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MEMORANDUM

TO: City Council Members

FROM: City Planning Department  
City Attorney  
City/County Building Department

DATE: March 12, 1987

RE: Lamplite Park Subdivision Landslide

The following is a report on legal issues and status, and legal actions and status of Lamplite Park Subdivision landslide as they relate to the City of Grand Junction (City), including options for the City to either recover expenses or penalize responsible parties.

Introduction

On March 2, 1987 Council heard the recommendation by the Growth and Planning Committee that \$15,000 be approved for the second phase study by the Colorado Geological Survey (CGS). Councilman Bennett raised the issues of compensation to the City for its cost, and penalizing responsible parties, e.g. denying them the City's business.

Conclusion

There have been two lawsuits involving the City; both have had favorable dispositions. The City has little risk in further suits against it, particularly if the houses, located on the head scarp of the landslide, are removed, because of notice provisions of the Governmental Immunity Act and the slide not continuing.

So far, the City has not suffered any physical damage and, therefore, has no right to legal action against any party. The cost for the CGS surveys was voluntary and taken as a preventative measure to protect our own self-interest; the courts do not compensate this type of cost.

Rather than prematurely penalize involved parties and increase the City's exposure to additional lawsuits, we suggest that if the City is to do anything, it consider a preferred contractor list to reward those firms who have provided exceptional service. However, even this option may create its own problems.

#### History of Lamplite Subdivision

- \* Annexed to Grand Junction in 1973. Lamplite was submitted for subdivision in 1977, PD8 by Furmeister, Land and Abrahamson.
- Geotechnical report by Lincoln-DeVore indicates houses can be built on site if both site and foundations are properly engineered. Site work is begun but never completed.
- \* Mike Messina (no longer in Grand Junction) purchased lots in interest in 1982 from J & J Enterprises (which has since gone bankrupt) and built houses in the immediate area of the head scarp of the landslide. The foundations were engineered by Tom Beck of Beck-Shrum (has since left the area).
- \* Problems with ground failure affecting landscaping and foundations occur in 1983. Anderegg and Smith houses are condemned.
- \* Lawsuit filed by Anderegg; suit dismissed.
- \* Lawsuit filed by Smith.
- \* City approached by Colorado Geological Survey (CGS) to see if assistance was required. The City, acting to protect self-interest in Santa Clara Avenue and its utilities lying under the street, commissioned the study (Conclusions and Recommendations Summary attached.)
- \* Smith lawsuit against the City and County was settled out of court due to a change in the law. The lawsuit is continuing against the remaining defendants.
- \* The study by CGS to determine exact location of the original scarp of slide, to evaluate long-term stability of the houses and Santa Clara Avenue, and the potential threat to underground utilities located beneath Santa Clara Avenue, is being considered by Council.

Legal Issues/Actions and Their Status

Regarding Anderegg v. City of Grand Junction, the suit alleged that Grand Junction, the builder, and the foundation engineer should compensate the Anderegg's for cost, including \$65,000 for the home. The matter was dismissed by order of the court as a result of a motion to dismiss. The motion argued that the City was immune from suit based upon the Public Duty Doctrine. The court agreed and dismissed Anderegg's claim. It is to be noted that subsequent to the court's decision, the Colorado Supreme Court in Leak v. Cain abrogated the Public Duty Doctrine. There is, therefore, some possibility of a future Lamplite Subdivision case having a different holding.

Regarding the Smith case, the matter was resolved in the summer of 1986. The matter was not simply dropped by the court like the Anderegg case because of the change in the case law. A settlement was agreed upon, half of which came from the City and half from the County. The City's insurer has asked that the settlement amount remain confidential.

There are houses in the Lamplite Subdivision which have some damage and others which may be damaged in the future. As to the Smith and Anderegg claims, Earl Rhodes, who handled the cases for the City, had occasion to look at the question of the City's exposure for approval of the subdivision and approval of building permits. He feels the City is not at risk for its issuance of building permits, since the City required the subject foundations be engineered and were, in fact, presented with engineered plans. It is Mr. Rhodes' position that the City is not qualified to review the work of a professional engineer and must accept the engineer's work unless it is on notice of some gross or obvious irregularity.

