

COUNTY ORDINANCE NO CO-06-22

AN ORDINANCE OF MORGAN COUNTY ENACTING REGULATIONS AND STANDARDS OF REVIEW FOR THE ISSUANCE OF BUILDING PERMITS FOR CERTAIN SUBDIVISIONS WITHIN MORGAN COUNTY, AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, recent geological instability in Morgan County, the County Council has determined that further geological studies are necessary in the area to determine the extent of said geological instability;

WHEREAS, the County Council has determined that in order to protect the public from loss of property; regulations and standards of review are necessary to determine if building is appropriate;

WHEREAS, This Ordinance shall be established for the Highlands West Subdivision, Woodland Heights Subdivision, and Highlands Subdivision, Additions 1-6, where known geological hazards exist;

WHEREAS, the County used TZO-06-06 as a moratorium on building in the Mountain Green area for the purpose of determining the appropriate course of action;

THE GOVERNING BODY OF MORGAN COUNTY, STATE OF UTAH, DOES HEREBY MAKE FINDINGS OF COMPELLING, COUNTERVAILING PUBLIC INTEREST AND ORDAINS AS FOLLOWS THAT TEMPORARY ZONING ORDINANCE TZO-06-06 IS REPEALED AND THAT THE FOLLOWING REGULATIONS AND STANDARDS OF REVIEW BE ESTABLISHED FOR THE ISSUANCE OF BUILDING PERMITS:

Section 1.

1. All property owners wishing to obtain a building permit for a single family dwelling upon approved lots in the affected subdivisions shall submit a site specific geologic hazard report.
2. Geotechnical/Geologic Report Standards.
 - A. An engineering geology report or a geotechnical engineering report that includes a geologic hazards investigation and assessment shall be prepared by a qualified engineering geologist with supporting documentation from a professional engineer. The report shall be site-specific and shall identify all known or suspected potential geologic hazards, originating on-site or off-site, whether previously mapped or unmapped, that may affect the particular property. All reports shall be signed and stamped by the preparer in the form of an active Professional Geologist and Professional Engineer registered in the State of Utah and shall include the qualifications of the preparers.
 - B. The final grading plan for the lot must be signed and sealed by the Professional Engineer or Professional Geologist that prepared the Geotechnical/Geologic Report to verify that their recommendations have been incorporated and that the building location is approved. An appropriately signed and sealed addendum from the Professional Engineer or Professional Geologist that prepared the Geotechnical/Geologic Report may be filed with the final grading plan in lieu of the Professional

Engineer or Professional Geologist that prepared the Geotechnical/Geologic Report signing and sealing the grading plan.

C. Landslide Hazard Reports shall be prepared in accordance with the Utah Geological Survey's "Guidelines for Evaluating Landslide Hazards in Utah" (Hylland, 1996). Landslide Hazard Reports shall be prepared, signed, and stamped by a qualified engineering geologist, and include the qualifications of the preparer. Slope stability or other analyses included in these reports shall include both static and dynamic conditions, and shall be prepared by a qualified professional geotechnical engineer and shall include the professional engineer's original stamp and signature. Slope stability analyses shall be modeled such that the factor of safety of existing, active landslides shall be less than 1.0. This model shall then be used as a baseline for evaluating developed conditions. Back-calculated adjustments shall be made to piezometric surfaces, strength parameters, etc. to assure that the pre-developed condition in existing landslides is in accordance with landslide conditions in which the resisting forces are less than the driving forces. Those adjustments shall then be translated to the slope stability model for the developed conditions. Effective, residual soil strength parameters taken from actual laboratory testing of site soils must be used in the slope stability analysis in clay soil profiles.

1. Claims that a landslide is inactive must be substantiated by actual data derived from a study of the specific landslide in question.
2. The property owner shall be required to stabilize landslide areas and other areas with unacceptable factors of safety if the owner intends to build on those areas.

D. Other geologic hazard or engineering geology reports shall be prepared in accordance with Utah Geological Survey Miscellaneous Publication M, "Guidelines for Preparing Engineering Geologic Reports in Utah." All reports shall be signed by the preparer and include the qualifications of the preparer. These reports must be prepared, signed, and stamped by a qualified engineering geologist. However, reports co-prepared by a professional engineer must include the professional engineer's original stamp and signature.

