SULTAN CITY COUNCIL

AGENDA ITEM COVER SHEET

ITEM NO: A-8

DATE: March 26, 2009

SUBJECT: First Reading of Ordinance:
Amendments to Sultan Municipal Code Chapter 17.08, Flood Damage Prevention.

CONTACT PERSON: Robert Martin, Community Development Director

ISSUE:
Conduct first reading of Ordinance No. 1019-09, amendments to SMC 17.08, Flood Damage Prevention:
Update Sultan Municipal Code (SMC) Chapter 17.08, Flood Damage Prevention to accommodate changes called for in recent Community Assistance Visit (CAV) by Washington Department of Ecology (DOE) and the Federal Emergency Management Agency (FEMA).

SUMMARY:
City staff and the Planning Board recommend adoption of revisions to Chapter 17.08 SMC to address issues raised by the Dept. of Ecology during its 2009 review of the City's flood damage prevention regulations.

RECOMMENDATION:
Staff recommends that the Council conduct first reading of Ordinance 1019-09, amendments to Sultan Municipal Code (SMC) Chapter 17.08, Flood Damage Prevention.

PRIOR ACTION:
At its regular meeting of January 20, 2009, the Sultan Planning Board conducted a public hearing on the proposed amendment to Chapter 17.08, Flood Prevention. The Board approved a motion to recommend adoption of the proposed amendment to the City Council.

At its regular meeting of January 22, 2009, the City council received the Planning Board's recommendation and set February 12, 2009 as the date for a public hearing on the Planning Board Draft of the proposed amendments.

On February 12, 2009, the City Council conducted a public hearing on the amendments as recommended by the Planning Board. The agenda packet for this public hearing contains all documents, meeting minutes, and information related to the FEMA insurance program and the background for the ordinance amendments.

At the February 12th public hearing, the Council received input and questions on flood topics. This citizen involvement was not related to the content of Chapter 17.08. The input was related to the issue of potential change in the base flood elevation that is under study at this time by FEMA and Snohomish County. Chapter 17.08 is not affected by a change in the base flood elevation and it does not establish or affect the base flood elevation or the study that is under way. This Chapter only addresses management of the flood provisions and construction activities that take place in the floodplain regardless of what base flood elevation is being enforced.

NEW LANGUAGE SINCE PUBLIC HEARING:
On February 12, 2009, staff received a review letter from Mr. Chuck Steele (Attachment B), Floodplain Management Specialist for the Department of Ecology. Mr. Steele conducted the Community Assistance Visit in June, 2008, and the person responsible for reviewing local programs for compliance with the National Flood Insurance Program and Department of Ecology standards. Mr. Steele's letter dated February 11th indicated a five language modifications that are necessary to bring the public hearing draft document into compliance with the required standards. These changes, as provided in Mr. Steele's letter are summarized as follows:

1. Section 17.08.110 B. 5 needs to read: *"If Section 17.08.110 B. 5. a. is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 17.08.110."*
2. Section 17.08.070 B. 2. : Limit authority to issue FEMA Flood Elevation Certificates to Licensed Land Surveyors, eliminate authority from engineers and architects.
3. Section 17.08.070 B. 4, and D. 2: Insert North American Vertical Datum with acronym "NAVD", delete National Average Vertical Datum.
4. Section 17.08.070. 4. : Delete reference to Technical Bulletin 7-93 and insert reference to Technical Bulletin 3-93.
5. Section 17.08.100 A. 2. : Delete existing language and insert as follows:
   "Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood level. As the lot size increases the technical justification required for issuing the variance increases."

In addition to the changes called for in the D.o.E. letter discussed above, staff has made a change to clarify reference to the position responsible for administering Chapter 17.08. The previous language referred to "the building and zoning official". This is an old position title that is no longer used in the rest of the Sultan Municipal Code. Definition 23 has been added to the document, defining "Responsible Official".

This term is used so that future changes in position titles within the organization do not result in questions about what position is being referenced. The title "Responsible Official" is defined in this draft as the position charged with administering this code by

the Mayor and/or City Administrator. Corresponding changes have been made throughout the text where the old term "building and zoning official" occurs.

The above described changes have been included in the ordinance that is provided in this packet for first reading by the Council.

ATTACHMENTS:
Attachment A: Ordinance 1019-09
Attachment B: February 11th letter, Chuck Steele, Washington State D.o.E.