In regard to subdivision approval, the records show that the City has in its possession a soil report from Lincoln-DeVore which recommends construction of dwellings on the slide area conditional upon engineered foundations. In this instance as well, the recommendation was followed and the City cannot be put in the position of having to second guess a professional recommendation.

HUD, owner of seven houses in the slide area, has reviewed the possibility of legal action against the City. As a general rule, each case must be dealt with individually to see whether there is a defense. It appears that the homes will be sold and moved before any additional structural damage occurs, which seems to make the issue moot.

Legal Actions Available to the City

To date the City has not suffered any damage and, therefore, has no cause of action. The cost incurred by the City for the CGS studies is voluntary. The court does not compensate for speculative damages or costs voluntarily incurred. If the City is sued, it may cross-claim against any of the other available suable defendants. However, even in a cross-claim or counter claim, the City would not be compensated for the cost of the study. A cross-claim was not pursued in the Smith case since it was settled, and further legal action would not have been cost-effective.

Without a legal determination of liability in this case, it would be presumptuous of the City to take any action which would impair an individual's or company's right to do business or slander their reputation such as by prohibiting them from doing business in the City. What is informally done now by the City and what is done in other areas, is to have a preferred contractor list. In that way, the City rewards those who have consistently provided high quality work. In the long run, this may be a better way to serve both the City and the community. Even this option could create significant administrative and legal problems when selecting and applying the criteria for evaluation.

xc: Mark Achen  
Gerry Ashby  
Andy Anderson  
Jim Shanks  
Karl Metzner

**FLOOD INSURANCE RATE MAP (FIRM)**

The official map on which the Federal Insurance Administration EMERGENCY MANAGEMENT AGENCY has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY**

An official report provided by the Federal Emergency Management Agency that includes profiles, the 100-YEAR Floodplain and Floodway Boundary FLOODWAY Maps, and the water surface elevation of a one hundred-year flood.

**FLOODPLAIN**

An area adjacent to a watercourse which may be subject to flooding as a result of an increase in water flow beyond a normal high water mark.

**HABITABLE FLOOR**

Any floor suitable for living purposes, which includes working, sleeping, eating, cooking, recreation, or a combination thereof. A floor used only for storage purposes is not considered a "habitable floor."

**LOWEST FLOOR**

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 NON-ELEVATION DESIGN REQUIREMENTS OF THIS ORDINANCE.

**MANUFACTURED MOBILE HOME PARK**

Property under single ownership used to provide permanent parking space for A PARCEL OR CONTIGUOUS PARCELS OF LAND DIVIDED INTO TWO OR MORE MANUFACTURED mobile homes LOTS FOR RENT OR SALE for living purposes, including accessory structures and uses.

**MANUFACTURED HOUSING**

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 CONNECTED TO THE REQUIRED UTILITIES. FOR FLOODPLAIN MANAGEMENT PURPOSES, THE TERM "MANUFACTURED HOME" ALSO INCLUDES PARK TRAILERS, TRAVEL TRAILERS, AND OTHER SIMILAR VEHICLES PLACED ON A SITE FOR GREATER THAN 180 CONSECUTIVE DAYS. FOR INSURANCE PURPOSES, THE TERM "MANUFACTURED HOME" DOES NOT INCLUDE PARK TRAILERS, TRAVEL TRAILERS, AND OTHER SIMILAR VEHICLES.

**MOBILE HOME**

Any vehicle normally used for residential living purposes by a family. The term "Mobile Home" shall only include those units designed and intended for use as permanent residence and shall not include travel trailers, camp trailers, or other recreational type vehicles designed for temporary occupancy.

