

CHAPTER 13.75: ~~NATURAL HAZARD AREAS~~ GEOLOGIC HAZARDS (Formerly “Natural Hazards Area”)

SECTION:

13.75.010: Purpose Of Provisions

13.75.020: Critical Facilities

13.75.030: Applicability

13.75.040: Disputes; Boundaries Or Mapped Hazards

13.75.050: Studies And Reports Required

13.75.060: ~~Natural~~Geologic Hazards Report

13.75.070: Review Of Reports; Approval Procedure

13.75.080: Active Fault Considerations

13.75.090: Disclosure When A ~~Natural~~Geologic Hazards Report Is Required

13.75.100: Disclosure When No ~~Natural~~Geologic Hazards Report Is Required

13.75.110: Warning And Disclaimer

13.75.120: Change Of Use

13.75.130: Conflicting Regulations

Notes

- ~~1. The ordinance codified herein includes liquefaction and surface fault rupture hazards. Chapter 13.74 of this title contains floodplain hazard regulations.~~

13.75.010: PURPOSE OF PROVISIONS:

A. The purpose of this chapter is to promote the health, safety and general welfare of the citizens of Holladay the city and minimize the potential adverse effects of ~~natural~~geologic hazards to public health, safety and property by encouraging wise land use of ~~natural~~geologic hazard areas. (Ord. 2012-15, 9-20-2012)

B. This chapter and its appendices address surface fault rupture, slope stability, liquefaction, and rockfall hazards, and present minimum standards and methods for evaluating geologic hazards.

C. Results of geologic hazard studies shall comply with this chapter and its appendices. The standards set forth in the appendices are minimum requirements and shall not supersede other more stringent requirements that may be required by other regulatory agents

D. Appendix A of this chapter presents geologic hazards study area maps reflecting geological concerns pertaining to development within Holladay City. Site specific geologic hazard assessments performed by qualified engineering geologists shall be required prior to developing projects located within a geologic hazards study area. In the event known or readily apparent geologic hazards exist in an area subject to a development application, which area is not depicted on the geologic hazards study area maps, the developer shall submit the applicable study and follow the process as outlined in this chapter.

13.75.020: CRITICAL FACILITIES:

For the purposes of this title, critical facilities are defined as:

A. Lifelines, such as major communication, utility and transportation facilities and their connection to emergency facilities; or

B. Essential facilities, such as:

1. Hospitals and other medical facilities having surgery and emergency treatment areas;
2. Fire and police stations;

- 43 3. Tanks or other structures containing, housing or supporting water or other fire suppression materials or
44 equipment required for the protection of essential or hazardous facilities, or special occupancy structures;
45 4. Emergency vehicle shelters and garages;
46 5. Structures and equipment in emergency preparedness centers;
47 6. Standby power generating equipment for essential facilities;
48 7. Structures and equipment in government communication centers and other facilities required for emergency
49 response; or
50 C. Hazardous facilities, such as structures housing, supporting or containing sufficient quantities of toxic or
51 explosive substances to be dangerous to the safety of the general public if released; or
52 D. Special occupancy structures, such as:
53 1. Covered structures whose primary occupancy is public assembly (capacity greater than 300 persons);
54 2. Buildings for schools through secondary or daycare centers (capacity greater than 250 students);
55 3. Buildings for colleges or adult education schools (capacity greater than 500 students);
56 4. Medical facilities with fifty (50) or more resident incapacitated patients, but not included above;
57 5. Jails and detention facilities;
58 6. All structures with occupancy greater than five thousand (5,000) persons;
59 7. Structures and equipment in power generating stations and other public utility facilities not included above,
60 and required for continued operation. (Ord. 2012-15, 9-20-2012)

61
62 13.75.030: APPLICABILITY:

63 These regulations are applicable to all lands within the [naturalgeologic](#) hazard special study areas in the city, as
64 shown on the [naturalgeologic](#) hazards maps ~~in this Appendix A. on file with the community development~~
65 ~~department~~. Such maps and all amendments thereto are made a part of this chapter as if fully described and detailed
66 herein. Each change in the [naturalgeologic](#) hazards maps shall be subject to the amendment procedures set forth in
67 chapter 13.07 of this title. (Ord. 2012-15, 9-20-2012)

68
69 13.75.040: ~~DISPUTES; BOUNDARIES OR MAPPED HAZARDS;~~ [GEOLOGIC HAZARDS STUDY AREA](#)
70 [MAPS:](#)