CITY OF SULTAN
WASHINGTON
ORDINANCE NO. 1019-09

AN ORDINANCE OF THE CITY OF SULTAN, WASHINGTON, ADOPTING AMENDMENTS TO SULTAN MUNICIPAL CODE CHAPTER 17.08, FLOOD DAMAGE PREVENTION; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of Sultan, participates in the National Flood Insurance Program of the Federal Emergency Management Agency (FEMA), and

WHEREAS, the Washington State Department of Ecology (DOE), in partnership with FEMA, conducts periodic Community Assistance Visits to review the codes, standards, and implementation programs for flood management in local jurisdictions, and

WHEREAS, the City of Sultan, through high levels of compliance with FEMA and DOE standards, has achieved a favorable rating of "Class 7" in the National Flood Insurance Program (NFIP), which reduces the NFIP policy rates for citizens and businesses in the community, and

WHEREAS, it is the intent and policy of the City Council to maintain favorable insurance ratings for the community, and

WHEREAS, FEMA and DOE conducted a Community Assistance Visit in June, 2009, and DOE provided a follow-up letter dated July 9, 2008 indicating certain modifications and improvements to the City of Sultan Flood Damage Prevention Code (Sultan Municipal Code (SMC) Chapter 17.08) as a condition of maintaining the favorable "Class 7" NFIP insurance rating, and

WHEREAS, the City of Sultan Planning Board has constructed draft revisions to SMC Chapter 17.08, and,

WHEREAS, the Planning Board held a public hearing on the Planning Commission Draft of the proposed amendments at its regular meeting of January 20, 2009, and took public testimony and considered that testimony and additional staff input on the draft, and adopted a motion to recommend adoption of the Public Participation Policies by the City Council, and

WHEREAS, the City Council, at its regular meeting of January 22, 2009, received the Planning Board's recommendation and set February 12, 2009 as the date for a public hearing on the draft amendments to SMC Chapter 17.08, and

WHEREAS, the City Council held a public hearing at its regular meeting of February 12, 2009 and has considered input received at that hearing, and the recommendation of the Planning Board and the public input received at the public hearing of the Planning Board,

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SULTAN, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. The CITY OF SULTAN MUNICIPAL CODE CHAPTER 17.08, "FLOOD DAMAMAGE PREVENTION" IS HEREBY AMENDED AS FOLLOWS (ATTACHMENT A).

Section 2. Severability. Should any section, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this Ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or circumstances.

Section 3. Effective Date. This Ordinance shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE _____DAY OF _____, 2009.

CITY OF SULTAN

_____
Carolyn Eslick, Mayor

ATTEST/AUTHENTICATED:

_____
Laura Koenig, City Clerk

Approved as to form:

_____
Margaret J. King, City Attorney

Passed by the City Council:
Date of Publication:
Effective Date:

Chapter 17.08
Flood Damage Prevention

Sections:

17.08.010 Statutory authorization.

The legislature of the State of Washington has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Sultan does ordain as set forth in this chapter.

17.08.020 Findings of fact.

A. The flood hazard areas of the City of Sultan are subject to periodic inundation that may result in loss of life and property, health, and safety hazards, disruption of commerce and government services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

B. These flood losses are caused by the cumulative effect of obstructions in floodplains resulting in increases in flood heights and velocities, and by the occupancy in flood hazard lands by structures that are inadequately elevated, flood proofed, or otherwise unprotected from flood damage.

17.08.030 Statement of purpose.

It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

A. Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
C. Control the alteration of natural floodplains, stream channels, and natural protective barriers that are involved in the accommodation of floodwaters;
D. Control filling, grading, dredging and other development that may increase erosion or flood damage; and
E. Prevent or regulate the construction of flood barriers that will unnaturally divert floodwaters or which may increase flood hazards to other lands.

17.08.040 Objectives.

The objectives of this chapter are:
A. To protect human life and health;
B. To minimize expenditure of public money for costly flood control projects;
C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
D. To minimize prolonged business interruptions;
E. To help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize the number of blighted areas that could be created by floods;
F. To ensure that potential homebuyers are notified that property is in a flood area; and
G. To prevent the loss of federal assistance to the City of Sultan due to a violation of federal flood control requirements.

17.08.050 Definitions.

A. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter it's most reasonable application.

~~A.~~ 1.**"Appeal"** means a request for a review of the interpretation of any provision of this chapter or a request for a variance.

~~B~~ 2.**"Area of special flood hazard"** means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

3. **"Assessed Valuation"** means the value placed on a property by the Snohomish County Assessors office.

~~C.~~ 4.**"Base flood"** means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A or V.

~~D.~~ 5.**"Basement"** means any area of the building having its floor subgrade (below ground level) on all sides. See Technical Bulletin 11-1

~~E.~~ 6.**"Breakaway wall"** means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

~~F.~~ 7.**"Critical facility"** means a facility for which even a slight chance of flooding might be ~~to~~too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

8. "Design Flood Elevation" means at a minimum the base flood elevation plus freeboard.