5-8-4 GENERAL REQUIREMENTS

A. Administration

1. Floodplain Development Permit applications shall be reviewed by staff based on criteria established in this regulation and by any flood-RELATED evaluation data available from Federal, State or other professional sources. Staff shall ensure that building permits issued comply with this regulation and the other necessary permits required by Federal or State law.
2. Prior to alteration or relocation of a watercourse, adjacent communities and the FEMA shall be notified.
3. Staff shall make necessary interpretations concerning the boundaries of flood prone, flood fringe, and floodway districts.
4. Public records shall be maintained of all floodplain permits approved or denied. Records shall be submitted to the FEMA as required and include the elevation of the lowest floor for all new structures and structures improved over fifty percent of market value. Certificates of floodproofing shall be maintained as part of the Floodplain Development Permit file.
5. No structure or land use shall thereafter be constructed, located, extended, converted, or altered in the floodplain without full compliance with the requirements of this regulation.
6. Also see Chapter 10, Variances and Appeals, and Chapter 13, Definitions.

B. Validity: A Floodplain Development Permit shall be valid for a period of ~~one year~~ SIX MONTHS from the date of issue. If ~~substantial commencement of the~~ START OF CONSTRUCTION ON original purpose of the permit has not begun at that time, the permit shall become invalid.

C. Liability: The degree of flood protection intended to be provided by this regulation is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur or the flood height may be increased by manmade or natural cause, such as ice jams and bridge openings restricted by debris. This regulation does not imply that the areas outside floodplain area boundaries or land uses permitted within such areas will always be totally free from flooding or flood damages. This regulation shall not create any liability on the part of, or cause an action against, the Governing Body or any officer or employee thereof, or the FIA FEMA, for any flood damages that may result from reliance on this regulation.

D. Floodplain Maps

1. The FEMA has conducted a flood insurance study dated July 6, 1982, for Grand Junction. This study, with the accompanying Flood Insurance Rate Map and Flood Boundary-Floodway Maps, are incorporated into

this regulation and shall be referenced as 5-8-4E of the City of Grand Junction Zoning and Development Code. Amendments to the official maps or adoption of additional maps shall be accomplished under the procedures and requirements for rezoning (see 4-4).

2. The official floodplain maps define only approximate boundaries of the floodplain. Precise determination of boundaries can only be made by a comparison of flood water elevation with ground elevation at a particular site. Projected flood water elevation data is normally obtained from the FIA FEMA Flood Profiles data, or from information determined by a qualified engineering study. If new or additional flood or ground elevation data becomes available, that data will take precedence over boundaries shown on the floodplain maps AFTER FEMA APPROVAL.

E. Floodplain Maps (on file in the Department).

#### 5-8-5 USES ALLOWED OR PROHIBITED

##### A. Floodplain Areas

1. Designated floodplain areas are usually divided into two subdistricts, the floodway and the flood fringe (see Figure F5-8-5). Where this distinction has not been made, or in areas categorized only as flood prone, a comparison between flood water elevations and ground elevations shall be necessary in order to make the distinction. Until the distinction has been made, the land shall be considered to lie within the floodway and shall be regulated by 5-8-6B below. After the distinction has been made, uses shall be regulated by 5-8-5B or 5-8-5C as applicable.
2. Any land use within a designated floodplain not specifically allowed or permitted by a Floodplain Development Permit is prohibited.

##### B. Floodway District

1. The following uses may be allowed subject to approval of a Floodplain Development Permit:
  - a. Private and public recreational uses, such as golf courses, tennis courts, picnic grounds, boat launching ramps, shooting preserves, fish hatcheries, swimming pools, open air theaters, or driving, archery, target, trap and skeet ranges, etc.
  - b. Utility transmission lines, communication towers, pipelines, roadways, water monitoring devices, and railroad rights-of-way, except railroad sidings and freight or passenger transfer and holding areas.
  - c. Open pit sand or gravel extraction, including portable processing equipment, but not related offices.

- d. Any type of change, filling or realignment of a watercourse channel.
- e. Subdivision of land. Staff shall review subdivision proposals and other proposed new development in a flood prone area, any such proposals shall be reviewed to assure that all such proposals are consistent with the need to minimize flood damage within the flood prone area, all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and adequate drainage is provided to reduce exposure to flood hazards.
- f. e. Water and wastewater treatment facilities for storage.

