threshold for requiring the provision of open space. It was agreed that the buffering requirement should be eliminated.

Staff will continue its work and return to the Commission at a future meeting with a complete draft.

#### 7. Director's Report

CED Director Jeff Robinson announced that the Port of Seattle will be making a presentation at next week's Hotel/Motel Advisory Committee regarding both air quality issues and also their Ground Transportation Master Plan.

He also announced that the Port is scheduled to make a presentation on the Sustainable Airport Master Plan at the September 26<sup>th</sup> City Council meeting.

Finally, Mr. Robinson announced the hiring of a new graphic specialist. This individual is part of the CED Department, but will provide assistance throughout various City departments.

#### 8. Commissioners' Reports

None.

#### 9. Adjournment

Moved and seconded to adjourn. Motion passed 6-0. The meeting adjourned at 6:54 p.m.

EXHIBIT B DATE: 08/15/17



To: Planning Commission

From: Albert Torrico, Jr., Senior Planner

Date: August 15, 2017

Re: Multi-Family Housing Design Standards Update Project

Staff has begun working to revise and update the current Multi-Family Housing Design Standards, SMC 15.510. These standards were developed in 2000, shortly after the City Center standards were developed in 1991. Some updates have occurred since their development in 2015, 2008 and 2001, but these were largely minor amendments.

Why have design guidelines? Design guidelines help establish a common understanding of design principles and standards. The purpose of such standards supports high quality, well designed multi-family development for a wide variety of medium and high density residential housing within the City.

Why update the design guidelines? Staff has begun working to revise and update the current Multi-Family Housing Design Standards, SMC 15.510. These standards were developed in 2000, shortly after the City Center standards were developed. Some updates have occurred to the development standards since their development in 2015, 2008 and 2001, but these were largely minor amendments. Since their adoption, several projects have been approved and developed. However, each of these projects included several meetings with the design team to provide guidance and interpretation of the standards. Both staff and developers have commented that the standards are complex and, in some cases, results in different interpretations. That said, the project seeks to accomplish the following:

- Reduce impediments, streamline and find flexibility within the standards.
- Ensure guidelines are clear and concise for developers and staff.
- Articulate design attributes regarding site and building standards for a wide range of multi-family housing types.
- Foster the use of high quality design and materials.
- Review open space standards for multi-family development.
- Review and amend the over emphasis on security.
- Review density incentives for multi-family development
- Review minimum parking standards

 Ensure guidelines don't impede high density projects anticipated in the Station Areas

The City's Comprehensive Plan provides the policy basis for implementing multifamily design guidelines.

Specifically, the following goals and policies:

#### ➤ Goal 2.3

Achieve a mix of housing types while maintaining healthy residential neighborhoods and guiding new housing development into appropriate areas.

#### ➤ Goal 7.2

Provide a well-designed, pedestrian-friendly, and community-oriented environment in the Urban Center.

- Policy 7.2L Encourage unifying features and individual creative architectural designs.
- Policy 7.2N
   Encourage flexibility in the Zoning Code and design guidelines to not discourage retrofitting existing development.

#### ➤ Goal 7.3

Enhance the character of residential areas and promote a range of well-designed housing types.

Policy 7.3B
 Require high-quality multi-family building and site design that fosters a sense of community, relates to the street, has unobtrusive parking arrangements, provides useable open space, and ensures compatible transitions between different types of housing.

Staff is currently working through how best to revise the code and present a draft document to the Commission. More information on schedule will be forthcoming, but expect to begin reviewing draft content this fall.

Exhibit: C Date: 8/15/17

## 2017 Comprehensive Plan Amendment Process

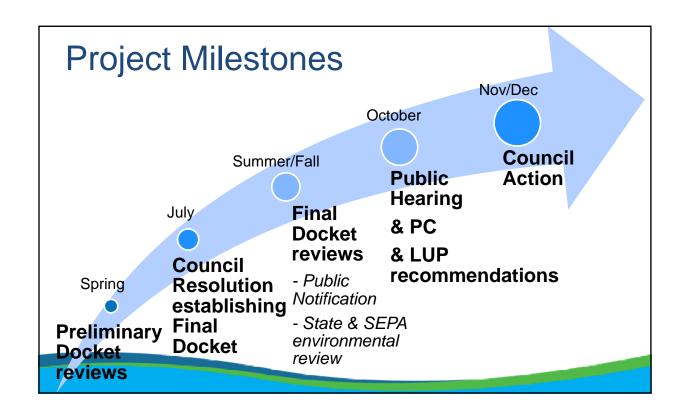
Final Docket Review #1

Planning Commission August 18, 2017



## Today's Review Items

- 1. Project Milestones & Anticipated Final Docket Review Process
- 2. Overview of Final Docket Items Established by 7/25 Council Resolution
  - Update on proposals, especially new information
- 3. Final Docket Review Criteria
- 4. Detailed Review of New Information



FINAL DOCKET: Anticipated Review Process			
<u>Aug</u> 8/15	PC Final Docket Review #1	Aug-Sept: Staff & Other Reviews:	
<u>Sept</u> 9/5 9/19	<ul><li>PC Final Docket Review #2</li><li>PC Final Docket Review #3</li></ul>	-SEPA environmental review -Required Dept of Commerce review -Public notification Staff Report &	
9/28	LUP Final Docket Review	Recommendations: - To be provided to PC	
Oct 10/3	Public Hearing	before Public Hearing	
10/17	PC final review & recommendation on Final Docket		
10/26	LUP final review & recommendation on Final Docket		
Nov/Dec	<u>City Council review &amp; action on Final Docket</u>		

# Overview of Final Docket Items Established by Council on 7/25/17

## Final Docket Proposals (14):

2 proposals added, 2 proposals removed

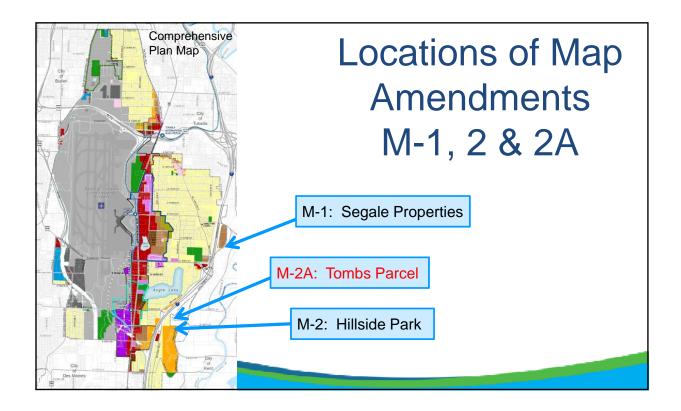
Total Text Amendments: 7

Total Map Amendments: 7

Proposal summaries on following pages (new information in red text)

