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File		1980-0061					
D	ate_	9/6/01 Project	Nar	ne <u>: I</u>	Modern Merchandising, Inc.		
P r	S C	A few items are denoted with an asterisk (*), which mea					
e	a	ISYS retrieval system. In some instances, not all entries					
s	n	are also documents specific to certain files, not found on	tne	e sta	andard list. For this reason, a checklist has been		
e	n	included.					
n t	e d	Remaining items, (not selected for scanning), will be mar	ked	i pr	esent on the checklist. This index can serve as a		
1	ľ	quick guide for the contents of each file.					
	Files denoted with (**) are to be located using the ISYS Query System. Planning Clearance will need to be typed						
	V	in full, as well as other entries such as Ordinances, Resolut	tion	is, i	Soard of Appeals, and etc.		
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		Receipts for fees paid for anything					
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		expiration date)	PI	<b>P</b> 1 0	an (per tanning to change in conditions of		
-		DOCUMENTS SPECIFIC TO TH	TS	D	EVELOPMENT FILE		
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7	-		X	X	4/8/80 Earthwork, Grading and Excavation		
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·		· · · · · · · · · · · · · · · · · · ·	X		Grading Plan		
	X X			-			
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	K	Flood Plain Permit Application					
	x x	Memo from Bob Goldin to File - site check on 4/9/81 showed no problems					
Ľ		thus far on Leach Creek Channel – 4/13/81					
	K x	Letter from James Blomquist to John Caskey re: alternatives 2 & 3 preferable referring to $7/30/80$ letter $-8/5/80$					
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IMPACT OF PROPOSED LA BELLE'S BUILDING ON THE 100-YEAR FLOOD PLAIN OF LEACH CREEK, GRAND JUNCTION, COLORADO

Job # 1959.002

March, 1980

Prepared by

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Gingery Associates, Inc. 1310 Ute Avenue Grand Junction, Colorado FLOOD PLAIN ANALYSIS ALONG LEACH CREEK NEAR NEW "F" ROAD, GRAND JUNCTION, COLORADO

# 1. Introduction

The proposed building site is located in Grand Junction, Colorado in Section 4, Township 1 South, Range 1 West. The building is located about 60' east of 24 Road, 680' north of "F" Road and 60' south of New "F" Road. The actual location is shown on the worksheet (Exhibit 1).

The objective of this study is to find out what is the impact of the building to the nearby 100-year flood plain.

# II. Previous Flood Plain Study

A flood hazard information report for the City of Grand Junction was prepared by the U. S. Army Corps of Engineers in November, 1976. The report shows that the proposed LaBelle's store is within the 100-year flood plain of Leach Creek (Reference 1). The New "F" Road embankment and bridge immediately upstream of the proposed La Belle's store were not considered in the USCE study. This report revises the flood plain study to include the effect of the topographic changes in the vicinity of the La Belle's store. Water surface elevations of the 100-year flood were computed by using the U. S. Army Corps of Engineers' HEC-II step-backwater computer program (Reference 2).

The channel cross section data and other input parameters used in the Corps of Engineers' 1976 study for the portion of Leach Creek under study were obtained from the Corps of Engineers Sacramento District. This data input was updated to include the New "F" Road bridge and embankment.

The 100-year peak discharge is 1,800-cfs in this reach of Leach Creek. Due to limited capacity of the bridge opening under New "F" Road and because the new "F" Road is higher than the "24" Road, it is estimated that from a total of 1,800-cfs, nearly 700-cfs flows west over "24" Road and only 1,100-cfs remains in the channel. The new 100-year water surface profile under existing conditions is shown in Exhibit 2. The effect of the encroachment due to the proposed building is considered next. Since the 100-year flood flows do not overpass the New "F" Road embankment, only a small fraction of the building is in the path of the effective flow area of the 100-year flows. The rise in the 100-year flood water surface elevation due to the proposed building encroachment is evaluated to be about 0.1 feet. The increase in the 100-year water surface elevation along Leach Creek due to the proposed building encroachment is about 0.1 feet. The effect of the proposed building on the upstream and downstream property is insignificant. The 100-year flood plain and the 100-year water surface profile for the study reach of Leach Creek are given in Exhibits 1 and 2 respectively. The 100-year water surface elevations and the corresponding velocities with and without the proposed building encroachment are given in Table 1.