~~G.~~ 9.**"Development"** means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, the storage of equipment and materials, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

~~H.~~ 10.**"Elevated building"** means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

~~I.~~11.**"Existing manufactured home park or subdivision"** means a manufactured home park subdivision for which the construction of the facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is competed before the effective date of the adopted floodplain management regulations.

~~J.~~12.**"Expansion to an existing manufactured home park or subdivision"** means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured home are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

~~K.~~ 13.**"Flood or flooding"** means a general and temporary condition of partial or complete inundation of normally dry land areas from:

~~1.~~a. The overflow of inland or tidal waters; and/or

~~2.~~b. The unusual and rapid accumulation of runoff of surface waters from any source.

~~L.~~ 14.**"Flood insurance rate map (FIRM)"** means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

~~M.~~ 15.~~"~~**Flood insurance study"** means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

~~N.~~ 16.~~"~~**Floodway"** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

~~O.~~ 17.**"Lowest floor"** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor; provided, that such enclosure is not built so

as to render the structure in violation of the applicable nonelevation design requirements of this chapter, SMC 17.08.110(B)(3).

~~P.~~ 18. **"Manufactured home"** means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term manufactured home does not include a "recreational vehicle".

~~Q.~~ 19. **"Manufactured home park or subdivision"** means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

~~R.~~ 20. **"New construction"** means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.

~~S.~~ 21. **"New manufactured home park or subdivision"** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads is completed on or after the effective date of adopted floodplain management regulations.

~~T.~~ 22. **"Recreational vehicle"** means a vehicle which is:

~~1.~~a. Built on a single chassis;

~~2.~~b. Four hundred square feet or less when measured at the largest horizontal projection;

~~3.~~c. Designed to be self-propelled or permanently towable by a light duty truck; and

~~V.4.~~d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal use.

23. **"Responsible Official"** is the Community Development Director, Building Official, or other person designated by the Mayor or City Administrator to implement and administer the requirements of this Chapter.

24. **"Start of construction"** includes substantial improvement, and means the date the building permit was issued provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction or a structure on the site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement the actual start of construction means the first alteration of any wall, ceiling, floor, other structural part of a building, whether or not that alteration ~~effects~~ affects the external dimensions of the building.

25."**Site Plan**" per International Building Code sections 106.2 and IRC section R106.1 and R106.2 with references to figure 1 and Technical Bulletin 10-01 The construction documents submitted with the application for a floodplain development permit shall be accompanied by a site plan showing to scale the

26."**Structure**" means a walled and roofed building including a gas or liquid storage tank that is principally above ground.

~~W.~~27."**Substantial damage**" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the assessed value ~~market value~~ of the structure before the damage occurred, ~~or 10 percent of the market value when a natural disaster has been declared in Snohomish County.~~

~~X.~~28."**Substantial improvement**" means:

~~1.~~a. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the assessed~~market~~ value of the structure either:

~~a.~~i. Before the improvement or repair is started; or

~~b.~~ ii. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of the definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

~~2.~~b. The term does not, however, include either:

~~a.~~i. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

~~b.~~ii Any alteration of a "historic structure" provided, that the alteration will not preclude the structures continued designation as a "historic structure."

~~Y.~~29."**Variance**" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

~~Z.~~30."**Water dependent**" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

17.08.060 General provisions.

A. **Lands to which these performance standards apply.** These performance standards shall apply to all areas of the special flood hazards within the jurisdiction of the City of Sultan.

B. **Basis for establishing the areas of special flood hazard.** The area of special flood hazard identified by the Federal Emergency Management Agency in a

scientific and engineering report entitled "The Flood Insurance Study for Snohomish County, Washington and Incorporated Areas," dated November 8, 1999, and any revisions thereto, with accompanying flood insurance rate map (FIRM) are adopted by reference and declared to be a part of these performance standards.

C. **Establishment of Permit,** A floodplain development permit shall be required in conformance with the provisions of these standards prior to the commencement of any development activities.

D. **Compliance.** No structure or land shall hereafter be located, extended, constructed or structurally altered without full compliance with the terms of these standards and other applicable laws.

E. **Abrogation and Greater Restrictions.** These performance standards are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. ~~However, where these standards and any other conflict or overlap, whichever imposes the more stringent restrictions shall prevail.~~

~~3.~~**F. Interpretation.** In the interpretation and application of these standards, all provisions shall be:

1. Considered as minimum requirements;
2. Liberally constructed in favor of the governing body; and
3. Deemed neither to limit nor repeal any other laws.

