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File 1994-0189 Name: Country Crossing Subdivision – Preliminary Plan – SE 25 Road / G Road

Present	Scanned	
		A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the ISYS retrieval system. In some instances, items are found on the list but are not present in the scanned electronic development file because they are already scanned elsewhere on the system. These scanned documents are denoted with (**) and will be found on the ISYS query system in their designated categories. Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page. Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file.
X	X	**Table of Contents**
		***Review Sheet Summary**
X	X	***Application form**
		Review Sheets
		Receipts for fees paid for anything
X	X	***Submittal checklist**
		***General project report**
		Reduced copy of final plans or drawings
		Reduction of assessor's map.
		Evidence of title, deeds, easements
X	X	***Mailing list to adjacent property owners**
		Public notice cards
		Record of certified mail
		Legal description
		Appraisal of raw land
		Reduction of any maps – final copy
		***Final reports for drainage and soils (geotechnical reports)**
		Other bound or non-bound reports
		Traffic studies
		***Review Comments**
X	X	***Petitioner's response to comments**
X	X	***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Correspondence	X		Easement Agreement – Bk 1138 / pg 507-not conveyed to the City
X		Preliminary Traffic Study -103194			
X	X	Preliminary Master Drainage Study – 10/94			
X		Commitment for Title Insurance – Chicago Title Ins.-11/12/93			
X	X	Geotechnical Report – 5/27/81			
X	X	Pavement Section Design			
X	X	Preliminary Development Plan – 11/94			
X	X	Posting of Public Notice Signs – issued 11/28/94			
X	X	Phasing Plan			
X	X	Location Map			
X	X	Detail Sheet			
X	X	Official Development Plan Country Crossing Sub.-GIS Historical Map			
X	X	Official Development Plan Moonridge Falls- GIS Historical Map			

GEO TESTING LABORATORIES, INC.

Geotechnical Engineering and Materials Testing

PH Management
P.O. Box 363
Grand Junction, Colorado 81502

Preliminary Geotechnical report for Planned Multi-family residence

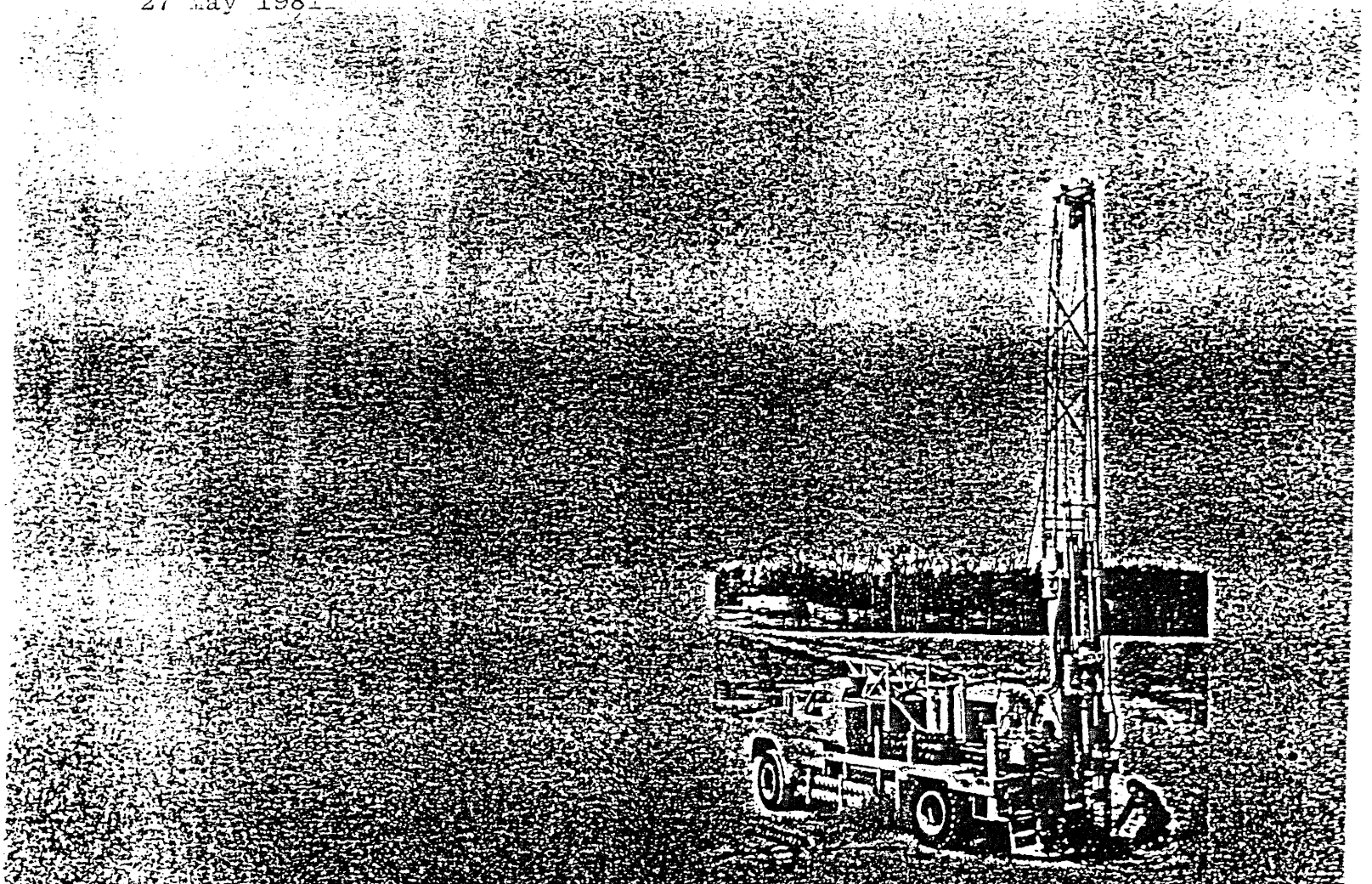
189 94

Original
Do NOT Remove
From Office

Attention: Ken Shrum

Job 999-78

27 May 1981



P.O. Box 3142 · 3224 Highway 6 & 24, No. 3 · Grand Junction, Colorado 81502 · 303 — 434 9873

GEO TESTING
Geotechnical Engineering and Materials Testing
LABORATORIES, INC.

27 May 1981

PH Management
P.O. Box 363
Grand Junction, Colorado 81502

Attention: Ken Shrum

Re: Preliminary Geotechnical report for planned Multi-family Residences; Job 999-78.

Gentlemen:

We have completed our preliminary geotechnical studies of the proposed Multi-family housing. Data from our field and laboratory studies, along with our preliminary analyses and recommended design criteria have been summarized and are presented in the attached report. If you have any questions, please call.

Yours truly,

GEO TESTING LABORATORIES, INC.

Stephen G. Rice

Stephen G. Rice
Secretary/Treasurer

SGR/dldl

TABLE OF CONTENTS

INTRODUCTION

We made this preliminary study to assist in determining the best types and depths of foundations for the structures and design criteria for them. Data from our field and laboratory work are summarized on Figures #1 through 5, attached.

PROPOSED CONSTRUCTION

We understand the proposed structures planned at this time will be 2 story wood frame multi-family units and will consist of approximately 24 units per structure.

For the purpose of our analyses, we assumed maximum column loads on the order of 15 Kips and wall loads of 2½ Kips/Ft.

If final designs vary from these assumptions, we should be advised to permit re-evaluation of our recommendations and conclusions.

SITE CONDITIONS

The site contains 48 acres on the southeast corner of G Road and 25 Road. Grand Valley Canal runs along the east property line and Leach Creek borders along the north property line. At the time of our observations water was present in both locations.

The site was abandoned pasture consisting of grasses and weeds. Drainage was generally towards 25 Road to the west and southwest, however the northwest corner of the property, water has been known to "pond" at times during high periods of seasonal irrigation or runoff.

There are farm houses adjacent to the property, on both G Road and 25 Road. Most are wood frame single story and 2 story with no basements. No apparent damage to the foundation systems was noted.

No bodies of water or bedrock outcroppings were observed on the site.

SUB SOILS

Our test holes showed about 54.0 to as much as 70 feet of medium dense silts, soft silts, clays and medium dense clays overlying dense sands, gravels and cobbles which were encountered in test holes 1,3,6,8,11,13,14,16 and 18.

Groundwater was encountered in test holes 1,7,11,13,14,16 and 18 ranging in depth from 8.0 feet to 15.0 feet, caving had occurred in all test holes drilled. Due to the groundwater conditions we do not suggest basement type construction.

FOUNDATIONS

We have considered one type of foundation for the proposed buildings. Founding the building with spread footings on the natural upper silts involves a "normal" risk of foundation movement. Founding the building with driven piling would reduce the risk of foundation movement, however due to the depths of gravel encountered it would not be economical for the proposed structures to bear on piles. We believe considering safety, economy, and the ever present risk of movement involved in any type of foundation, spread footings on the natural silts would be the most practical. The preliminary foundation criteria included herein is for spread footings only. However, should you decide upon a lower risk alternative, such as driven piling, we would be happy to discuss the criteria for them with you.

Spread footings placed below frost depth of about 3.0 feet should be designed for a maximum soil bearing pressure of 1000 PSF.

FLOOR SLABS

We believe the most practical type of floor used in conjunction with spread footing foundations would be a floating slab-on-grade.

For slab-on-grade construction, we suggest the following:

1. Place a minimum of 4" of gravel beneath the compacted to a minimum of 70% relative density (ASTM D-2049) or 95% of Proctor density (ASTM D-698) whichever applies to the chosen material.

2. Provide moderate slab reinforcement and carry the reinforcement through the interior slab joints, but not to foundation walls or load bearing walls.

3. Omit under slab plumbing. Where such plumbing is unavoidable, pressure test it during construction to minimize the possibility of leaks that result in foundation wetting. Utility trenches should be compacted to a minimum of 95% maximum dry density as determined by ASTM D-698.

WETTING OF FOUNDATION SOILS

Wetting of foundation soils always causes some degree of volume change in the soils and should be prevented during and after construction. Methods of doing this include compaction of "impervious" backfill around the structure, provision of an adequate grade for rapid runoff of surface water away from the structure, and discharge of roof downspouts and other water collection systems well beyond the limits of the backfill.

GENERAL INFORMATION

Our exploratory test holes were spaced as closely as feasible in order to obtain a preliminary comprehensive picture of the sub soil conditions; however, erratic soil conditions may occur between test holes. When more design information is known it is advisable that we be notified to perform a more detailed analysis of the

soils encountered. This preliminary report is not intended to be used for design purposes.

GEO TESTING LABORATORIES, INC.

Stephen G. Rice

Drafted by:
Stephen G. Rice
Secretary/Treasurer

Andrew A. Porter

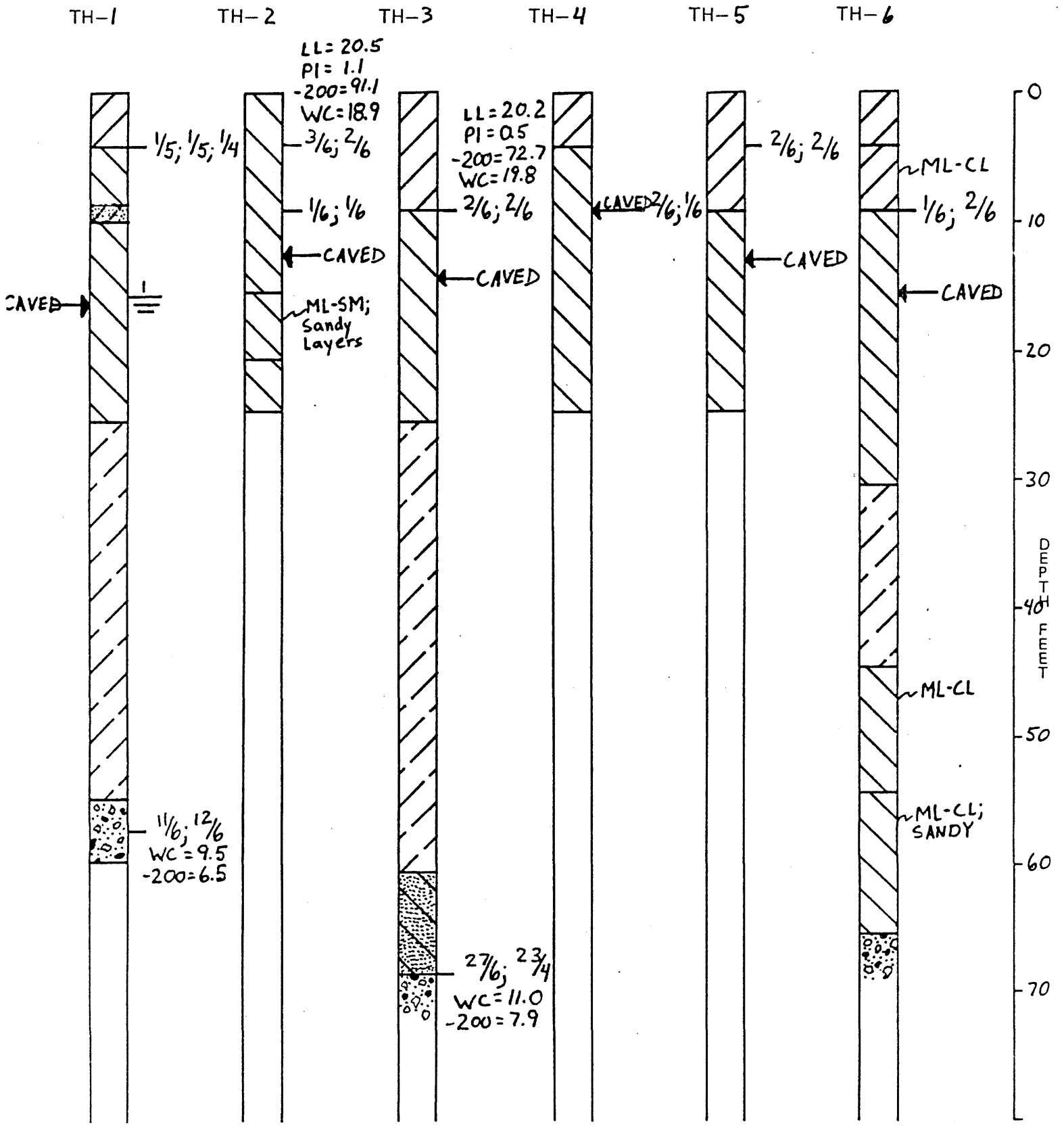
Reviewed by:
Andrew A. Porter, P.E.
President

SGR/dldl

DRILL NOTES:

1) THESE TEST HOLES WERE DRILLED ON APRIL 17, 20, 21, 22 & 23 POWERED BY A CME-55 DRILL RIG WITH 4" SOLID AUGER.
2) THESE TEST HOLES WERE LOCATED BY PARAGON ENGINEERS.
3) THIS DRAWING WAS REDUCED FROM

GTL GEO TESTING
Geotechnical Engineering and Materials Testing
LABORATORIES, INC.
P-H MANAGEMENT JOB #999-78
LOCATION OF TEST HOLES



GTL GEO TESTING
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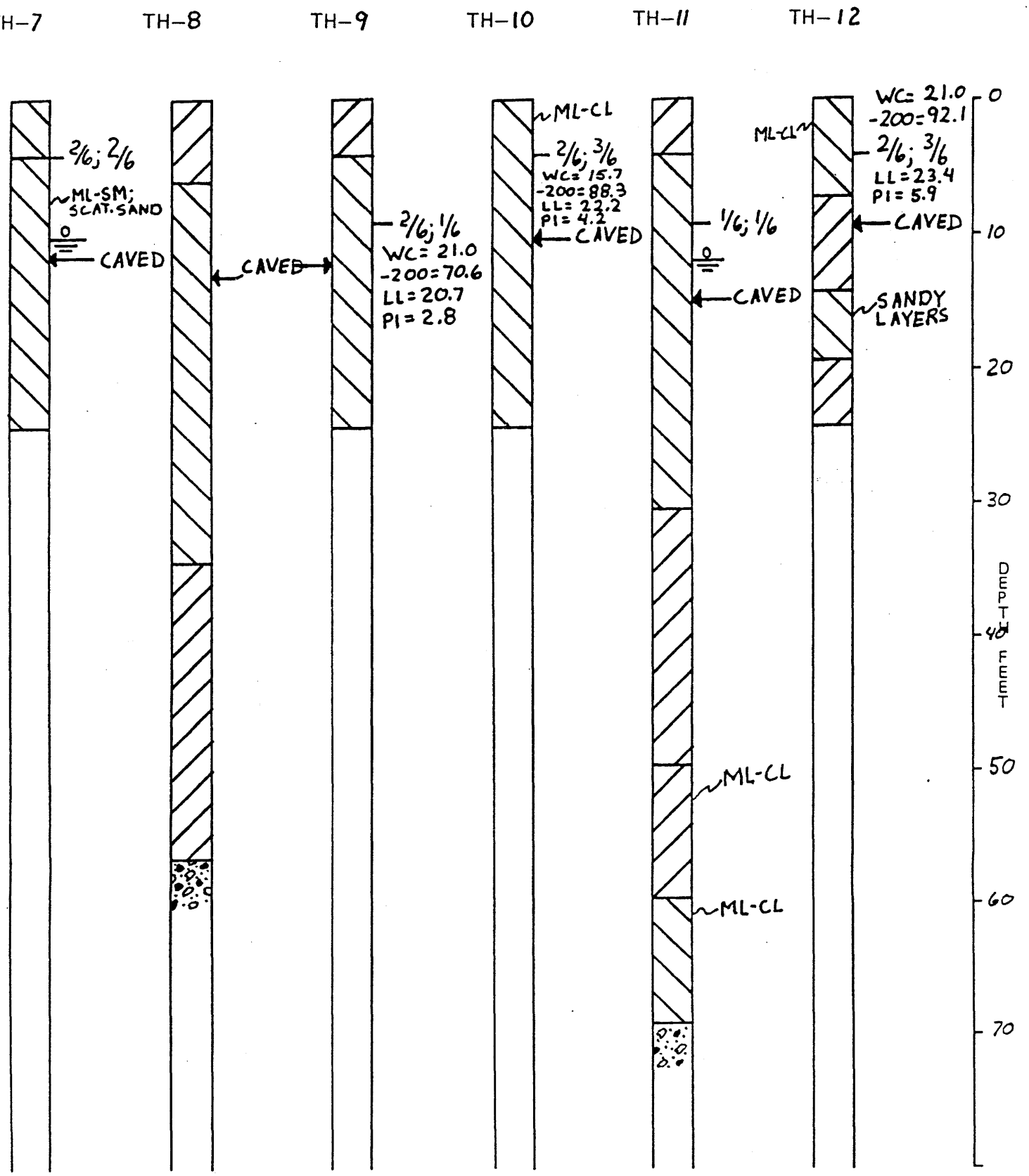
LABORATORIES, INC.
P-H MANAGEMENT JOB # 999-78
SUMMARY LOGS OF TESTS AND TEST HOLES

Fig 2A



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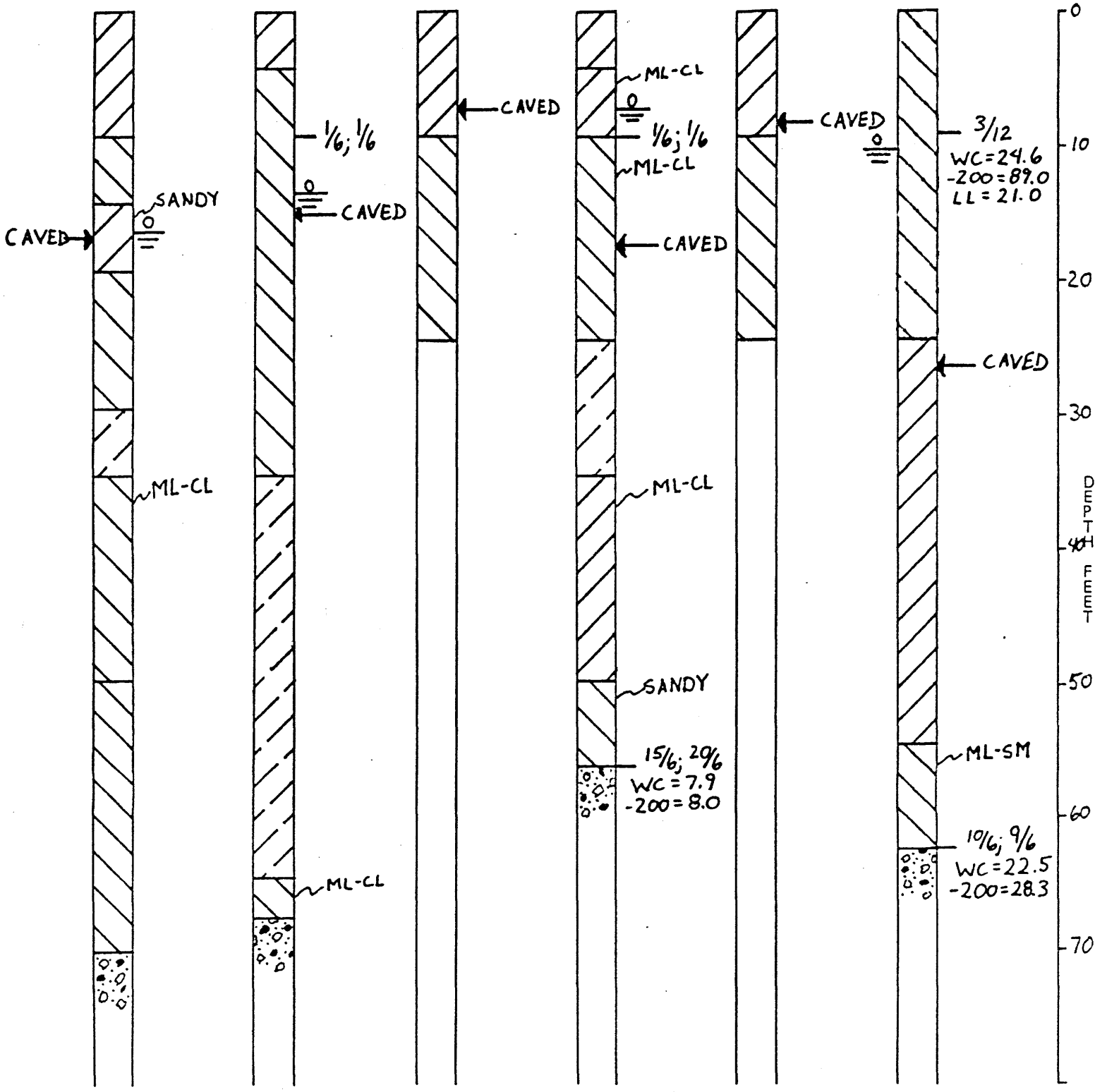
P-H MANAGEMENT JOB #999-78
SUMMARY LOGS OF TESTS AND TEST HOLES