2. The following uses are specifically prohibited in the floodway district.

- a. Any alteration or relocation of a watercourse which reduces its flood-carrying capacity.
- b. Any use, obstruction or encroachment which would result in any increase in the elevation of flood waters at any point during the one hundred-year flood.
- c. Habitable dwellings, including mobile MANUFACTURED homes. Dwellings and mobile MANUFACTURED homes existing prior to the considered non-conforming uses subject to provisions of section 5-8-3 of this Code.
- d. Storage or processing of materials that are flammable, radioactive, poisonous, explosive, corrosive or which would pose a hazard to life and property during a flooding.
- e. Public or private overnight or recreational campgrounds or parks.
- f. Junk yards, salvage yards and wrecking yards of any kind.

C. Flood Fringe District

- 1. The following uses may be allowed subject to compliance with the provisions of this regulation.
  - a. Growth of agricultural crops or animals.
  - b. Private and public recreational uses, as listed in 5-8-5B.1.a.
  - c. Utility transmission lines, communication towers, pipelines and roadways.
  - d. Wildlife and nature preserves, game farms and fish hatcheries, but not related offices or shops.



- d. Any type of change, filling or realignment of a watercourse channel.
- e. Subdivision of land. Staff shall review subdivision proposals and other proposed new development in a flood prone area, any such proposals shall be reviewed to assure that all such proposals are consistent with the need to minimize flood damage within the flood prone area, all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and adequate drainage is provided to reduce exposure to flood hazards.
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- a. Any alteration or relocation of a watercourse which reduces its flood-carrying capacity.
- b. Any use, obstruction or encroachment which would result in any increase in the elevation of flood waters at any point during the one hundred-year flood.
- c. Habitable dwellings, including mobile MANUFACTURED homes. Dwellings and mobile MANUFACTURED homes existing prior to the considered non-conforming uses subject to provisions of section 5-8-3 of this Code.
- d. Storage or processing of materials that are flammable, radioactive, poisonous, explosive, corrosive or which would pose a hazard to life and property during a flooding.
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  - d. Wildlife and nature preserves, game farms and fish hatcheries, but not related offices or shops.

E. SUBDIVISION OF LAND. STAFF SHALL REVIEW SUBDIVISION PROPOSALS AND OTHER PROPOSED NEW DEVELOPMENT IN A FLOOD PRONE AREA, ANY SUCH PROPOSALS SHALL BE REVIEWED TO ASSURE THAT ALL SUCH PROPOSALS ARE CONSISTENT WITH THE NEED TO MINIMIZE FLOOD DAMAGE WITHIN THE FLOOD PRONE AREA; ALL PUBLIC UTILITIES AND FACILITIES, SUCH AS SEWER, GAS, ELECTRICAL, AND WATER SYSTEMS ARE LOCATED AND CONSTRUCTED TO MINIMIZE OR ELIMINATE FLOOD DAMAGE; AND ADEQUATE DRAINAGE IS PROVIDED TO REDUCE EXPOSURE TO FLOOD HAZARDS.

2. The following uses may be allowed subject to approval of a Floodplain Development Permit.
  - a. All development allowed in accordance with the provisions of this Code except those specifically prohibited below:
    - 1) Any residential structure in which the lowest floor, including basement, is lower LESS than one foot above the elevation of the one hundred-year flood.
    - 2) Junk yards, salvage yards, and wrecking yards of any kind.

#### 5-8-6 FLOODPLAIN DEVELOPMENT PERMIT

##### A. Procedure

1. The applicant shall schedule a conference with staff prior to a submittal.
2. Applicant shall submit the required material to staff. Staff may send applications for review to other affected agencies in accordance with 2-2-2.
3. The Administrator may require that a second professional consultant be hired at the petitioner's expense when government expertise is either unavailable or inadequate to evaluate the submitted documentation. The Administrator shall use all technical information thus provided, determine the specific flood hazard at the site, and evaluate the suitability of the proposed use in relation to the flood hazard.
4. The staff shall approve, conditionally approve, or deny the application within thirty days of the submittal date. The decision, including the reasons and conditions, shall be stated, in writing, to the applicant.