~~d.~~**G. Warning and Disclaimer of Liability.** The degree of flood protection required by these performance standards is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. These standards do imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or damages. These standards shall not create liability on the part of the City of Sultan or by any officer or employee thereof for any flood damages that result from reliance on these standards or any administrative decision lawfully made thereunder.

17.08.070 Administration

A. **Designation of the ~~Building and Zoning~~ Responsible Official.** The ~~building and zoning official is hereby designated to administer and implement the provisions of these performance standards~~ Mayor or City Administrator shall designate the Responsible Official. The duties of this position shall be to implement and administer the provisions of this Chapter as specifically provided in Section 17.08.080.

~~B. Permit Procedure. Application for a permit shall be made to the building and zoning official prior to any development activities, and shall include, but not be necessarily limited to plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing facilities; the location of the proposed development activity; proposed cuts and filling of any land area; existing and/or proposed storage of materials; existing and/or~~

~~proposed stormwater drainage facilities; and the locations of all of the foregoing. Specifically, the following information is required:~~

~~1. Application Stage.~~

~~a. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures;~~

~~b. Elevation in relation to mean sea level to which any nonresidential structure will be floodproofed;~~

~~c. Certificate from a registered professional engineer or architect registered in the state of Washington that the nonresidential floodproofed structure will meet the floodproofing criteria contained in these performance standards; and~~

~~d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.~~

~~2. Construction Stage. Provide a floor elevation or floodproofing certification after the lowest floor is completed. Upon placement of the lowest floor, or floodproofing by whatever construction means, it shall be the duty of the permit holder to submit to the building and zoning official's office a certification of the elevation of the lowest portion of the horizontal structural members of the lowest floor, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same.~~

~~3. When floodproofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The building and zoning official shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey, or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project. (Ord. 808-03)~~

B. Permit Procedure. Application for a floodplain development permit shall be made to the ~~building and zoning~~ responsible official prior to any development activities, and shall include, but not be necessarily limited to site plans drawn to scale showing the following:

1. The construction drawings and documents submitted with the application for a floodplain development permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site,
2. Distances from the lot lines, and front, side(s), rear, setbacks,
3. Established street grades and the proposed finished grades with quantities of cut/fill materials
4. Zoning designation flood hazard areas, floodways, and "design flood elevations" drawn in accordance with an accurate boundary line survey and shall indicate elevation datum used for BFE (National Geodetic

Vertical Datum 1929) (NGVD 1929) or North American Vertical Datum 1988 (NAVD 1988). Benchmark(s) set/used shall utilize this datum and conversion factors and comments.

5. North arrow and scale the NFIP Community name and number, the (FIRM) map/panel number & suffix, FIRM index date, FIRM panel Effective/Revised Date, flood Zone(s)
6. Base Flood Elevation(s),Required freeboard 1.6 feet, design flood elevation(s). Tax parcel number, plat name, lot number, street address,
7. Longitude and latitude if known.
8. Encroachments such as fences, driveways, roads, streets and rights-of-way.
9. Critical areas and there buffers, including, wetlands, aquifer recharge, steep slopes, special flood hazard areas, floodway boundaries.
10. Known threatened or endangered species on or within 200 feet of the property.

C. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

D. As a condition of floodplain development permits issuance a benchmark or reference mark shall be set by a professional land surveyor licensed in the State of Washington and shall indicate

1. the ground elevation,
2. datum used for BFE (National Geodetic Vertical Datum 1929) (NVGD 1929) or North American Vertical Datum 1988 (NAVD 1988) located within site distance of the structures foundation.
3. If the property requesting a floodplain development permit has a floodway located on the property the floodway boundary shall be permanently marked by a state licensed surveyor.

2**. Construction Stage**.

~~Provide a floor elevation or flood proofing certification after the lowest floor is completed. Upon placement of the lowest floor, or flood proofing by whatever construction means, it shall be the duty of the permit holder to submit to the building and zoning official's office a certification of the lowest portion of the horizontal structural members of the lowest floor, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same.~~

In addition to standard requirements of the adopted building codes, structures subject to provisions of this Chapter shall conform to the following standards, and building inspection processes shall certify compliance with these standards as a condition of issuance of Certificate of Occupancy.

a. At the foundation inspection stage the inspector shall confirm the location, elevation, and datum of the referenced benchmark the inspector shall see that the benchmark is properly placed, and that the foundation is located as drawn on the site plan.

