ORDINANCE NO. 07-09

ROLL CALL

VOTING	YES	NO
MAYOR JOE L THOMAS *(votes only in case of tie)*	Absent	
G. WAYNE ANDERSEN *Councilmember*	X	
ROD DART *Councilmember*	X	
RICHARD M. DAVIS *Councilmember*	X	
STEVE LEIFSON *Councilmember*	X	
JENS P. NIELSON *Councilmember*	X	

I MOVE this ordinance be adopted: Councilman Leifson
I SECOND the foregoing motion: Councilman Dart

ORDINANCE 07-09

FLOOD DAMAGE PREVENTION ORDINANCE

WHEREAS, flooding has occurred in the past within Spanish Fork City and will certainly occur in the future; that flooding is likely to result in substantial injury or destruction of property; and

WHEREAS, Spanish Fork City participates in the National Flood Insurance Program, which requires participating communities to adopt floodplain management regulations that meet or exceed the minimum standards of 44 CFR; and

WHEREAS, in order to effectively comply with minimum standards for coverage under the National Flood Insurance Program; and in order to effectively remedy the situation described herein, it is necessary that this ordinance be adopted; and

WHEREAS, rivers and streams are among the most active landforms on earth and they tend to move laterally due to erosive forces. Areas of special hazard exist along reaches of open channels that convey floodwaters through Spanish Fork City. A FIRM defines only flood hazard areas for conditions that existed at the time the hydraulic model to define those hazards was developed. Bank erosion and lateral channel movement can create special hazards for nearby structures, as evidenced b the flood damage in Washington County, Utah in January 2005. In addition, the areas adjacent to open channels typically can convey significant floodwater during a flood event; and

WHEREAS, it is appropriate to implement requirements for special erosion hazard areas to protect existing and future structures; and

WHEREAS, The flood hazard areas of rivers and streams are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare; and

WHEREAS, These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood proofed or otherwise protected from flood damage; and

WHEREAS, It is the purpose of this ordinance 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:

1. Protect human life and health;
2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
6. 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 future flood blight areas; and
7. Insure that potential buyers are notified that property is in a flood area; and

WHEREAS, In order to accomplish its purposes, this ordinance uses the following methods:

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
4. Control filling, grading, dredging and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands;

NOW THEREFORE, be it enacted and ordained by the Spanish Fork City Council as follows:

I.

Spanish Fork Municipal Code §15.1.04.020 is amended by adding the following definitions:

Alluvial Fan Flooding means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

Apex means a point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

Area of Shallow Flooding - means a designated AO or AH zone on a community's Flood Insurance Rate Map (FIRM) with a one percent chance or greater annual chance of flooding to an average depth of one to three feet as well as a shaded X zone on a community's FIRM with a one percent chance or greater annual chance of flooding to an average depth of less than one foot where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of Special Erosion Hazard is land that is adjacent to or within 200 feet of the centerline of the Spanish Fork River or within 100 feet of any other open channel facility that conveys runoff water located within the corporate limits of City.

Area of Special Flood Hazard is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the Flood Insurance Rate Map (FIRM), Zone A usually is refined into Zones A, AE, AH, AO, or A1-99.

Base Flood means the flood having a one percent chance of being equaled or exceeded in any given year.

Basement means any area of the building having its floor sub-grade (below ground level) on all sides.

Critical Feature means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Development means any man-made change in improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Elevated Building means a non-basement building (i) built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water and (ii) adequately anchored so as not to impair the structural integrity of

the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters.

Existing Construction means for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRM effective before that date. "Existing construction" may also be referred to as "existing structures."

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters.
2. The unusual and rapid accumulation or runoff of surface waters from any source.

Flood Insurance Rate Map (FIRM) - means an official map of City, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood Insurance Study is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the Flood Boundary-Floodway Map.

Flood-prone Area means any land area susceptible to being inundated by water from any source (see definition of flood or flooding).

Floodplain Management means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain Management Regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Flood Protection System means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

Flood Proofing means any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway (Regulatory 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 a designated height.