(insert Figure F5-8-5)

B. Submittal Requirements: Exact submittal requirements shall be determined at the preapplication conference. The type of information which may be requested AND CONSIDERED is as follows:

1. Maps drawn to scale at not less than 1" = 200' showing the location and dimensions of the lot, existing and proposed structures, streets, stored materials and floodproofing measures, and the relationships of the above to the location of the stream channel, existing overflow channels and the outer perimeter line of the one hundred-year flood.
2. Elevations of the stream channel, land areas occupied by the proposed use, one hundred-year flood, lowest floor, INCLUDING BASEMENT, of all proposed structures, streets, areas to be filled, proposed water and wastewater treatment facilities, storage areas, THE ELEVATION and the extent of floodproofing measures of all structures. All elevations shall be at two foot intervals, submitted on U.S. Geologic Survey data, tied to flood hazard information prepared by the Army Corps of Engineers, OR THE FEMA FLOOD INSURANCE STUDY, and certified by a registered professional engineer.
3. Specifications for construction materials, floodproofing, filling, dredging, grading, channel improvement and storage of materials. Certification shall be provided by a registered professional engineer showing that proposed floodproofing measures will mitigate the potential flood hazards.
4. Existing direction of water forces, areas of bank erosion, areas of accretion, potential for channel movement or relocation, any intended alteration or relocation of a watercourse, and related hydraulic considerations.
- 6 5. All subdivision proposals and other proposed new developments greater than 50 lots or 5 acres, whichever is the lesser, shall include within the proposals base flood elevation data.
- 5 6. Any additional information required by the FEDERAL OR State GOVERNMENT in order FOR THE LOCAL ADMINISTRATOR to determine if the proposed development design features are adequate to mitigate the potential flood hazard, FOR ANY NEW CONSTRUCTION, SUBSTANTIAL IMPROVEMENTS OR OTHER DEVELOPMENT IN ZONE A.

C. Development Requirements

1. All development allowed by the approval of a Floodplain Development Permit shall comply with the following:
  - a. New construction and improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure, be constructed with materials and utility equipment resistant to flood damage, and be constructed by methods and practices that minimize PREVENT flood damage. ELECTRICAL, HEATING, VENTILATION, PLUMBING, AND 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 FLOOD CONDITIONS.
  - b. All mobile homes shall be anchored with over-the-top ties and frame ties at each corner of the home with one intermediate over-the-top tie and frame tie per side for each ten feet of length. All components of the anchoring system shall be capable of carrying a force of 4,800 pounds. All mobile homes shall be anchored with over-the-top ties provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, and mobile homes less than 50 feet long requiring one additional tie per side. Frame ties provided at each corner of the home with five additional ties per side at intermediate points and mobile homes less than 50 feet long requiring four additional ties per side. ALL MANUFACTURED HOMES TO BE PLACED WITHIN ZONE A SHALL BE INSTALLED USING METHODS AND PRACTICES WHICH MINIMIZE FLOOD DAMAGE. FOR THE PURPOSES OF THIS REQUIREMENT, MANUFACTURED HOMES MUST BE ELEVATED TO AT LEAST ONE FOOT ABOVE THE BASE FLOOD ELEVATION 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. All components of the anchoring system shall be capable of carrying a force of 4,800 pounds; and any additions to the mobile MANUFACTURED home be similarly anchored. In lieu of the specific requirements of this paragraph, an alternative anchoring system may be used if a licensed professional engineer certifies that such a system will adequately anchor the mobile MANUFACTURED home with respect to the base flood discharge. THIS REQUIREMENT IS IN ADDITION TO APPLICABLE STATE AND LOCAL ANCHORING REQUIREMENTS FOR RESISTING WIND FORCES.
  - c. New and replacement sewer and water systems shall be designed to minimize infiltration.
  - d. On-site waste disposal systems shall be designed to avoid impairment.
  - e. Individual mobile MANUFACTURED homes which are to be elevated TO ONE FOOT ABOVE THE BASE FLOOD ELEVATION on pilings shall have the piling foundations placed in stable soil no more than ten feet apart, and reinforcement shall be provided for any piers more than six feet above ground level.