b. Prior to pouring concrete, the contractor/homeowner shall call for a foundation form inspection. The following shall be in place for this inspection:
    i) foundation footing and stem wall forms,
    ii) rebar, steel, bolts, hold-downs, straps, vents, accesses, buck-outs, plates, mud seal,
    iii) foundation grade height is established and marked on the foundation formst;
c. At the time of the foundation inspection the contractor or his representative shall demonstrate and shall show proof positive that:
    i) the lowest floor shall be at a minimum 1.6" above the base flood elevation and per technical bulletin 11-01
    ii) flood venting equals 1 square inch per square foot of floor area and the vents shall be 1 foot or less above the finish grade.
d. If all applicable codes have been met the inspector shall document
    i) the Base Flood Elevation,
    ii) the projected amount of freeboard,
    iii) the projected lowest floor elevation, the number
    iv) square inches of flood vents
    v) the projected lowest adjacent grade.
e. After the concrete has been placed and form material has been removed, prior to the start of any framing work, the structure shall be inspected and shall be found to meet the following:
    i) Foundation construction shall meet the National Flood Insurance Program (NFIP) minimum requirement for crawlspace construction in the Special Flood Hazard Area (SFHA) (see technical bulletin 11-01).
    ii) The interior of the foundation area shall be filled so that it is level with or higher that the Lowest Adjacent Grade (LAG).
    iii) All building materials at or below the base flood elevation must be flood resistant see technical bulletin 2-93. This requirement includes;
        a. Floor joist, insulation, HVAC systems.
        b. Ductwork can be elevated above the BFE or designed so that floodwaters cannot enter the system components during flood conditions,
        c. Ductwork systems designed so that floodwater cannot enter the system must also be designed and encored to resist displacement.
f. The exterior grade shall slope away from the building foundation at 2% or more for a minimum of five feet.
g. The interior under floor area shall slope to a positive drainage system terminating at an exterior drainage system. (Typical under floor drainage system 4" pipe run under footing day-lighting 5+ feet from building with a pest screen on the end. Also note the building code requires 6-mill black plastic sheeting.)
h. If the building inspector finds the structure in compliance with the adopted regulations he shall sign and date the inspection sheet and allow the work to proceed or if he finds corrections are needed he shall the permit holder or his agent of the actions/work needed to bring the project in to compliance.

i. The inspector may require a elevation or/and a flood proofing certificate at the permit holders expense for the building under construction at this time if in his opinion it would benefit the project of help clarify an issue of concern.

j. Note that this is not the finial elevation or flood proofing certificate that will be required; a completed elevation or/and flood proofing certificate is required at the finish of the project.

k. Elevation and flood proofing certificates shall be signed, sealed, and dated by a Washington State Licensed Professional Land Surveyor.

3. It shall be the permit holders responsibility to insure the his structure/building/project is in compliance with the National Flood Insurance Program, Washington State adopted laws, City of Sultan adopted standards, regulations, and codes.

~~1.~~ ~~3.~~4. When flood proofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The project shall follow the flood proofing requirements for structures located in special flood hazard areas in accordance with the National Flood Insurance Program (Technical Bulletin 3-93). Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The building and zoning official shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey, or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

17.08.080 Duties and responsibilities of the ~~building and zoning~~ responsible official.

The duties of the ~~building and zoning~~ responsible official shall include, but not be limited to:

A. Permit Review.

1. Review all permits to assure that the permit requirements of these standards have been satisfied.

a. Construction plan review,
b. Site plan review,
c. Construction document review; including building applications, flood plain development applications, engineering calculations, review elevation certificated flood proofing certificates, all Letters of Map Amendments,and make comments regarding the amendments and revisions on behalf of the City of Sultan back to FEMA.
d. Review the Flood Insurance Study for the City of Sultan,
e. Review the Flood Insurance Rate Map's for the City of Sultan.

2. Advise the permittee that additional Federal(Army Corps of Engineers 404, 401),, State of Washington or Snohomish County permits may be required, and if these specific permit requirements are known, require

the copies of such permits be provided and maintained on file with the permit.

3. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
    a. Notify adjacent communities and the Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
4. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures.
5. Verity and record the actual elevation (in relation to mean sea level) to which the new or substantially improve structures have been flood proofed.
6. When flood proofing is utilized for a particular structure, the building and zoning official shall obtain certification from a professional engineer or architect registered in the State of Washington.
7. Where interpretation in needed to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be conflict between a mapped boundary and actual field conditions), the building and zoning official shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this section.
8. When base flood elevation data is not available either through the flood insurance study, FIRM, the responsible official shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source in order to administer Sections 110 through 130 of this chapter. Where elevation data is not available either through the flood insurance study, FIRM, or from another authoritative source ~~or from another authoritative source~~, applications for building permits shall be reviewed to assure that proposed construction will be reasonable safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, ect., where available. Failure to elevate to at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.
9. All records pertaining to the provisions of these performance standards shall be maintained in the office of the building and zoning official and shall be open for public inspection.