Prepared by

Reviewed by

Jim Chang Engineer

Turushottan Dasp

Purushottam Dass, Ph.D., P.E. Project Manager

# V. References

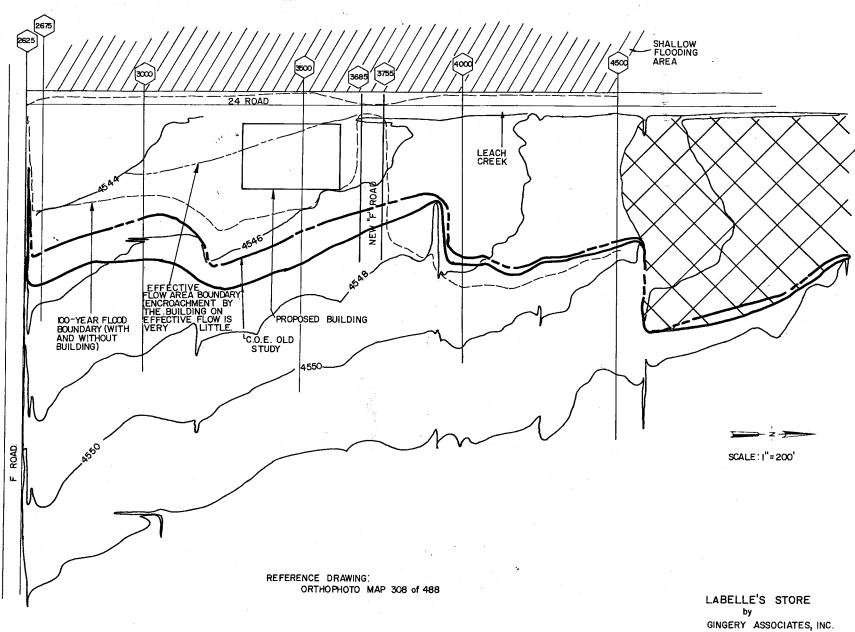
- City of Grand Junction and Mesa County, "Flood Hazard Information, Grand Junction, Colorado", November, 1976.
- U. S. Army Corps of Engineers, Hydrologic Engineering Center, "HEC-II Water Surface Profiles, Computer Program 723-X6-L202 A", Davis, California, 1976.

Table 1. 100-Year Flood Elevations and Velocities

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· · · ·					
	100-Year Flood tion * <u>(Without Building)</u>		100-Year Flood (With Building)		
Location *					
Section No.	Elevation ft	Velocity ft	Elevation ft.	Velocity ft.	
2625	4543.8	4.86	4543.8	4.86	
2675	4544.1	3.84	4544.1	3.84	
3000	4544.5	5.23	4544.5	5.23	
3500	4545.9	4.48	4545.9	4.67	
3685	4545.9	9.61	4545.9	9.33	
3755	4547.4	7.51	4547.4	7.51	
4000	4548.5	3.11	4548.5	3.11	
4500	4549.4	8.11	4549.4	8.11	

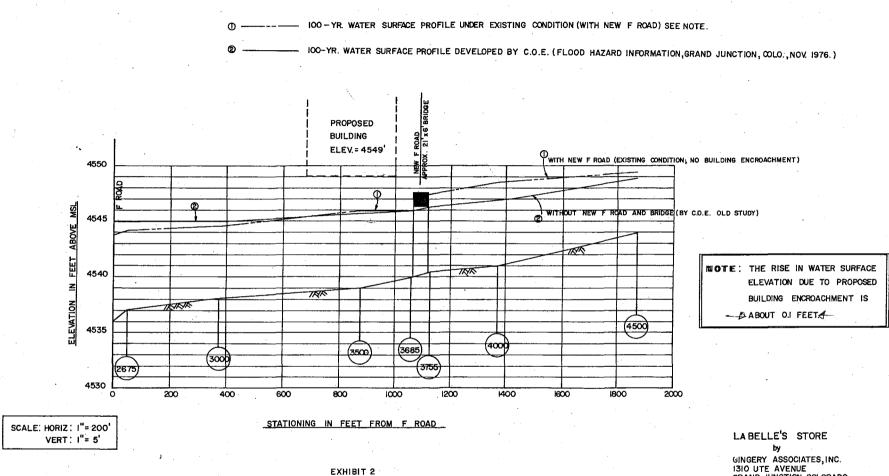
\* See Exhibit 1 for cross section locations



FXHIBIT I

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1310 UTE AVENUE



- LEACH CREEK, GRAND JUNCTION, COLORADO -----

<u>.</u>)

GINGERY ASSOCIATES, INC. 1310 UTE AVENUE GRAND HINCTION COLORADO



City of Grand Junction. Colorado 81501 250 North Fifth St., 303 243-2633 April 8, 1980

Mr. John Caskey Gingery Associates, Inc. Consulting Engineers 1310 Ute Avenue Grand Junction, CO 81501

Dear Mr. Caskey:

Re: Proposed La Belle's Building on 100-year Flood Plain of Leach Creek

As requested, I have reviewed your report of March, 1980, on the above as submitted on April 3, 1980. I have also reviewed the Ordinance No. 1482 which Mr. Hollinger gave me at our meeting on April 4, 1980. A copy of that ordinance is enclosed for your use.