- f. All new construction and substantial improvements of residential structures within Zones A1 - 30 on the community's FIRM shall have the lowest floor, INCLUDING BASEMENT, elevated to AT LEAST ONE FOOT or above the base flood level.

All new construction and substantial improvements of non-residential structures within Zones A1 - 30 on the community's FIRM shall have the lowest floor elevated to or 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.

Where floodproofing is utilized for a particular structure in accordance with this Section, either a registered professional engineer or architect shall certify that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood, and a record of such certificates indicating the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained with the permit file FOR PUBLIC INSPECTION.

Within Zones A1 - 30 on the community's FIRM, ALL new mobile home parks and mobile home subdivisions, expansions to existing mobile home parks and mobile home subdivisions, and existing mobile MANUFACTURED homes parks and mobile home subdivisions where the TO BE PLACED, repaired, reconstructionED, or SUBSTANTIALLY improvedED, OR WHERE THE IMPROVEMENT of the streets, utilities and pads equals or exceeds 50% of the value of the streets, utilities and pads before the repair, reconstruction or improvements have commenced, THE stands or lots shall be elevated on compacted fill or on pilings so that the lowest floor of the mobile MANUFACTURED home will be at LEAST ONE FOOT or above the base flood level AND BE SECURELY ANCHORED TO AN ADEQUATELY ANCHORED FOUNDATION SYSTEM IN ACCORDANCE WITH PROVISIONS OF SECTION 5-8-6C-1A AND B. Adequate surface drainage and access for a hauler shall be provided. In the instance of elevation on pilings, lots shall be large enough to permit steps, piling foundations shall be placed in stable soil no more than ten feet apart, and reinforcement shall be provided for pilings more than six feet above the ground level.

For all mobile MANUFACTURED homes to be placed within Zones A1 - 30 on the community's FIRM, but not into a mobile MANUFACTURED home park or mobile MANUFACTURED home subdivision, stands or lots shall be elevated on compacted fill or on pilings so that the lowest floor of the mobile MANUFACTURED home will be at or above the base flood level. Adequate surface drainage and access for a hauler shall be provided. In the instance of elevation on pilings, lots shall be large enough to permit steps. Piling

foundations shall be placed in stable soil no more than ten feet apart, and reinforcement shall be provided for piers more than six feet above ground level.

- g. Shallow flooding requirements, as revised January 6, 1981, state that within any AO Zone on the community's FIRM, all new construction and substantial improvements of residential structures have the lowest floor elevated above the highest adjacent grade or at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified); and all new construction and substantial improvements of non-residential structures have the lowest floor elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified) or together with attendant utility and sanitary facilities be completely floodproofed to that level to meet the floodproofing standards specified in paragraph 4 above; and require adequate drainage paths around structure on slopes, to guide flood waters around and away from proposed structures.
2. The following requirements may be included in the approval of Floodplain Development Permits:
    - a. Modification of waste disposal and water supply facilities to minimize or eliminate infiltration of flood waters.
    - b. Limitation of periods of use and operation.
    - c. Impositions of operational controls, sureties, and deed restrictions.
    - d. Requirements or prohibition of channel modifications, dikes, levees and other protective measures.
    - e. Placement of a structure on the site to create minimum obstruction to flood waters.
    - f. Location of building pads or envelopes.
    - g. Floodproofing measures as described in 5-8-66.1.f.
  3. Floodproofing measures as described in 5-8-66.1.f SHALL BE INCLUDED IN THE APPROVAL OF FLOODPLAIN DEVELOPMENT PERMITS.
- D. Criteria: The criteria used in evaluating Floodplain Development Permits shall be as follows:
1. The effects of a flood on the site itself, including:
    - a. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.