Fig 2B



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LABORATORIES, INC.
RH MANAGEMENT JOB # 999-78
SUMMARY LOGS OF TESTS AND TEST HOLES

Fig 2C

CL, CL-CH, CH
CLAY, medium stiff to very stiff

CL, CL-CH, CH
CLAY, soft to very soft

SP, SW, SP-SW, SP-SC, SP-SM, SW-SC, SW-SM
SAND, medium to very dense, clean to slightly dirty

SP, SW, SP-SW, SP-SC, SP-SM, SW-SC, SW-SM
SAND, loose to medium dense, clean to slightly dirty

SC, SC-SM
SAND, clayey, ~~loose~~ dense to ~~medium~~ very dense

SC, SC-SM
SAND, clayey loose to medium dense

ML, ML-CL
SILT, dense to very dense

ML, ML-CL
SILT, loose to medium dense

SM, SM-SC
SAND, silty, dense to very dense

SM, SM-SC
SAND, silty, loose to medium dense

GW-SW, GP-SP, GW, GP, SW-GW, SP-GP, GW-GC, GW-GM
GRAVEL and SAND, clean to slightly dirty, dense to very dense

GRAVEL and SAND, clean, loose to medium dense

GC-CL, GC
GRAVEL and SAND, very clayey, dense to very dense

GC-CL, GC
GRAVEL and SAND, very clayey, loose to medium dense

GM-ML
GRAVEL and SAND, very silty, dense to very dense

GM-ML
GRAVEL and SAND, very silty, loose to medium dense

CL-CH, CH, CL
CLAY (highly weathered claystone) or SHALE

SP, SM, SC, SW
SAND (highly weathered sandstone)

CLAYSTONE or SHALE firm to medium hard

SANDSTONE, firm to medium hard

SANDSTONE, CLAYSTONE, SHALE, or SILTSTONE, hard to very hard

CLAYSTONE, SHALE, or SILTSTONE, layered, firm to medium hard

SILTSTONE, firm to medium hard

CONCRETE or ASPHALT PAVING and BASECOURSE, etc.

TOPSOIL

FILL, man made, loose or unknown

FILL, man made, dense, controlled

GRANITE or similar hard competent rock

Gradual change in materials. Exact strata change not located.

Undisturbed sample taken by Shelby, Denison, Pitcher, etc.

Indicates practical Rig Refusal. More than one such symbol indicated depth in adjacent hole attempted at same location

Free water level and number of days after drilling that measurement was taken.

9/12 Indicated that 9 blows of a 140 pound hammer falling 30 inches were required to drive a 2-inch diameter sample 12 inches.

WC = Water content percent

DD = Dry density, PCF

UC = Unconfined compression strength, PSF

LL = Liquid limit, percent

PI = Plasticity index, percent

SS = Shear Stress, direct shear, torvane, etc. PSF

-200 = Percent passing number 200 sieve

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Geotechnical Engineering and Materials Testing

SUMMARY LOGS LEGEND
Fig. 2

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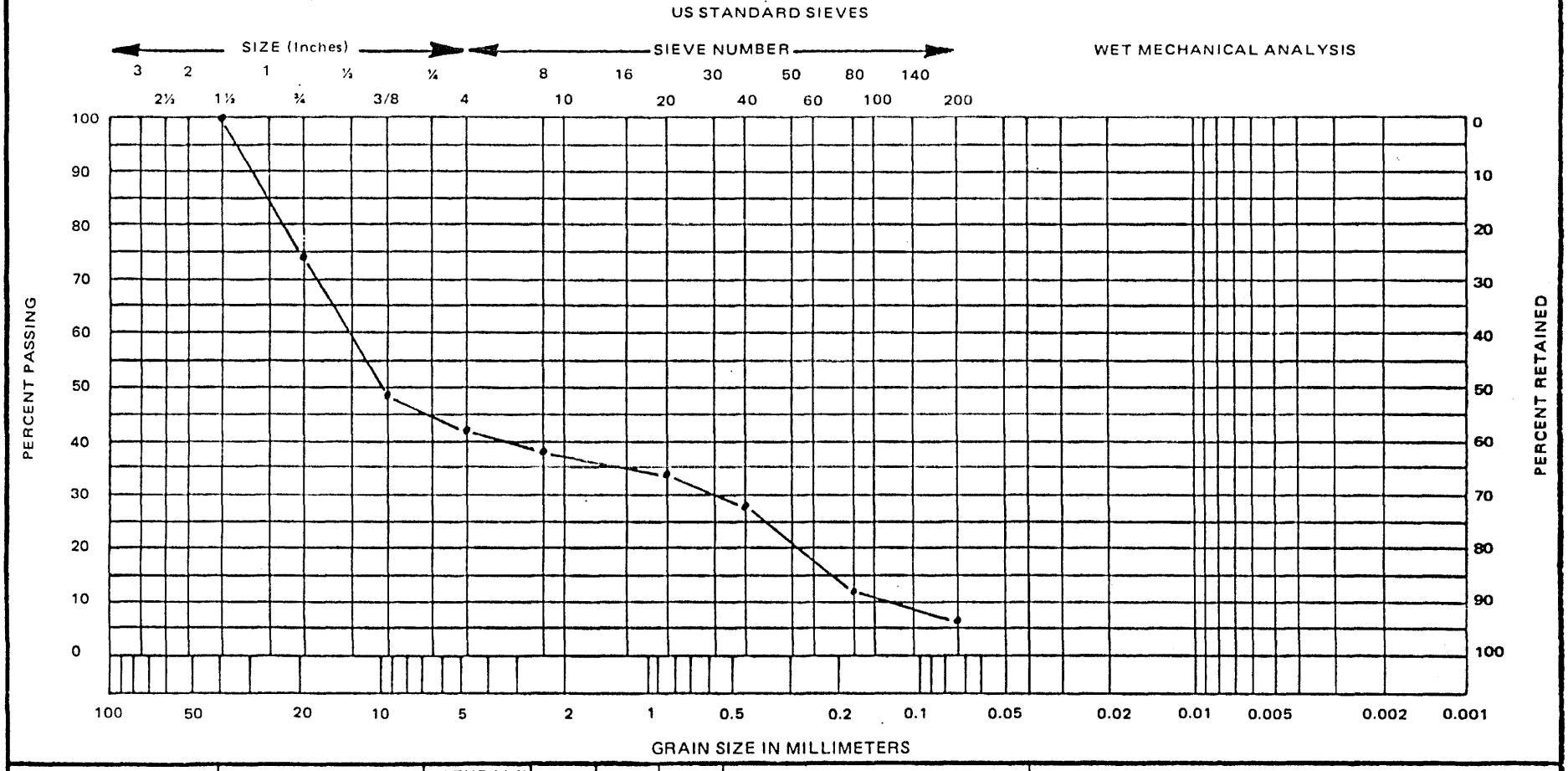
GRAIN SIZE DISTRIBUTION GRAPH AGGREGATE GRADING CHART

DATE: 4/28/81

PROJECT: P-H Management 999-78



EXCAVATION NUMBER	SAMPLE NUMBER	NATURAL% MOISTURE	W_L	W_P	I_P	CLASSIFICATION	REMARKS
1@59'-0		9.5	—	—	—	GP-GM	Gravel - 57.7%, Sands - 35.9%, fines - 6.4%

TECHNICIAN (Signature): Conny Thelps

PLOTTED BY (Signature): Conny Thelps

CHECKED BY (Signature): C Hatter

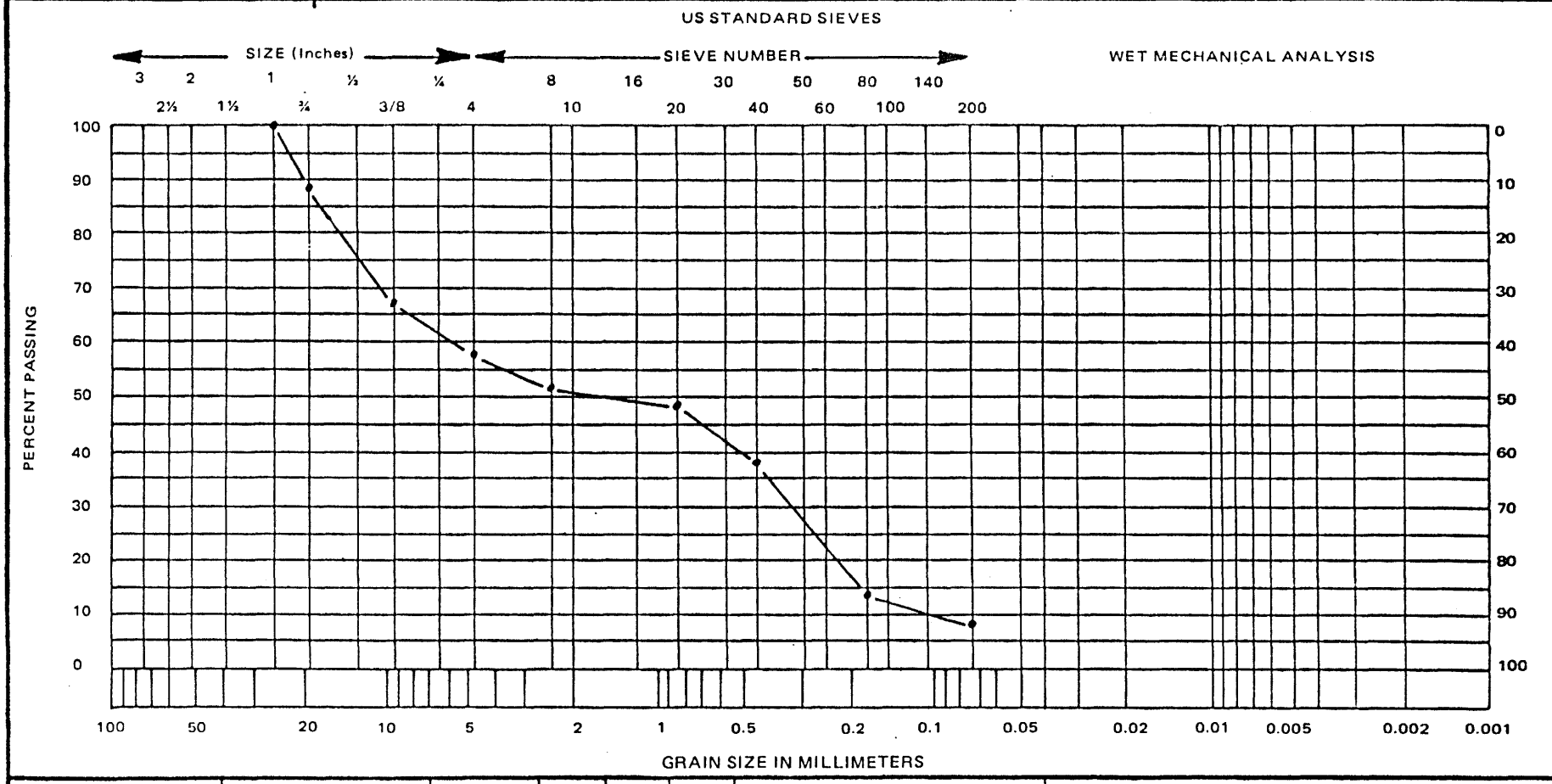
Fig. 4

GEO TESTING Geotechnical Engineering and Materials Testing
LABORATORIES, INC.

GRAIN SIZE DISTRIBUTION GRAPH AGGREGATE GRADING CHART

DATE: 4/28/81

PROJECT: P-H Management 999-78



EXCAVATION NUMBER	SAMPLE NUMBER	NATURAL % MOISTURE	W_L	W_P	I_P	CLASSIFICATION	REMARKS
3 @ 68'-0		11.0	—	—	—	SP-SM (gravelly)	Gravel - 42.4%, Sands -
							49.7%, Fines - 7.9%

TECHNICIAN (Signature): Lonny Thelps

PLOTTED BY (Signature): Lonny Thelps

CHECKED BY (Signature): D Porter

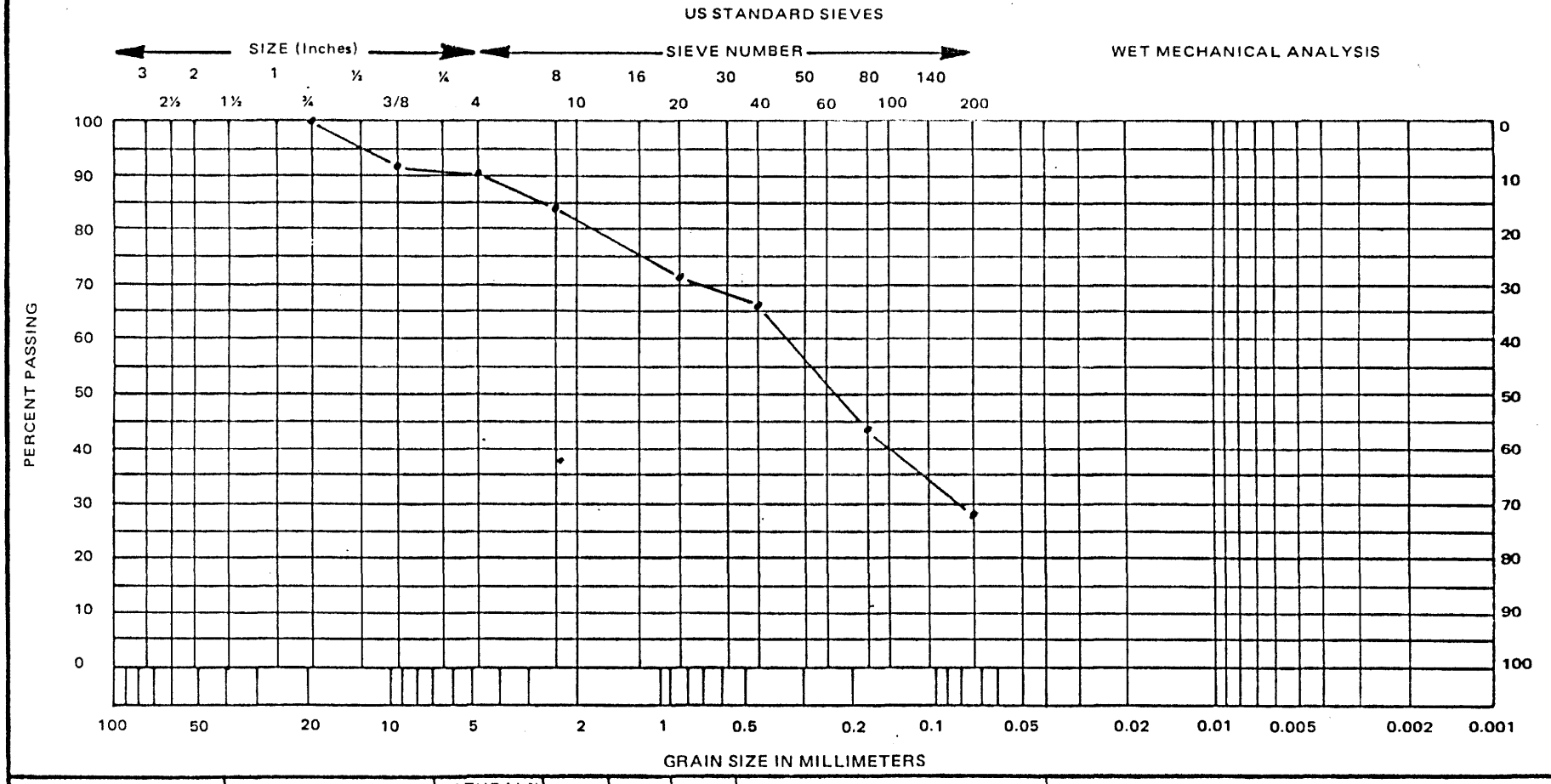
FIG. 5

GEO TESTING
Geotechnical Engineering and Materials Testing
LABORATORIES, INC.

GRAIN SIZE DISTRIBUTION GRAPH AGGREGATE GRADING CHART

DATE: 4/28/81

PROJECT: P-H Management 939-78



EXCAVATION NUMBER	SAMPLE NUMBER	NATURAL% MOISTURE	W_L	W_P	I_P	CLASSIFICATION	REMARKS
18@62'-0		22.5	—	—	—	SM	Gravel - 9.7%, Sands - 62.0%, Fines - 28.3%

TECHNICIAN (Signature): Lonny Thelps

PLOTTED BY (Signature): Lonny Thelps

CHECKED BY (Signature): A Hatter

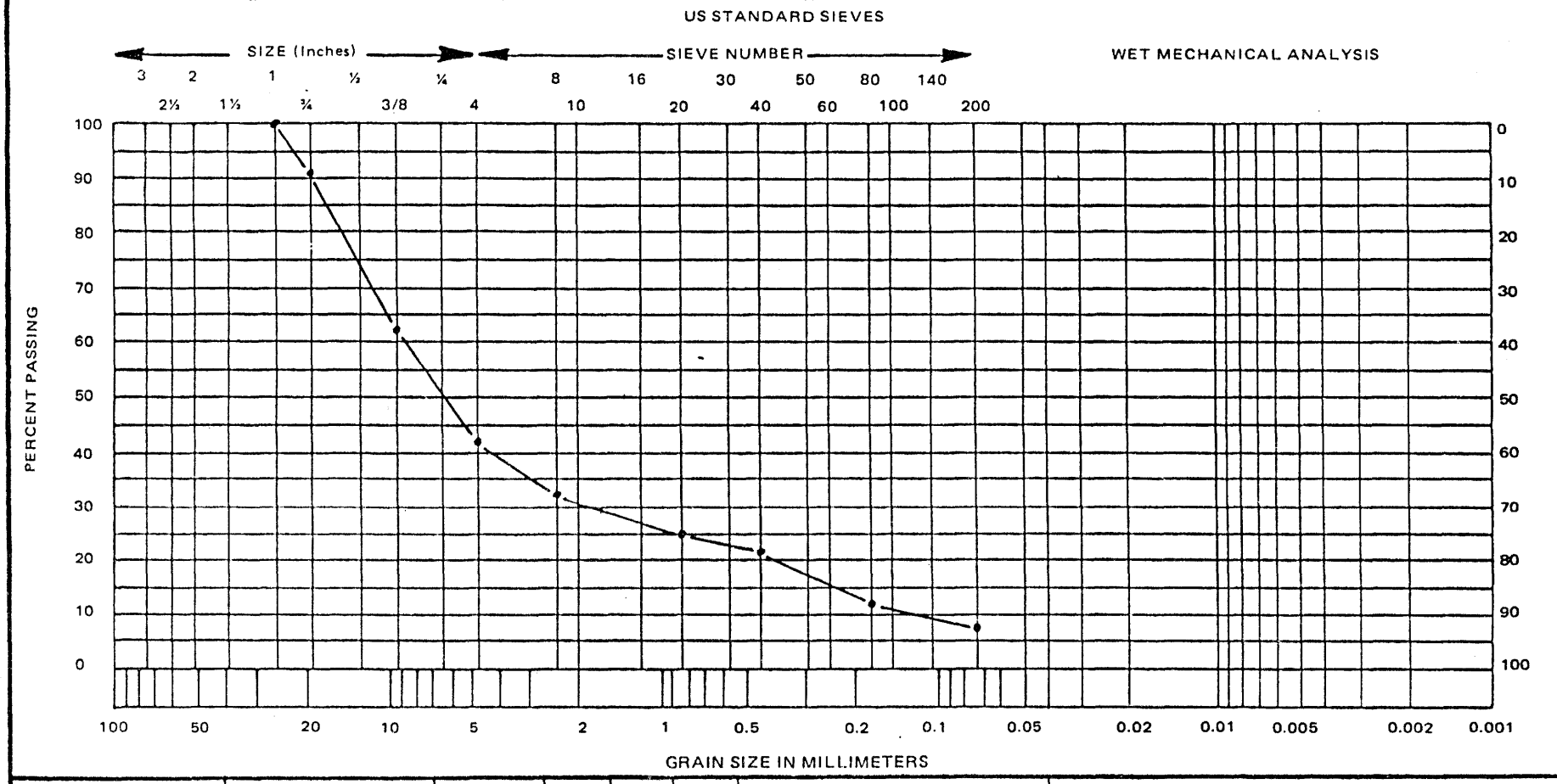
Fig. 7

GTL GEO TESTING
Geotechnical Engineering and Materials Testing
LABORATORIES, INC.