The ordinance specifies the procedure an applicant must follow and also contains criteria for siting improvements within the 100-year flood plain. I wish to mention some of the items in the ordinance, but I strongly recommend you go over it yourself carefully to determine what is required of an applicant. Also enclosed is a Flood Plain Permit" application including instructions. This is the permit referred to in Section G. of the ordinance and Mr. Charly Ray of the Development Department has been designated as the "Director's" designee to process the permit application. Please refer all submittals to Mr. Ray. He will of course consult with me on technical engineering questions. The "Flood Plain Permit" must be processed before any consideration of a building permit will be given. Please note that Mr. Ray must submit a report to City Council (Section G.4) and that therefore the Flood Plain Permit shall not be effective for 30 days from the date of issuance.

I offer the following comments concerning your report as submitted on April 3, 1980:

- Many of the requirements for the application for a "Flood Plain Permit" are not met. (See Section G of Ordinance 1482 and the permit application.)
- Section F of Ordinance 1482 prohibits the erection of structures or more than "nominal" filling in the floodway district.
- 3. Your hydraulics analysis should include delineation of the "floodway district" and the floodfringe district" for
  - (a) existing site conditions,
  - (b) improved site conditions including all proposed grading.

#### Mr. John Caskey

The "floodway district" is of course that portion of the designated flood plain which is required to carry and discharge a 100-year flood without comulatively increasing the water surface elevation more than one foot at any point.

The hydraulics analysis should also include estimated flow velocities as your submitted report does. The grading proposal should include rip-rapping or other appropriate erosion control protection.

4. Since your hydraulics analysis is based on the existing grade of 24 Road, and Mesa County has alternative plans for improving 24 Road in conjunction with the Redlands Parkway interchange at Highway 6 and 50, I feel it is imperative that you secure in writing from the County Engineer what the probable road grades will be for 24 Road. The hydraulics analysis should be based on the "worst case" condition caused by the grade of 24 Road. I am by copy of this letter requesting that Mr. Dave Leonard give you written guidance on this grade issue.

John, I will do what I can to help you avoid delays, but it seems to me that delay is almost inevitable considering the import of the currently proposed site plan. In any case, the ordinance dictates what we all must do prior to issuance of a building permit.

Very truly yours, P. Rich

Ronald P. Rish, P.E. City Engingeers

RPR/hm

Enclosures

cc - Dave Leonard, Armstrong Engineers Dick Hollinger Jim Patterson Charly Ray Jim Wysocki

		EMORANDUM
Reply Requested Yes 🗌 No 🗌		Date July 30, 1980
To: (From:)	Charley Ray	From: (To:) Ron Rish

TV OF CRAND HINCTION COLORA

SUBJECT: Floodplain Permit Application for LaBelles at 24 Road and F Road.

As requested, I reviewed the above as prepared by Gingery Associates, Inc. on July 7, 1980, and submitted to me on July 16, 1980, and have the following comments:

- 1. The hydraulic concept proposed is reasonable and is acceptable to this office. Elevation of the building, enlargement of Leach Creek, and flood detention in the parking lot are very good flood mitigation proposals.
- 2. Additional right-of-way and/or easement width should be deeded to accomodate the proposed widened Leach Creek channel to insure no future encroachments into the flood channel.
- 3. The professional engineer responsible for this report should sign and stamp the report.
- 4. I called Ed Currier today concerning the references to future modifications to the F Road bridge and the Leach Creek channel upstream to accomodate the 100 year flow of 1800 cfs. He related that a concrete wall of some sort was built between the pipe pilings supporting the bridge, (Their as-builts do not show this) and that as much as "about 10 feet" of depth below the beams would not affect the structural integrity of the bridge.

I told Ed that Bill Nelson had related to us that Ed had a scheme(s) for future expansion of the channel under the bridge to accomodate the 100 year flow, and that I needed to know what the resulting streambed gradient might be, so I could make a judgement about the proposed gradient and channel section adjacent to LaBelles. I requested that Ed submit to me a proposal(s) for what the modifications might be, the impact on the structure, and supporting hydraulic calculations. I also requested a full set of as-built drawings of the Mesa Mall storm drainage system since another annexation is being processed. Ed indicated he would do these things.

I called Bill Nelson at his request today and related the above. When I receive the information from Ed Currier I will notify you.