- b. The susceptibility of the proposed facility and its contents to flood damage, and the effect of the damage on the individual owners.
  - c. The determination of whether the proposed use will be inhabited or used on a part-time basis.
  - d. The proposed water supply and sanitation systems, and the ability of these systems to prevent contamination or unsanitary conditions.
  - e. The importance of the services provided by the proposed facility to the community.
  - f. The requirements of the facility for a waterfront location, and the availability of alternative sites for the use.
  - g. The precedent which would be set by granting the permit, and the cumulative effect of numerous similar permits, if issued.
  - h. The safety of access to the property in times of flood for both ordinary and emergency vehicles.
  - i. The determination that the property is endangered by possible channel relocation due to natural causes.
  - j. Stands must be elevated to or above the base flood elevation.
  - k. That adequate access and drainage is provided.
2. The effects conveyed downstream or upstream of allowing a use, including:
- a. The effect on depth and velocity of flood water (i.e. peak flow characteristics).
  - b. The danger to life and property downstream due to increased flood velocities and heights caused by encroachment or obstruction upstream or downstream.
  - c. The possible increases of the depth of flood waters on neighboring parcels by more than one foot above normally expected flood depths.
  - d. The increased probability of erosion to downstream property, as opposed to normal stream bank erosion, because of accelerated flood velocities or directed flood waters resulting from the obstruction or encroachment.
  - e. The need for additional public expenditures for increased flood protection downstream, such as dike or bridge maintenance.
  - f. The obtaining of an undue advantage by the applicant compared to later applicants who might request a permit.

- g. The danger that materials may be swept downstream and injure persons or property.
  - h. The possibility of contamination downstream from ruptured waste disposal systems, or related storage of toxic chemicals and/or bacteriological substances.
3. The preservation of the efficiency and capacity of the watercourse to transmit and discharge flood waters, including assuring that the flood carrying capacity of altered or relocated portions of the watercourse is maintained.

CHANGES TO SECTION 13 - DEFINITIONS:

ADD:

**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 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 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.



AMENDING THE GRAND JUNCTION ZONING AND DEVELOPMENT CODE BY  
DELETING THE EXISTING SECTION 5-4-6 AND ADOPTING NEW SECTION 5-4-6  
READING AS FOLLOWS:

5-4-6 Public Sites, Parks and Open Spaces

- A. All new development which requires processing through the rezoning, subdivision, planned development, conditional use, or special use procedures of this Code shall require payment to the escrow fund for Parks/Open Space acquisition and/or development. For the purpose of this section (5-4-6) only, new development shall be considered construction of principal structures where the addition constitutes 35% or more of the existing floor area of the structure, or a change of use category for an existing structure or for a parcel of land.
- B. The fee schedule for compliance with 5-4-6A shall be as follows:
  - 1. All residential uses \$225 per dwelling unit.
  - 2. All business/commercial/industrial uses 5% of the appraised raw land value. The value shall be determined, at the developer's expense, by an accredited real estate appraiser (member of American Institute of Real Estate Appraisers) not otherwise involved in the development.
  - 3. All uses in the Use/Zone Matrix (sec. 4-3-4) which are classed under the general categories of Community Facilities - Public and Private, and Human Care/Treatment Facilities which are non-profit uses shall not be charged a fee. All other uses in these categories shall be charged 2.5% of appraised raw land value as determined in paragraph B.2 above. Proof of non-profit status may be required.
- C. Fees shall be paid at the time of final approval and prior to commencement of the use. Fees for subdivision shall be paid at the time of final plat recording.
- D. Private open spaces or recreational areas in planned developments shall not be a substitute for the required fee or dedication.
- E. The Governing Body may, after recommendation by the Planning Commission, waive or defer the provisions of this section (5-4-6). In considering such a waiver or deferment, the Governing Body shall use the criteria established in Section 10-1-1B.2. The Governing Body may also consider the dedication of public sites, parks, and/or open space areas in lieu of payment to the escrow fund. The dedication of land area shall not be less than equal in value to the payment that would be required under B above and in accordance with adopted plans and policies.