FINAL	DOCKET: SUMMARY OF PROPOSED TEXT AMENDMENTS
T-1	Clarify Land Use Designation Descriptions & Criteria: Update language to better describe land use designations such as "Commercial High," "Commercial Medium,"
	etc. Staff proposed language recently completed, PC to review 8/15
T-2	Integrate Low Impact Development (LID) Policy Updates: Per State requirements
<del>T 3</del>	Consider Updating Mobile Home Park Policies Council removed from consideration
T-4	Add Duplex Policy to Explore Where Appropriate: Including in some low density
	residential/single family areas
T-5	Update Policies on Regional Facility Design Policies: Address design of regional
-	projects (e.g. Sound Transit, SR509 extension) in and near residential neighborhoods
T-6	Add Policy Establishing Review of City Center Plan
T-7	Update Capital Facilities Plan Update: Routine update
	Update underway, Planning Commission will review in September
T-8	Remove Business Park Designation References from Comprehensive Plan & Zoning
	Code: Added after proposal M-4 established on Final Docket

#### FINAL DOCKET: SUMMARY OF PROPOSED MAP AMENDMENTS M-1 Segale Comprehensive Plan Map Amendment & **Concurrent Rezone** Proposal to change parcel from Residential Low Density to Residential High Density as part of Tukwila South Project Location: Northeast SeaTac, near S 184th St, east of I-5 **Applicant**: Segale Properties M-2 Hillside Park Comprehensive Plan Map Amendment & Concurrent Rezone: Proposal to change parcel from Residential Medium Density to Residential High Location: Southeast SeaTac, Orillia Rd, south of S 204th St & east of I-5 Applicant: Pier 67 Capital Partners M-2A Council Added New Proposal: To consider in tandem with proposal M-2 **Tombs Comprehensive Plan Map Amendment & Concurrent Rezone** Proposal to change parcel from Residential Low Density to Residential High Location: Immediately adjacent to Hillside Park parcel, 20040 37th Ave S Applicant: City of SeaTac



FINAL	DOCKET: SUMMARY OF PROPOSED MAP AMENDMENTS (continued)	
M-3	Address Zoning & Comprehensive Plan Map Consistency	
	Change classification/s of properties zoned at a higher intensity than their land	
	use designation (17 properties)	
M-4	Eliminate Business Park Zone & Land Use Designation	
	(29 properties)	
	Proposal updated based on property owner input	
M-5	Correct/Update Land Use Designations of City-Owned Properties	
	(5 properties)	
M-6	Routine Comp Plan Map Updates (housekeeping)	
<del>M-7</del>	Council Request: Examine Bow Lake & Angle Lake Mobile Home Park Zoning &	
	Land Use Designations	
	Council removed from consideration	

## Final Docket Criteria

Final Docket proposals evaluated as to whether they meet following criteria:

- 1. Changed Circumstance: Or new information available which led to initiation of proposal
- 2. Comprehensive Plan Consistency
- 3. Population/Employment Targets Not Prevented from Being Met
- **4. Concurrency Requirements Met/No Adverse Impacts:** Does not adversely impact public facilities (i.e., transportation, utilities), health, safety, housing, environment, etc. in ways that can't be mitigated
- 5. Additional Map Amendment Criteria
  - a) Change in Condition:
    - 1) Conditions changed since property given its present designation
    - 2) Map change will correct a designation that was inappropriate when established
  - b) Proposal Identifies Anticipated Impacts to Geographic Area
  - c) Compatibility with Adjacent Uses

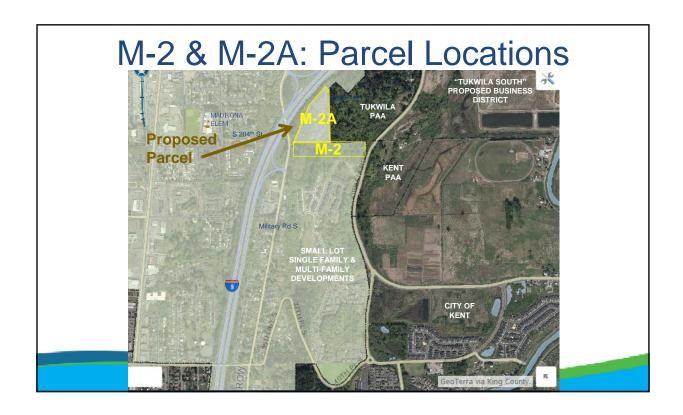
## Review of New Proposal Information

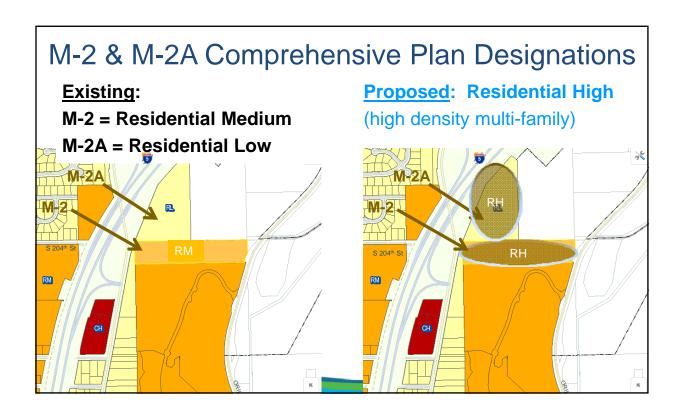
## M-2A: Tombs Parcel Map Amendment & Rezone: Proposal:

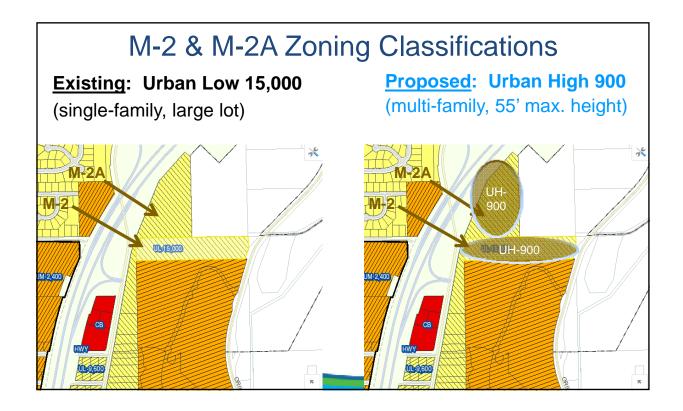
 To change a Residential Low Density parcel to Residential High Density (& rezone from UL-15,000 to UH-900). City Council requested parcel be added to Final Docket to be considered in tandem with map amendment proposal M-2A.