Functionally Dependent Use means a use, which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Highest Adjacent Grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic Structure means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4. Individually listed on a local inventory or historic places in communities with historic preservation programs that have been certified either:

a. By an approved state program as determined by the Secretary of the Interior or;

b. Directly by the Secretary of the Interior in states without approved programs.

Levee means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee System means a flood protection system, which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Lowest Floor means the lowest floor of the lowest enclosed area of a building (including basement). An unfinished or flood resistant enclosure, usable solely for parking or 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 non-elevation design requirement of Section 60.3 of the National Flood insurance Program regulations.

Mean Sea Level means, for purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 (NAVD 88) or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

New Construction means, for the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after

December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

Recreational Vehicle, Trailer, or Motorhome means a vehicle, which is:

1. Built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projections;
3. Designed to be self-propelled or be permanently towable by a light duty truck; and
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Start of Construction includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a 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 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, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial Damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before "start of construction" of the improvement. This includes structures, which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

1. 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 City building official and which are the minimum necessary conditions or
2. Any alteration of a "historic structure" provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Water Surface Elevation means the height, in relation to the North American Vertical Datum of 1988 (NAVD 88) (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of riverine areas.

II.

Spanish Fork Municipal Code §15.4.20 is hereby created as follows:

PART 4 DEVELOPMENT

CHAPTER 20. Flood Damage Prevention

15.4.20.010. Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

15.4.20.020. General Provisions.

A. The ordinance shall apply to all areas with defined flood hazards within the jurisdiction of City.

B. The flood hazard areas for the purposes of this ordinance are those flood hazard areas in City that are identified by the current Federal Emergency Management Agency on Flood Insurance Rate Maps and Flood Boundary-Floodway Maps (FIRM and FBFMand any revisions thereto and any accompanying scientific and engineering Flood Insurance Study Report are hereby adopted by reference and declared to be a part of this ordinance.

C. Preliminary plat approval, site plan approval, or a building permit shall be required to ensure conformance with the provisions of this ordinance.

D. No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this ordinance and other applicable regulations.

E. This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

F. In the interpretation and application of this ordinance, all provisions shall be:

1. Considered as minimum requirements;
2. Liberally construed in favor of the governing body; and
3. Deemed neither to limit nor repeal any other powers granted under State statutes.

15.4.20.030. Administration.

A. The Spanish Fork City Engineer or his/her appointee is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

B. The duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

1. Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance.

2. Review permit application to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding from both surface and groundwater as well as from flood-related erosion.

3. Review, approve or deny all applications for development permits required by adoption of this ordinance.

4. Review permits for proposed development to assure that all necessary City permits have been obtained.

5. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.

6. Notify, in riverine situations, adjacent communities and the State Engineer's office prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

7. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

8. When base flood elevation data has not been provided in accordance with §030(B) the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of §050.

9. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on City's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, 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 City.

C. Application for a preliminary plat, site plan, or building permit within a special floodplain hazard area shall be presented to the Floodplain Administrator on forms

furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, and the construction of fences, and the location of the foregoing in relation to areas of special flood hazard and areas of special erosion hazard. Additionally, the following information is required:

1. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;

2. Elevation in relation to mean sea level to which any nonresidential structure shall be flood proofed;

3. A certificate from a licensed professional engineer or architect that the nonresidential flood proofed structure shall meet the flood proofing criteria of §050(B)(2);

4. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

5. A bank stability/erosion hazard analysis performed by a licensed professional engineer, including site photographs, that evaluates potential flood-related erosion hazards and identifies appropriate erosion hazard mitigation measures to protect any structural improvements proposed in the area of special erosion hazard.

6. A geotechnical report that includes: at least one measurement of the ambient groundwater surface elevation on the site of proposed development collected between May 1 and May 31 (unless otherwise approved by the Floodplain Administrator); an engineer's estimate of the maximum anticipated groundwater elevation anticipated on the site during periods of flooding on the Spanish Fork River, referencing nearby base flood elevations on the current FIRM and all other available sources; and an engineer's recommendation with regard to the lowest elevation(s) that the lowest floor(s) (including basement) of all new and substantially improved structures should be constructed to be protected from flooding from groundwater and groundwater that could be influenced by surface water during periods of flooding.