On a separate matter, I noticed this layout shows a driveway to F Road at the northeast corner of the building. It is my opinion this violates the stated design intent of Mesa Mall to have all accesses to the internal "loop" road with public access <u>only</u> at the predetermined intersections of that loop road. I related this to Karl Metzner today and he promised to research the development file concerning access locations.

cc: Hollinger Metzner Patterson Wysocki Wayney

CC. Ron Rish

WILLIAM II. NELSON GREGORY K. HOSEIN JOHN W. GROVES ANTHONY F. PRINSTER JON E. GETZ FREDERICK G. ALDRICH GREGO K. KAMPP

EDWARD A. LIPTON WILLIAM H. KAIN III CURTIS G. TAYLOR NELSON, HOSKIN, GROVES & PRINSTER PROFESSIONAL CORPORATION ATTORNEYS AT LAW

> 500 FIRST NATIONAL BANK BUILDING P. O. BOX 40 GRAND JUNCTION, COLORADO 61502 TELEPHONE 242-4903 AREA CODE 303

> > July 30, 1980

Mr. James A. Blomquist Director of Construction Modern Merchandising, Inc. 5101 Shady Oak Road Minnetonka, Minnesota 55343

Dear Mr. Blomquist:

Your Grand Junction engineers have submitted the method of treatment of floodplain. It has been received by Ron Rish, Grand Junction City engineer, who has reacted favorably towards it, more or less. A letter addressed to Charlie Ray of the Grand Junction planning staff has been sent by Mr. Rish, commenting on a few items.

Jours not

One of the items which has to be addressed relates to the method by which the bridge across F Road will be enlarged to accommodate a hundred year flood. Because of your engineer's decision to push the building up against the wash, that will require a berm along the sides of the wash on the north side of the bridge because the design of your building and floodway raises the water elevation about one extra foot.

According to General Growth's engineers, there are three methods around this problem, which are generally described as:

1. Move your building about ten feet and widen the floodway.

2. Install a berm along both sides of the floodway north of the bridge.

3. Put a shallow depression in F Road so flood waters can pass over the road rather than be impounded by it.

Mr. James A. Blomquist July 30, 1980 Page Two

Whether or not this whole matter will cause the building permit to be held up, I do not know. You might want to check in on it, or have your engineers check in on it.

According to the Grand Junction ordinances, the technical staff presents its report and the City Council has thirty days to react to it. If they do not react, then the building permit can issue.

If you want to check directly, contact Mr. Ron Rish, Grand Junction City engineer, or Mr. Charlie Ray, of the Grand Junction (Mesa County) planning staff.

I will be back in the office on August 22.

Sincerely,

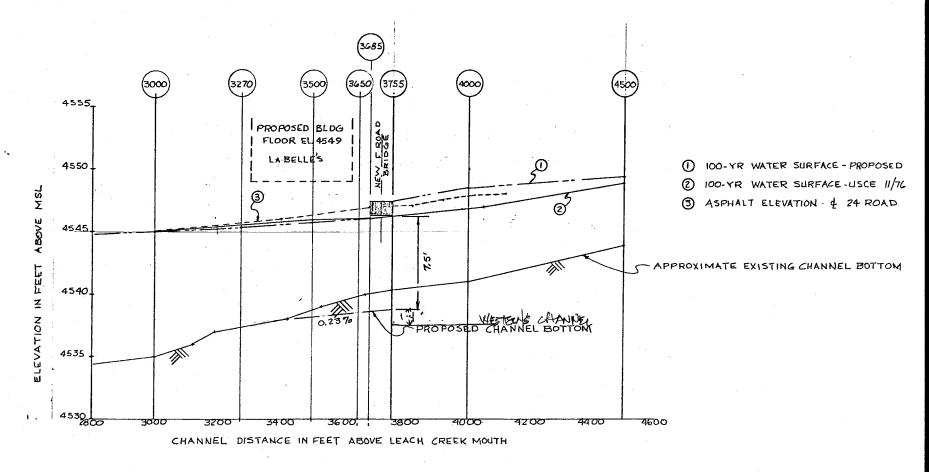
Fr. William H. Nelson

Rec. 8-15-80 Front Conders Sugar.

col Charly Ray Jun Patterson

LEACH CREEK, GRAND JUNCTION, COLORADO

FIGURE L



Gingery Associates, Inc. CONSULTING ENGINEERS ISAND JUNCTION, COLORADO 81501 TELEPHONE 303 245-0627 MODERN MERCHANDISING, INC. FLOODPLAIN PERMIT

DATE 7-2-80 PRE. By J. Costey JOB No 1959.003

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City of Grand Junction Floodplain Permit Application Comments