GRAIN SIZE DISTRIBUTION GRAPH AGGREGATE GRADING CHART

DATE 4/28/81

PROJECT P-H Management 999-78



EXCAVATION NUMBER	SAMPLE NUMBER	NATURAL % MOISTURE	W_L	W_P	I_P	CLASSIFICATION	REMARKS
16 @ 55.5'		7.9	—	—	—	GP-GM	Gravel - 56.4%, Sands - 35.6%, Fines - 8.0%

TECHNICIAN (Signature) Lonny Thelps

PLOTTED BY (Signature) Lonny Thelps

CHECKED BY (Signature) [illegible]

Fig. 6

Pavement Section Design

Persigo Village
25 Rd. & G Road
Grand Junction, CO

24 September 1982

WESTERN TECHNOLOGIES, INC.

Phoenix
3737 East Broadway Road
P.O. Box 21387
Phoenix, Arizona 85036
(602) 268-1381

Flagstaff
2400 East Huntington Drive
Flagstaff, Arizona 86001
(602) 774-8708

Tucson
423 South Olsen Avenue
Tucson, Arizona 85719
(602) 624-8894

Farmington
400 South Lorena
Farmington, New Mexico 87401
(505) 327-4966

Las Vegas
300 West Boston Avenue
Las Vegas, Nevada 89102
(702) 382-7483

Grand Junction
P.O. Box 177
3224 Highway 6 & 24, No. 3
Clifton, Colorado 81520
(303) 434-9873

WESTERN TECHNOLOGIES, INC.

P.O. Box 177
322 Highway 6 & 24, No. 3
Clifton, Colorado 81520
(303) 434-9873

Turner Collie & Braden, Inc.
P.O. Box 3944
Grand Junction, CO 81501

24 September 1982

Job No. 6142J077
Invoice No. 61420158

ATTENTION: Jim Langford

PROJECT: Persigo Village
25 Rd. & G Road
Grand Junction, CO

The following report presents the pavement section design on the roads within the above referenced project limits. The design was performed using the Asphalt Institute's Replacement Method and the Colorado State Highway Department Method. Traffic criteria was provided by Turner Collie and Braden. The recommended pavement sections were calculated for a twenty year design life.

If you have any questions concerning this information or if we may be of any additional service, please do not hesitate to contact us.

Sincerely yours,
WESTERN TECHNOLOGIES, INC.

Jim Fife

Jim Fife

Reviewed by:

COLORADO REGISTERED CRAIG P. WIEDEMAN 19506 PROFESSIONAL ENGINEER

Craig P. Wiedeman, P.E.
Division Manager

JF/jf

Copies: Addressee (2)

Persigo Village
Job No. 6142J07

Introduction

This report presents the results of our field investigation, laboratory testing and pavement section design for residential streets in Persigo Village near the interesection of 25 Rd. and G Rd. in Grand Junction, Colorado.

Field Investigation

Seven subgrade samples were obtained by hand methods on 17 September 1982, at the locations shown on the accompanying site plan. All samples were a composite of material from existing grade to a depth of approximately 18 inches. No groundwater was encountered at any sample location at the time of this exploration. All samples were returned to the laboratoary for testing to determine their physical properties. Any vegetation or debris recovered was removed prior to testing.

Laboratory Testing

Visual classification was performed on all samples obtained. Four samples were then chosen for laboratory testing. The samples were classified using both the Unified and the AASHTO Classification Systems, with group indices calculated according to the United States Bureau of Public Roads Method.

Results indicated that the soils were relatively uniform and consisted of clays, silts and fine sands. For design purposes a composite of the clays and silts was used. The composite sample of these soils was tested for CBR values in the soaked condition with the following results:

Soil Group	CBR Value*
Clays & Silts	4

*Value in the soaked condition at 95% of maximum density as determined in accordance with ASTM D698.

Test results are enclosed in the summary data sheets and include initial compaction data, CBR value and swell results at four days. Due to the limited extent of the sandy silt material encountered during our field investigation, the CBR value obtained on the clayey material was used for design purposes.

Design Recommendations

Several alternate pavement sections are tabulated and included hereinafter. Based on a total evaluation of existing and projected future conditions, the following pavement section appears to be the most feasible for the proposed streets and parking areas:

Proposed Streets

3 inches - asphaltic concrete pavement
4 inches - aggregate base course
8 inches - aggregate subbase course

Proposed Parking Areas

3 inches - asphaltic concrete pavement
6 inches - aggregate base course

Construction Recommendations

It is recommended that all materials conform with Colorado Highway Department Specifications. Aggregate subbase material should conform with Class 1 specifications. Aggregate base course should conform with Class 6 specifications. Asphaltic concrete pavement should conform with Grading E specifications and consist of an approved mix design giving required Marshall properties, optimum asphalt content, job mix tolerances, and recommended mixing and placement temperatures. Asphaltic concrete should be compacted to a minimum of 95 percent of maximum density as determined using the 75 blow Marshall method. The compaction of all subgrade and fill materials should be performed to the following recommended percent compaction and moisture content:

Material	Test Method	Minimum Percent Compaction	Moisture Content
Existing Subgrade	AASHTO T-99	95	Optimum ± 2%
Subbase Fill	ASSHTO T-99	95	Optimum ± 2%
Subbase Course	ASSHTO T-180	95	Optimum ± 3%
Base Course	ASSHTO T-180	95	Optimum ± 3%

Acceptance testing of fill materials and mineral aggregates should be performed prior to construction to assess compliance with project requirements. Positive drainage should be provided during construction and maintained throughout the life of the proposed streets. Adequate drainage is essential for continuing performance of these streets.

Persigo Village
Job No. 6142J077

Construction Procedure

The following procedure is recommended for preparation of all alignments:

- o Strip and remove existing vegetation, debris, rubble and excavate to the subgrade level. Clean and widen depressions, pits and ditches to accommodate compaction equipment.
- o Rework, moisten or dry as required, and compact all subgrade soils to a minimum depth of 8 inches. Reworking may be accomplished by scarification, discing, removal and replacement or other methods which will result in uniform moisture contents and densities.
- o Place and compact required fill in horizontal lifts at thicknesses consistent with compaction equipment used to achieve uniform densities throughout lift thickness.

It is recommended that all excavation, subgrade preparation, fill placement and asphalt laydown be accomplished under observation and testing directed by the geotechnical/materials engineer to assess compliance with the project requirements.

Sincerely yours,
WESTERN TECHNOLOGIES, INC.

Jim Fife

Reviewed by:

Craig P. Wiedeman, P.E.
Division Manager

Persigo Village
Job No. 6142J077

CALIFORNIA BEARING RATIO RESULTS

Soil: Composite of Clays & Silts

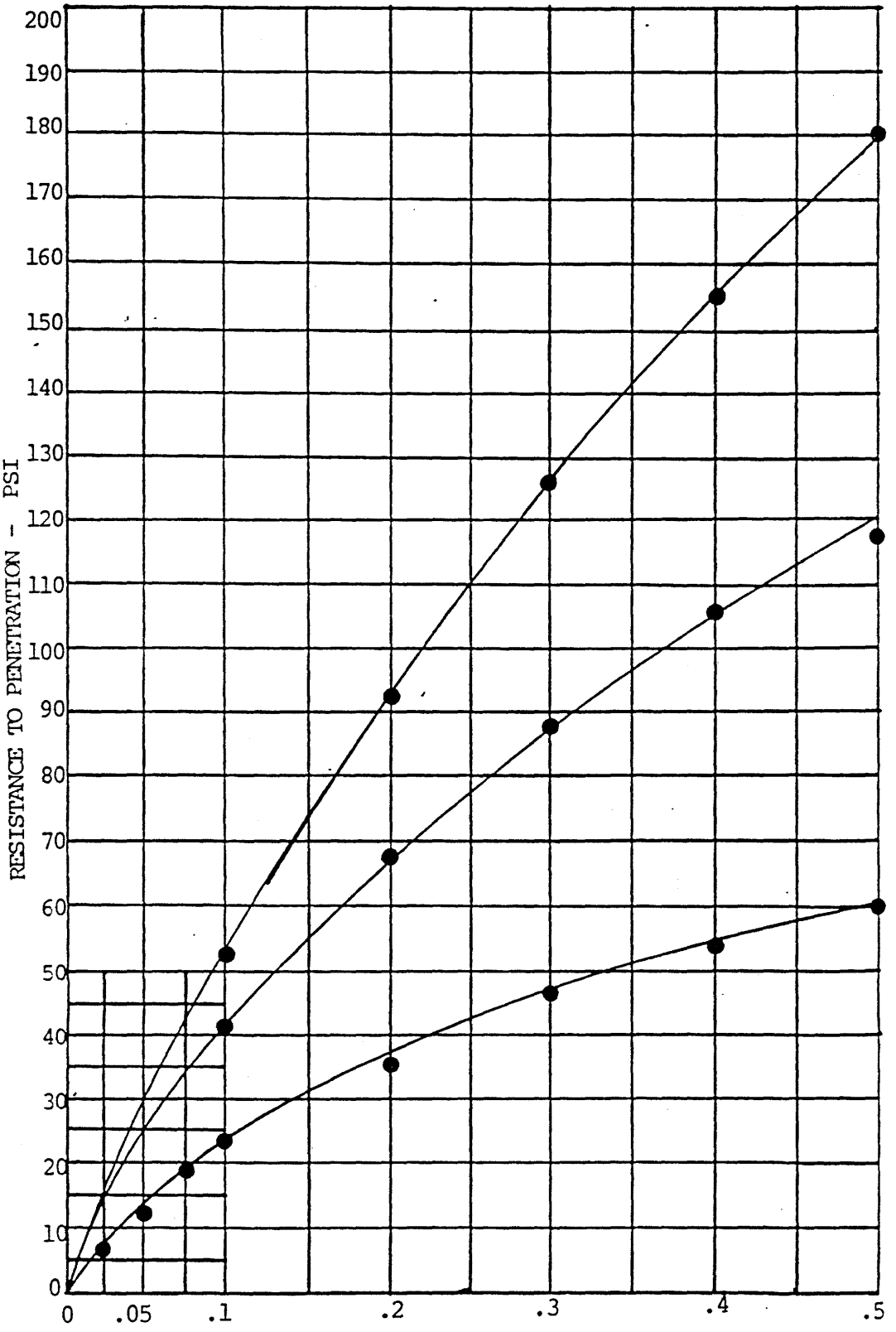
INITIAL COMPACTION DATA	Point 1	Point 2	Point 3
Number of Blows per Layer	15	26	56
Initial Wet Density (PCF)	115.6	126.4	129.3
Initial Moisture Content (%)	14.7	17.1	16.1
Initial Dry Density (PCF)	100.8	105.3	109.4
Initial Compaction (%) (Proctor - 110.7 pcf @ 14.0)	91	95	99
SWELL RESULT (4 Days)			
Swell (inches)	.035	.036	.046
Swell (%)	.8	.8	1.0
Soaked Wet Density (PCF)	121.3	126.4	129.3
Soaked Moisture Content (%)	20.1	18.6	17.3
Soaked Dry Density			
Divided by Original M.C.	105.7	107.9	111.4
Divided by Soaked M.C.	101.0	106.6	110.2
PENETRATION TEST RESULTS			
Surcharge Weight (lbs)	12.5	12.5	12.5
Piston Seating Pressure (lbs)	10	10	10
Load for Penetration-Inches	lbs/PSI	lbs/PSI	lbs/PSI
0.025	6.1	12.1	12.1
0.050	12.7	25.8	25.8
0.075	18.5	34.8	37.9
0.100	24.2	42.4	51.5
0.200	34.5	68.2	90.9
0.300	45.8	87.9	127.3
0.400	53.0	105.8	154.5
0.500	60.0	116.7	180.6

Corrected Pressure for Penetration-Inches

	CBR	CBR	CBR
0.10	2.4	4.2	5.2
0.20	2.3	4.5	6.1
0.30	2.4	4.6	6.7
0.40	2.3	4.6	6.7
0.50	2.3	4.5	6.9

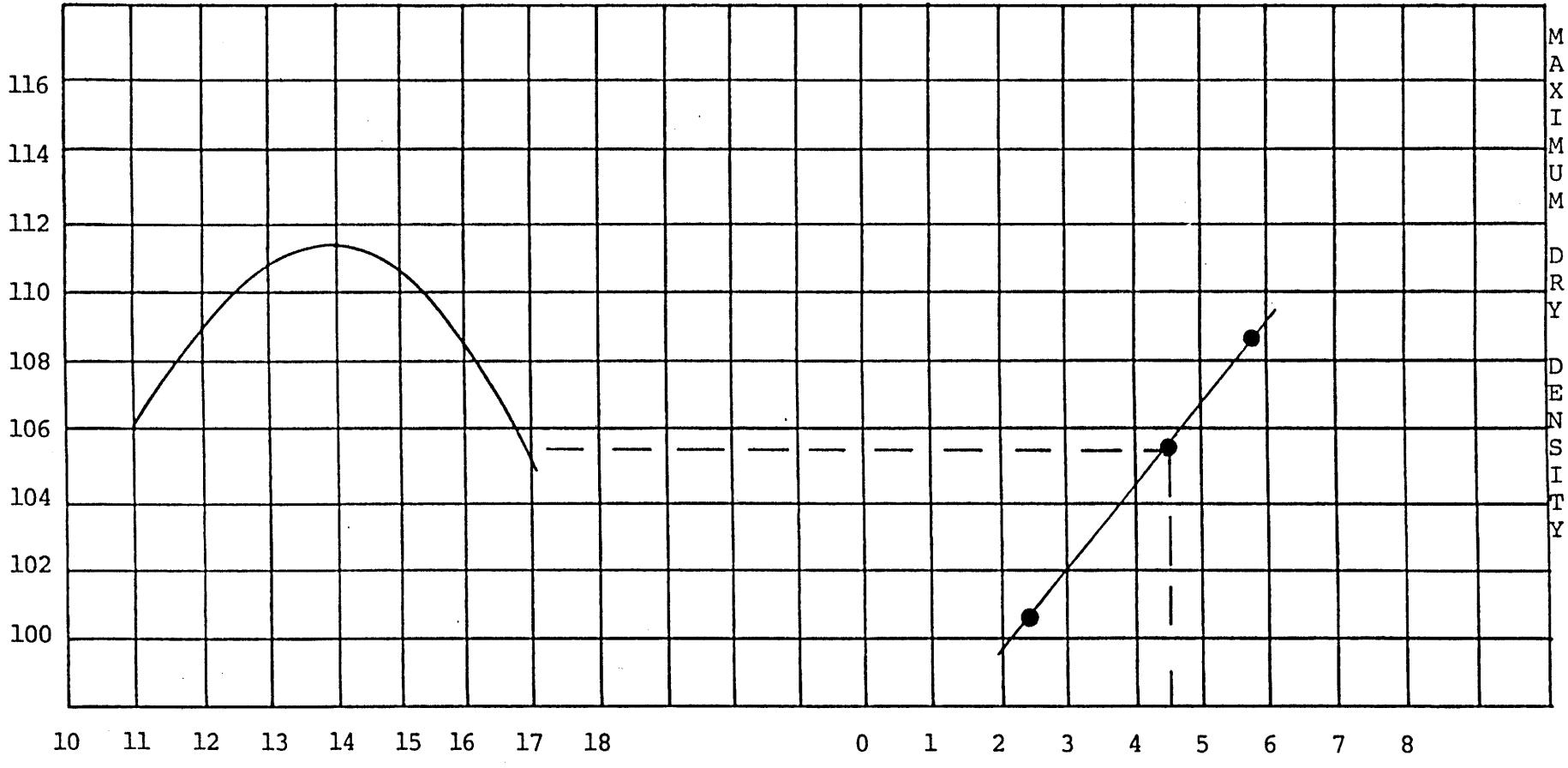
Persigo Village
Job No. 6142J077

CBR STRESS - STRAIN RESULTS

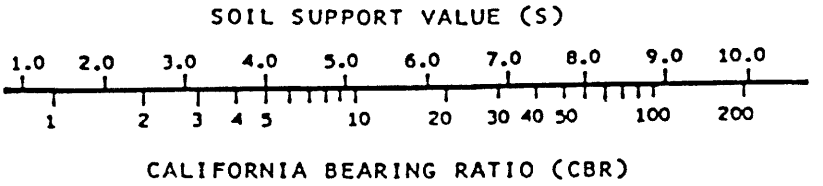


Persigo Village
Job No. 6142J077

MOISTURE DENSITY CBR CURVES



CBR = 4.5
Adjusted = 4



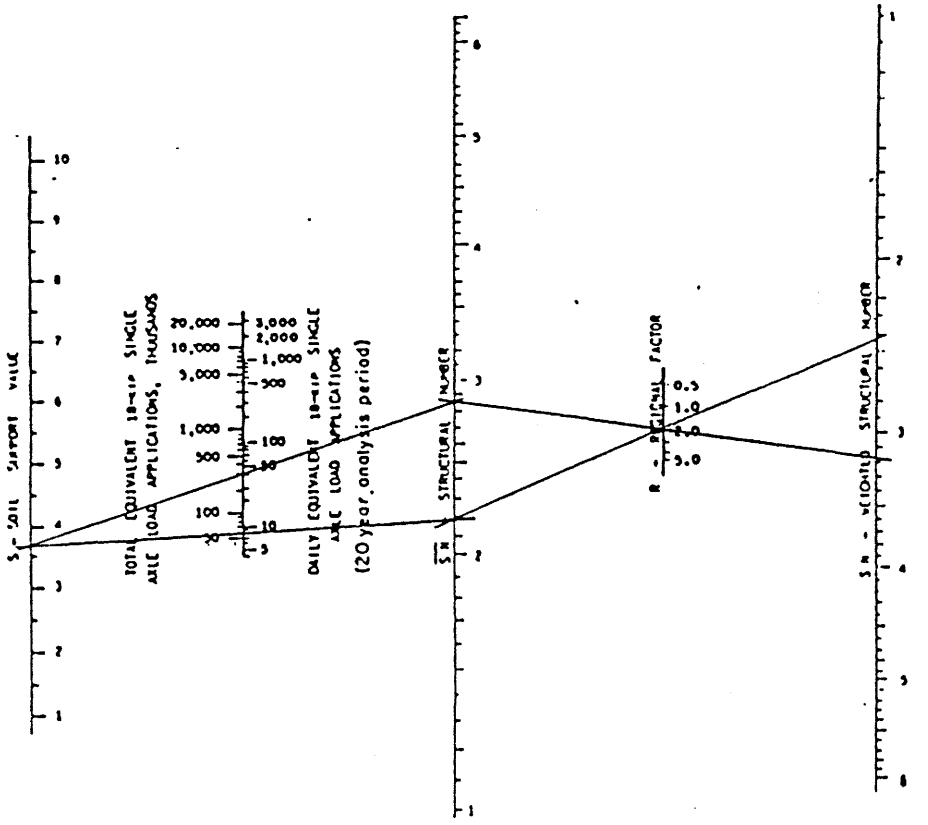


Figure II-2 Design Chart for Flexible Pavements, p_t = 2.0

Persigo Village
Job No. 6142J077

ALTERNATE PAVEMENT SECTIONS

Description		CBR	DTN	BCS	ABC	SBC	TOTAL
Residential Streets	A	4	40	8			8
(2650 trips/day)	B			3	10		13
	C			3	4	8	15
	D			3	14		17
	E			3	4	16	23
Parking Areas	A	4	8	6			6
(800 trips/day)	B			3	6		9
	C			3	4	3	10
	D			3	9		12
	E			3	4	7	14

CBR = California Bearing Ratio Value
DTN = Equivalent 18K Daily Traffic Number
BCS = Bituminous Concrete Surface
ABC = Aggregate Base Course
SBC = Subbase Course

A = Bituminous Concrete Pavement
B = Bituminous Concrete Pavement + Aggregate Base Course (Replacement Method)
C = Bituminous Concrete Pavement + Aggregate Base Course + Subbase Course (Replacement Method)
D = Bituminous Concrete Pavement + Aggregate Base Course (Colorado Highway Department Method)
E = Bituminous Concrete Pavement + Aggregate Base Course + Subbase Course (Colorado Highway Department Method)


G ROAD
N

DEVELOPMENT APPLICATION

Community Development Department
250 North 5th Street Grand Junction, CO 81501
(303) 244-1430

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Receipt 1742
Date 11-2-94
Rec'd By mp

File No. 189 94

We, the undersigned, being the owners of property situated in Mesa County, State of Colorado, as described herein do hereby petition this:

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
[X] Subdivision Plat/Plan	[ ] Minor [X] Major [ ] Resub	46.3 ac.	SE 25 Rd and G Rd.	PR-17	Res.
[ ] Rezone				From: To:	
[X] Planned Development	[X] ODP [ ] Prelim [ ] Final				
[ ] Conditional Use					
[ ] Zone of Annex					
[ ] Text Amendment					
[ ] Special Use					
[ ] Vacation					[ ] Right-of-Way [ ] Easement

[X] PROPERTY OWNER [ ] DEVELOPER [X] REPRESENTATIVE

Denny Granum		LANDesign Ltd. c/o Thomas A. Logue
Name	Name	Name
759 Horizon Dr. Suite A.		200 N. 6th Street
Address	Address	Address
Grand Jct. CO. 81506		Grand Junction, CO. 81501
City/State/Zip	City/State/Zip	City/State/Zip
243-4890		245-4099
Business Phone No.	Business Phone No.	Business Phone No.