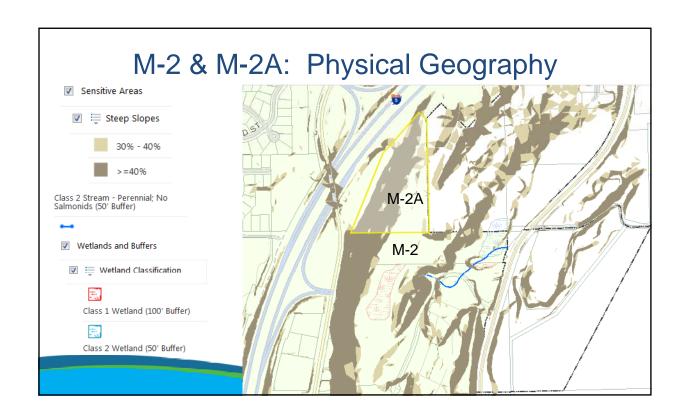
#### **Additional Considerations:**

 Council requested that proposals M-2 & M-2A be considered concurrently because of adjacency of parcels and desire for compatibility of potential Comprehensive Plan designation and zone changes for those parcels.









## **Review of New Proposal Information**

## M-4: Eliminating "Business Park" Proposal

#### Recap: Reasons for Eliminating "Business Park"

- Limited uses allowed in zone and special zoning standards may constrain development of Business Park parcels.
- Other existing zones could allow for development compatible with existing uses and adjacent areas.

#### **Total # of Existing Business Park Parcels: 29**

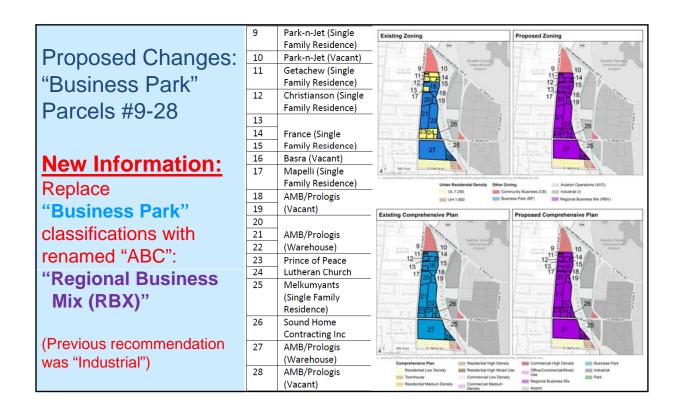
Includes parcels with Business Park zone and/or Comprehensive Plan land use designation.

### M-4: Eliminating "Business Park" Proposal

#### **New Information:**

The following proposed revisions are based on input from property owners and additional research:

- Revised Land Use Designation Recommendations:
   Changed recommendations for current "Business Park" parcels along 8<sup>th</sup> Avenue South from "Industrial" to high intensity commercial designation, currently called "Aviation Business Center (ABC)."
- Changed Name of "ABC" Designation: Name changed to Regional Business Mix (RBX) – to clarify meaning of zone and land use designation and to update the designation for broader use. (ABC land use designation policy language also revised.)



KEY DIFFERENCES	Business Park Zone	Industrial Zone	Regional Business Mix Aviation Business Center (ABC) Zone
Permitted Uses	<ul> <li>Light Manufacturing</li> <li>Distribution Center/ Warehouse</li> <li>Office limited to 20% of a structure</li> </ul>	<ul> <li>Light Manufacturing</li> <li>Distribution Center/ Warehouse</li> <li>Office building</li> <li>Park and Fly ("public/private pkg")</li> <li>Vehicle rental/sales</li> </ul>	<ul> <li>Light Manufacturing</li> <li>Distribution Center/ Warehouse</li> <li>Office building</li> <li>Park and Fly ("public/private pkg")</li> <li>Vehicle rental/sales</li> </ul>
Min. Size of Development Site	5 acres	N/A	N/A
Max. Height	45'	75'	No height max.
Landscape Buffers Required	Adjacent to street & other properties	Less required than Business Park zone	More pedestrian- oriented landscaping required

## Review of New Proposal Information:

## T-1: Clarify Land Use Designation Descriptions & Criteria

### **Purpose of Proposal:**

- Update policy language to better describe land use designations such as "Commercial High," "Commercial Medium," etc.
- Create criteria for land use designations to assist with evaluation of proposed Comprehensive Plan map amendments.

Existing & Proposed Revisions

Land Use Designations & Related Zones

See Exhibit C-1 for Proposed Revisions to Policy Language

Table BR2.8: Comprehensive	Land Use Designations & Corresponding Zones
COMPREHENSIVE PLAN	ZONING CLASSIFICATIONS
DESIGNATIONS	
RESIDENTIAL	
Residential Low Density	UL-15,000
	UL-9,600
	UL-7,200
	UL-5,000 Overlay Zone
Townhouse:	T
Residential Medium Density	UM-3,600
	UM-2,400
	MHP
Residential High Density	UH-1,800
	UH-900
Residential High – Mixed Use	UH-UCR
COMMERCIAL	
Commercial Low Density	NB
Office/Commercial/Mixed Use	O/C/MU
Commercial Medium Density	OCM
Commercial High <del>Density</del>	CB
	CB-C
Aviation Business Center:	Aviation Business Conter (ABC)
Regional Business Mixed	Regional Business Mix (RBX)
INDUSTRIAL	DD
Business Park:	BP
Industrial	I
AIRPORT	AVC
Airport	AVO
PARK	AVU
Park	P
Park	۲



COMPREHEN- SIVE PLAN	IMPLEMENTING ZONES	EXISTING GOALS & POLICIES	PROPOSED DESIGNATION CRITERIA
RESIDENTIAL LAND USE DESIGNATIONS		GOAL 2.3 Achieve a mix of housing types while maintaining healthy residential neighborhoods and guiding new housing development into appropriate areas.	
Residential Low Density	UL-15,000 (Urban Low) UL-9,600 UL-7,200 UL-5,000 Overlay Zone	Residential – Low Density (Single Family) Policy 2.3A Stabilize and protect existing single family residential neighborhoods by maintaining a designated Residential Low Density (Single Family) area. SeaTac's established residential neighborhoods are important components of the community and should be protected from negative impacts of conflicting or inappropriate nearby land uses. The character of healthy neighborhoods should be maintained since it provides a sense of well-being for residents and enhances the stability of the entire city. Land within the Residential Low Density areas is, and will continue to be, primarily single family in nature.  Policy 2.3B Allow accessory dwelling units (sometimes called "mother-in-law units") in single family designations to provide additional housing opportunities and income sources for homeowners, and compatible non-residential uses including schools, parks and religious use facilities.	<ul> <li>Existing Land Uses/Locations: Areas are characterized by existing pattern of low density single family development. Very low density residential uses are appropriate in locations that lack sewer facilities and other urban levels of service.</li> <li>Access: Properties are generally located away from streets with high volumes of through traffic.</li> <li>Environmentally Critical Areas: Areas must be capable of appropriately accommodating environmentally critical areas.</li> </ul>
Townhouse	Т	Townhouse Policy 2.3C Maintain single-family characteristics while building the densities that support transit ridership and nearby commercial activities through the Townhouse designation. The Townhouse designation buffers provides a transition between Residential Low Density areas from and more intensely developed residential or commercial/mixed use areas.	<ul> <li><u>Existing Land Uses/Locations</u>: Areas that provide a transition between lower density residential and higher density residential and/or commercial uses.</li> <li><u>Access</u>: Properties are located adjacent to or have adequate access to arterial streets, and are near transit.</li> <li><u>Environmentally Critical Areas</u>: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>