71 [A.](#) The boundary lines of the special study areas shown on the [naturalgeologic](#) hazards maps shall be determined by
72 use of the scale appearing on the map. Maps intend to represent generalized scientific information designed to
73 indicate areas where hazards may exist and where geologic hazards studies are required. Because the geologic
74 hazards study area maps are prepared at a nonsite specific scale, hazards may exist that are not shown on the
75 geologic hazards study area maps. A site that is not shown in a geologic hazards study area for a particular hazard
76 does not exempt the applicant from considering the hazard if evidence is found that it may exist. If it is subsequently
77 determined that the site features a geologic hazard not represented on the geologic hazards study area maps, the
78 review process will be pursuant to this chapter.

79
80 B. Geologic hazards study area maps may be updated and amended by the city as per Chapter 13.07 if found to be
81 inaccurate or in error, or as new methods or data are developed to better define areas of potential hazards.

82
83 C. Where geologic hazards study area maps are thought by an applicant to be inaccurate or in error and require
84 revision, the applicant shall submit to the city technical evidence by a qualified professional supporting the claim
85 and showing the proposed revision. The city will review the information and render a decision. The applicant may
86 appeal that decision to the city council

87
88 ****Following section has been relocated to 13.75.090**

Where there is a conflict between the boundary lines illustrated on the map and actual field conditions, or where detailed investigations show that the mapped hazards are not present within a particular area, the dispute shall be settled as follows:

—A. Report Required: The person disputing the natural hazard study area boundary or the mapped hazards present within a particular area shall submit technical and geologic evidence to support such claim to the planning commission in the form of a site specific natural hazards report.

—B. Review By Experts: The planning commission may request the city geologist, the Utah geological and mineral survey, the U.S. forest service, and/or other experts to review the evidence prior to making a decision concerning the dispute.

—C. Cost Of Review: The cost of the review shall be paid by the person disputing the map.

—D. Deviations Permitted: The planning commission may allow deviations from the mapped boundary line only if the evidence clearly and conclusively establishes that the natural hazard special study area boundary location is incorrect, or that the mapped hazards are not present within a particular area.

—E. Appeal: Any decision of the planning commission may be appealed to the city council pursuant to the procedures set forth in section 13.08.040 of this title. (Ord. 2012-15, 9-20-2012)

13.75.050: RESPONSIBILITY FOR GEOLOGIC HAZARD STUDIES:

Geologic hazard studies often involve both engineering geology and geotechnical engineering. Engineering geologic studies shall be performed under the direct supervision of a qualified professional engineering geologist. Geotechnical engineering studies shall be performed under the direct supervision of a qualified professional geotechnical engineer.

13.75.060: PRELIMINARY SITEWORK / ACTIVITIES:

This section shall apply to any geologic hazard investigation for the purpose of determining the feasibility of development or for the purpose of exploring, evaluating or establishing locations for permanent improvements.

A. Scoping Meeting: The developer or consultant shall schedule a scoping meeting with the city's technical review committee (TRC) to evaluate the engineering geologist/geotechnical engineer's investigative approach. At this meeting, the consultant shall present a work plan that includes locations of anticipated geologic hazards and locations of proposed exploratory activities necessary to minimum standard of practice. The investigation approach should allow for flexibility due to unexpected site conditions. Field findings may require modifications to the work plan. Upon completion of a successful scoping meeting, a grading permit application may be submitted to The City.

B. Grading Permit: As required by title 13 of this code and except as otherwise noted therein, no person shall commence or perform any grubbing, grading, earthwork, or any other land disturbance activity, without first obtaining a permit. Application shall be filed with the community and economic development department on forms provided and maintained by the city for such purpose.

13.75.070: GEOLOGIC HAZARD STUDIES AND REPORTS REQUIRED:

Any applicant requesting development on a parcel of land within a natural geologic hazards study area, as shown on the natural Appendix A: Geologic Hazards Maps, and as indicated in Chart 13.75.071 of this section, shall submit to the community and economic development department two six (26) copies and one digital copy of site specific natural geologic hazard studies and reports, where required for such development according to the following:

[NATURAL HAZARDS MAPS](#)

[Chart 13.75.071 USES REQUIRING SPECIAL STUDY AREA REPORT REQUIREMENTS](#)

[Is a site specified natural hazards report required prior to approval?](#)

[Chart 13.75.071](#)