17.08.90 Variance procedures.

Variances to provisions of this Chapter shall be processed by the City of Sultan Hearing Examiner according to provisions of Sections 2.26.090 through 2.26.140.

A. Appeal of a Hearing Examiner Decision shall be to Superior Court or other appropriate body. The Planning Board and City Council are not involved in quasi-judicial processing of any portion of this Chapter.
B. Applications for variances shall be submitted on forms provided by the City and fees called for in the Sultan Annual Fee Schedule shall be submitted at the time of application.
C. It shall be the burden of proof of the applicant to provide evidence that all conditions required in Section 17.08.100 are met.
D. Staff shall assemble a staff report for review by the Hearing Examiner
E. Public notice shall be provided as called for in Chapter 16.124.
F. The Hearing Examiner shall conduct a hearing and render a decision as provided in Sections 2.26.090 through 2.26.130 of this Code.
G. Appeals of the Hearing Examiner decision shall be made to Superior Court as provided in Section 2.26.140.

~~A. Variances may be issued for new construction and substantial improvements to be erected on a lot one-half acre or less in size if it is contiguous to and surrounded by lots with existing structures constructed below the base flood level; provided, that all items contained in subsections (C)(1)through(9) of this section have been fully considered.~~
~~B. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places without regard to procedures set fourth in the remainder of this section, and provided the proposed reconstruction, rehabilitation, or restoration will not result in the structure losing its historical designation.~~
~~C. In passing upon such applications, all technical evaluations, all relevant factors, and all standards specified in other sections of these performance standards shall be considered, as well as:~~
~~1. The danger that materials may be swept into other lands to the injury of others;~~
~~2. The danger to life and property due to flooding or erosion damage;~~
~~3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;~~
~~4. The importance of the services provided by the proposed facility to the community;~~
~~5. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;~~
~~6. The relationship of the proposed use to the comprehensive plan to that area;~~
~~7. The safety of the access to the property in times of flood for ordinary and emergency vehicles;~~
~~8. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and~~
~~9. The cost of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, electrical, water system, and bridges.~~

~~D. Upon consideration of, but not limited to, the factors listed above, conditions may be attached to the granting of variances as is necessary to further the purposes of these standards.~~

~~E. Variances shall not be issued within any designated floodway, if any increase in flood levels during the base flood discharge would result. (Ord. ___ - __)~~

17.08.100 Conditions for variances.

Application

A. Variances shall only be issued upon a written findings indicating ~~determination~~ that all of the following standards, criteria, and conditions are met.

1. General Variance Criteria:

a. ~~the~~ The requested variance is the minimum necessary~~, considering the flood hazard,~~ to afford relief.

~~2.~~b. In the case of an historic building, a determination must be made that the variance is the minimum necessary so as not to destroy the historic character, design, and designation of the building.

~~B. Variances shall only be issued upon:~~

~~a.~~ c. A showing of good and sufficient cause;

1. d. ~~A determination that~~ failure to grant the variance would result in exceptional hardship; and

~~A determination that the~~

~~F.~~ e. granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create a nuisance, cause fraud on or victimization of the public, or conflict with existing laws.

2. Variance Criteria for New Construction

Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood level. As the lot size increases the technical justification required for issuing the variance increases.

3.Variance Criteria for Historic Structures

Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places without regard to procedures set fourth in the remainder of this section, and provided the proposed reconstruction, rehabilitation, or restoration will not result in the structure losing its historical designation.

B. Conditions to be considered in application of Variance Criteria:

1. The danger that materials may be swept into other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;

3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
6. The relationship of the proposed use to the comprehensive plan to that area;
7. The safety of the access to the property in times of flood for ordinary and emergency vehicles;
8. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and
9. The cost of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, electrical, water system, and bridges.

C. Upon consideration of, but not limited to, the factors listed above, conditions may be attached to the granting of variances as is necessary to further the purposes of these standards.

D. Variances shall not be issued within any designated floodway, if any increase in flood levels during the base flood discharge would result.

1.