7. A grading permit shall be obtained from the Floodplain Administrator before any excavation or fill work that could modify the flood hazards defined on the community's FIRM is completed in the area of special erosion hazard area.

8. Maintain record of all such information in accordance with §040(B)(1).

D. Approval or denial of a preliminary plat, site plan, or any permit required by City shall be based on all of the provisions of this ordinance and the following relevant factors:

1. The danger to life and property due to flooding or erosion damage;

2. The susceptibility of the proposed facility and its contents to flood and/or erosion damage and the effect of such damage on the individual owner;

3, The danger that materials may be swept onto other lands to the injury of others;

4. The safety of access to the property in times of flood for ordinary and emergency vehicles;

5. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;

6. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;

7. The necessity to the facility of a waterfront location, where applicable;

8. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

9. The relationship of the proposed use to the comprehensive general plan for that area

15.4.20.040.Provisions For Flood Hazard Reduction.

A. General Standards.

1. In all areas of special flood hazards the following provisions are required for all new construction or substantial improvements:

a. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

b. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

c. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;

d. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

e. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

f. All new construction shall be required to connect to City's sanitary sewer system.

g. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

h. No solid walls, solid fences, or other structures that could disrupt flowing water in an area of special flood hazard shall be constructed in a position or direction contrary to the direction of flowing water.

2. In all areas of special erosion hazards the following provisions are required for all new construction or substantial improvements:

a. No new construction or substantial improvements shall be designed or constructed until a licensed professional engineer certifies that no erosion hazard exists on the reach of open channel adjacent to or upstream from the proposed site for a distance of at least 150 feet or until any potential erosion hazard is mitigated by measures designed by a registered professional engineer and accepted by the Floodplain Administrator.

b. All permanent structures shall be set back a minimum of 60 feet from the top of bank of the nearest open channel that conveys runoff water.

c. No excavation or fill that could modify the flood hazards defined on the FIRM shall be performed without applying for and receiving a grading permit from the Floodplain Administrator.

d. No solid walls, solid fences, or other structures that could disrupt flowing water in an area of special erosion hazard shall be constructed in a position or direction contrary to the direction of flowing water.

3. In all areas of special flood hazard, all areas of special erosion hazard, and areas with potentially high groundwater levels, the following provisions are required for all new construction or substantial improvements:

a. As part of the building or development permit process, a geotechnical report shall be completed that includes a licensed professional engineer's recommendation with regard to the lowest elevation(s) that the lowest floor(s) (including basement) of all new and substantially improved structures should be constructed to be protected from flooding from groundwater and groundwater that could be influenced by surface water during periods of flooding, in accordance with §040(C)(6).

B. Specific Standards

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) §030(B); (ii) §040(B)(8); or (iii) §050((C)(3), the following provisions are required:

1. Residential Construction - new construction or substantial improvement of any residential structure shall have the lowest floor (including basement), elevated a

minimum of two feet above the base flood elevation. A licensed professional engineer or land surveyor shall submit a certification to the Floodplain Administrator that the standard of this subsection as proposed in §040(C)(1), is satisfied.

2. Nonresidential Construction - new construction or substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated a minimum of two feet above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are flood proofed shall be maintained by the Floodplain Administrator.

3. Enclosures - new construction or substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement, and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement

must either be certified by a licensed professional engineer or meet or exceed the following minimum criteria:

a. 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 shall be provided.

b. The bottom of all openings shall be no higher than one foot above grade.

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

4. Manufactured Homes

a. Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.

b. Require that manufactured homes that are placed or substantially improved on a permanent foundation such that the lowest floor of the manufactured home is elevated a minimum of two feet above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

c. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of paragraph (4) of this section be elevated so that either:

i. The lowest floor of the manufactured home is at least two feet above the base flood elevation, or

ii. The manufactured home chassis is 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 foundation system to resist flotation, collapse, and lateral movement.