# Submitted By

MODERN MERCHANDISING, INC. 5101 Shady Oak Road Minnetonka, Minnesota 55343

# Prepared By

GINGERY ASSOCIATES, INC. 1310 Ute Avenue Grand Junction, Co 81051

> Job No. 1959.003 July 7, 1980

> > Revised 8/22/80

added P.E. signature and

Seal

# Background

Gingery Associates, Inc. submitted a report to the City on 4-3-80 titled "Impact of Proposed LaBelle's Building on the 100-Year Floodplain of Leach Creek, Grand Junction, Colorado". This report discusses hydraulic considerations. The proposal being submitted now deviates from the above report by including enlarging of the channel to eliminate overland flow and resulting encroachment of the building in the floodway.

Since submitting the above report, Gingery Associates has done additional study on the floodplain situation. As a result of that study and based on previous experience in similar situations, the approach proposed in this application is to alter the Leach Creek channel in the project area to handle the design 100-year storm flow. The channel will currently have significant over capacity because F Road and the current bridge will not pass the 100-year storm.

When development occurs north of F Road, it will be necessary to address revisions in the F Road bridge and /or F Road itself to pass the 100-year storm flood. We believe the revisions would logically include some deepening of the current Leach Creek Channel combined with additional water flow capacity just east of the present bridge. We have based our proposal on this approach.

This permit application proposes to widen Leach Creek to 67 feet wide and deepen the channel just south of F Road to about

-1-

7.5 feet. When development occurs north or south of the project site, the same type of channel improvements would be desirable. This will eventually provide a channel adequate to prevent overland flooding during a 100-year storm event.

The following comments apply to specific items included on the floodplain permit documents list:

#### Structures

There are no existing structures on the project site. The proposed structure will be a single story masonry and steel structure about 200' by 325'. The first floor elevation will be 4549.

# Stored Materials

There will be no materials stored outside of the proposed building on the project site.

### Specifications

Specifications for earthwork, grading, and excavation are attached to these comments.

### Watercourse Alterations

It is proposed to alter the Leach Creek channel as shown on the plot plan. Briefly, the channel will be widened to 67

-2-

feet top width from the present 25 to 30 feet. The alteration will begin on the south side of relocated F Road and be terminated just south of the project site. Proposed cross sections are shown on the plot plan.

The proposed channel improvement is designed to carry the USCE calculated 100-year storm flow of 1800 cfs entirely within the channel banks. Figure 1, attached to these comments, shows a profile of Leach Creek and the relative elevations of the 100year storm flows with and without recent F Road changes and proposed channel alterations.

# Narrative - Effects on Adjacent Properties

During the 100-year flood, the proposed channel alterations will result in basically the same effects as would occur now without the channel alteration with one significant exception. This exception is that the proposed channel is sized to contain a 100-year flow rather than allow overland flooding to the east as now occurs.

New F Road and the bridge over Leach Creek currently control hydraulic conditions north of F Road during the 100-year storm. This condition will not be affected by the proposed channel alterations.

South of the project site, overland flooding will still occur just as it would without the channel alterations. Hy-

-3-

draulic conditions here are dictated by downstream conditions, existing ground elevations, and current channel size. This project will not change those conditions.

a. Floodwater elevations will be basically the same with or without the channel alterations. Our calculations show a 0.2 foot decrease in the water elevation with the proposed alteration at station 3500. This calculated change is insignificant.

Floodway velocities will increase from about 4.5 feet/sec. to 5.5 feet/sec. with the proposed alteration. This is due to elimination of overland flow and restricting the floodwaters to a channel. The channel banks will be grass lined so the increased velocity will not be detrimental.

There will be no change in floodwater direction due to the proposed channel alterations and the development.

b. There will be no significant increased erosion to downstream properties or increased scour to adjacent or upstream properties as a result of this development. At the southern end of the proposed channel alteration, a transition sec-

-4-

tion is used to decrease the proposed channel back to its existing width. In this transition section, the channel banks will be topped and overland flow will be initiated. There may be some local erosion in this area, but that probably will be no more than or no less than would occur without the channel alteration.

c. There will be no additional protective measures necessary to mitigate (b.) above. The land adjacent to the south end of this project is currently still an undeveloped field. At such time as it is developed, then protection consistent with its development can be accomplished.

In the altered channel, the main banks will be seeded with grasses. In areas just south of F Road where the bank is too steep to seed, the bank will be riprapped as necessary.

d. There is no possibility of release of toxic or hazardous materials during a 100-year flood because there are none stored on the project site.

#### Access

Access during a 100-year flood event will be from the east along F Road.