~~C.~~B. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

~~D.~~E. The office of the ~~building and zoning~~ responsible official shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

17.08.110 Provisions for flood hazard reduction.

A. General Standards. In all areas of special flood hazard the following provisions are required:
   1. New construction and substantial improvements shall be anchored to prevent flotation, colapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
   2. All manufactured homes shall meet the anchoring standards of subsection (B) (4) (b) (ii) of this section.
   3. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage. See Technical Bulletin 2-93 Flood-Resistant Materials requirements
   4. New construction and substantial improvements shall be erected by methods and practices that minimize flood damage.

5. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
6. New or replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
7. New or replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into them and discharges from them into flood waters.
8. On-site waste disposal systems (septic tanks) shall be located and constructed to avoid impairment to them or contamination from them during flooding.
9. Any alteration, repair, reconstruction or improvements to a structure that is in compliance with the provisions of these section, shall meet the requirements of "new construction" as contained in this section.

B. Specific Standards. In all areas of special flood hazard where base flood elevation data have been provided, the following provisions are required:
    1. Residential Construction. New construction and substantial improvements of any residential structure shall have the lowest floor, including basement, elevated no lower than 1.6 feet above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided per subsection (B) (3) of this section.
    2. Nonresidential Construction. New construction and substantial improvements of any commercial, industrial, or nonresidential structure shall either have the lowest floor including basement, elevated 1.6 feet or more above the base flood elevation, together with attendant utility and sanitary facilities, or shall:
        a. Be flood proofed to a point 1.6 feet or more above the base flood elevation so that the structure is watertight with walls substantially impermeable to the passage of water.
        b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
        c. Be certified by a professional engineer or architect registered in the State of Washington, that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provide to the official as set forth in SMC 17.08.070;
        d. Nonresidential structures that are elevated, not flood proofed, must meet the same standard for space below the lowest floor as described in subsection (B) (3) of this section.
        e. Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g., a

building flood proofed to the base flood level will be rated as one foot below).

3. Elevated Buildings. New construction and substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls and shall be designed and built so that the interior finished grade will be at or above the exterior finished grade on at least the entire length of one foundation wall. See technical bulletin 11-01. ~~.~~
    a. Designs for complying with this requirement must either be certified by a professional engineer or architect registered in the State of Washington or meet the following minimum criteria:
        i. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding; Note this includes attached garages.
        ii. The bottom of all openings shall be no higher than one foot above the finished/landscaped exterior grade; and
        iii. Opening may be equipped with screens, louvers, valves or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions.

    b. Electrical, plumbing, and other utility connections are prohibited below the base flood elevation;
    c. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and
    d. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
4. Manufactured Homes.
    a. All manufactured homes to be place or substantially improved within A1-A30, AH, and AE on the community's FIRM on sites:
        i. Outside of a manufactured home park or subdivision;
        ii. In an new manufactured home park or subdivision;
        iii. In an expansion to an existing manufactured home park or subdivision;
        iv. In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood; shall be elevated on a permanent foundation such that the lowest floor of the manufacture home is elevated 1.6 feet above the base flood elevation and be securely anchored to an adequately ~~designed foundation~~ anchor

foundation system to resist flotation, collapse and lateral movement;

b. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-A30, AH, and AE on the community's FIRM that are not subject to the above provisions be elevated so that either:
   i. The lowest floor of the manufactured home is elevated 1.6 feet above the base flood elevation, or
   ii. The manufactured home chassis in supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored ~~designed~~ foundation system to resist floatation , collapse, and lateral movement.

5. ~~floodways~~Floodways. Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters that carry debris and potential projectiles and has erosion potential, the following provisions shall apply:
   a. Encroachments, including fill, new construction, substantial improvements, and other development, shall be prohibited, unless certification (with supporting technical data) by a professional engineer registered in the State of Washington is provided, demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that such encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.
   b. Construction or reconstruction of residential structures is prohibited within designated floodways, except for:
      i. Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and
      ii. Repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the ~~market~~ assessed value of the structure either (A) before the repair or reconstruction is started, or (B) if the structure has been damaged, and is being restored, before the damage occurred. Any project to improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the 50 percent.

c. If no floodway is designated, then a setback of 30 feet from the banks of the watercourse, river, stream or pond that is reserved to discharge the base flood wherein encroachments shall be prohibited. Once a base flood elevation has been established, it must be demonstrated that the commutative effect of the proposed development, including substantial improvements and fill, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

~~e.~~d. If Section 17.08.110 B.5.a. is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 17.08.110.

17.08.120 Standards for subdivision proposals.

A. All subdivision proposals shall be consistent with the need to minimize flood damage;

B. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize damage.

C. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and

D. Base flood elevation data shall be provided for subdivision proposals and other proposed development that is no less than three acres in size.