E. All reports shall include, at a minimum:

1. A 1:24,000-scale geologic map (with reference) showing the surface geology, bedrock geology (where exposed), bedding attitudes, faults or other structural features, and the locations of any geologic hazards;
2. An evaluation of recent aerial photographs for the potential presence of landslides and/or faults;
3. A review of published maps of the Utah Geologic Survey including the maps prepared by Coogan and King for the Ogden/Snowbasin area that include portions of Morgan County;
4. An accurate, detailed site map of the subject area showing any site-specific mapping performed as part of the geologic investigation, and including boundaries and features related to any geologic hazards, topography, and drainage. The site map must show the location and boundaries of the hazard(s), delineation of any recommended setback distances from hazard(s), and recommended location(s) for structures. Buildable and non-buildable areas shall be clearly identified. Scale shall be one inch equals one hundred feet or larger;
5. A site geology map and geologic cross sections to illustrate local geologic structure and earth material characteristics;
6. Trench logs, boring logs, and test pit logs (scale: 1 inch equals 5 feet, or larger), boring logs

(scale: 1 inch equals 5 feet, or larger), technical references with citations, and other supporting information, as applicable. All trenches, borings, and test pits shall be logged to a minimum of 10' below the final proposed grade or to bedrock refusal, whichever is lesser;

7. Conclusions that summarize the characteristics of the geologic hazards, and that address the potential effects of the geologic conditions and geologic hazards on the proposed development and occupants thereof in terms of risk and potential damage;

8. Specific recommendations for avoidance or mitigation of the effects of the hazard(s), consistent with the purposes set forth in Chapter 16-28-010 shall be included in the report. These recommendations shall include design or performance criteria for engineered mitigation measures and all supporting calculations, analyses, modeling or other methods, and assumptions. Final design plans and specifications for engineered mitigation must be signed and stamped by a qualified professional licensed geotechnical or structural engineer, as appropriate;

9. Evidence on which conclusions and recommendations are based shall be clearly stated in the report;

10. Historical groundwater highs and lows must be indicated in the report. Any vegetation or surface features that indicate perennially wet conditions or surface creep shall be identified on the site map and discussed in the report;

11. The report must include the responsible professional's specific opinion regarding the suitability of the site for the proposed development.

3. Peer Review of Report and Building Permit Approval Process.

- A. In order to fulfill the purposes of this ordinance, the Morgan County Engineer, Morgan County Planner, and/or Morgan County Building Official, shall review any structure designed for human occupancy to determine the potential risks to the safety of persons or property from geologic hazards.
- B. Prior to consideration of any building permit, the geologic hazard report shall be submitted to Morgan County for review and recommendation.
- C. Morgan County shall impanel a Geologic Peer Review Board to review the report (third-party peer review) to critically review the report and, if necessary, provide recommendations for additional investigation and clarification. Said Peer Review Board shall be made up of three (3) professional Engineering Geologists, Geotechnical Engineers, or otherwise qualified professionals. The cost of peer review shall be the responsibility of the property owner. Morgan County shall retain a copy in the Community Development Department project file.
- D. In reviewing the report the Geologic Peer Review Board shall determine if the proposed structure presents an unreasonable risk to the safety of persons or property (including buildings, storm drains, public streets, utilities or critical facilities, whether off-site or on-site), or to the natural functions of the landscape (e.g. slopes, streams or other waterways, drainage, wildlife habitat, etc., whether off-site or on-site) because of the presence of geologic hazards or because of modifications to the site due to the proposed structure;
- E. The proposed structure may only be approved if the reports submitted by the applicant demonstrate that, consistent with the state of the practice, the identified hazards can be mitigated to a level where the risk to human life and damage to property are reduced to a reasonable level in a manner which will not violate applicable federal, state, or local statutes, ordinances or regulations. Mitigation measures should consider, in their design, the intended aesthetic functions of other governing ordinances.