COMPREHEN- SIVE PLAN	ZONING CLASSIFICATIONS	EXISTING GOALS & POLICIES	PROPOSED DESIGNATION CRITERIA
RESIDENTIAL (cont.)			
Residential Medium Density	UM-3,600 (Urban Medium) UM-2,400 MHP (Mobile Home Park)	Residential Medium Density Policy 2.3D Allow higher densities than single family areas while maintaining a desirable family environment through the Residential Medium Density designation. Some compatible non-residential uses including schools, parks and religious use facilities may be allowed. This designation provides a transition between lower density and higher density areas. Examples of medium density uses include two- to fourthree-story apartments and townhouses.	<ul> <li>Existing Land Uses/Locations: Areas that provide a transition between lower density residential uses and more intense uses.</li> <li>Access: Properties are located adjacent to or have adequate access to arterial streets, and are near transit.</li> <li>Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>
Residential High Density	UH-1,800 (Urban High) UH-900	Residential High Density Policy 2.3E Provide a high density living option through the Residential High Density designation. Some compatible non-residential uses may be allowed, including neighborhood oriented commercial when part of mixed use development. This designation provides a transition between lower density residential areas and commercial areas and is intended to be primarily residential in character. Examples of high density residential development include two-to four-story apartments and condominiums. with three or more stories.	<ul> <li><u>Existing Land Uses/ Locations</u>: Areas that provide a transition between low to moderate density residential uses and higher intensity mixed use or commercial areas.</li> <li><u>Access</u>: Areas are located adjacent to arterial streets and are near transit and employment and/or commercial areas.</li> <li><u>Environmentally Critical Areas</u>: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>
Residential High – Mixed Use	UH-UCR (Urban High – Urban Center Residential)	Residential High Mixed Use Policy 2.3F Promote high density residential uses and opportunities for mixed-use development that complements the bordering high density commercial areas through the Residential High Mixed Use designation.	<ul> <li>Existing Land Uses/Locations: Areas that provide a transition between moderate to high density residential uses and higher intensity commercial areas.</li> <li>Access: Areas are located adjacent to arterial streets and are near transit and employment and/or commercial areas.</li> <li>Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>

COMPREHEN- SIVE PLAN	ZONING CLASSIFICATIONS	EXISTING GOALS & POLICIES	PROPOSED DESIGNATION CRITERIA
COMMERCIAL LAND USE		GOAL 2.4 Serve the needs of the City's residents, businesses, and visitors through appropriate commercial land uses.	
Commercial Low <del>Density</del>	NB (Neighborhood Business)	Commercial Low Density Policy 2.4A Enhance low to medium density residential neighborhoods by locating primarily resident-oriented goods, and services, and transit facilities in designated Commercial Low Density areas. Commercial Low Density areas are generally located outside the Urban Center and provide convenient daily shopping and some services for a limited service area.	<ul> <li>Existing Land Uses/Locations: Areas that are generally located adjacent to previously developed low intensity commercial uses which provide goods and services to existing low or medium density residential neighborhoods. Areas are primarily located outside of the urban center boundary. Any newly established Commercial Low area should be at least two acres in size.</li> <li>Access: Properties are generally located on or adjacent to arterial street intersections.</li> <li>Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>
Office/ Commercial/ Mixed Use	O/C/MU (Office/ Commercial/ Mixed Use)	Office/Commercial/Mixed Use Policy 2.4B Allow mixed use medium density intensity development in the designated Office/Commercial/Mixed Use areas including small apartments or offices, especially those with a mixed use component. This designation is intended to be more residential in character than the Commercial Medium Density designation and is different from the Residential Mixed Use designation by allowing office as a primary use. Policy 2.4C Only allowEncourage retail and commercial uses in the Office/Commercial/Mixed Use designation when they are mixed with residential or office uses on the same site.	Designation Criteria:     Existing Land Uses/Locations: Areas that establish or provide a transition between medium intensity uses and public facilities or lower density residential uses.     Access: Properties are located adjacent to or have adequate access to arterial streets, and are near transit and employment and/or commercial areas.     Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.

PROPOSED DESIGNATION CRITERIA	PROPOSED DESIGNATION CRITERIA	EXISTING GOALS & POLICIES	PROPOSED DESIGNATION CRITERIA
COMMERCIAL (cont.)			
Commercial Medium <del>Density</del>	O/CM (Office/ Commercial Medium)	Commercial Medium Density Policy 2.4D Allow medium density intensity development to accommodate office buildings, small hotels, restaurants, dense retail, apartments, or mixed residential/commercial developments in designated Commercial Medium Density areas. Policy 2.4E Encourage a mix of land uses in the Commercial Medium Density designation. Vertical (within the same building) or lateral (within different buildings on the same site) mixing of uses is appropriate.	<ul> <li>Existing Land Uses/Locations: Areas that provide a transition between higher intensity uses and public facilities or lower density residential uses.</li> <li>Access: Properties are located adjacent to or have adequate access to arterial streets, and are near transit and employment and/or commercial areas.</li> <li>Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>
Commercial High <del>Density</del>	CB (Community Business)  CB-C (Community Business in the Urban Center)	Commercial High Density Policy 2.4F Allow the highest concentration intensity of development in the Commercial High Density designation to accommodate intense land uses, such as mixed-use hotels, office towers, and high density housing, to support transit/walking/bicycling communities.	<ul> <li>Existing Land Uses/Locations: Areas are generally characterized by previously developed high intensity commercial or industrial uses and are in locations that provide a transition between industrial or high intensity commercial areas and less intensive commercial, mixed use or residential zones.</li> <li>Access: Properties are located along principal or minor arterial streets.</li> <li>Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>