NOTE: Legal property owner is owner of record on date of submittal.

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all hearings. In the event that the petitioner is not represented, the item will be dropped from the agenda, and an additional fee charged to cover rescheduling expenses before it can again be placed on the agenda.

Thomas A. Logue — 11/1/94
Signature of Person Completing Application — Date

Denny Granum
Signature of Property Owner(s) - Attach Additional Sheets if Necessary

1894

Leemon Reynolds
695 25 Road
Grand Junction, CO 81505

Gary Johnson
693 25 Road
Grand Junction, CO 81505

Robert Van Doozer
685 25 Road
Grand Junction, CO 81505

Robert Hilgenfeld
683 25 Road
Grand Junction, CO 81505

Sandra Pierce
681 25 Road
Grand Junction, CO 81505

Vern Wood
2533 Q Road
Cedaredge, CO 81413

Raedene Basinger
679 25 Road
Grand Junction, CO 81505

Mary States
675 25 Road
Grand Junction, CO 81505

Michael Melgoza
11514 Lindale Street
Norwalk, CA 90650

Cosmo Fazio
669 25 Road
Grand Junction, CO 81505

Gertrude Soencer
667 25 Road
Grand Junction, CO 81505

Herman Crist
145 Willow Brook Road
Grand Junction, CO 81506

Edward Dry
655 25 Road
Grand Junction, CO 81505

Leroy McKee
652 25 Road
Grand Junction, CO 81505

Delbert Wanzer
2520 F 1/2 Road
Grand Junction, CO 81505

Herbert High
2524 F 1/2 Road
Grand Junction, CO 81505

David Christensen
3330 Norwalk Street
Grand Junction, CO 81506

Richard Watson
653 26 Road
Grand Junction, CO 81506

Moonridge Falls LTD
Liability Company
677 25 1/2 Road
Grand Junction, CO 81505

Marieta Hockett
2527 G Road
Grand Junction, CO 81505

Steve Gaudio
2485 E Harbor Cir.
Grand Junction, CO 81505

James Parker
2487 E Harbor Cir.
Grand Junction, CO 81505

Kenneth Simons
2489 E Harbor Cir.
Grand Junction, CO 81505

J Quentin Jones
2491 E Harbor
Grand Junction, CO 81505

Sharon Patrick
2493 E Harbor Cir.
Grand Junction, CO 81505

Chester Elder
2495 E Harbor Cir.
Grand Junction, CO 81504

Alfred Reeder
2497 E Harbor Cir.
Grand Junction, CO 81505

John Foreman
2499 E Harbor Cir.
Grand Junction, CO 81505

Stephen Miller
702 E Harbor
Grand Junction, CO 81505

Phyllis Mcclellan
2532 G Road
Grand Junction, CO 81505

Nancy Eaton
2526 G Road
Grand Junction, CO 81505

Wayde Dockery
2524 G Road
Grand Junction, CO 81505

Heather Walton
702 25 Road
Grand Junction, CO 81505

Just Companies INC
1716 N 18th Street
Grand Junction, CO 81501

Patricia Davis
1023 24 Road
Grand Junction, CO 81505

Nancy Eaton
2526 G Road
Grand Junction, CO 81505

Wayde Dockery
2524 G Road
Grand Junction, CO 81505

Heather Walton
702 25 Road
Grand Junction, CO 81505

SUBMITTAL CHECKLIST

MAJOR SUBDIVISION: PRELIMINARY

Location: 25 & 6 Roads   Project Name: Trolley Gate Sub

DESCRIPTION

189 94

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ITEMS – DESCRIPTION	SSID REFERENCE	● City Community Development	● City Dev. Eng.	● City Utility Eng.	● City Property Agent	● City Parks/Recreation	● City Fire Department	● City Attorney	● City G.J.P.C. (8 sets)	○ City Downtown Dev. Auth.	● City Police	● County Planning	○ Walker Field	● School Dist. #51	● Irrigation District	○ Drainage District	● Water District	○ Sewer District	● U.S. West	● Public Service	● GVRP	○ CDOT	● Corps of Engineers	● Colorado Geological Survey $545	● US Postal Service	○ Persigo WWTF	● TCI Cable	TOTAL REQ'D. 20
● Application Fee $740 + 15/ac	VII-1	1																										
● Submittal Checklist*	VII-3	1																										
● Review Agency Cover Sheet*	VII-3	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Application Form*	VII-1	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	29
● Assessor's Map	VII-1	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Evidence of Title	VII-2	1			1			1																				
● Names and Addresses	VII-3	1																										
● Legal Description	VII-2	1			1																							
● General Project Report (narrative)	X-7	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Location Map	IX-21	1																										
● Preliminary Plan	IX-26	1	2	1	1																							
● 11"x17" Reduction of Prelim. Plan	IX-26	1				1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Preliminary Drainage Report	X-12	1	2																									5

NOTES:
1) An asterisk in the item description column indicates that a form is supplied by the City.
2) Required submittal items and distribution are indicated by filled in circles, some of which may be filled in during the pre-application conference. Additional items or copies may be subsequently requested in the review process.
3) Each submitted item must be labeled, named, or otherwise identified as described above in the description column.

PRE-APPLICATION CONFERENCE

Date: 19-Oct-1994
Conference Attendance: Denny Granum, Tom Logue, Tom Dixon, Kathy Portner, Judy Kliska
Proposal: Preliminary 169 lot Subdivision
Location: 25 ½ & G Road

Tax Parcel Number: _____
Review Fee: $740 + $15/acre
(Fee is due at the time of submittal. Make check payable to the City of Grand Junction.)

Additional ROW required? yes
Adjacent road improvements required? TEP on street improvements
Area identified as a need in the Master Plan of Parks and Recreation? _____
Parks and Open Space fees required? $225/unit Estimated Amount: _____
Recording fees required? _____ Estimated Amount: _____
Half street improvement fees required? _____ Estimated Amount: _____
Revocable Permit required? _____
State Highway Access Permit required? _____

Applicable Plans, Policies and Guidelines _____

Located in identified floodplain? FIRM panel # _____
Located in other geohazard area? _____

Located in established Airport Zone? Clear Zone, Critical Zone, Area of Influence? _____
Avigation Easement required? _____

While all factors in a development proposal require careful thought, preparation and design, the following "checked" items are brought to the petitioner's attention as needing special attention or consideration. Other items of special concern may be identified during the review process.

O Access/Parking	O Screening/Buffering	O Land Use Compatibility
O Drainage	O Landscaping	O Traffic Generation
O Floodplain/Wetlands Mitigation	O Availability of Utilities	O Geologic Hazards/Soils

O Other _____
Related Files: _____

It is recommended that the applicant inform the neighboring property owners and tenants of the proposal prior to the public hearing and preferably prior to submittal to the City.

PRE-APPLICATION CONFERENCE

WE RECOGNIZE that we, ourselves, or our representative(s) must be present at all hearings relative to this proposal and it is our responsibility to know when and where those hearings are.

In the event that the petitioner is not represented, the proposed item will be dropped from the agenda, and an additional fee shall be charged to cover rescheduling expenses. Such fee must be paid before the proposed item can again be placed on the agenda. Any changes to the approved plan will require a re-review and approval by the Community Development Department prior to those changes being accepted.

WE UNDERSTAND that incomplete submittals will not be accepted and submittals with insufficient information, identified in the review process, which has not been addressed by the applicant, may be withdrawn from the agenda.

WE FURTHER UNDERSTAND that failure to meet any deadlines as identified by the Community Development Department for the review process may result in the project not being scheduled for hearing or being pulled from the agenda.

Signature(s) of Petitioner(s) _____ Signature(s) of Representative(s) _____

PRELIMINARY MASTER DRAINAGE STUDY

FOR

COUNTRY CROSSING SUBDIVISION

October, 1994

Prepared For:

Denny Granum
Prudential Monument Realty
759 Horizon Drive, Suite A
Grand Junction, Colorado 81506

Prepared By:

LANDesign LTD.
200 North 6th. Street, Suite 102
Grand Junction, Colorado 81501
(303) 245-4099

Prepared By: 11/1/94
Monty D. Stroup

"I hereby certify that this Preliminary Master Drainage Study for Country Crossing Subdivision was prepared under my direct supervision."

Reviewed By:
Philip M. Hart, P.E.
State of Colorado, #19346

I. General Location and Description

A. Site and Major Basin Location:

The Country Crossing property contains approximately 46.34 acres. The project is located in the City of Grand Junction, State of Colorado, more particularly in the NW 1/4, NW 1/4 of Section 3, Township One South, Range One West, of the Ute Meridian. A Preliminary Plan was previously approved for the site by Mesa County in 1982 known as "Persigo Village".

Streets in the vicinity include 25 Road running from the south to the north defining the west boundary line of the property. G Road runs from the east to west and defines the north boundary line of the project.

Development in the vicinity and surrounding the site is rural in nature. To the north, south and west are single family residential dwellings on acreage sized parcels. These parcels are typically put to pasture and agricultural uses. To the east is the main line of the Grand Valley Canal with Moon Ridge Falls Subdivision a new single family development beyond.

B. Site and Major Basin Description:

The proposed project site contains approximately 46.34 acres and is planned for single family residential lots, duplex townhomes, a multi-family parcel, RV storage area and open space. The total number of residential units planned for the site is 174.

Presently there is one single family dwelling, two out-buildings and a one multi-family structure on the subject property. The multi-family structure was constructed as part of the original Persigo Village project in 1982 and has never been occupied. Agricultural use of the property has been limited to pasture land and is currently in a fallow state.

Based on the "Soil Survey, Grand Junction Area" (Reference 8, Exhibit 1.0) on and off-site soils are defined as (Bc), Billings silty clay loam, 0 to 2 percent slopes, hydrological soil group "C" (10% of the site) and (Rf), Ravola very fine sandy loam, 0 to 2 percent slopes, hydrological soils group "B" (90% of the site).

II. Existing Drainage Conditions

A. Major Basin:

The subject property is a small percentage of a much larger area wide basin defined as the Leach Creek Watershed (References 3, 4, 5 & 11, Exhibit 2.0) which drains from the northeast to the southwest and ultimately discharges to the Colorado River. The Leach Creek watershed originates approximately 8.85 miles northeast of the site at the crest of

the "Book Cliffs" plateau. An estimate of the tributary area within the Leach Creek Watershed as defined by the 1982 report by Turner, Collie & Braden Inc. (Reference 11) is 26.4 square miles. The Flood Insurance Study (Reference 5, Exhibit 8.0) defines the tributary area as approximately 25 square miles.

Leach Creek is adjacent to the south right-of-way line of G Road flowing from the east to the west through the north portion of the site. The creek enters the site as it passes under large concrete flume conveying the Main Line of the Grand Valley canal. The creek continues west approximately 1,100-feet where it is conveyed under 25 Road via an existing bridge. The creek and it's overbanks vary in depth from 9 to 10 feet and in width from 80 to 130 feet as it traverses the site. An existing Public Service Company gas regulator station occupies an area immediately southeast of the bridge at 25 Road and is located within the floodway fringe.

Field inspection of the site reveals various types of plant life indigenous to wetlands on the site within the Leach Creek waterway. These areas are confined to the existing channel area of Leach Creek.

The northeast portion of the subject site, approximately 8.6 acres, located adjacent to 25 Road is within the Effective Floodplain and is classified as Zone "AO" as determined by the FIRM Flood Insurance Rate Map (Reference 6, Exhibit 4.0). Leach Creek and it's associated floodway are classified as Zone "AE". A long narrow backwater reel is apparent along the east boundary line of the site adjacent to the Grand Valley Canal and is subject to inundation, however it is not designated on the FIRM map.

The Effective Floodplain, floodway elevations and discharge to downstream properties from Leach Creek is governed in large part by the existing bridge at 25 Road and G Road. The Effective Floodplain at this location appears to be the result of backwater effects due to the existing bridge hydraulics and the subsidence of the south overbank for approximately 170 feet upstream of the bridge.

B. Site:

Historically the property drains in a sheet flow fashion from the east to the west at slopes of 0.7 to 1.2 percent towards 25 Road. At 25 Road the drainage from the north one-half of the site is conveyed via roadside ditches and swales north where it discharges to Leach Creek. The south one-half of the site is conveyed south along 25 Road where it is entrapped by the roadway embankment of 25 Road at 2 well defined low areas and does not exit the site.

With the exception of the Leach Creek watershed there are no offsite tributary sub-basins which affect the subject property.

III. Proposed Drainage Conditions

A. Changes in Drainage Patterns:

Leach Creek:

Historic drainage patterns adjacent to Leach Creek at the 25 Road bridge will be altered to modify the Effective Floodplain. The proposed RV area and Lots within the floodplain are to be elevated by filling of the floodway fringe thus eliminating the overbank subsidence along the south line of Leach Creek. The Effective Base Flood Elevation (BFE) at the bridge and for some distance upstream of the bridge is 4590 (Reference 4, Exhibit 4.0). The proposed RV area immediately south of the bridge shall be raised to an elevation of 4591.5 and graded to slope toward 25 Road along it's westerly boundary. The filling of the RV area shall eliminate the overbank subsidence which results in the effective floodplain. All lots within the floodplain shall be filled to a minimum elevation of 4590 at the front lot corner. The minimum finish floor elevation for all lots within the floodplain area shall be 4591, providing a minimum of 1-foot of freeboard between structures and the adjacent BFE within Leach Creek.

The final drainage study for this development shall include a copy of the HEC2 model used to establish the existing effective floodplain, floodway limits and elevations as approved by FEMA. The effective model shall be calibrated and revised to show proposed conditions along Leach Creek using FEMA defined flow rates for the 10, 50, 100 and 500 year storm events. This information shall be used as the basis for a request for a Conditional Letter of Map Revision (CLOMAR). The request is to be submitted to and processed by the Floodplain Administrator for the City of Grand Junction.

A formal request has been made to FEMA to provide a copy of the hydrological and hydraulic information used in the Effective Flood Insurance Study (FIS) for the City of Grand Junction, (Reference 4), and shall be included in the Final Drainage Study for this project.

With the exception of the proposed modifications to the floodway fringe of Leach Creek along it's south line no other channel modifications are proposed. The channel is to remain in it's natural undisturbed state.

Site Drainage:

Based on a review of the FIS for Leach Creek and the proximity of the project to Leach Creek as a major drainageway, the requirement for onsite detention of developed flows is considered mitigated at this time. The rational is to release developed flows from the site prior to the peak hydrograph of the Leach Creek. Onsite detention of developed flows could increase the peak flows within Leach Creek and subsequently affect downstream lands. In the event that the hydrograph information for the Leach Creek

watershed is available, the Time to Peak for the drainageway shall be compared to that of the site to assure consistency with the above rationale.

The proposed site plan divides the site into 12 sub-basins labeled as A1 thru A3, B1 thru B3, C1 thru C3 and D1 thru D3. Runoff from sub-basins A, B, C and D shall be conveyed via lot grading, swales, roadway alignments and storm sewer to Leach Creek. Sub-basins A1, B3, C2 and C3 are graded to provide (backwater) storage volume in the form of small pond areas. These areas are provided to accommodate ponding of developed flows as Leach Creek reaches its peak elevation of 4590, producing a backwater affect into the site drainage systems. The peak backwater elevation within the site shall be 4590 maximum. All building structures shall be set a minimum of 1-foot above this elevation.

B. Maintenance Issues:

Access to and through the site shall be by dedicated public-right-of-way.

Ownership and responsibility for maintenance of proposed backwater storage areas shall be that of the Country Crossing Subdivision Homeowners Association.

Ownership and responsibility for maintenance of the proposed storm sewer and Leach Creek shall be that of the City of Grand Junction.

IV. Design Criteria & Approach

A. Hydrology:

The "Stormwater Management Manual, (SWMM), Public Works Department, City of Grand Junction, Co., June 1994" (Reference 1) and the "Mesa County Storm Drainage Criteria Manual" (Reference 2) shall be used as the basis for analysis and facility design.

B. HEC1 Methodology:

Precipitation Method

The 100 Year Synthetic Storm will be simulated based on rainfall (DDF) Depth-Duration-Frequency data for the Grand Junction Urbanized, Area (Table 403a, Reference 2). All site drainage facilities shall be designed to convey the 100 year storm, therefor the 2 year storm event will not be analyzed.

Loss Rate Method:

The effects of interception and infiltration will be analyzed using the SCS Curve Number Method.

Basin Model:

Flow from each of the sub-basins is to be analyzed as it converges with northwest corner of the site using the Muskingum-Cunge Routing Method.

Runoff Transformation Method:

Based on watershed geometry the SCS Dimensionless Unit Hydrograph method is to be used.

Element Application:

Each sub-basin is to be analyzed using 3 elements, overland flow, shallow concentrated flow and channel flow. Travel times (Tt) for each of these elements were calculated individually and combined to define the Time of Concentration (Tc) for each sub-basin. The Lag Time (TLAG) for each basin was calculated based on the relationship of TLAG = 0.6 * Tc as defined in Reference 9.

C. Hydraulics:

All site facilities and conveyance elements shall be designed in accordance with the City of Grand Junction guidelines as provided in Reference 1.

This Preliminary Master Drainage Study has been prepared to address site specific drainage concerns in accordance with the requirements of the City of Grand Junction, Colorado. The Appendix of this report includes criteria, exhibits, tables and design nomographs to be used in the Final Drainage Study.

V. References

1. Stormwater Management Manual, (SWMM), Public Works Department, City of Grand Junction, Co., June 1994.

2. Mesa County Storm Drainage Criteria Manual, Final Draft, Mesa County, Colorado, March, 1992.

3. Flood Hazard Information, Colorado River and Tributaries, Grand Junction, Colorado, prepared for the City of Grand Junction and Mesa County, by The Department Of The Army, Sacramento District, Corps Of Engineers, Sacramento, California, November, 1976.

4. Flood Insurance Study, City of Grand Junction, Colorado, Mesa County, Community Number 080117, Federal Emergency Management Agency, Revised July 15th, 1992.

5. Flood Insurance Study, Mesa County, Colorado (Unincorporated Areas), Community Number 080115, Federal Emergency Management Agency, Revised July 15th, 1992.

6. Flood Insurance Rate Map, City of Grand Junction, Colorado, Mesa County, Community-Panel Number 080117 0003 E, Federal Emergency Management Agency, Map Revised July 15th, 1992.

7. Flood Insurance Rate Map, Mesa County, Colorado, (Unincorporated Areas), Community Panel Number 080115 0460 B, Federal Emergency Management Agency, Map Revised July 15th, 1992.

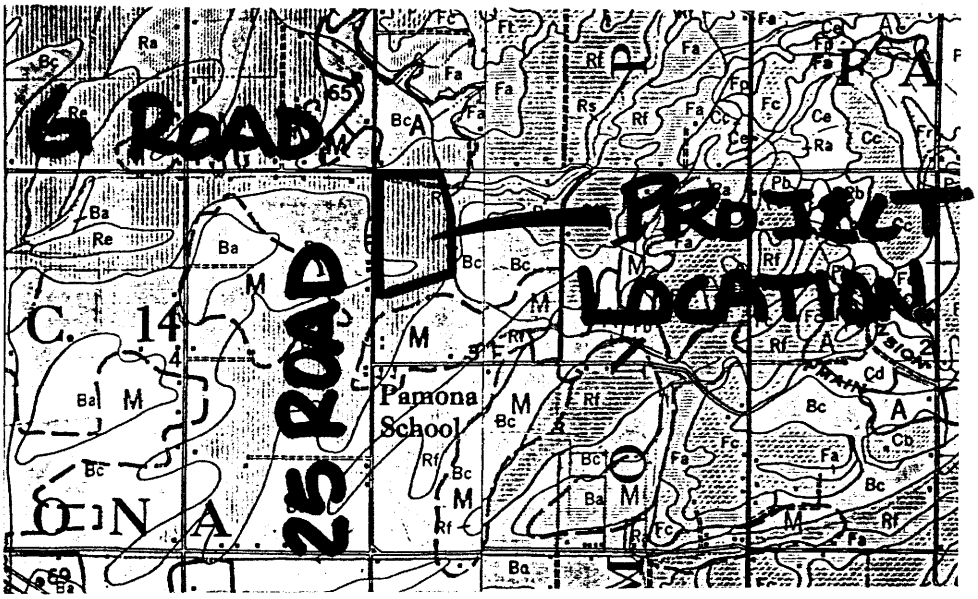
8. Soil Survey, Grand Junction Area, Colorado, Series 1940, No. 19, U.S. Department of Agriculture, issued November, 1955.

9. HEC 1, Flood Hydrograph Package, US Army Corps of Engineers, September, 1990.

10. HEC 2, Water Surface Profiles, US Army Corps of Engineers, September, 1990.

11. Persigo Village Drainage Report, Prepared By: Turner, Collie & Braden Inc., Grand Junction, Colorado, September, 1982.

APPENDIX



(Rf) Ravola Very Fine Sandy Loam, 0 to 2 Percent Slopes. Group 'B'

(Bc) Billings Silty Clay Loam, 0 to 2 Percent Slopes. Group 'C'

SOILS MAP
EXHIBIT 1.0

SCALE 1:50 000

CONTOUR INTERVAL 80 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

MILES

FEET

LEACH CREEK

PROJECT SITE

EXHIBIT 2.0

PERSIGO VILLAGE
DRAINAGE STUDY

SUBWATERSHEDS OF LEACH CREEK

Turner Collie & Braden Inc.