-5-

All site utility access will be above the 100-year storm water surface elevation.

# Anchoring Floatables

There will be no floatables stored on the site.

# Floodplain/Hazard Boundary Map

Please refer to the U.S. Department of Interior, Bureau of Reclamation, Orthophoto Map series, Sheet 308 for this information.

This report was prepared under

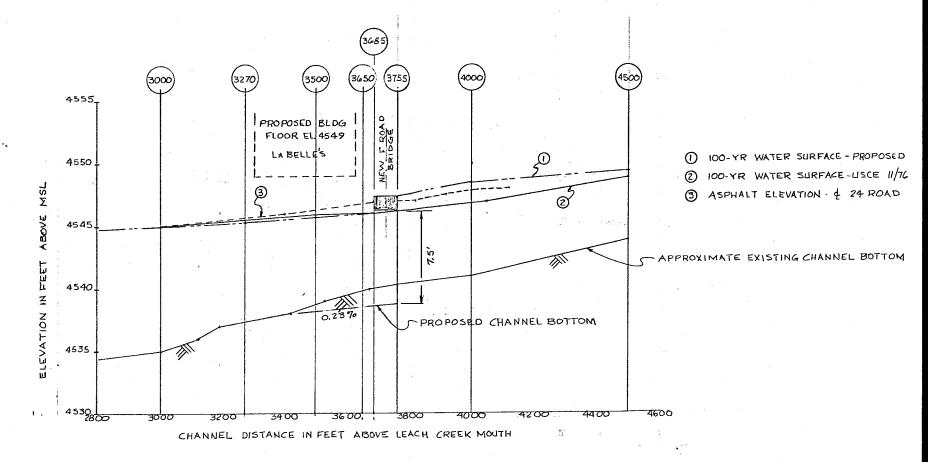
my direction and supervision.

John Mm. Caskey,

SEAL



# FIGURE 1 LEACH CREEK, GRAND JUNCTION, COLORADO





MODERN MERCHANDISING, INC. FLOODPLAIN PERMIT

DATE 7-2-30 PRE. By J. Costey JOB No 1959.003

# DIVISION 2

# SECTION 2.2

# EARTHWORK, GRADING AND EXCAVATION

2

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# DIVISION 2

# SECTION 2.2

### EARTHWORK, GRADING AND EXCAVATION

# **1.** DESCRIPTION

This item shall consist of the excavation, transportation placing and compaction of materials obtained from locations indicated on the plans or staked by the Engineer as necessary for the proper preliminary street, overlot grading and drainage construction.

# 2. GENERAL

A Soils Engineer shall be the Owner's representative to control the fill compaction. The Soils Engineer shall approve the material, and the method of placing, placement moistures and compaction, and shall give a written report to the Owner summarizing his work and including a tabulation of all tests performed.

The fill materials should be on-site soils exclusive of any debris, organic materials or other deleterious matter. The fill should be placed and compacted as follows.

### 3. CLEARING JOB SITE

The Contractor will be required to remove all brush and rubbish before excavation is begun. The Contractor shall pile and burn or otherwise dispose of this cleared material so as to provide the Owner with a clean, neat appearing job site.

## 4. SCARIFYING AREA TO BE FILLED

- A. All vegetable matter shall be removed from the surface upon which the fill is to be placed and the surface shall then be plowed or scarified to a depth of at least six inches (6") and until the surface is free from ruts, hummocks or other uneven features which would tend to prevent uniform compaction by the equipment to be used.
- B. Where fills are made on hillsides or slopes, the slope of the original ground upon which the fill is to be placed shall be plowed or scarified deeply, or where the slope ratio of the original ground is steeper than 5 horizontal to 1 vertical, the bank shall be stepped or benched. Ground slopes which are flatter than 5 to 1 shall be benched when considered necessary by the Soils Engineer.

### 5. COMPACTING AREA TO BE FILLED

After the foundation for the fill has been cleared and plowed, or scarified, it shall be disked or bladed until it is uniform and free from large clods, brought to the proper moisture content and compacted to not less than 95% of maximum density in accordance wtih ASTM D-698-70. (Standard Proctor)

#### 6. FILL MATERIALS

The materials used shall be free from vegetable matter and other deleterious substance and shall not contain rocks or lumps having a diameter of more than six inches (6"). This fill material shall be obtained from areas shown on the Plans.

# 7. MOISTURE CONTENT

The fill material shall be compacted within 3% under to 2% over optimum moisture content specified for the soils. Sufficient laboratory moisture density tests will be made to determine the optimum moisture content for the various soils encountered in the borrow area. The Contractor may be required to add the necessary moisture to the backfill material in the excavation, if, in the opinion of the Soils Engineer, it is not possible to obtain uniform moisture content by adding water on the fill surface.