COMPREHEN- SIVE PLAN	ZONING CLASSIFICATIONS	EXISTING GOALS & POLICIES	PROPOSED DESIGNATION CRITERIA
COMMERCIAL (cont.)			
Aviation Business Center Regional Business Mix	Aviation Business Center (ABC)  Regional Business Mix (RBX)	Aviation Business Center Policy 2.4G Allow development that creates a pedestrian friendly, major commercial center that supports employment, shopping, and childcare access for high concentrations of customers, visitors, and employees through the Aviation Business Center (ABC) designation.  The northern part of the ABC area (north of the SR 509 Extension right-of-way) around the Angle Lake light rail station should be particularly pedestrian and transit friendly.	
		Policy 2.4H Attract businesses oriented to and compatible with Airport operations in the southern portion of the ABC designation. The ABC district was created in 1991 to provide space for and encourage a wide mix of Airport-related businesses southeast of the Airport. These play a key role in the City's economy.	
		Regional Business Mix Policy 2.4G Allow a mix of employment activities primarily related to high intensity commercial uses including distribution/warehouse, light assembly, R&D testing, service commercial uses, office and related retail commercial uses. Residential uses may be allowed under certain conditions.  Policy 2.4H The Regional Business Mix designation is intended to create a built environment which facilitates the compatible development of heavy commercial uses in tandem with people-intensive uses, while providing an appropriate transition between industrial areas and less intensive commercial, mixed use or residential zones.	<ul> <li>Existing Land Uses/Locations: Areas are generally characterized by previously developed high intensity commercial or industrial uses and are in locations that provide a transition between industrial or high intensity, heavy commercial areas and less intensive commercial, mixed use or residential zones.</li> <li>Access: Properties are located along principal or minor arterial streets.</li> <li>Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.</li> </ul>

Existing ABC Zone Description	Proposed RBX Zone Description
SMC 15.200.030 Zones and Map Designations – Purpose Statements	SMC 15.200.030 Zones and Map Designations – Purpose Statements
J. Aviation Business Center Zone (ABC). The purpose of this zone is to promote a	SMC 15.200.030 Zones and Map Designations – Purpose Statements
major commercial center supporting high concentrations of customers, visitors,	J. Regional Business Mix (RBX). The purpose of this zone is to provide a higher
employees, and pedestrian activity; to create a quality development in which people	intensity commercial zone providing areas for the compatible development of
can work, shop and access child care; and to create a market geared toward a	heavy commercial uses such as warehouse/ distribution, light assembly, service
business orientation to the airport which is compatible with airport operations. These	commercial in tandem with people-intensive commercial uses, such as office and
purposes are accomplished by encouraging flexible development programs to	related retail uses. It is a transitional zone between industrial areas and less
improve the design, character, and quality of new development; facilitating the	intensive commercial, mixed use or residential zones. The Commercial High-
provisions of streets and utilities; preserving natural and scenic features; establishing	Regional Mix zone implements the Comprehensive Plan's Commercial High-
minimum lot sizes to encourage projects of sufficient scale to increase the viability of	Regional land use designation.
high capacity transit and encourage ride-share alternatives; and promoting a	
balanced multimodal transportation network consisting of motor vehicle	
transportation, public transportation, pedestrian circulation, and integrated parking.	

COMP PLAN	ZONING	EXISTING GOALS & POLICIES	
DESIGNATIONS	CLASSIFICATIONS		
MANUFACTU-		GOAL 2.5 Provide an appropriate level of manufacturing, industrial, and business	
RING,		parkwarehouse/distribution land uses within the City.	
INDUSTRIAL,			
Warehouse			
/DistributionB			
USINESS PARK			
AND AIRPORT		Policy 2 FA	
		Policy 2.5A	
		Concentrate manufacturing, industrial, and business parkwarehouse/distribution	
		uses in specific and appropriate locations to provide services and protect existing residential and other commercial areas.	
		Industrial, and manufacturing and warehouse/distribution establishments provide jobs for SeaTac residents and tax revenues for the City but are not always compatible	
		with other land uses. To enjoy the benefits and minimize the adverse impacts of	
		industrial and manufacturing establishments, the City should encourage the	
		development of "clean, light manufacturing" and business park	
		landwarehouse/idstribution uses with minimal environmental and land use impacts in	
		this designation. Examples include high technology business firms, Airport-related	
		warehousing, and light manufacturing that do not use toxic substances or emit	
		pollutants.	
		Policy 2.5B	
		Discourage inappropriate, heavy manufacturing businesses from locating in SeaTac,	
		excluding Airport-sited uses.	
		The development of new "heavy industrial" land uses, with their negative	
		environmental impacts, are not appropriate for the City of SeaTac.	

		Deleting Business Park: Comprehensive Plan	Deleting Business Park Zone Description
		Land Use Designation	
<b>Business Park</b>	BP	<u>DELETED</u> - EXISTING BUSINESS PARK COMPREHENSIVE PLAN LAND USE DESIGATION	<b>DELETED:</b> EXISTING BUSINESS PARK ZONE DESCRIPTION:
		DESCRIPTION (Policy 2.5C)	SMC 15.200.030
		Business Park	K. Business Park Zone (BP). The purpose of this zone is to provide a wide range
		Policy 2.5C	of nonpolluting business activities. The business park designation allows for light
		Allow non-polluting commercial land uses such as biotechnology, light	and high technological industries, such as biotechnology, nonpolluting light
		manufacturing, electronics, computer technology, or communications equipment	manufacturing, computer technology and communications equipment
		businesses while prohibiting land uses with significant environmental or nuisance	establishments. Land uses with any significantly adverse impacts (such as
		impacts in the Business Park designation.	excessive noise levels, or emitting significant quantities of dirt, dust, odor,
			radiation, glare or other pollutants) shall be strictly prohibited. Design and
			development standards for business park areas will be administered to foster
			high quality developments.
,			

COMPREHEN- SIVE PLAN	ZONING CLASSIFICATIONS	EXISTING GOALS & POLICIES	PROPOSED DESIGNATION CRITERIA
MFG/IND (cont.)			
Industrial	I	Industrial Policy 2.5G Provide for industrial enterprises and activities involving manufacturing, assembly, fabrication, processing, bulk handling, storage, warehousing, and heavy trucking through the Industrial designation.	Existing Land Uses/Locations: Areas are generally characterized by previously developed industrial uses and are immediately adjacent to industrial areas or the airport. Should be separated from existing and potential residential or pedestrian-oriented commercial neighborhoods.     Access: Properties are accessed by arterial streets.     Environmentally Critical Areas: Areas should be free of or must be capable of appropriately accommodating environmentally critical areas.
Airport	AVC (Aviation Commercial) AVO (Aviation Operations)	Airport Policy 2.5D Provide for the Airport and high intensity Airport-related facilities and activities. This designation includes all properties owned by the Port of Seattle. Under the Airport Master Plan it provides for facilities and activities that are related to "Aviation Operations" or "Aviation Commercial" uses. Policy 2.5E Encourage land uses adjacent to the Airport that are compatible with Airport operations. The Federal Aviation Administration's standards (under the Part 150 Program) identify compatible land uses for areas immediately adjacent to an airport. Improving land use compatibility in areas near the Airport enables the City to take better advantage of the job and tax revenue benefits of the Airport, maintain and enhance the Airport's role as an essential public facility, and help reduce the negative impacts to City residents. Some appropriate land uses near airports include open space and passive park land, parking, transportation-related activities, and some manufacturing or business park uses. Multi-family housing that is constructed to meet the applicable noise standards and designed to recognize noise issues may be appropriate for areas within the 65 DNL area (see Map 1.3). Single family residential use, on the other hand, is an example of a land use that is not generally recommended adjacent to airports. Uses that are essential to the aviation function of an airport, including necessary support facilities, are considered elements of an airport as an Essential Public Facility (EPF), as addressed in Goal 2.7, and are subject to provisions of the ILA between the City and the Port of Seattle for the Airport. These land uses are addressed under the Recommended Implementation Strategies section.	N/A