CONSULTING ENGINEERS

TEXAS AUSTIN DALLAS EL PASO HOUSTON PORT ARTHUR
COLORADO DENVER GRAND JUNCTION

Exhibit	2	Job No.	8013-003	Date	SEPT., 1982

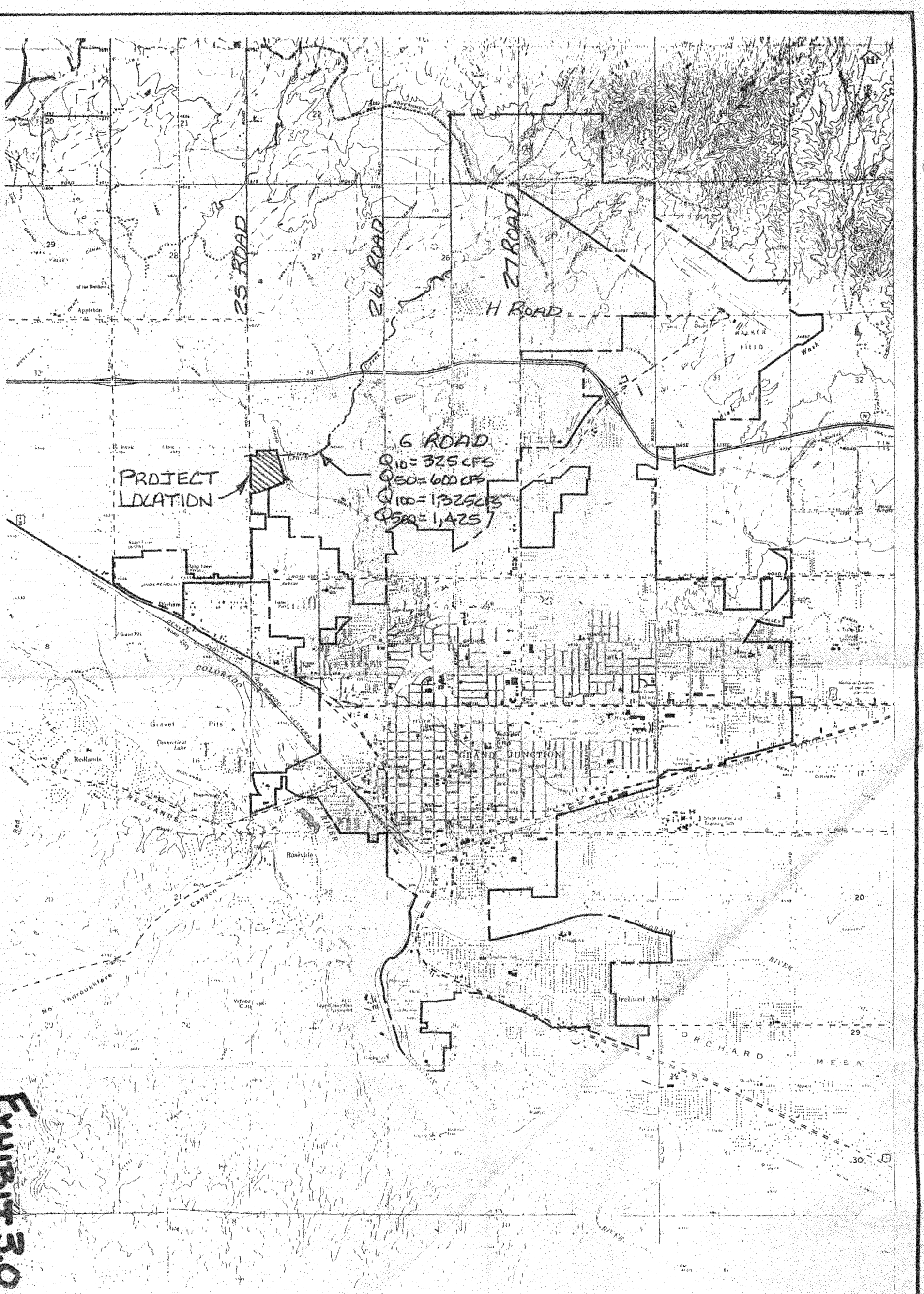


EXHIBIT 3.0

FIGURE 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF GRAND JUNCTION, CO
(MESA CO.)

APPROXIMATE SCALE
3000 0 3000 6000 9000 FEET

VICINITY MAP

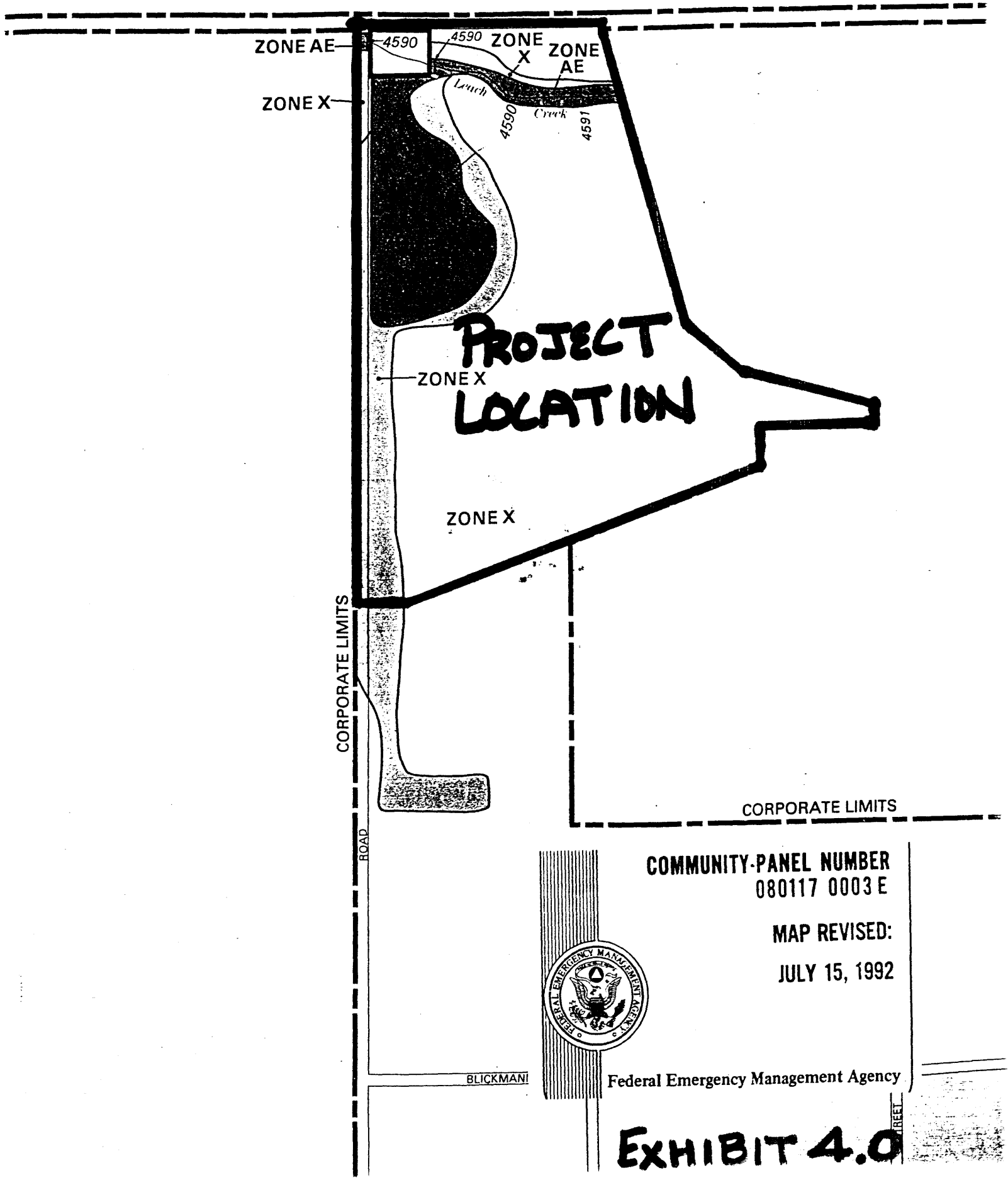
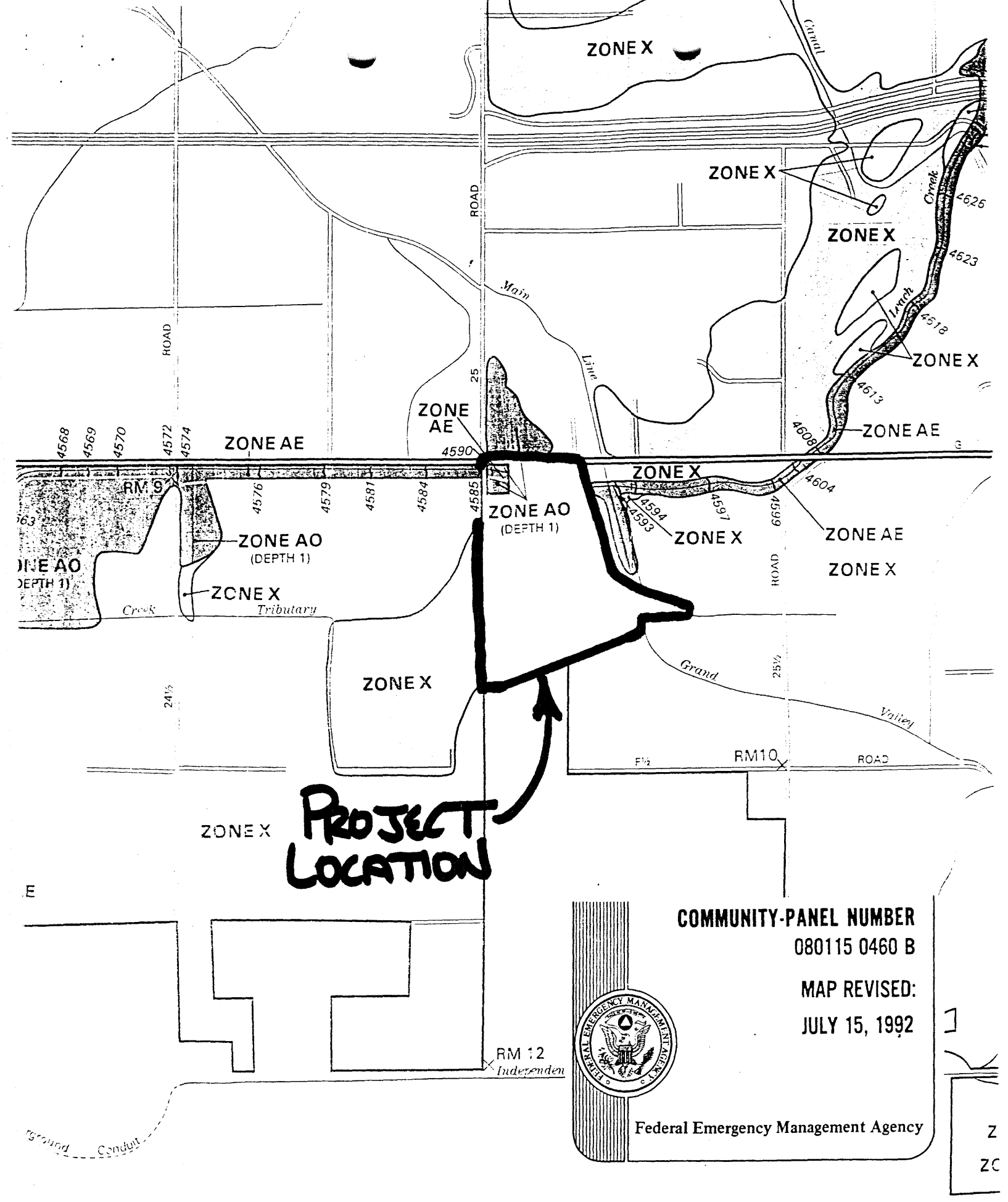

ZONE AE
4590
4590
ZONE X
ZONE AE
ZONE X
Leach
Creek
4590
4591
PROJECT LOCATION
ZONE X
ZONE X
CORPORATE LIMITS
ROAD
CORPORATE LIMITS
BLICKMAN
COMMUNITY-PANEL NUMBER
080117 0003 E
MAP REVISED:
JULY 15, 1992
Federal Emergency Management Agency
REET

EXHIBIT 4.0



City of Grand Junction

EXHIBIT 5.0

F.I.S. For Grand Junction

Table 2. Summary of Discharges

Flooding Source and Location	Drainage Area (Square Miles)	Peak Discharges (Cubic Feet per Second) 10-Year	50-Year	100-Year	500-Year
Colorado River					
Above Confluence With Gunnison River	8,800	32,900	44,400	49,300	61,000
Below Confluence With Gunnison River	17,000	50,600	73,100	83,700	111,400
Gunnison River					
Near Grand Junction	7,928	17,700	28,700	34,400	50,400
Indian Wash					
At Upstream Corporate Limits	11.6	400	1,000	1,260	2,350
At 28 Road and Orchard Avenue	12.2	460[1]	530[1]	550[1]	690[1]
At Grand Avenue	13.4	460[1]	680[1]	700[1]	750[1]
Above Confluence With 29½ Road Channel (at U.S. Highways 6 and 24)	13.5	650	820	820	1,050
Below Confluence With 29½ Road Channel	15.3	540[1]	780[1]	890[1]	1,330[1]
Leach Creek					
At H Road	12	400	1,150	1,750	4,200
Below 26 Road (24½ Road)	--[2]	350	1,150	1,700	4,110
Below G and ~~26½~~ Road	--[2]	325	600	1,325	1,425
Horizon Drive Channel					
At 26 Road	4.2	290	360	385	435

[1]Reductions in Flood Flows Caused by Sheetflow Diversions From the Channel
[2]Flows Determined by Routing Procedures, Areas Not Determined

EXHIBIT 6.0

F.I.S. For Mesa County

Table 3. Summary of Discharges

Flooding Source and Location	Drainage Area (Square Miles)	Peak Discharges (Cubic Feet Per Second) 10-Year	50-Year	100-Year	500-Year
Colorado River					
Above Confluence with Gunnison River (near Palisade)	8,800	32,900	44,400	49,300	61,000
Below Confluence with Gunnison River (near Fruita)	17,000	50,600	73,100	83,700	111,400
Big Salt Wash[2]					
At Denver and Rio Grande Western Railroad	142	1,900	5,500	7,900	16,700
Little Salt Wash[2]					
At Denver and Rio Grande Western Railroad	33	1,500	3,170	4,300	8,100
Leach Creek					
At H Road	12	400	1,150	1,750	4,200
Below 26 Road	-[1]	350	1,150	1,700	4,100
Below Interstate Highway 70	-[1]	350	1,100	1,470	3,800
Below G and 24 1/2 Road	-[1]	325	600	1,325	1,425
Below Confluence With Leach Creek	7.4	400	800	1,000	1,425
Below River Road	-[1]	400	700	725	1,300
Horizon Drive Channel[2]					
At 26 Road	4.22	290	360	385	435

[1]Flows were determined by routing procedures; drainage areas were not determined.
[2]Peak discharges shown were used in entire study reach.

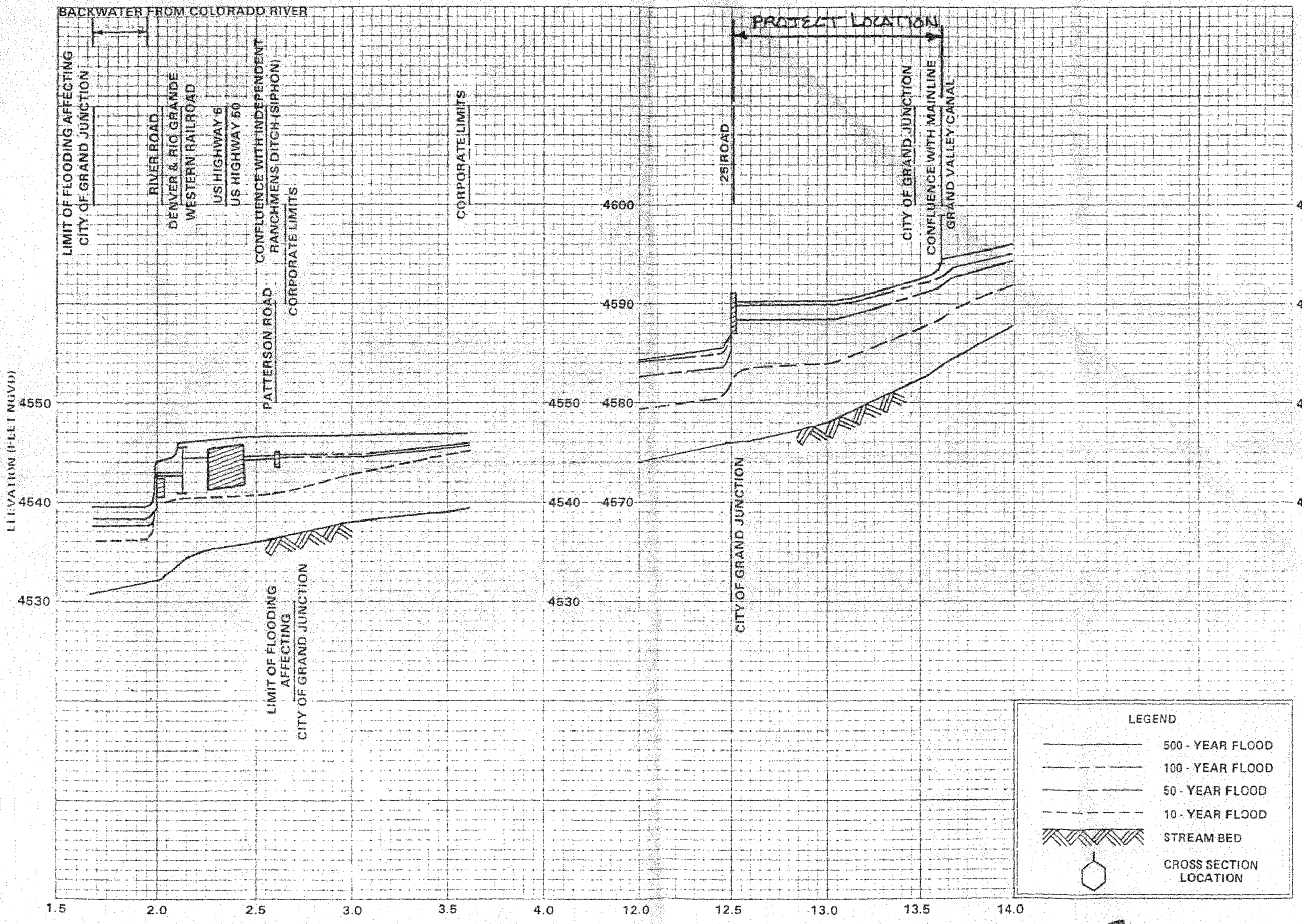
EXHIBIT 7.0

F.I.S. FOR MESA COUNTY

Table 2. Drainage Areas and Stream Gradients

Stream Name/Location	Approximate Drainage Area (Square Miles)	Average Gradient in Study Reach (Feet/Mile)
Big Salt Creek		
At Mouth	142	5
Buzzard Creek		
At Mouth	185	110
Colorado River		
At Gaging Station Near Fruita	17,100	7
At Gaging Station Near Palisade	8,790	9
Dolores River		
At Gaging Station Near Gateway	4,350	4
Grove Creek		
At Mouth	28	105
Gunnison River		
At Gaging Station Near Grand Junction	7,928	2
Horizon Drive Channel		
At F Road	2	9
Leach Creek		
At Mouth	25	6
Little Salt Wash		
At Grand Valley Canal	31	4
Mesa Creek		
At Mouth	35	265

EXHIBIT B.O



FLOOD PROFILES

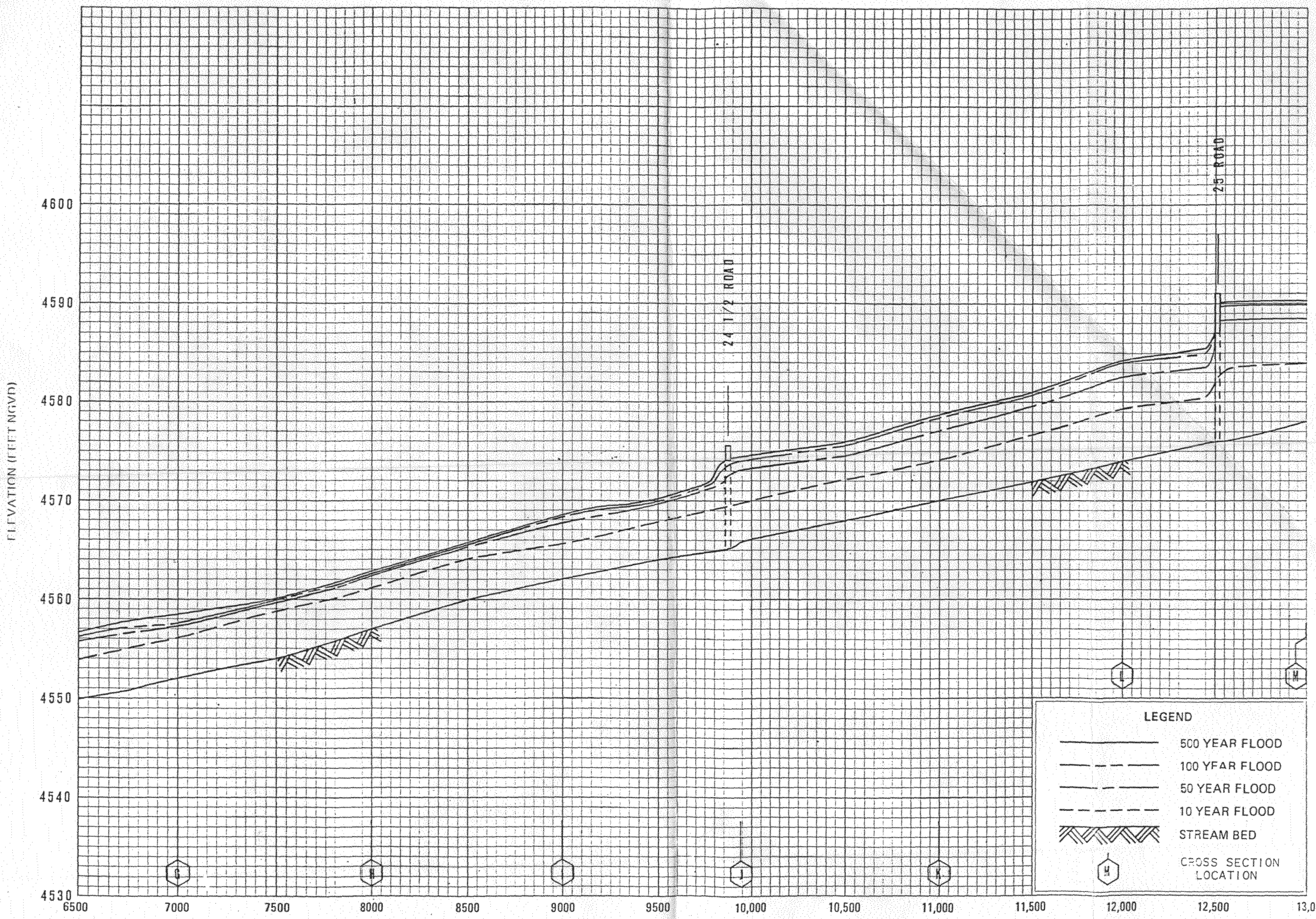
LEACH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF GRAND JUNCTION, CO
(MESA CO.)