5. Recreational vehicles,trailers,or motor homes placed on sites within Zones A1-30, AH, and AE on the community's FIRM must meet one of the following criteria:

   a. Be on the site for fewer than 30 consecutive days,

   b. Be fully licensed and ready for highway use, or

   c. Meet the permit requirements of §040(C)(1), and the elevation and anchoring requirements for "manufactured homes" in paragraph (4) of this section. A recreational vehicle, trailer, or motor home is ready for highway use if it is 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. Standards for Subdivision Proposals.

1. All subdivision proposals shall be consistent with this ordinance.

2. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Development Permit requirements of §030(C); §040(C); and the provisions of §050 of this ordinance.

3. Base flood elevation data shall be generated for subdivision proposals and other proposed development (including the placement of manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to §030(B), or §040(B)(8) of this ordinance.

4. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards form both surface water and groundwater.

5. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

D. Standards for Areas of Shallow Flooding

1. Located within the areas of special flood hazard established in §030(B), are areas designated as shallow flooding (AO and AH Zones). These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

   a. All new construction or substantial improvements of residential structures shall have the lowest floor (including basement) elevated at least two feet above the base flood level.

   b. All new construction or substantial improvements of non-residential structures;

      i. Have the lowest floor (including basement) elevated at least two feet above the base flood level.

      ii, Together with attendant utility and sanitary facilities be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

   c. A licensed professional engineer shall submit a certification to the Floodplain Administrator that the standards of this Section, as proposed in §040(C)(5) and §040(C)(6), are satisfied.

   d. Require within Zones AH or AO adequate drainage paths around structures on sloping ground, to guide flood waters around and away from proposed structures.

2. City's FIRM may also identify areas of shallow flooding hazards with an average depth less than 1 foot deep (shaded Zone X), as established in §030(B). These areas may be between the flood hazard boundaries defined for the 1- and 0.2-percent-chance-annual-flood or associated with base flood depths less than 1 foot where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity may be evident. Such flooding is generally characterized by sheet flow; therefore the following provisions apply:

   a. All new construction or substantial improvements of residential and non-residential structures;

      i. All new construction or substantial improvements have the lowest floor (including basement) elevated above the estimated depth of the base flood and above the highest groundwater level that is anticipated to occur during periods of flooding.

      ii. Require within shaded X Zones positive ground slopes away from structures and adequate drainage paths around structures on sloping ground to guide flood water around and away from proposed structures.

      iii. A registered professional engineer shall submit certification to the Floodplain Administrator that the standards of this Section, as proposed in §040(C)(5) and §040(C)(6)are satisfied.

E. Floodways

Floodways (located within areas of special flood hazard established in §030(B)) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway *unless* it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

2. If §050(A)(7) above is satisfied, all new construction or substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5.

F. Standards for Areas of Special Erosion Hazard

In order to prevent damage to structures in areas subject to special erosion hazards, the following provisions shall apply:

1. No structural development will be allowed to be constructed in an area of special erosion hazard unless the potential erosion hazards have been evaluated and mitigated and buildings meet minimum setback requirements in accordance with §050(A)(2).

2. No excavation or fill that could modify flood hazard boundaries defined on the FIRM shall be performed in areas of special erosion hazard without a grading permit, in accordance with §050(C)(7).

3. No solid walls, solid fences, or other structures that could disrupt flowing water in an area of special flood hazard or special erosion hazard shall be constructed in a position

or direction contrary to the direction of flowing water to create additional flooding and erosion hazards.

15.4.20.050. Penalties for Violaton.

A. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations.

B. Violation of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a class B misdemeanor. In addition to any fine, a violater shall pay all costs and expenses involved in the case.

C. Nothing herein contained shall prevent City from taking such other lawful action as is necessary to prevent or remedy any violation.

III.

This ordinance shall become effective twenty days after passage and publication.

PASSED AND ORDERED PUBLISHED BY THE CITY COUNCIL OF SPANISH FORK, UTAH, this 17 day of February 2009.

G. WAYNE ANDERSEN, Mayor Pro Tem

ATTEST:

Kimberly Robinson, City Recorder