COMPREHEN- SIVE PLAN	ZONING CLASSIFICATIONS	EXISTING GOALS & POLICIES	PROPOSED DESIGNATION CRITERIA
PARK AND		GOAL 2.6	
OPEN SPACE		Provide an adequate amount of accessible parks, recreational land, and open space	
		throughout the City.	
Park		Policy 2.6A	<u>Designation Criteria:</u>
		This designation identifies publicly funded park and open space areas to be used for	Applicable to public and private parks and open space.
		outdoor passive and active recreation uses, conservation and protection of	
		municipal watersheds, and wildlife corridors and habitats, and also includes private	
		open space facilities such as cemeteries.	





# MEMORANDUM COMMUNITY & ECONOMIC DEVELOPMENT

Date: August 9, 2017

To: Planning Commission

From: Steve Pilcher, Planning Manager

Subject: Miscellaneous Code Amendments

At your last meeting, the Commission basically concluded its discussion of the suggested changes brought forward from staff. There was one area where questions remained: the proposed definitions of Erosion Hazard Area and Landslide Hazard Area. Subsequent to the meeting, the background materials which formed the basis of the proposed definitions were emailed to the Commission; those materials are also attached to this memorandum.

The proposal is simply to add definitions for these terms; erosion hazard areas and landslide hazard areas are already regulated in the Critical Areas Code:

#### 15.700.190 Erosion Hazard Areas - Development Standards and Permitted Alterations

- A. Clearing on an erosion hazard area is allowed only from April 1st to September 1st, except that:
  - 1. Up to fifteen thousand (15,000) square feet may be cleared on any lot, subject to any other requirement for vegetation retention and subject to any clearing and grading permit required by Chapter 15.445 SMC, Landscaping and Tree Retention; and
  - 2. Timber harvest may be allowed pursuant to an approved forest practice permit issued by the Washington Department of Natural Resources or a clearing and grading permit issued by the City.
- B. All development proposals on sites containing erosion hazard areas shall include a temporary erosion control plan consistent with this section and other laws and regulations prior to receiving approval.
- C. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:
  - 1. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;

- 2. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to submit a restoration plan to the City for review and approval. Following approval, the applicant shall be required to implement the plan;
- 3. Clearing of vegetation on lots may be allowed without a separate clearing and grading permit if the City determines that:
  - a. Such clearing is a necessary part of a large scale grading plan;
  - b. It is not feasible to perform such grading on an individual lot basis; and
  - c. Drainage from the graded area will meet current water quality standards.
- D. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas may be prohibited by the City under the applicable RCW statutes.

#### 15.700.250 Landslide Hazard Areas - Development Standards and Permitted Alterations

A development proposal on a site containing a landslide hazard area shall meet the following requirements:

- A. A minimum buffer of fifty (50) feet shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a steep slope or erosion hazard or as otherwise necessary to protect the public health, safety and welfare;
- B. Unless otherwise provided herein, or as part of an approved alteration, removal of any vegetation from a landslide hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection;
- C. Vegetation on slopes within a landslide hazard area or buffer which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the City pursuant to an enhancement plan approved by the City. The use of hazardous substances, pesticides and fertilizers in landslide hazard areas and their buffers may be prohibited by the City under the applicable RCW statutes; and
- D. Alterations to landslide hazard areas and buffers may be allowed only as follows:

- A landslide hazard area located on a slope of forty percent (40%) or steeper may be altered only if the alteration meets the standards and limitations set forth for steep slope hazard areas in SMC <u>15.700.270</u>,
   Steep Slope Hazard Areas – Development Standards and Permitted Alterations;
- 2. A landslide hazard area located on a slope less than forty percent (40%) may be altered only if the alteration meets the following requirements:
  - a. The development proposal will not decrease slope stability on contiguous properties; and
  - b. The landslide hazard area is modified or the development proposal is designed so that the landslide hazard to the project and contiguous property is limited or mitigated, and the development proposal on the site is determined to be safe by the City based on a study prepared by a geologist or geotechnical engineer; and
- 3. Neither buffers nor a critical area tract shall be required if the alterations meet the standards of subsection (D)(2) of this section.

#### There is a separate set of standards that address steep slopes:

## 15.700.270 Steep Slope Hazard Areas - Development Standards and Permitted Alterations A development proposal on a site containing a steep slope bazard area shall most the following requirements:

A development proposal on a site containing a steep slope hazard area shall meet the following requirements:

- A. A minimum buffer of fifty (50) feet shall be established from the top, toe and along all sides of any slope forty percent (40%) or steeper. The buffer shall be extended as required to mitigate a landslide or erosion hazard or as otherwise necessary to protect the public health, safety and welfare. The buffer may be reduced to a minimum of ten (10) feet if, based on a critical area report, the City determines that the reduction will adequately protect the proposed development and the critical area. For single-family residential building permits only, the City may waive the special study requirement and authorize buffer reductions if the City determines that the reduction will adequately protect the proposed development and the critical area;
- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a steep slope hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection;

- C. Vegetation on steep slopes within steep slope hazard areas or their buffers which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the region pursuant to a vegetation management plan approved by the City. The use of hazardous substances, pesticides and fertilizers in steep slope hazard areas and their buffers may be prohibited by the City;
- D. Alterations to steep slope hazard areas and buffers may be allowed only as follows:
  - 1. Approved surface water conveyances, as specified in the Surface Water Design Manual, may be allowed on steep slopes if they are installed in a manner to minimize disturbance to the slope and vegetation;
  - 2. Public and private trails may be allowed on steep slopes if they receive site-specific approval by the City, as guided by the construction and maintenance standards in the U.S. Forest Service "Trails Management Handbook," FSH 2309.18, June 1987, as amended, and the "Standard Specifications for Construction of Trails" (EM-7720-102, June 1984, as amended). Under no circumstances shall trails be constructed of concrete, asphalt or other impervious surfaces which will contribute to surface water runoff, unless such construction is necessary for soil stabilization or soil erosion prevention or unless the trail system is specifically designed and intended to be accessible to handicapped person(s);
  - 3. Utility corridors may be allowed on steep slopes if a special study shows that such alterations will not subject the area to the risk of landslide or erosion;
  - 4. Limited trimming and pruning of vegetation may be allowed on steep slopes pursuant to an approved vegetation management plan for the creation and maintenance of views if the soils are not disturbed and the activity is subject to administrative rules; and
  - 5. Approved mining and quarrying activities may be allowed; and
- E. The following are exempt from the provisions of this section:
  - 1. Slopes which are forty percent (40%) or steeper with a vertical elevation change of up to twenty (20) feet if no adverse impact will result from the exemption based on the City's review of and concurrence with a soils report prepared by a geologist or geotechnical engineer; and
  - 2. The approved regrading of any slope which was created through previous legal grading activities. Any slope which remains forty percent (40%) or steeper following site development shall be subject to all requirements for steep slopes.