08P

EXHIBIT 9.0



FLOOD PROFILES

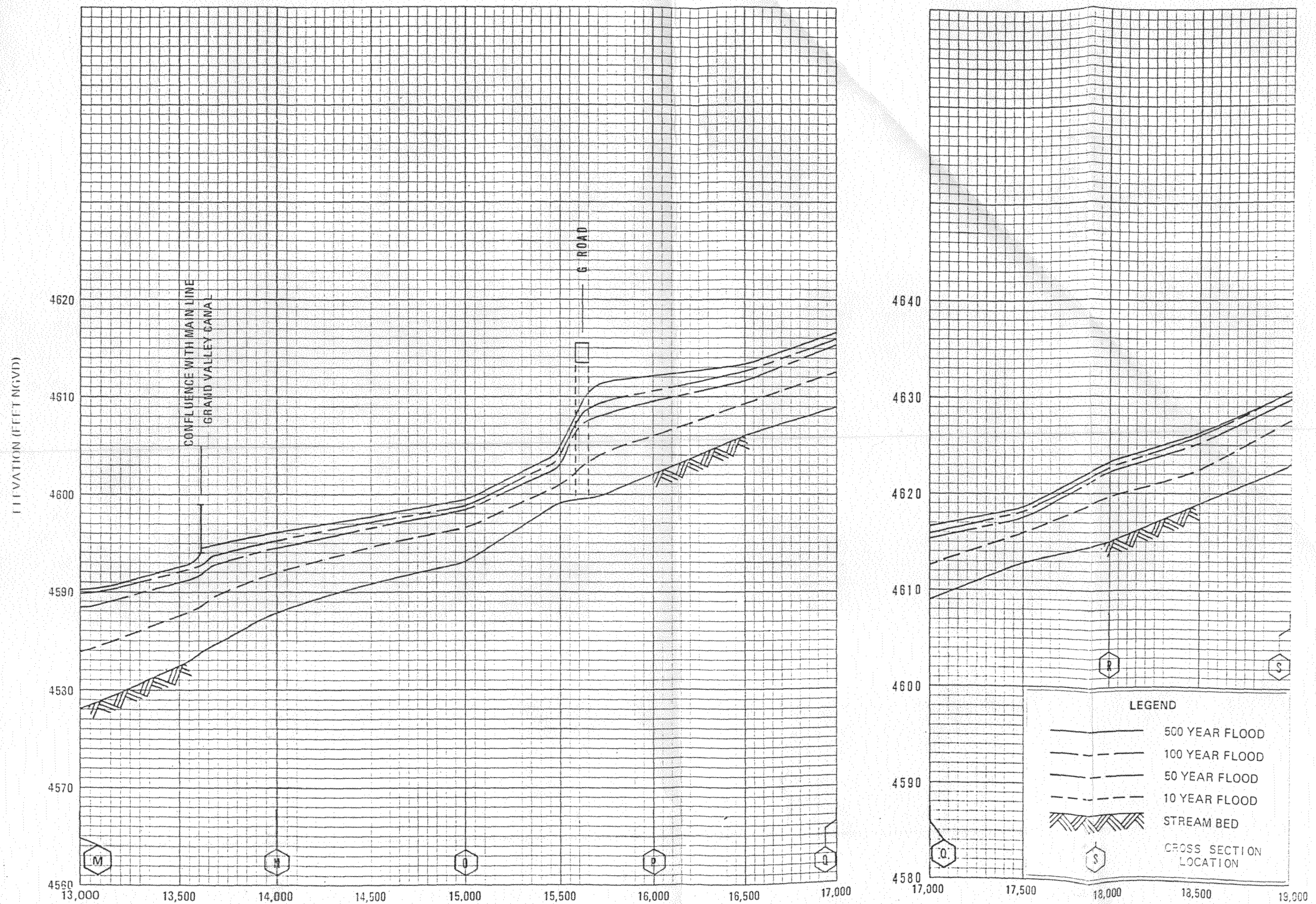
LEACH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MESA COUNTY, CO
(UNINCORPORATED AREAS)

EXHIBIT 10.0

16P



FLOOD PROFILES

LEACH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MESA COUNTY, CO

(UNINCORPORATED AREAS)

EXHIBIT 11.0

17P

DEPTH-DURATION-FREQUENCY TABLE FOR MESA COUNTY
(REFERENCE: TM-2)

DURATION	2-YR	10-YR	100-YR
5-MIN	0.16	0.27	0.41
10-MIN	0.25	0.41	0.64
15-MIN	0.32	0.52	0.81
30-MIN	0.44	0.73	1.13
1-HR	0.56	0.92	1.43
2-HR	0.64	1.01	1.55
3-HR	0.69	1.07	1.63
6-HR	0.78	1.19	1.78
12-HR	0.89	1.41	2.17
24-HR	1.00	1.65	2.56

INTENSITY-DURATION-FREQUENCY TABLE FOR MESA COUNTY
(REFERENCE: TM-1)

DURATION	2-YR	10-YR	100-YR
5-MIN	1.96	3.20	4.97
10-MIN	1.52	2.48	3.86
15-MIN	1.28	2.10	3.26
30-MIN	0.89	1.45	2.26
1-HR	0.56	0.92	1.43
2-HR	0.32	0.51	0.78
3-HR	0.23	0.36	0.54
6-HR	0.13	0.20	0.30
12-HR	0.07	0.12	0.18
24-HR	0.04	0.07	0.11

EXHIBIT 12.0

PRELIMINARY TRAFFIC STUDY

FOR

COUNTRY CROSSING

October 31, 1994

Prepared for:
Denny Granum
c\o Prudential Monument Realty
759 Horizon Drive
Grand Junction, CO 81506

Prepared by:
HART GROUP,PC
ENGINEERS • DESIGNERS • PLANNERS
A **LANDesign** Partner
200 North 6th St.
Suite 102
Grand Junction, Colorado 81501

I certify that this study has been prepared by me or under my supervision.

Prepared by:_____

Philip M. Hart P.E
State of Colorado, #19346

TABLE OF CONTENTS

A. INTRODUCTION

1. Land Use

The Country Crossing site is located in Grand Junction, just south of intersection of 25 Road and G Road. It is located in part of the NW 1/4 of the NW 1/4, Section 3, T1S, R1E of the Ute Meridian. The site contains 46.34 acres.

The site is not currently in use for any purpose and is in a fallow state. Some activity has occurred in the past and one uncompleted apartment building is presently on the site. Agricultural production has occurred on the property in the past. The topography of the site is relatively flat and gently slopes towards the southwest at a average rate of 1%. The site has grass cover and some shrubs and trees.

The proposed use of the site calls for the ultimate development of 95 single family home sites, 48 townhomes and 31 duplex units on the 46.34 acres. The resulting density is 3.75 dwelling units per acre.

The surrounding land uses of the site are primarily single family developments on moderately sized lots and single family residences on small acreages. Some small agricultural parcels are located in the area. To the Northwest of the site across G Road is Fountainhead Subdivision which is in the process of being developed. Directly North, of the site across G Road, South of the site along 25 Road and West of the site across 25 Road the land use is single family on small acreages.

2. Access

Primary access to the site is gained from 25 Road which runs north\south along the west side of the site, and G Road which adjoins the north side of the site and serves as the east\ west acess although no direct access is proposed from G Road due to a major

drainage way located at the south edge of G Road between G Road and the Site. The intersection of 25 Road and G Road is the primary intersection to be evaluated by this report.

B. PROPOSED ROADWAY IMPROVEMENTS

Currently no roadway improvements are proposed for the 25 Road and G Road intersection. One lane will be added to 25 Road on the East side of the road along the frontage with this site.

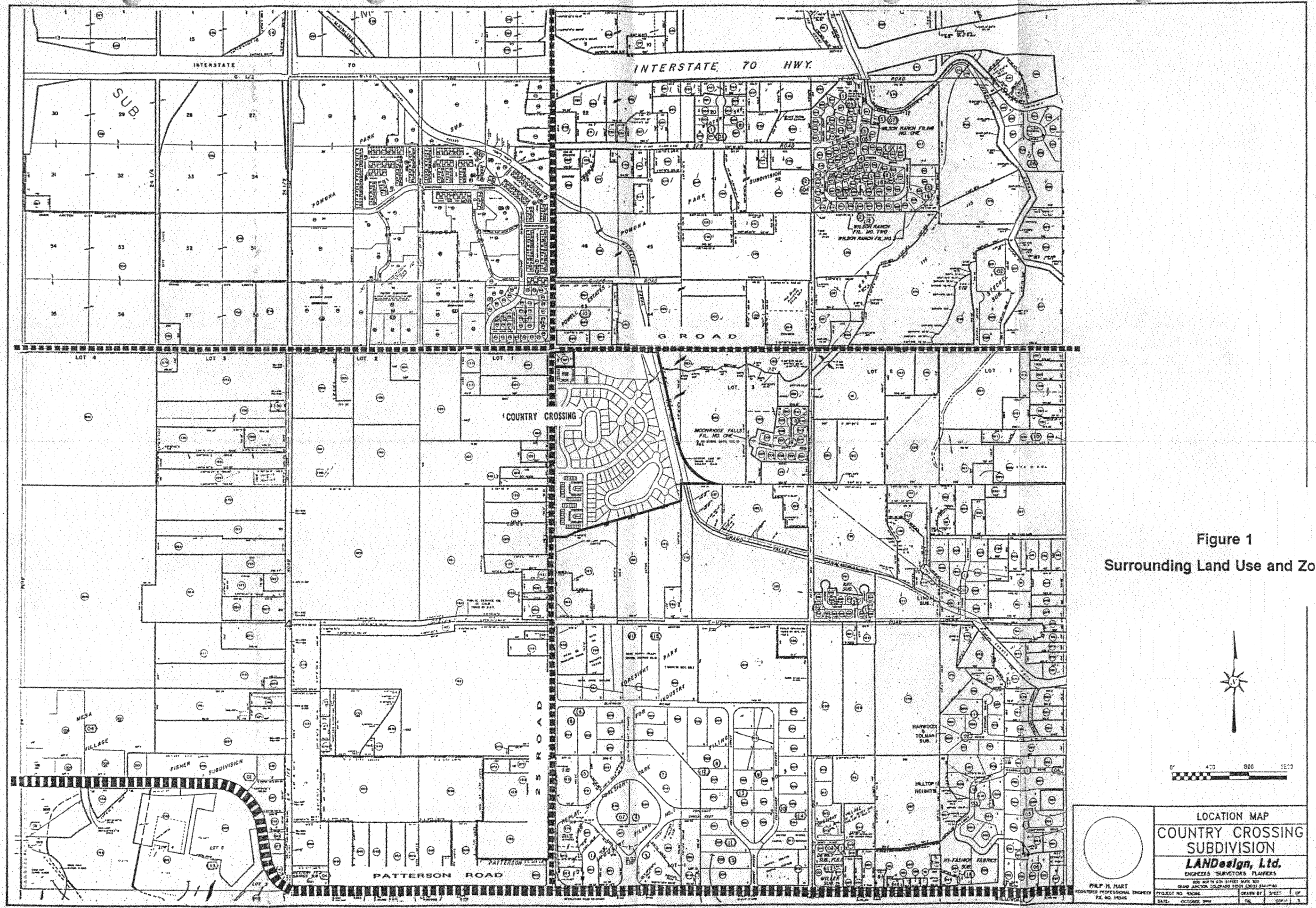


Figure 1

Surrounding Land Use and Zoning

LOCATION MAP

COUNTRY CROSSING SUBDIVISION

LANDesign, Ltd.

ENGINEERS SURVEYORS PLANNERS

PHILIP M. HART
REGISTERED PROFESSIONAL ENGINEER
P.E. NO. 19346

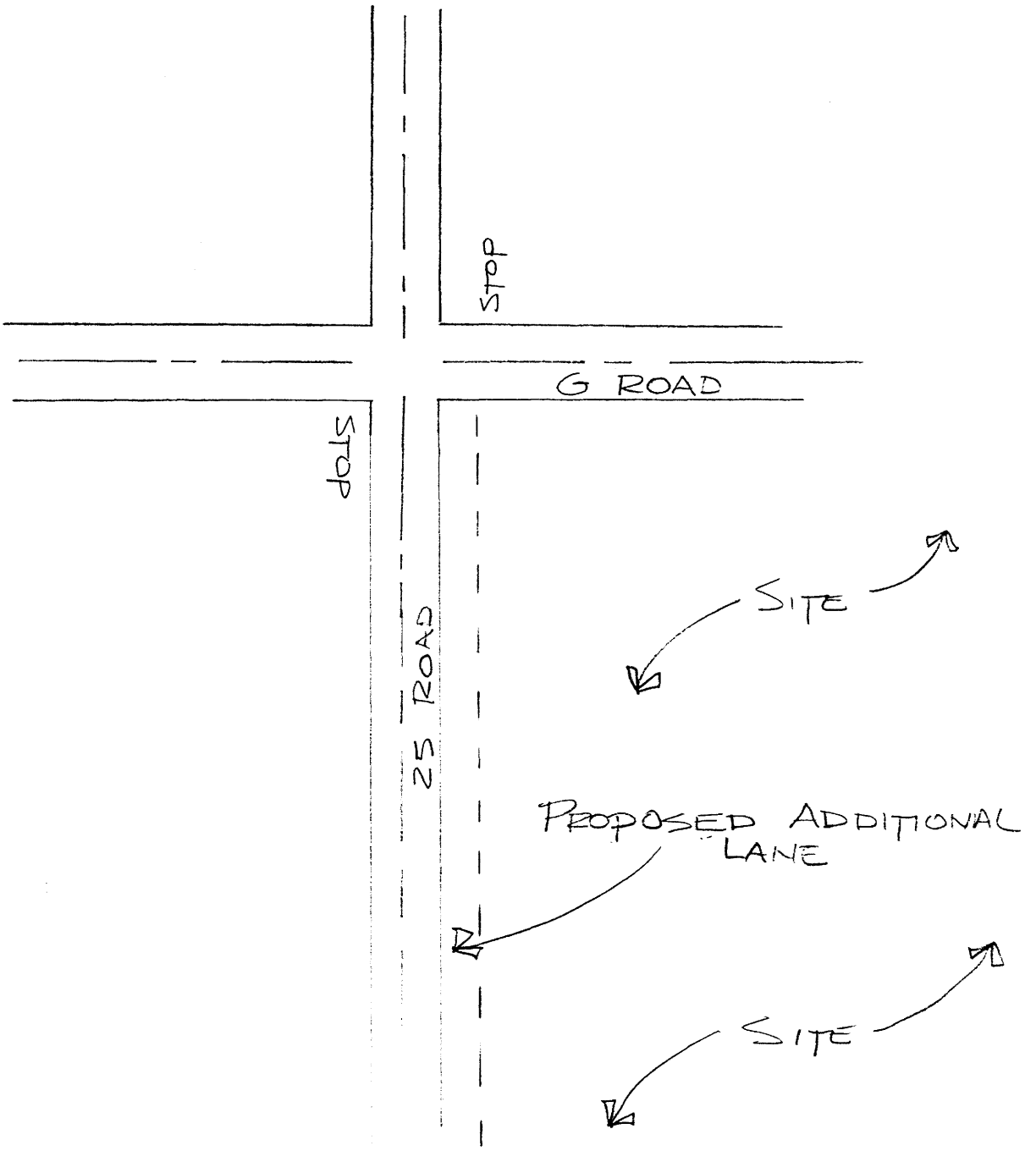


Figure 2

G Road and 25 Road intersection

C. TRIP GENERATION

1. Trip Generation Rates

Trip generation rates are provided in Trip Generation , January 1991, Institute of Transportation Engineers. (see Appendix A)

TRIP GENERATION RATE SINGLE FAMILY SITES

Intersection	# of Lots	Ave Day	Ave Day Trips	Peak Hour (am)	Peak Hour (am) Trips	Peak Hour (pm)	Peak Hour (pm) Trips
North Access and 25 Road	30	9.55	287	.74	23	1.01	31
South Access and 25 Road	65	9.55	621	.74	49	1.01	66
Total	95		908		72		97

Table A

TRIP GENERATION RATE TOWNHOME UNITS

Intersection	# of Lots	Ave Day	Ave Day Trips	Peak Hour (am)	Peak Hour (am) Trips	Peak Hour (pm)	Peak Hour (pm) Trips
North Access and 25 Road	0			.59		.78	
South Access and 25 Road	48	5.86	282	.59	29	.78	38
Total	48		282		29		38

Table B

TRIP GENERATION RATE DUPLEX UNITS

Intersection	# of Lots	Ave Day	Ave Day Trips	Peak Hour (am)	Peak Hour (am) Trips	Peak Hour (pm)	Peak Hour (pm) Trips
North Access and 25 Road	0			.67		.90	
South Access and 25 Road	31	7.71	239	.67	21	.90	28
Total	31		239		21		28

Table C

D. CURRENT TRAFFIC @ 25 ROAD

Current Traffic on 25 Road

Peak AM Hour 110

Peak PM Hour 139

Weekday Total 2400

E. CONCLUSIONS AND RECOMMENDATIONS

1. Recommendations for Final Report

The final report should use the existing traffic volumes and projected trips generated by the development of this subdivision to determine traffic patterns and Levels of Service for the intersection of G Road and 25 Road.

PRELIMINARY DEVELOPMENT PLAN FOR:

COUNTRY CROSSING SUBDIVISION

GRAND JUNCTION, COLORADO

NOVEMBER, 1994

189 94

Original
Do NOT Remove
From Office

PREPARED BY: ***LAND**esign* Limited, 200 N. 6th. Street, Grand Junction, CO 81501 (303) 245-4099

PRELIMINARY PLAN for: COUNTRY CROSSING SUBDIVISION

INTRODUCTION - The Country Crossing Subdivision site is located southeast of 25 Road and G Road in the City of Grand Junction. The 46.3 acre site was formerly known as "Persigo Village" and later known as "Trolley Gate". The prior development proposal gained a change in zoning and Preliminary Plan approval from the City of Grand Junction in 1981. The approved development application consisted of 740 multi-family units at a density of 16 dwelling units per acre. A Final Plan was processed and construction was begun on an eight unit building which has not been completed as of this date.

EXISTING LAND USE - The property under consideration is comprised of 46.3 acres and contains an uncompleted eight unit structure. The most dominate feature of the site is Leach Creek. Other than the area around Leach Creek the topography of the site is considered to be "flat" in nature and generally slopes towards the northwest at a typical rate of one percent. Other than the area around the existing multi-family structure, all of the property is being farmed as grazing land, which is the historical land use. Several small groves of cotton-wood trees are evident on the property.