Land Use (Type Of Facility)	Liquefaction Potential		Surface Fault Rupture Special Study Area
	High And Moderate	Low And Very Low	
Critical facilities (essential and hazardous facilities, and special occupancy structures, as defined in section 13.75.020 of this chapter)	Yes	Yes	Yes
Industrial and commercial buildings (greater than 2 stories or 5,000 square feet)	Yes	No	Yes
Multi-family residential structures (4 or more units per acre), and all other industrial and commercial	Yes	No	Yes
Residential subdivisions	Yes	No	Yes
Residential single lots and multi-family dwellings (less than 4 units per acre)	No*	No	Yes
*Although no special study is required, disclosure is required as described in section 13.75.100 of this chapter.			

(Ord. 2012-15, 9-20-2012)

13.75.0860: [NATURAL GEOLOGIC](#) HAZARDS REPORT:

A. Preparation: The [natural geologic](#) hazards report shall be prepared by an engineering geologist. In the case of a snow avalanche hazard, the report shall be prepared by an experienced avalanche expert. The report shall be signed by the preparer and shall also include the qualifications of the preparer.

B. Content: The report shall be site specific and identify all known or suspected potential [natural geologic](#) hazards, originating on site or off site, affecting the particular property. [The report shall reflect current professional practice similar or to exceed the guidelines suggested in Utah Geologic Survey Circular 122 \(2016\) or its replacement document. Considering the complexity of evaluating surface and near-surface faults, additional effort beyond the minimum reporting standards may be required to adequately address the fault hazard. Minimum reporting standards required or inferred, does not relieve the engineering geologist from his/her duty to perform additional geologic or engineering services he/she believes are necessary to assess the fault rupture potential at a site.](#)

C. Site Map: The report shall include a detailed site map (scale: 1 inch equals 200 feet or larger), showing the location of the hazards with delineation of the recommended setback distances from hazards and the recommended location for structures.

D. Effects Addressed: The report shall address the potential effects of the hazards on the proposed development and occupants thereof in terms of risk and potential damage.

E. Recommendations: The report shall contain recommendations for avoidance or mitigation of the effects of the hazards, consistent with the purposes set forth in section 13.75.010 of this chapter. The evidence on which recommendations and conclusions are based shall be clearly stated in the report. Trench logs (scale: 1 inch equals 5

feet, or larger), aerial photographs, references with citations, and other supporting information as applicable, shall also be included in the report. (Ord. 2012-15, 9-20-2012)

13.75.070: REVIEW OF REPORTS; APPROVAL PROCEDURE:

A. Review: In order to fulfill the purposes of this chapter, the planning commission (for conditional uses and subdivisions), and the community development department (for permitted uses) shall review any proposed development which requires preparation of a [naturalgeologic](#) hazards report under this chapter to determine the possible risks to the safety of persons or property from [naturalgeologic](#) hazards.

B. Expert Review; Costs: Prior to consideration by the planning commission or the community development department of any such development, the community development department shall submit the report to the city engineer, the Utah geological and mineral survey, the U.S. forest service, and/or other experts for review and recommendation. Any cost the city must pay for the review shall be paid by the applicant prior to planning commission or community development department action. The community development department shall file a copy of the [naturalgeologic](#) hazards report in the city [naturalgeologic](#) hazards library and another copy with the Utah geological and mineral survey.

C. Standards: The city geologist and other retained experts in their review of the report, and the planning commission or community development director in their consideration of the development, shall determine whether the development complies with the following standards:

1. The development does not present an unreasonable risk to the safety of persons or property (including public streets), or to the aesthetics and [naturalgeologic](#) functions of the landscape (e.g., drainage, wildlife habitat, etc.) because of the presences of [naturalgeologic](#) hazards.

2. At the planning commission's discretion, with advice from the city's consulting geologist, such area may be approved for development if the applicant submits substantial evidence that, using best available practices, the identified hazards can be mitigated to a level where the risk to human life and damage to property, as well as the risk to the aesthetics and [naturalgeologic](#) functions of the site, are reduced to a reasonable and acceptable level in a manner which has a minimum effect on the [naturalgeologic](#) environment.