All of these various features are portrayed in a general sense in the City's GIS system. The attached descriptions headed KCGIS are the "metadata" behind those graphic representations. As with all critical areas, the presence of these features would need to be field verified at the time of a development proposal. An applicant would have a qualified professional prepare a critical area report, which would verify whether the critical area does indeed exist and if so, establish its boundaries and any other salient factors. If modifications to the critical area are proposed as potentially allowed, the report would address that issue and offer any mitigation measures that might be necessary.

We look forward to discussing this matter with the Commission next Tuesday. Once this issue is resolved, staff will finalize the amendment package and send it to the State for agency review, plus initiate the SEPA process.

## Erosion Hazards, Published in 1997, downloaded from KCGIS 10/30/2014

#### File Geodatabase Feature Class

Thumbnail Not Available

#### Tags

natural resoures, Washington state, environmental, enviro, King County, WA, Pacific NW

#### Summary

Defines significant erosion hazards for unincorporated areas of King County per the County Sensitive Areas Ordinance. This featureclass was part of environGDB downloaded from KCGIS portal on 10/30/2014.

#### Description

The Sensitive Ares Ordinance (SAO) defines significant erosion hazard areas as those soils in King County that may experience severe to very severe erosion hazard. The SAO adopts the soils definition in the U.S. Department of Agriculture Soil conservation Service (SCS) 1973 King County Coil Survey and the current draft of the Snoqualmie Pass Area Soil Survey (ND).

#### Credits

There are no credits for this item.

#### **Use limitations**

King County data are made available with the understanding that they shall be used exclusively by the obtainer or his/her authorized agents. Digital products may not be reproduced or redistributed in any form or by any means without the express written authorization of King County.

#### Extent

West -122.542250 East -121.671459 North 47.784983 South 47.131445

#### **Scale Range**

Maximum (zoomed in) 1:5,000 Minimum (zoomed out) 1:150,000,000

You are currently using the Item Description metadata style. Change your metadata style in the Options dialog box to see additional metadata content.

## Landslide Hazard Areas. downloaded from King County GIS data portal 10/30/2014.

#### **File Geodatabase Feature Class**

Thumbnail Not Available

#### Tags

natural resources, Washington state, landslide hazard, enviro, King County, WA, Pacific NW

#### Summary

Downloaded from King County GIS data portal 10/30/2014, as part of environGDB Slide is suitable for general reference and medium to small scale map displays, and generalized analyses. Many of the major valleys and shoreline bluffs of Puget Sound are bordered by steeply sloping unconsolidated glacial deposits that are highly susceptible to landslides. These unstable slopes area a major hazard to people and structures. the identification of areas susceptible to landsliding is necessary to support grading, building, foundation design, housing density, and other land development regulations in reducing the risk of property damage and personal injury. **Description** 

Areas subject to severe landslide risk identified in the Sensitive Areas Ordinance as: A. Any area with a combination of: 1. Slopes greater than 15 %; and 2. Impermeable soils (typically silt and clay) frequently interbedded with granular soils (predominantly sand and gravel); and 3. Springs or groundwater seepage. B. Any area that has shown movement during the Holocene epoch (from 10,000 years ago to present), or that is underlain by mass wastage debris of that epoch. C. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action.D. Any area that shows evidence of, or is at risk from, snow avalanches. E. Any area located on an alluvial fan, presently subject to or potentially subject to

indundation by debris flows or deposition of stream-transported deposits.

#### Credits

There are no credits for this item.

#### Use limitations

King County data are made available with the understanding that they shall be used exclusively by the obtainer or his/her authorized agents. Digital products may not be reproduced or redistributed in any form or by any means without the express written authorization of King County. The landslide hazard data is based on average, regional conditions and does not portray small, local variations. Geologic mapping at the scale used for this data will not differentiate deposits less than several hundred feet in extent; glacial deposits covering large areas may have pockets of other material. Likewise, steep slopes with relief less than the contour interval of the topographic maps will not be resolved. Observation of actual on-site conditions is required to determine if a particular parcel is in a landslide hazard area or not.

#### Extent

West -122.542292 East -121.691152 North 47.784856 South 47.165880

Scale Range

Maximum (zoomed in) 1:5,000 Minimum (zoomed out) 1:150,000,000

You are currently using the Item Description metadata style. Change your metadata style in the Options dialog box to see additional metadata content.

EXHIBIT D-1
DATE: 08/15/17

#### **Erosion Hazard Areas Definitions:**

- 1. WAC (seems like most websites/jurisdictions reference this)
  - a. "Erosion hazard areas" are those areas containing soils which, according to the United States Department of Agriculture Natural Resources Conservation Service Soil Survey Program, may experience significant erosion. Erosion hazard areas also include coastal erosion-prone areas and channel migration zones. <a href="http://apps.leg.wa.gov/wac/default.aspx?cite=365-190-030">http://apps.leg.wa.gov/wac/default.aspx?cite=365-190-030</a>

#### 2. King County GIS Center

a. The Sensitive Ares Ordinance (SAO) defines significant erosion hazard areas as those soils in King County that may experience severe to very severe erosion hazard. The SAO adopts the soils definition in the U.S. Department of Agriculture Soil conservation Service (SCS) 1973 King County Coil Survey and the current draft of the Snoqualmie Pass Area Soil Survey (ND). Erosion is a natural process of wearing away of land surfaces by falling and running water, wind and glacier scour. http://www5.kingcounty.gov/sdc/Metadata.aspx?Layer=erode

#### 3. Burien Code Definitions

a. Lands underlain by soils which are subject to severe erosion when disturbed.

#### 4. Des Moines Code Definitions

a. "Erosion hazard areas" means at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard. Erosion hazard areas are also those areas impacted by shore land and/or stream bank erosion and those areas within a river's channel migration zone.