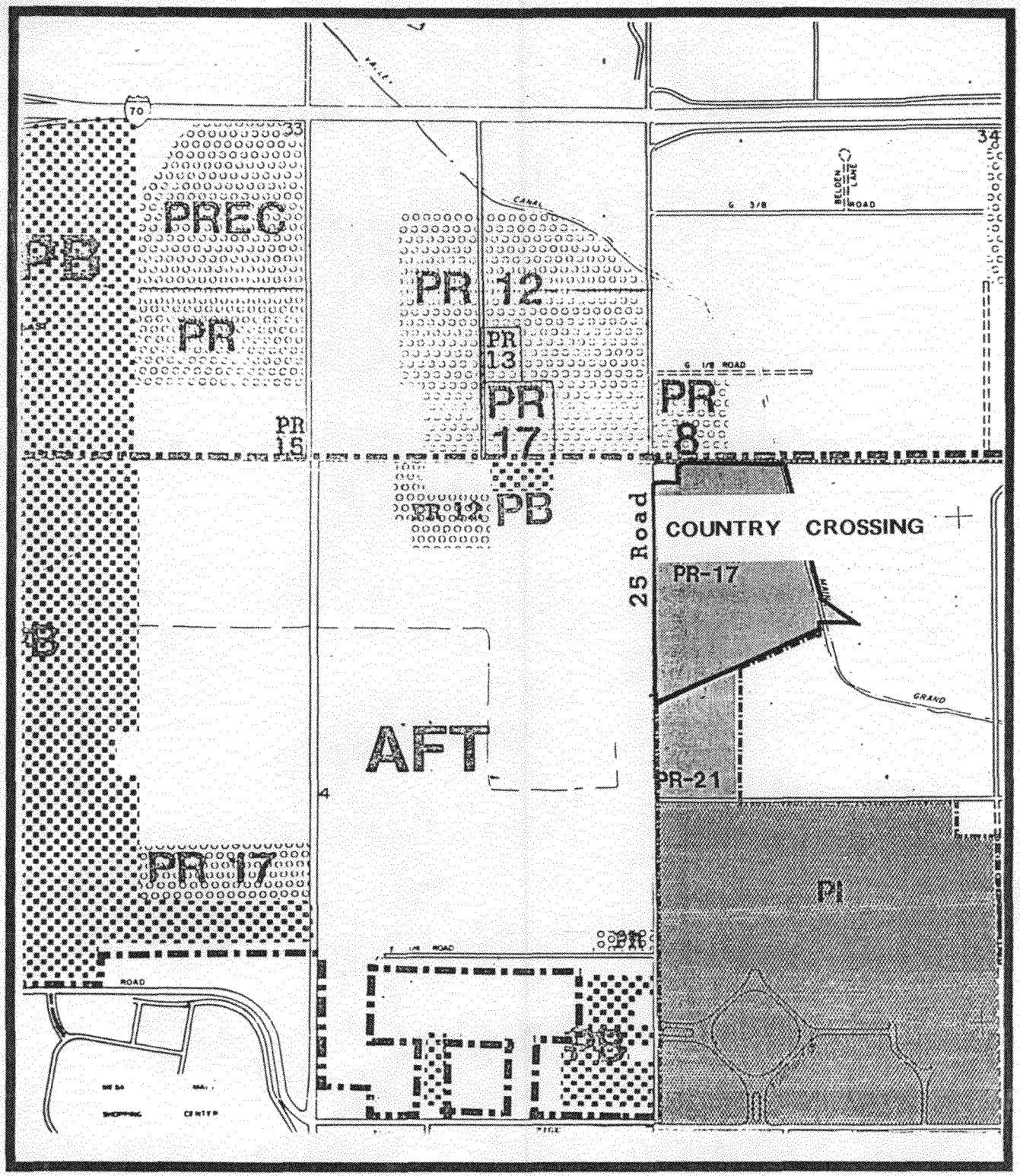
The property is zoned PR (planned residential) 17 units per acre by the City of Grand Junction.

SURROUNDING LAND USE - The dominate land use in the area surrounding Country Crossing Subdivision is Fountainhead Subdivision, a single family development on small sized lots. Acreage sized parcels with single family dwellings adjoin the subject site adjacent to 25 Road. Land to the south known as "Country Village" consists of a large parcel zoned for up to 21 dwelling units per acre. There are no current plans for development of this property. Existing non-residential uses in the surrounding area can be found in Foresight Park for Industry and the Patterson Road corridor less than one quarter mile south of the subject property.

Other subdivisions in the vicinity include Valley Meadows and Moonridge Falls, both of which are adjacent to the Grand Valley Canal, which forms the easterly boundary of Country Crossing Subdivision.

A Location Map at the end of this narrative statement illustrates the location of Country Crossing Subdivision in relationship to the surrounding land ownership. A reproduction from the Grand Junction and Mesa County Zoning maps follow:

SURROUNDING ZONING MAP



PROPOSED LAND USE - The proposal calls for the ultimate development of three separate residential use areas; single family, townhome units and du-plex townhome units at an overall density of 3.75 dwelling units per acre.

SINGLE FAMILY AREA consists of 95 building sites ranging in size from 5850 square feet to 9900 square feet.

TOWNHOME AREA is located near the southwest corner of the property on approximately 3.7 acres. The townhome area consist of 48 units arranged in clusters of eight, two story buildings of which one is existing.

DUPLEX TOWNHOME AREA is identified as Block Six on the accompanying Site Development Plan. Each one of the 31 units will be located on individually owned lots of approximately 4050 square feet. One of the duplex walls will be common with the adjacent unit.

LAND USE SUMMARY

USE	UNITS	AREA	% OF TOTAL
SINGLE FAMILY	95	17.2	37.1
TOWNHOME AREA	48	3.7	8.0
DUPLEX TOWNHOMES	31	3.3	7.1
ROAD R.O.W		7.2	15.6
R.V. STORAGE		0.7	1.5
PRIVATE OPEN SPACE		4.8	10.4
PUBLIC OPEN SPACE		4.9	10.6
OUTLOT "A"		0.8	1.7
FUTURE DEVELOPMENT		3.7	8.0
TOTAL	174	46.3	100.00

The accompanying Site Development Plan depicts the relationship of each dwelling use type to the property boundary, roadway access and Open Spaces.

In addition to the individual lot development standards presented herein, architectural controls will be implemented to insure an aesthetically pleasing and orderly development. To achieve this, covenants, conditions and restrictions (C.C. & R's) will be adopted to insure ongoing protection to the future residents of Country Crossing Subdivision and surrounding property owners. The C. C. & R's will also include provisions for ownership and maintenance of the designated Private Open Space and irrigation system.

Building setback requirements for each lot is illustrated on the following chart, setback requirements for the townhome units can be found on the Site Development Plans:

S.F. BUILDING SETBACK REQUIREMENTS	
FRONT	20 feet
SIDE	5 feet
REAR	15 feet
MAX. BUILDING HEIGHT = 32 FT.	

DU-PLEX TOWNHOME SETBACK REQUIREMENTS	
FRONT	20 feet
SIDE	5 feet; 0 feet other side
REAR	15 feet
MAX. BUILDING HEIGHT = 32 FT.	

ACCESS - Primary access is gained to Country Crossing Subdivision from 25 Road. Patterson Road is located 1/4 mile south of the site and serves as a major arterial east/west roadway in Grand Junction. Other access is also available from

"G" Road which affords access to U.S. Highway 50 two miles east of 25 Road. Interstate 70 is located one quarter mile to the north. Primary access to the development will be from either a new "Urban Residential Street" or an "Urban Residential Collector". An "inter-neighborhood" connector is also provided to adjoining undeveloped property to the south and will improve the circulation of traffic in the neighborhood. According to the City of Grand Junction's, *Trip Generator*, 1429 average week day trips would be realized when the Country Crossing Subdivision is fully developed.

A Preliminary Traffic Analysis has been transmitted to the Community Development and Engineering Departments under separate cover. The analysis evaluates current and future traffic impacts at 25 Road and G Road.

UTILITY SERVICE

DOMESTIC WATER - All dwellings within Country Crossing Subdivision will be served by an public owned domestic water distribution system. An existing 6 and 12 inch water mains are located within 25 Road and will be used to provide water service to the new dwellings. New 8, 6 and 4 inch mains will be extended within the property. The existing water mains are owned and maintained by the Ute Water Conservancy District. Fire hydrants will be placed throughout the development. Sufficient flows and pressure exist to provide adequate water supply for fire protection.

SANITARY SEWER - A new sanitary sewage collection system will be constructed. Sewer service will be extended from an existing main, owned and maintained by the City, located in 25 Road. It is estimated that peak sewage flows generated by the lots within the development will be 52,200 gallons per day.

ELECTRIC, GAS, PHONE & CATV - Electric, gas, and communication lines will be extended to each lot within the development from existing lines located adjacent to

the proposed development. Proposed gas, electric, and communication lines will be located in a "common trench" adjacent to the dedicated road right-of-way.

IRRIGATION WATER - Irrigation water will be provided by a zoned pressurized delivery system which will create water conservation. A central pumping facility will be located within the proposed Private Open Space near the southeast property corner, where the petitioner's water rights are available.

DRAINAGE - A Preliminary Drainage Report which evaluates the impacts on existing drainage patterns has been submitted to the City Engineering and Community Development Departments under separate cover. Most of the future drainage will be carried on the ground surface to the proposed street system and underground pipe to Leach Creek.

SOILS AND GEOLOGY - There are no known geologic hazards within Country Crossing Subdivision. A Preliminary Geotechinical report for the subject property was conducted in 1981. A copy of the report has been transmitted to the Engineering and Community Development Department under separate cover. The report did not identify any server soil limitations.

DEVELOPMENT SCHEDULE - The rate at which development of Country Crossing Subdivision will occur is dependent upon the City's future housing needs. It is anticipated that site development will occur in phases as shown on the Phasing Plan which follows.

We're taking television into tomorrow.

TCI Cablevision of Western Colorado, Inc.

November 16, 1994

Country Crossing Subdivision
Thomas L. Logue
% Community Development Department
250 North 5th Street
Grand Junction, CO 81501

Ref. No. TCICON.049

Dear Mr. Logue;

We are in receipt of the plat map for your new subdivision, **Country Crossing Subdivision**. We will be working with the other utilities to provide service to this subdivision in a timely manner.

I would like to take this opportunity to bring to your attention a few details that will help both of us provide the services you wish available to the new home purchasers. These items are as follows:

1. We require the developers to provide, at no charge to TCI Cablevision, an open trench for cable service where underground service is needed. This trench may be the same one used by other utilities.

2. We require developers to provide, at no charge to TCI Cablevision, fill-in of the trench once cable has been installed in the trench.

3. We require developers to provide, at no charge to TCI Cablevision, a 4" PVC conduit at all utility road crossings where cable TV will be installed. This 4" conduit will be for the sole use of cable TV.

4. TCI Cablevision will provide service to your subdivision so long as it is within the normal cable TV service area. Any subdivision that is out of the existing cable TV area may require a construction assist charge, paid by the developer, to TCI Cablevision in order to extend the cable TV service to that subdivision.

5. TCI will normally not activate cable service in a new subdivision until it is approximately 30% developed. Should you wish cable TV service to be available for the first home in your subdivision it will, in most cases, be necessary to have you provide a construction assist payment to cover the necessary electronics for that subdivision.

In addition, Any subdivision which has Cul-de-sacs must have the driveways clearly marked to avoid the cost of relocating cable pedestals due to placement within a driveway not properly marked.

Should you have any other questions or concerns please feel free to contact me at any time. If I am out of the office when you call please leave your name and phone number with our office and I will get back in contact with you as soon as I can.

Sincerely,

Glen Vancil,
Construction Supervisor 245-8777

2502 Foresight Circle
Grand Junction, CO 81505
(303) 245-8750

STAFF REVIEW (Preliminary comments)

FILE: #189-94

DATE: November 17, 1994

STAFF: Tom Dixon

REQUEST: Preliminary Plan review for 174 residential units and Final Plan/Plat review for Phase I of Country Crossing

LOCATION: Southeast corner of 25 and G Roads

APPLICANT: Denny Granum

EXISTING LAND USE: Residential (unfinished residential structure)/Undeveloped

PROPOSED LAND USE: Residential (single-family, duplexes, multi-family)

SURROUNDING LAND USE (AND APPROXIMATE DENSITY):
NORTH: Single-family Residential (2 units per acre)
SOUTH: Undeveloped
EAST: Single-family Residential (1 unit per acre)
WEST: Single-family Residential (4 units per acre)

EXISTING ZONING: PR-17 (Planned Residential, 17 units per acre)

PROPOSED ZONING: PR-3.8

SURROUNDING ZONING:
NORTH: PR-8 and AFT (Mesa County)
SOUTH: PR-21 and AFT (Mesa County)
EAST: AFT (Mesa County)
WEST: AFT (Mesa County)

RELATIONSHIP TO COMPREHENSIVE PLAN/POLICIES/GUIDELINES:

No such plans have been adopted in this area of the City.

STAFF ANALYSIS:

This 46.3 acre site is being proposed for 174 residential units comprised of three residential housing types: 95 detached, single-family units; 31 duplex units; and 48 multi-family units.

This site has been the subject of previous reviews and approvals, known initially as Persigo Village and later as Trolley Gate. The 1981 Trolley Gate approval consisted of 740 multi-

family units at an overall density of approximately 16 units per acre. The PR-17 zone was applied to the site to reflect this general density.

The proposed Country Crossing will develop a total of 174 residential units on this site, an effective density of approximately 3.8 units per acre. This will be realized in as many as five different phases, the location and timing of each phase being driven by market demand.

STAFF COMMENTS:

1) Public sidewalk connections need to be provided between the open space on the south side of the site and the property to the south and between the open space on the east side and the canal/public open space to the east.

2) The open space area on the southeast portion of the site, which will contain the irrigation pond, should have a sidewalk connection passing through it, preferably over the outlet structure that leads to the storm sewer area.

3) The area between the townhome units and 25 Road should be bermed and landscaped in order to create a better separation. The townhomes should have at least a 50-foot setback from the 25 Road right-of-way.

4) The area proposed for recreation vehicles should be heavily screened from the public right-of-way with a continuous landscape edge. Berming along 25 Road would also be beneficial. In addition, an entry monument could be placed at the street corner that would help to hide and screen the use.

5) The 5.7 acre area along G Road needs to be defined regarding future use and/or density. This can be achieved by simply indicating the proposed density for this area, types of structures, general circulation, and a development phasing schedule. An Outline Development Plan for this parcel would satisfy this.

6) The townhome detail shows no sidewalk connections between the structures or to the parking lots. These connections need to be shown.

7) The trail along the canal will need to be improved with a 10-foot wide concrete path built to City standards.

8) A maximum of five lots may be approved under preliminary/final plan review as Phase I. Final plans/plat must be submitted in conformance with the Submittal Standards fir Improvements and Development (SSID) manual. The platting of all remaining lots will have to be delayed until final plat/plan approval for the entire project.

9) A Development Improvements Agreement will be required for the public street improvements.

10) Additional right-of-way dedication may be necessary along either 25 or G Roads or

both.

11) Building setbacks are proposed to be 20 feet. Consideration should be given to reducing this to 15 feet for the residence and 20 feet for the garage. This would allow more utilization of the back yard, enhance the streetscape, and create more of a "neighborhood" feeling to the project. Duplexes on corner lots should be built with each unit having a different street frontage.

POSTING OF PUBLIC NOTICE SIGNS

The posting of the Public Notice Sign is to make the public aware of development proposals. The requirement and procedure for public notice sign posting are required by the City of Grand Junction Zoning and Development Code.

To expedite the posting of public notice signs the following procedure list has been prepared to help the petitioner in posting the required signs on their properties.

1. All petitioners/representatives will receive a copy of the Development Review Schedule for the month advising them of the date by which the sign needs to be posted. IF THE SIGN HAS NOT BEEN PICKED UP AND POSTED BY THE REQUIRED DATE, THE PROJECT WILL NOT BE SCHEDULED FOR THE PUBLIC HEARING.
2. A deposit of $50.00 per sign is required at the time the sign is picked up.
3. You must call for utility locates before posting the sign. Mark the location where you wish to place the sign and call 1-800-922-1987. You must allow two (2) full working days after the call is placed for the locates to be performed.
4. Sign(s) shall be posted in a location, position and direction so that:
   a. It is accessible and readable, and
   b. It may be easily seen by passing motorists and pedestrians.
5. Sign(s) MUST be posted at least 10 days before the Planning Commission hearing date and, if applicable, shall stay posted until after the City Council Hearing(s).
6. After the Public Hearing(s) the sign(s) must be taken down and returned to the Community Development Department within three working days to receive full refund of the sign deposit. For each working day thereafter the petitioner will be charged a $5.00 late fee. After eight working days Community Development Department staff will retrieve the sign and the sign deposit will be forfeited in its' entirety.

Community Development Department staff will field check the property to ensure proper posting of the sign. If the sign is not posted, or is not in an appropriate place, the item will be pulled from the hearing agenda.

I have read the above information and agree to its terms and conditions.

SIGNATURE _____ DATE 11-28-94

FILE #/NAME #189-94 Country Crossing RECEIPT # 1807

PETITIONER/REPRESENTATIVE: Denny Granum/Tom Logue PHONE # 243-4890

DATE OF HEARING: 12/6/94 POST SIGN(S) BY: 11/28/94

DATE SIGN(S) PICKED-UP _____

DATE SIGN(S) RETURNED 12-16-94 RECEIVED BY: RSE

#40075834

RESPONSE TO REVIEW COMMENTS

November 28, 1994

Title: COUNTRY CROSSING, Preliminary Plan

File No: 189-94

Location: SE Corner of 25 Road & G Road

The following agency comments were informational in nature, or do not require a response:

U.S. POSTAL SERVICE
GRAND VALLEY RURAL POWER
SCHOOL DIST. 51

RESPONSE TO CITY UTILITY ENGINEER:
1. The preliminary sewer and water plans have been revised to show the location of a suggested sewer main extension to the Moonridge Falls development. The applicant will attempt to coordinate the final design of the sewer extension with the developer of Moonridge Falls. As a point of clarification, the applicant of Country Crossing expects a reimbursement if their development occurs prior to the Moonridge Fall development.

RESPONSE TO PARKS AND RECREATION DEPT.
Open space fees will be paid on a per unit bases prior to each phase of the development as is recorded. Also, see response to Community Development Department.

RESPONSE TO FIRE DEPARTMENT
The Final Plans will include water main connection to the existing 12 inch water main located within 25 Road. The existing 12 inch main will be connected to the existing 8 inch water main in G Road this winter by others.

A Utility Composite which indicates water main location, size and fire hydrant placement has been transmitted to the department under separate cover.

RESPONSE TO GRAND VALLEY IRRIGATION CO.
1. A single point of delivery will be located on the Final Plans adjacent to the canal east of the proposed pond area near the Southeast property boundary.

2. The existing irrigation line will be relocated and placed in a permanent irrigation easement.

3. A Pedestrian right-of-way will be established adjacent to the existing canal right-of-way.

4. An Utility Composite has been transmitted to the Company under separate cover.

RESPONSE TO MESA COUNTY PLANNING

1. The location of the RV Storage Area was selected to allow ease of access for the users in relationship to the overall circulation of the development. Other factors affecting the location include using the area as a screen buffer to the existing natural gas regulator station north of the storage area, and utilizing the area as fill to control the effects of flooding from Leach Creek.

2. The City Development Engineer has reviewed the proposed circulation plan and has determined that two accesses to 25 Road is appropriate since they are more than 800 feet apart. A right turn lane will be provided in response to the City Development Engineer's request.

3. A temporary turnaround at the end of the stub street can be accomplished by using the parking area for the multi-family units. Due to the configuration of adjoining properties this is the only stub street.

4. The open space dedication is in conformance with the City's parks and recreation plans.

RESPONSE TO DEVELOPMENT ENGINEER:

1. A right turn lane will be provided at the entrance. Lane length will be based on current transportation design standards and the Traffic Analysis for Country Crossing.

2. Street centerline radii will be increased to 100 feet, or, "elbows" will be incorporated within 90 degree intersections.

3. Specifications for the flap gate will be included within the final construction documents.

RESPONSE TO UTE WATER:

1. Water main connections will be to the existing 12 inch water main in 25 Road, not the 6 inch main.

2. The 8 inch water main in the stub street will be extended to the development's southerly boundary.

3. A Utility Composite for the multi-family area will be provided with the final construction plans.

RESPONSE TO COMMUNITY DEVELOPMENT:

1. Public sidewalk will be provided to link all private open spaces including the public open space along the canal.

2. Final landscape plans for the multi-family area will depict a bermed and landscaped area adjacent to 25 Road. The City's bulk setback requirement from 25 Road is 40 feet, not 50 feet.

3. Screening details for the RV Storage Area call for a combination of screen fencing and landscaping around the storage area. Grading of the area will include raising the storage area approximately 2 to 3 feet above existing ground elevations.

4. It is the petitioner's desire to transfer ownership of the 5.7 acre parcel along G Road to the City for public use.

5. Preliminary sidewalk connections have been added to the site plan for the multi-family area.

6. Since the City has not determined specific requirements for the overall public pedestrian circulation in relationship to surrounding land ownership, it is the petitioner's desire not to construct a sidewalk within the proposed public open space along the canal and G Road. The petitioner suggests that the $39,150 Parks and Recreation Open Space fee be applied toward the construction of the trail once the City has determined specific requirement of the pedestrian circulation system.

7. A Final Plat depicting five lots within the first phase has been transmitted to the department. It is the petitioners desire to have the construction documents processed through an administrative process.

8. The Preliminary Plan, as submitted, calls for the dedication of an additional 10 feet of right-of-way for 25 Road. This would provide a total of 40 feet half of the total right-of-way width. An additional 20 feet of right-of-way can be granted along G Road across the proposed public open space.

9. The minimum front yard setbacks will be changed to 20 feet for garages and 15 feet at the dwelling. Duplexes on corner lots could be design in a manner so that each unit will have a different street frontage.