17.08.130 Recreational vehicles.

Recreational vehicles placed on sites within Zones A1-A30, AH, and AE on the community's FIRM either:

A. Be on the site for fewer than 180 consecutive days; no recreational vehicles may be left in a flood zone during a flood warning or watch. Recreational vehicles may be towed to an impound yard and stored at the owners expense.

B. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

C. No recreational vehicle may be used as a permanent residence.

17.08.140 Critical Facility.

Construction of new critical facilities shall be, to the extent possible located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or more above the base flood elevation (100-year) at the site. Flood proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into

flood waters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

February 11, 2009

Bob Martin, Director
Community Development Department
319 Main Street, Suite 200
Sultan, WA 98294

Dear Mr. Martin:

On January 30, 2009 you responded to our July 9, 2008 letter summarizing findings from the Community Assistance Visit (CAV) we conducted on July 2, 2008. While we appreciate your response, we had requested it within 120 days of our July 9 letter, and must emphasize that FEMA policy requires that CAVs be closed as quickly as possible in order to retain eligibility in the National Flood Insurance Program (NFIP) and its Community Rating System (CRS).

Your response addressed issues we had raised with respect to Chapter 17.08 of the SMC, procedures to implement Chapter 17.08, and specific Field Inspection Report cases. Following is our summary after review of your letter:

Floodplain Regulations. We had raised seven issues regarding Chapter 17.08, six of which had to be changed in order to retain eligibility. Your response addressed these concerns, but included much additional language, some of which requires clarification. The concerns we originally had are shown in the enclosed copy of our July 9, 2008 letter. Of these concerns, your revised draft satisfactorily addressed the following:

17.08.080A.7, Use of Other Base Flood Data
17.08.110B.4.a., Manufactured Home Anchoring
17.08.110B.5.a., Floodway Encroachment Standard
17.08.050.23, Definition of Substantial Damage

You did not address the deficiency at 17.08.110B.5, dealing with floodway construction. This must be added to Chapter 17.08 in order for us to approve the Chapter. This provision guides construction if a proposal complies with the floodway encroachment standard. In the FEMA-State Model Ordinance, the provision reads as follows:

> "If (Section 17.08.110B.5.a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of (Section 17.08.110)."

The revisions also did not correct the deficiency at 17.08.070B.2 which at the new 17.08.070,2.k. allows an engineer to complete an Elevation Certificate. This must be stricken, since only a Professional Land Surveyor can complete these certificates in the State of Washington. Most of the new language added to Chapter 17.08 is good in that it clarifies many issues that have raised questions in the past, and is acceptable. However, there are a couple of minor clarifications that need to be made:

- At new Section 17.08.070B.4 and D.2, reference is made to "National Average Vertical Datum 1988 (NAVD 88)." The correct term is North American Vertical Datum.
- At new Section 17.08.070.4 regarding floodproofing of nonresidential structures, reference is made to FEMA Technical Bulletin 7-93; the correct reference is Technical Bulletin 3-93.
- At new Section 17.08.100A.2, reference is made to improvements on a lot one-half acre or less, etc. Though not mandatory, we suggest changing this to the following language in the current Model Ordinance in order that this requirement be more realistic:

  "Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood level. As the lot size increases the technical justification required for issuing the variance increases."

Procedures. Your letter stated that the framework for establishing procedures is more fully established in the draft revisions to Chapter 17.08. We agree with this assessment in that there is now a great deal of detail in the Chapter itself, much of which is often found in an administrative procedures document. The City's procedures will certainly reference much of what will be codified in Chapter 17.08. When a draft of the procedures is completed, it should be sent to this office for review before it is finalized. Enclosed, for your information, are procedures from a couple of other communities that have been accepted in the past.

Field Inspection Report Cases. No information was provided on the five remaining cases. You indicated that you have information on all but two of these cases that you are still pursuing. We need to emphasize that we cannot close this CAV until Elevation Certificates have either been obtained or re-done, even if that means that the City may need to do them.

The steps the City is taking to close this CAV are very positive. However, already seven months have passed without resolution. FEMA expects CAVs to be closed within 90 to 120 days, and we cannot let this CAV go unresolved much longer, especially in view of Sultan's CRS rating. Thus, we will extend the deadline to March 30, 2009 for complete resolution of findings from our July 9 letter and this letter. If you have any questions, please feel free to call me at (425) 649-7139.

Sincerely,

Charles L. Steele
Floodplain Management Specialist

cc: Mark Carey, FEMA
Dan Sokol, Ecology
Linda Ryan, ISO/CRS
Deborah Knight
Cyd Donk