The application of water to the embankment materials shall be made with any type of acceptable watering equipment which will give the desired results. Water jets from the spreader shall not be directed at the embankment material with such force that the fill materials are washed out.

Should too much water be added to any part of the embankment such that the material is too wet to permit the securing of the desired compaction, the rolling and all work on that section of the embankment shall be delayed until the material has dried to the required moisture content. The Contractor will be permitted to rework such wet material in an approved manner to hasten its drying.

#### 8. COMPACTION OF FILL AREA

The selected fill material shall be placed in mixed and evenly spread layers. After each fill layer has been placed, it shall be uniformly compacted to not less than the specified percentage of maximum density in accordance with the following table:

	AREA	DEPTH OF LAYER	PERCENT COMPACT	<u>10N</u> *
Α.	Street Foundation	8"	95%	
Β.	Overlot Fills	8"	95%	
			· · · ·	,

\*ASTM D-698-70 (Standard Proctor)

The compaction as specified above shall be obtained by the use of sheepsfoot rollers, multiple-wheel pneumatic-tired rollers, or other types of suitable compaction equipment approved by the Engineer. Compaction shall be accomplished while the fill material is at the specified moisture content. Compaction of each layer shall be continuous over its entire area and the compaction equipment shall make sufficient trips to insure that the required density is obtained.

### 9. COMPACTION OF SLOPES

Fill slopes shall be compacted by means of sheepsfoot rollers or other suitable equipment. Compacting operations shall be continued until the slopes are stable, but not too dense for planting, and there is no appreciable amount of loose soil on the slopes. Compacting of the slopes may be done progressively as the fill rises.

# 10. COMPACTION OF CUT AREAS

All cut areas under the streets shall be scarified to a depth of 6" and recompacted to 95% of Standard Proctor density (ASTM D-698-70)

### 11. DENSITY TESTS

Field density tests of the compaction of the fill should be made by the Soils Engineer. Where sheepsfoot rollers are used, the soil may be disturbed to a depth of several inches. Density tests shall be taken in the compacted material below the disturbed surface. When these tests indicate that the density of any layer of fill or portion thereof is below the required density, the particular layer or portion shall be reworked until the required density has been obtained.

### 12. COMPLETED PRELIMINARY GRADES

All areas both cut and filled shall be finished to a smooth surface and shall meet the following limits of construction:

A. Overlot Excavation shall be within plus or minus 0.2 ft.

B. Pavement grading shall be within plus or minus 0.1 ft.

The Engineer, or duly authorized representative, shall check all cut and fill areas to insure that the work is in accordance with the above limits.

### 13. INSPECTION

Inspection by the Soils Engineer shall be during the placement and compacting operations so that he can certify that the fill was made in accordance with the Specification.

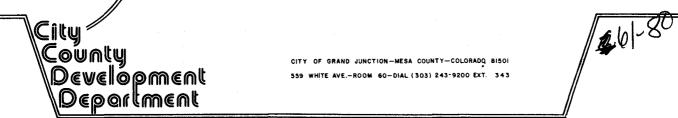
Inspection necessary to control fill and compaction operations, including a Soils, Engineer and/or compaction tests, will be at the expense of the Owner.

# 14. SEASONAL LIMITS

No fill material shall be placed, spread or rolled while it is frozen or thawing or during unfavorable weather conditions. When the work is interrupted by heavy rain, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of the previously placed fill are as specified.

# 15. MEASUREMENT AND PAYMENT

No quantity measurement will be made of the work, equipment and materials required to do this work, and payment shall be paid for as indicated on the Bid Form. CITY AND COUNTY PLANNING & DEVELOPMENT PROCESSING-CITY AND COUNTY BUILDING PERMIT & INSPECTION



August 22, 1980

Application has been made for a City of Grand Junction Floodplain Development Permit for construction of a commercial building (retail sales).

Common location of the site being: Southeast corner of 24 & F Roads (Mesa Mall)

The subject property lies within the H.O. (highway oriented) zoning district of the City of Grand Junction; the use described above is in conformance with uses listed as appropriate for this zone; such use is allowed in floodfringe areas, subject to successful application for a floodplain development permit.

A summary of the permit application process follows.

Initial application was made for a floodplain development permit April 3rd, 1980. The body of the material submitted dealt with a site specific flood hazard study for the project area. This study was necessitated due to:

- ° The lack of floodway delineation along Leach Creek and
- <sup>o</sup> Changes in flood characteristics resulting from new construction of "F" Road north of the project site.