D. Necessary Requirements May Be Set: The planning commission or community development director may set requirements necessary to reduce the risks from [naturalgeologic](#) hazards as a condition to the approval of any development which requires preparation of a [naturalgeologic](#) hazards report. (Ord. 2012-15, 9-20-2012)

13.75.110 DISPUTES, APPEAL PROCEDURE

An applicant may appeal any decision made under the provisions of this chapter only after the city has issued a written review of a report, and shall set forth the specific grounds or issues upon which the appeal is based. The appeal shall be submitted in writing to the director of community development within thirty (30) days of the issuance of the written review or other decision. The city shall assemble a professional panel of three (3) qualified experts to serve as the appeal authority for any technical dispute. The panel shall consist of an expert designated by the city, an expert designated by the applicant, and an expert chosen by the city's and the applicant's designated experts. If the city's and the applicant's designated experts cannot reach a consensus of the third expert within thirty (30) days, the city shall select the third expert. Decisions of the panel will be binding and will be based on the majority decision of the panel. The costs of the appeal process shall be paid by the applicant.

13.75.080: ACTIVE FAULT CONSIDERATIONS:

No critical facility (excluding transportation lines or utilities which by their nature may cross active faults) or structures designed for human occupancy shall be built astride an active fault. If a fault is discovered in the excavation for such a structure, a special study, as described in section 13.75.060 of this chapter, shall be performed to determine if the fault is active, and if the fault is determined to be active, the procedures set forth in section 13.75.070 of this chapter shall be followed. No structure designed for human occupancy shall be built on a fault scarp. Footing setbacks from a fault scarp shall meet the requirements of chapter 29 of the uniform building code.

The community development director may increase footing setback requirements where information from a geotechnical report indicates slope conditions warrant a greater setback distance. (Ord. 2012-15, 9-20-2012)

13.75.090: DISCLOSURE WHEN A [NATURAL GEOLOGIC](#) HAZARDS REPORT IS REQUIRED:

Whenever a [naturalgeologic](#) hazards report is required under this chapter the owner of such parcel shall record a restrictive covenant running with the land in a form satisfactory to the city prior to the approval of any development or subdivision of such parcel, which includes the following:

A. Notice that the parcel is located within a [naturalgeologic](#) hazards special study area as shown on the [naturalgeologic](#) hazards map;

B. Notice of the existence and availability of the [naturalgeologic](#) hazards report for public inspection in the city [naturalgeologic](#) hazards library; and

C. An agreement by the owner of the parcel and any successor in interest to comply with any conditions set by the planning commission or community development director to minimize potential adverse effects of the [naturalgeologic](#) hazards. (Ord. 2012-15, 9-20-2012)

13.75.100: DISCLOSURE WHEN NO [NATURAL GEOLOGIC](#) HAZARDS REPORT IS REQUIRED:

Whenever the applicant for any new development for human occupancy is not required under this chapter to prepare a [naturalgeologic](#) hazards report, although the parcel to be developed is located within a high or moderate liquefaction potential special study area, or surface fault rupture special study area, as shown on the [naturalgeologic](#) hazards maps, notice that the parcel is located within such areas shall be recorded by the landowner in a form satisfactory to the city prior to the approval of any such development. (Ord. 2012-15, 9-20-2012)

13.75.110: WARNING AND DISCLAIMER:

The [naturalgeologic](#) hazards ordinance codified in this chapter and [naturalgeologic](#) hazards maps represent only those hazardous areas known to the city, and should not be construed to include all possible potential hazard areas. The [naturalgeologic](#) hazards ordinance and the [naturalgeologic](#) hazards maps may be amended as new information becomes available pursuant to procedures set forth in chapter 13.07 of this title. The provisions of this chapter do not in any way assure or imply that areas outside its boundaries will be free from the possible adverse effects of [naturalgeologic](#) hazards. This chapter shall not create liability on the part of the city, any officer or employee thereof for any damages from [naturalgeologic](#) hazards that result from reliance on this chapter or any administrative requirement or decision lawfully made thereunder. (Ord. 2012-15, 9-20-2012)

13.75.120: CHANGE OF USE:

No change in use which results in the conversion of a building or structure from one not used for human occupancy to one that is so used shall be permitted unless the building or structure complies with the provisions of this chapter. (Ord. 2012-15, 9-20-2012)

13.75.130: CONFLICTING REGULATIONS:

In cases of conflict between the provisions of existing zoning classifications, building code, subdivision regulations, or any other ordinance of the city and the [naturalgeologic](#) hazards ordinance codified in this chapter, the most restrictive provision shall apply. (Ord. 2012-15, 9-20-2012)

[13.75.140: APPENDICES:](#)

[APPENDIX A: GEOLOGIC HAZARDS STUDY AREA MAPS](#)