- F. Any lot determined to contain geologic hazards to life or property shall not be approved for development unless the applicant demonstrates that the identified hazards or limitations can be reduced in a reasonable manner. The applicant must include, with the geologic hazards report, a mitigation plan that defines how the identified hazards will be addressed, and without impacting or affecting off-site areas.
 - G. The Review Board may set other requirements as are necessary to overcome any geologic hazards and to ensure that the purposes of this ordinance are met. These requirements may include, but are not limited to:
 - 1. Additional or more detailed studies to understand or quantify the hazard or determine whether mitigation measures recommended in the report are adequate;
 - 2. Specific mitigation requirements; establishing buildable and/or non-buildable areas; limitations on slope grading; and/or revegetation;
 - 3. Installation of monitoring equipment and seasonal monitoring of surface and subsurface geologic conditions, including groundwater levels;
 - 4. Other requirements such as time schedules for completion of the mitigation, phasing of development, etc.
 - H. The Review Board may also set requirements necessary to reduce the risks from geologic hazards as a condition to the approval of any building permit.
- 4. Applicants receiving any permit or approval shall be required to sign and record with the property a hold harmless agreement, in a form approved by the County Attorney. Said hold harmless agreement shall be recorded on the deed and shall remain in effect on future owners of the property.
 - 5. The owner of the lot shall record a notice running with the land in a form satisfactory to Morgan County prior to the approval of any building permit on such lot. Disclosure will include signing a Disclosure and Acknowledgment Form provided by the County, which will include the following:
 - A. Notice that the parcel is located within a geologic hazard area;
 - B. Notice that a geologic hazards report was prepared and is available for public inspection in Morgan County's files.
 - 6. Prior to acceptance of the building permit application and geologic hazard report, the owner shall deposit with the Morgan County Treasurer a minimum sum of \$5,000, to be placed in a trust account and used for the sole purpose by Morgan County to fund the expenses associated with the Peer Review Board, including but not limited to consultant fees, travel and lodging fees, transcription fees, etc. Any portion of the deposit not used shall be refunded to the property owner. Any deficit in said fees and expenses shall be billed to the property owner. If the Peer Review Board finds deficiencies in the submitted Geologic Hazard Report, additional site investigation may be required and an additional review fee will be required.
 - 7. Once the Peer Review Board grants approval of the Building Permit the property owner shall demonstrate to the County that the engineering geologist of record has been retained for the purpose of ensuring construction in compliance with the approved Geologic Hazard Report. Evidence shall be in the form of an estimate by the engineering geologist of record regarding the number of inspections and the associated costs of said inspections. The owner shall provide proof of payment of a retainer to the engineering

geologist of record or equal to the estimated cost, or in lieu of a retainer shall provide a deposit to the County, to be held in trust, for the payment of said inspector.

- 8. It shall be the responsibility of the owner and/or contractor to provide copies of all inspection reports to the County Engineer and Building Inspector within two (2) business days of said inspection. Failure to do so shall result in an immediate stop work order being placed upon the construction.
- 9. Prior to issuance of a Certificate of Occupancy the owner shall provide to the Building Inspector a letter from the engineering geologist of record certifying that the structure has been built in accordance with the approved Geologic Hazard Report and plan, and that all the required inspections were made and approved by the engineering geologist of record.

Section 2.

If any provision of this Ordinance, or the application of such provision to any person or circumstance, shall be held invalid or unenforceable for any reason, the remainder of this Ordinance, or the application of such provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby.

EFFECTIVE DATE. In the opinion of the county legislative body this ordinance is necessary for the immediate preservation of the peace, health, or safety of the county and the county's inhabitants, and as such this ordinance shall take effect immediately upon publication in one issue of a newspaper published in and having general circulation in the county.

APPROVED, ADOPTED AND PASSED and ordered published by the Morgan County Council, this 17th day of October, 2006.

ATTEST:

MORGAN COUNTY GOVERNING BODY

Stacy Lafitte
Morgan County Clerk

M. Reed Wilde, County Council Chair

Council Members

Voting:

Aye

Nay

APPROVED AS TO FORM

Jann L. Farris
Morgan County Attorney

Bart Smith	_____	_____
Bruce Sanders	_____	_____
Dan Hancock	_____	_____
Chad Hawkes	_____	_____
Lynette Stephens	_____	_____
David Gardiner	_____	_____