Subsequent review of the initial application information revealed the following deficiencies:

- ° No floodway delineation was indicated;
- \* The model used to graphically display floodplain impacts resulting from the proposed structure did not accurately reflect a "real" situation;
- <sup>o</sup> Future improvements to 24 Road which could increase flood elevations at the project site should be considered on a "worst case" basis.

As a result of these comments the project engineer submitted a second proposal for flood hazard mitigation July 15th, 1980.

This proposal satisfied all three points listed above by increasing the capacity of Leach Creek at the project site beyond the projected 100 year flood event Q of 1800 CFS; in so doing, the 100 year flow will be contained entirely within the Leach Creek channel. Floodplain Permit Page Two

In reviewing the revised submittal the following points were raised:

- Increasing the capacity of the channel, elevating the structure, and flood detention as indicated in the revised application were viewed as appropriate for this project.
- Additional right-of-way and/or easement width should be deeded to accomodate the proposed widened Leach Creek to facilitate maintenance of the channel area and prevent further encroachment into the flood channel.
- ° The engineer responsible should sign and
- stamp the submitted report.
- There should be a coordination of efforts for future proposals affecting the Leach Creek channel to assure rational design transition from one property to the next.

Of particular importance is the last comment referenced above. As a step in this direction, a meeting between Gingery Associates, Inc. (the project engineer for LaBelle's), Western Engineers (representing the property owner north of the LaBelles site), the city engineer and the City/County Floodplain Administrator was held August 18th, 1980. As a result of this meeting all parties concerned are aware of channel modifications that will occur at the LaBelle's site and can plan accordingly. Furthermore, the engineer has adequately addressed the possibility of increased erosion at the project site resulting from proposed channel alterations; as well as addressing possible effects of channel alterations on both upstream and downstream sites.

Therefore this floodplain development permit is granted subject to the following conditions:

- <sup>o</sup> Additional right-of-way and/or easement be deeded (as mentioned above);
- Occuments requiring the project engineer's stamp and signature be so stamped and signed;
- The applicant will proceed with development of the site in compliance with recommendations and specifications outlined in the revised flood hazard study as prepared by Gingery Associates, Inc. (reference job no's. 1959-001/002/003;
- <sup>o</sup> That any new construction be anchored to prevent flotation, collapse, or lateral movement; be constructed with materials and utility equipment resistant to flood damage and be constructed by methods and practices that minimize flood damage;
- <sup>o</sup> That all primary utility control points (water/electricity, etc.) be set at an elevation at least equal to or above the minimum firstfinished floor elevation of 4549 M-S-L.
- The applicant will proceed in conformity with all applicable federal and state statutes as well as all applicable local regulations in-

Floodplain Permit Page Three

> cluding but not limited to subdivision regulations, zoning regulations and building codes;

This permit applies only to the proposal as identified and may not be expanded or transferred.

This permit shall not be effective for thirty days from the date of issuance during which time the permit will be forwarded to the Grand Junction City Council for review and comment. If a hearing to review the proposal is not called for the permit will be considered in effect.

Before final approval of any permitted use (i.e. issuance of certificate of occupancy), the applicant shall submit a certificate by a registered professional engineer that the proposal has been completed in accordance with the approved plan and all conditions have been satisfied.

This permit shall be valid for one year from it's date of effect (i.e. permit will be in effect 30 days from day of issuance if approved by City Council). If substantial commencement relative to the original purpose of this permit has not begun during that one year the permit shall become invalid at that time. Extension of a floodplain development permit shall be achieved only through the application, review and evaluation process as required for the original permit.

Charly Ray

8.22.80

Floodplain Administrator

CR/kms

lopment CITY - COUNTY PLANNING grand junction-mesa county 559 white ave. rm. 60 grand jct., colo. 81501 w « v,

(303) 244-1628

May 3, 1983

Modern Merchandising Inc. 5101 Sandy Oak Road Minnetonka, MN 55343

Dear Sirs:

This letter is a follow-up to the floodplain permit application for LaBelle's at Mesa Mall. In the 8-22-80 letter, which approved the floodplain permit, certain conditions were required. One condition was dedication by Modern Merchandising Inc. for an easement for maintenance of the flood channel in Leach Creek.

Our records do not show any record of that easement dedication. We have therefore enclosed a copy of the necessary legal description for that dedication. Also, enclosed is a copy of the 8-22-80 letter describing the conditions of approval.

Your prompt cooperation in this matter is appreciated. If you have questions please contact this department at 244-1628.

Sincerely,

Bob Goldin Floodplain Administrator City of Grand Junction

BG/sw

xc: Jim Wysocki Ronald Rish File #61-80 ¥