#### 5. Kent Code Definitions

a. *Erosion hazard areas* means areas within the city of Kent underlain by soils which are subject to severe erosion when disturbed. Such soils include, but are not limited to, those delineated in the "Soil Survey, King County Area, Washington" (USDA, 1973) as having a moderate to severe, severe, or very severe erosion hazard potential. These soils consist of the following: Alderwood gravelly sandy loam, 15 to 30 percent slopes (AgD); Alderwood and Kitsap soils, very steep (AkF); Arents, Alderwood material, six to 15 percent slopes (AmC); Beausite gravelly sandy loam, 15 to 30 percent slopes (BeF); Everett gravelly sandy loam, 15 to 30 percent slopes (EvD); Indianola loamy fine sand, 15 to 30 percent slopes (InD); Kitsap silt loam, eight to 15 percent slopes (KpC); Kitsap silt loam, 15 to 30 percent slopes (KpD); Ovall gravelly loam, 15 to 25 percent slopes (OvD); Ovall

EXHIBIT D-1
DATE: 08/15/17

gravelly loam, 40 to 75 percent slopes (OvF); Pilchuck loamy fine sand (Pc); Ragnar fine sandy loam, 15 to 25 percent slopes (RaD); Ragnar-Indianola association, moderately steep (RdE); and riverwash (Rh).

#### 6. SR 509 Final EIS

a. Erosion hazard areas are defined as areas of soils that are rated as having severe to very severe erosion hazard by the Natural Resources Conservation Service (SCS). They generally occur where slopes are greater than 15 percent. <a href="https://books.google.com/books?id=w8Y1AQAAMAAJ&pg=PA70&lpg=PA70&dq=erosion+hazard+areas+definition&source=bl&ots=9YhsFtagMz&sig=brTUiu77ar7d7SpnM5-kq1N0TEU&hl=en&sa=X&ved=0ahUKEwi5xtLuou7UAhVCxGMKHaVdAmg4ChDoAQgpMAM#v=onepage&q=erosion%20hazard%20areas%20definition&f=false</a>

#### 7. City of Spokane

a. Erosion hazard areas are susceptible to severe erosion and may require mitigation measures, engineering solutions or restrictions to development to protect public safety. Erosion hazard areas are defined as "at least those identified by the U.S. department of agriculture natural resource conservation service (NRCS) as having a severe rill and interrill erosion hazard." Erosion hazard areas are also defined as those cutbank areas within a river or stream meander that area highly susceptible to bank carving. https://my.spokanecity.org/smc/?Section=17E.040.030

#### 8. Pierce County

a. "Potential erosion hazard areas are defined as the Puget Sound shoreline with a 200ft potential trigger review area, lakes and ponds greater than 2500 square feet with a 200ft trigger review area, the channel migration zones, and soils classified as severe or very severe and greater than 20% slope."

http://yakima.co.pierce.wa.us/MapGallery/index.cfm?event=displayMapInformation&id=279

#### 9. Cowlitz County

a. Erosion hazard areas are those areas identified by the U.S. Department of Agriculture's Natural Resource Conservation Service as having a "severe" or "very severe" erosion hazard. Erosion hazard areas are also those areas impacted by shore land and/or stream bank erosion and those areas within a stream's channel migration zone. <a href="http://www.co.cowlitz.wa.us/index.aspx?NID=1323">http://www.co.cowlitz.wa.us/index.aspx?NID=1323</a>

#### Landslide Hazard Area Definitions

#### 1. WAC

a. "Landslide hazard areas" are areas at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors.
 http://apps.leg.wa.gov/wac/default.aspx?cite=365-190-030

#### 2. King County GIS Center

a. Areas subject to severe landslide risk identified in the Sensitive Area Ordinance as: A. Any area with a combination of: 1. Slopes greater than 15%; and 2. Impermeable soils (typically silt and clay) frequently interbedded with granular soils (predominantly sand and gravel); and 3. Springs or groundwater seepage. B. any area that has shown movement during the Holocene epoch (from 10,000 years ago to present), or that is underlain by mass wastage debris of that epoch. C. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action. D. Any area that shows evidence of, or is at risk from, snow avalanches. E. Any area located on an alluvial fan, presently subject to or potentially subject to inundation by debris flows or deposition of stream-transported deposits.

#### 3. Burien Code Definitions

- a. Lands that are potentially subject to risk of mass movement due to a combination of factors, including historic failures, geologic, topographic and hydrologic features, including any of the following:
  - 1. Any slope with a vertical relief of 10 feet or more that is steeper than 15 percent with a combination of:
    - a. Impermeable soils, such as silt and clay, frequently interbedded with granular soils, such as sand and gravel; and
    - b. Springs or ground water seepage;
    - 2. Any slope with a vertical relief of 10 feet or more that is 40 percent or steeper, except areas composed of consolidated rock;
    - 3. Any area designated or mapped as class U, UOS or URS by the Department of Ecology Coastal Zone Atlas;
    - 4. Any area subject to wave erosion and bluff retreat;
    - 5. Any area which has shown movement during the Holocene epoch, from 10,000 years ago to the present, or which is underlain by mass wastage debris from that epoch;
    - 6. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action;

7. Any area located on an alluvial fan, presently subject to or potentially subject to inundation by debris flows or deposition of stream-transported sediments

#### 4. Des Moines Code Definitions

a. "Landslide hazard areas" are those areas of the City potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include, but are not limited to, the following:.....

#### 5. SR 509 Project Final EIS

a. "Landslide hazard areas are sloping areas that are subject to a severe risk of landslide. They are defined as any area with a combination of slopes greater than 15 percent, impermeable soils, and springs or groundwater seepage."

<a href="https://books.google.com/books?id=w8Y1AQAAMAAJ&pg=PA70&lpg=PA70&dq=erosion+hazard+areas+definition&source=bl&ots=9YhsFtagMz&sig=brTUiu77ar7d7SpnM5-kq1N0TEU&hl=en&sa=X&ved=0ahUKEwi5xtLuou7UAhVCxGMKHaVdAmg4ChDoAQgpMAM#v=onepage&q=erosion%20hazard%20areas%20definition&f=false</a>

#### 6. Snohomish County

a. Landslide hazard areas are lands that are subject to mass earth movement due to a combination of geologic, topographic, and hydrologic factors with a vertical height of 10 feet or more. The criteria that defines a landslide hazardous area includes land within a distance from the top of the slope equal to the height of a slope or within a distance of the toe of the slope equal to two times the height of the slope. https://snohomishcountywa.gov/3681/Landslide-Hazard-Area

#### 7. Thurston County

a. Those areas which are potentially subject to risk of landslide due to a combination of geologic, topographic, and/or hydrologic factors; and where the vertical height is fifteen feet or more, excluding those wholly manmade slopes created under the design and inspection of a geotechnical professional.

http://www.geodata.org/landslide.htm