STAFF REVIEW

FILE: #189-94

DATE: November 29, 1994

STAFF: Tom Dixon, AICP

REQUEST: Preliminary Plan review for 174 residential units and Final Plan/Plat review for Phase I of Country Crossing

LOCATION: Southeast corner of 25 and G Roads

APPLICANT: Denny Granum

EXISTING LAND USE: Residential (unfinished residential structure)/Undeveloped

PROPOSED LAND USE: Residential (single-family, duplexes, multi-family)

SURROUNDING LAND USE (AND APPROXIMATE DENSITY):
NORTH: Single-family Residential (2 units per acre)
SOUTH: Undeveloped
EAST: Single-family Residential (1 unit per acre)
WEST: Single-family Residential (4 units per acre)

EXISTING ZONING: PR-17 (Planned Residential, 17 units per acre)

PROPOSED ZONING: PR-3.8

SURROUNDING ZONING:
NORTH: PR-8 and AFT (Mesa County)
SOUTH: PR-21 and AFT (Mesa County)
EAST: AFT (Mesa County)
WEST: AFT (Mesa County)

RELATIONSHIP TO COMPREHENSIVE PLAN/POLICIES/GUIDELINES:

No such plans have been adopted in this area of the City.

STAFF ANALYSIS:

This 46.3 acre site is being proposed for 174 residential units comprised of three residential housing types: 95 detached, single-family units; 31 duplex units; and 48 multi-family units.

This site has been the subject of previous reviews and approvals, known initially as Persigo Village and later as Trolley Gate. The 1981 Trolley Gate approval consisted of 740 multi-

family units at an overall density of approximately 16 units per acre. The PR-17 zone was applied to the site to reflect this general density.

The proposed Country Crossing will provide a total of 174 residential units to this site, an effective density of approximately 3.8 units per acre. This will be realized in as many as five different phases, the location and timing of each phase being driven by market demand. Exhibit A reflects the possible phasing sequence of this project.

Phase I is the keystone phase to getting Country Crossing underway. That is because an unfinished eight-unit structure is already in place although it has remained uninhabitable for nearly ten years. The first phase would complete this structure and would add two more eight unit structures in addition to the platting of two single-family residential lots and two duplex lots. Access to these units would all come from new public streets which would connect to 25 Road at a single access point. A second connection to 25 Road is proposed with Phase V.

Planning staff issues at this time are:

1) Public sidewalk connections need to be provided between the open space on the south side of the site and the property to the south and between the open space on the east side and the canal/public open space to the east.

2) The open space area on the southeast portion of the site, which will contain the irrigation pond, should have a sidewalk connection passing through it, preferably over the outlet structure that leads to the storm sewer area.

3) The area between the townhome units and 25 Road should be bermed and landscaped in order to create a better separation. The townhomes should have at least a 40-foot setback from the 25 Road right-of-way.

4) The area proposed for recreation vehicles should be heavily screened from the public right-of-way with a continuous landscape edge. Berming along 25 Road would also be beneficial. In addition, an entry monument could be placed at the street corner that would help to hide and screen the use.

5) The 5.7-acre parcel along G Road containing the Leech Creek has been offered as an area to be dedicated to the public for park purposes. However, the Parks and Recreation Department has no interest in this parcel for it has little functional value for trail or park use.

6) The 4.91-acre parcel containing a portion of the Grand Valley Canal is identified as an area to be dedicated to the public for trail use. This trail is identified as a proposed Off-Road Bike Pedestrian Route in the Multi-Moldal Transportation Study for the Grand Junction/Mesa County Urbanized Area. This study was adopted by the City Council on July 21, 1993, as Resolution #46-93.

7) A maximum of five lots may be approved under preliminary/final plan review as Phase I. The platting of remaining lots will have to be delayed until final plat/plan approval for the entire project.

8) A Development Improvements Agreement is needed for the public street improvements.

9) Additional right-of-way dedication may be necessary along either 25 or G Roads, or both. The additional right-of-way is intended to benefit this property by creating turn lanes which will provide safer access conditions to the site.

10) Front yard building setbacks are proposed to be 20 feet. Reducing this to 15 feet for the residence and 20 feet for the garage is suggested. This would allow more utilization of the back yard, enhance the streetscape, and create more of a "neighborhood" character to the project. Duplexes on corner lots could be built with each unit having a different street frontage thereby decreasing the appearance of higher density.

11) Proposed Lot 21, Block Six is landlocked. Correction of this lack of street frontage must be corrected in the appropriate phase of platting.

12) Proposed lots on the north side of the site (Phase V) should be reconfigured so that lot lines extend to Leech Creek or to G Road since the parcel presently shown will not be accepted as a dedication to the City.

The petitioner has responded to review comments and has indicated a willingness to satisfy identified issues.

STAFF RECOMMENDATION:

Approval of the Preliminary Plan/Plat for the Country Crossing Subdivision and the Final Plan/Plat approval for Phase I (Filing 1) subject to satisfaction of the following issues:

1) Concerns presented by the City Utility Engineer, the Parks and Recreation Department, the Fire Department, the Grand Valley Irrigation Company, the Mesa County Planning Department, the Development Engineer, and Ute Water are adequately satisfied.

2) The 4.91-acre open space area along the Grand Valley Canal proposed by the petitioner to be dedicated to the City of Grand Junction for trail and park use purposes be deeded to the City prior to or in conjunction with the Phase II approval and platting.

3) A Development Improvements Agreement for Phase I which will guarantee the necessary public improvements that are needed for this project and which will directly benefit this project shall be entered into between the petitioner and the City prior to the platting.

SUGGESTED PLANNING COMMISSION MOTION:

Mr. Chairman, on item #189-94, I move that we approve the Preliminary Plan for Country

Crossing Subdivision and the Final Plan/Plat for Phase I, subject to staff recommendation.

STATE OF COLORADO

COLORADO GEOLOGICAL SURVEY
Division of Minerals and Geology

Department of Natural Resources
1313 Sherman Street, Room 715
Denver, Colorado 80203
Phone (303) 866-2611
FAX (303) 866-2461

FAXED 12/9/94

DEPARTMENT OF NATURAL RESOURCES

December 9, 1994 MA-95-0018

Mr. Tom Dixon
City of Grand Junction Community Development Department
250 North 5th Street
Grand Junction, Colorado 81501

Re: Proposed Country Crossing Subdivision -- Southeast of the Intersection of G Road and 25 Road, Grand Junction

Dear Mr. Dixon:

At your request, we have reviewed the materials submitted for and made a field inspection of the site of the proposed residential subdivision indicated above. We apologize for the delay in our response which has been caused by the large numbers of review requests which we have received lately. The following comments summarize our findings.

(1) The surficial geology of this site is characterized by a clayey residual sandy and silty soil with gravel clasts. The clasts are derived from ancient stream gravels of the ancestral Colorado River and the soil was ultimately derived from the Mancos Shale bedrock and/or stream alluvium. *In situ* gravels are also found at depth in lenses beneath the soil cover. The soils appear to be low density (no data regarding this are presented in the submitted geotechnical report) and are probably susceptible to settlement if subjected to relatively heavy or concentrated loads. The site has a shallow ground-water table caused by infiltration from irrigation-ditch leakage and the its proximity to Leach Creek. The surface drainage is fair to poor because it is nearly level and flat and the soils have slow percolation rates. There is surface evidence of shallow flooding in places on the parcel, especially toward its north end.

(2) Because of the conditions indicated above, the most serious geologic constraints to development of this parcel as planned relate to soils and drainage. Relatively light structures, without basements and founded on shallow spread footings probably will be the

most satisfactory type, structurally, for this area. The surface drainage needs to be improved and the recommendations presented in the submitted drainage plan, if followed, are adequate to do this. Individual building sites should be positively graded so that surface water cannot infiltrate beneath building foundations. If this occurs, foundation damage caused by settlement and possibly soil expansivity and corrosivity could occur. On-lot landscaping irrigation should be kept to a minimum. We strongly recommend that all building sites be investigated by a qualified soils and foundation engineer and that the engineer supervise construction of all foundations. Pavements (concrete and asphalt) that are to receive wheel loads should be placed on properly precompacted subgrades of (preferably) free draining, non-expansive fill materials.

(3) The existing, partially completed townhomes, on the parcel appear to have no damages caused by geologic conditions. However, since they have never been occupied, they have not been adversely affected by common homeowner practices such as landscaping irrigation.

If the recommendations made above and in the submitted geotechnical and drainage reports are followed and made conditions of approval of this revised project, then we have no geology-related objection to it.

Sincerely,

James M. Soule

James M. Soule
Engineering Geologist

877 25 Road
Grand Junction, CO 81505
December 13, 1994

Grand Junction Planning Commission
c/o Community Development Department
250 No. 5th Street
Grand Junction, CO 81501

Dear Planning Commission Members;

I am writing to register my opposition to the proposed Country Corners Subdivision at 25 and G Roads (File #189-94).

There are several major growth issues which we need to examine before we allow blanket development in our area, but the one issue which cannot be ignored is the impact that all future development will have on our schools. As a parent of a high-schooler facing year-round-school, as an educator in District 51 Schools, and as a taxpayer who will be asked to support education for a growing population, I ask you to consider how we are to solve the problems created by growth before allowing developments that encourage that growth.

The Country Corners Subdivision would have numerous negative effects, and I urge you to turn down this proposal.

Sincerely,

Joan Haberkorn

Joan Haberkorn

REVIEW COMMENTS

FILE #FPP-95-10 **TITLE HEADING:** Final Plat/Plan - Country Crossing Subdivision, Filing #2

LOCATION: SE corner of 25 Road & G Road

PETITIONER: Denny Granum

PETITIONER'S ADDRESS/TELEPHONE: Monument Homes
759 Horizon Drive, Suite A
Grand Junction, CO 81506
243-4890

PETITIONER'S REPRESENTATIVE: Tom Logue

STAFF REPRESENTATIVE: Tom Dixon

NOTE: THE PETITIONER IS REQUIRED TO SUBMIT FOUR (4) COPIES OF WRITTEN RESPONSE AND REVISED DRAWINGS ADDRESSING ALL REVIEW COMMENTS ON OR BEFORE 5:00 P.M., JANUARY 27, 1995.

GRAND JUNCTION FIRE DEPARTMENT **1/10/95**
Hank Masterson **244-1414**

The existing water line on 25 Road must be a looped line as stated in previous Fire Department comments. An additional hydrant is needed at either Block 3, Lot 8 or Block 2, Lot 3.

PARKS & RECREATION DEPARTMENT **1/11/95**
Don Hobbs **244-1542**

Fees for filing are based upon 21 units at $225 each = $4,725 due for open space fees.

GRAND VALLEY IRRIGATION COMPANY **1/12/95**
Phil Bertrand **242-2762**

The planning and plotting of this subdivision as it effects our canal and canal right-of-way needs to be declared, understood and accepted up front before we can proceed!

Please refer to comment sheets dated 11/11/94 for additional comments.

It appears this subdivision is not going through proper channels.

UTE WATER **1/13/95**
Gary R. Mathews **242-7491**

1. The 8" water main stubbed North must run to the far North side of Lot 1. Water line stub outs, 1 1/2" and larger are valved at the main.
2. Contact with Ute Water is needed to discuss water metering cost for Filing #1 and water valve locations. All fire hydrants are valved at the main.
3. POLICIES AND FEES IN EFFECT AT THE TIME OF APPLICATION WILL APPLY.

CITY DEVELOPMENT ENGINEER **1/17/95**
Jody Kliska **244-1591**

1. Plats - contain dedications for utility and irrigation easements, none are shown on the drawing.
2. Filing One Street Plan & Profile - Vertical curb is required on Country Circle within the 52' right-of-way. Shading on redlined plans indicates the limits. The right turn lane needs to be designed with a 15:1 taper, a 12' wide turn lane 100' in length. Appropriate striping and signing is the responsibility of the developer and must be shown on the plans. No typical sections are shown for 25 Road, Persigo Avenue, Crossing Lane. Pavement design must be updated and shown on the plans. Signing and street lights need to be indicated on the plans. Inlets need to be identified as single, combination inlets. The driveways to the multifamily area need to be curb cuts. Vertical curb should be maintained along this frontage.
3. Filing Two Street Plan & Profile - No typical section and pavement section shown for Country Circle. The temporary turn-around must be paved. Signs and street lights must be indicated.
4. Multi-family Area - The site plan needs to show the parking dimensions, aisle widths, identify the number of spaces in the garage. It is not clear if the minimum parking requirements are being met. Lighting in the parking area needs to be identified in conformance with the code for parking lot landscaping and lighting. Are the walkway widths sufficient? One is drawn at 2.5' width.
5. Improvements Agreement - The updated pavement design needs to be submitted to check quantities. An item for the 7' vertical curb, gutter and sidewalk needs to be added. Street lights need to be added.

CITY ATTORNEY **1/18/95**
Dan Wilson **244-1505**

Development Improvements Agreement is on the old form.

MESA COUNTY SCHOOL DISTRICT #51 **1/18/95**
L.A. Grasso **242-8500**

See previous review comments.

GRAND JUNCTION DRAINAGE DISTRICT **1/18/95**
John L. Ballagh **242-4343**

Filing #1 and Filing #2 do not cover any existing or planned GJDD facilities. The "Rice Tile" and the open "Rice Drain" are existing. They lie just westerly of the GVIC canal and parallel the canal. The tile originates at the south line of the site and flows northwesterly into the open "Rice Drain" which flows into Leach Creek.

COMMUNITY DEVELOPMENT DEPARTMENT **1/19/95**
Tom Dixon **244-1447**

See attached preliminary comments.

CITY UTILITY ENGINEER **1/20/95**
Bill Cheney **244-1590**

SEWER

1. Provide coordinates, offsets from monument line, or bearings and distance to located manholes in right-of-way.
2. Provide "Utility Composite" showing existing utilities in vicinity of proposal.
3. Minimum 10" line required on 25 Road. Reduce grade to 0.20% to provide additional cover as required on other lines within development.
4. How will proposed re-routing of sewer from original ODP affect future connections to east? Show how southeast portion of property will be sewered with new alignment for lines "D" and "E".

PUBLIC SERVICE COMPANY **1/23/95**
Dale Clawson **244-2695**

ELECTRIC & GAS: No objections but if water lines are installed as shown on street plan all above ground pedestals and transformers will have to be installed quite a distance from side lot lines.

PHASING PLAN

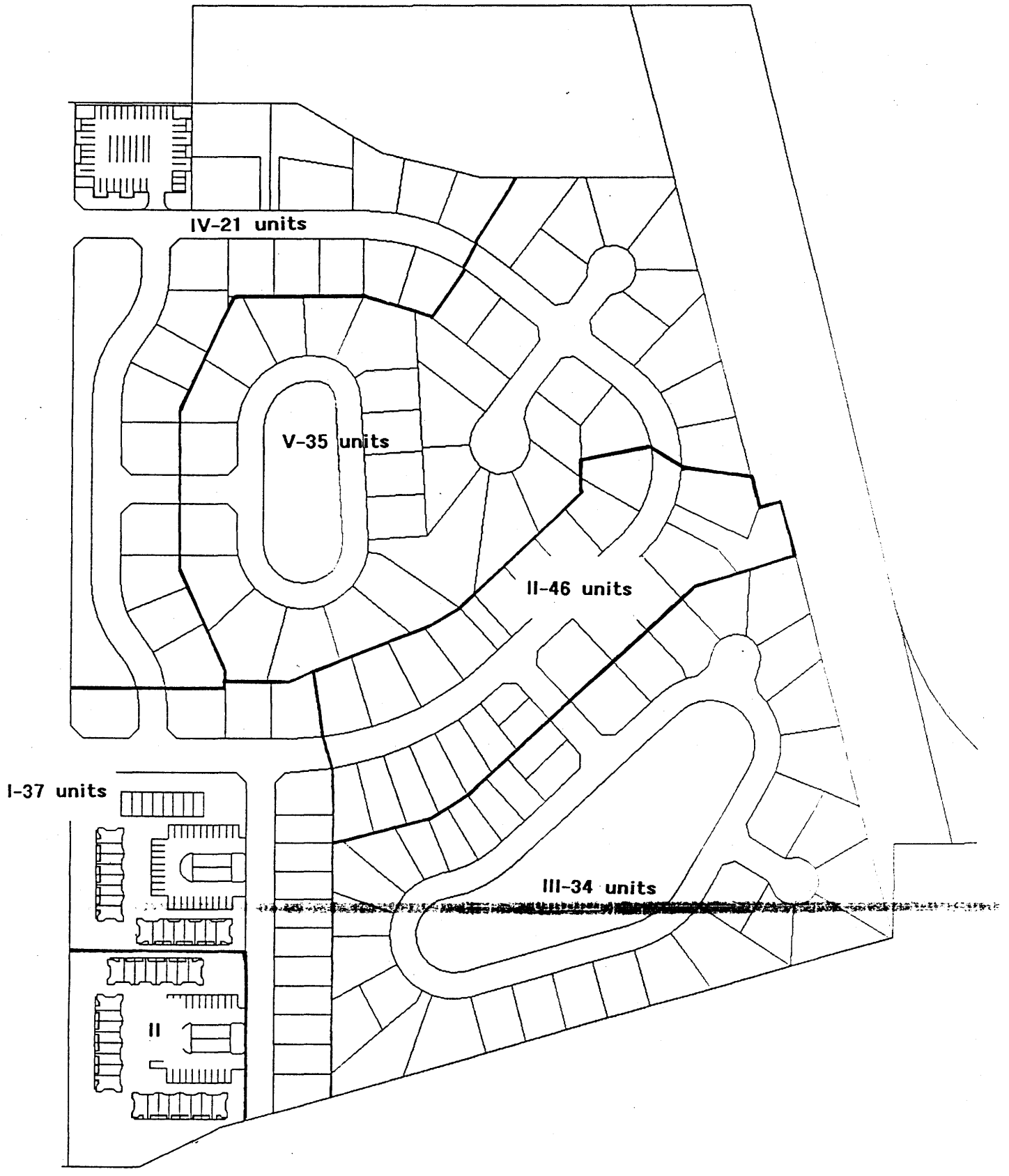
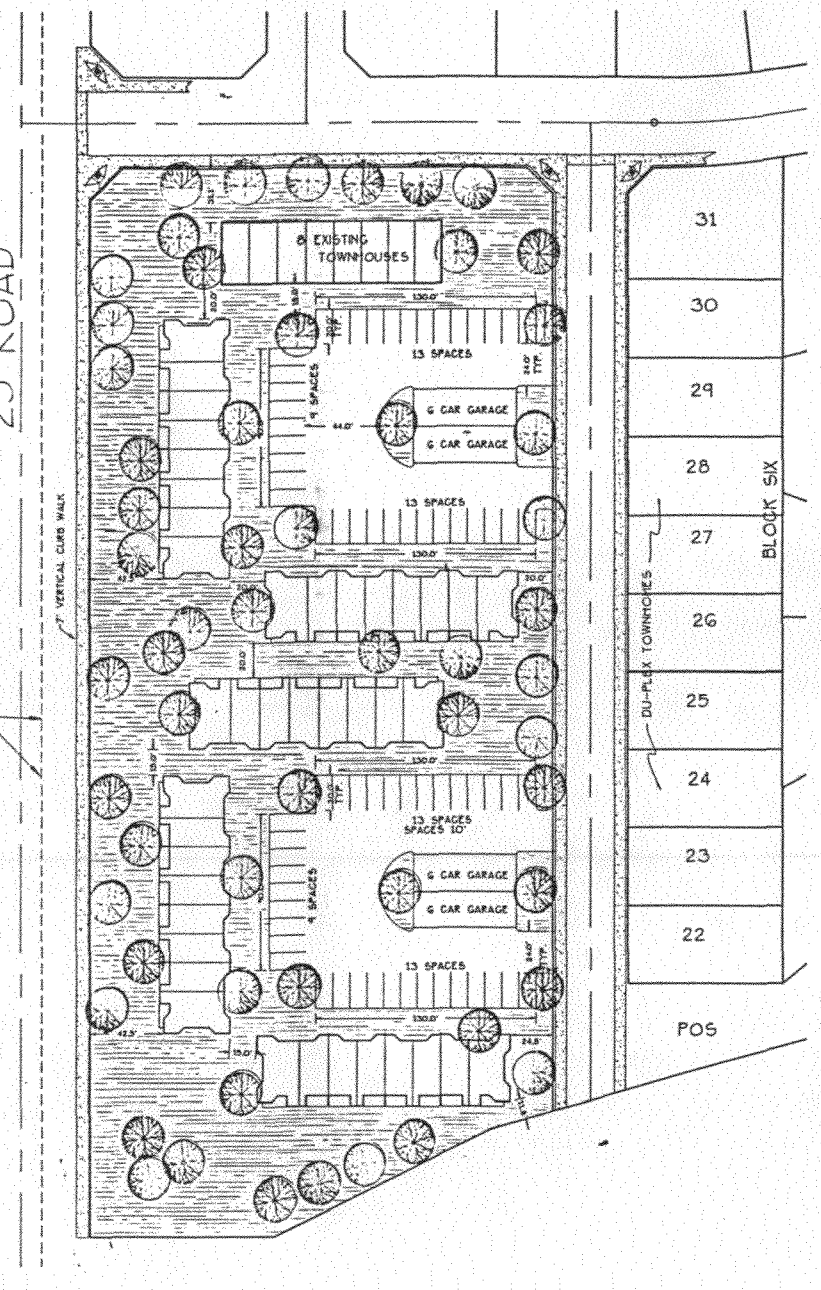


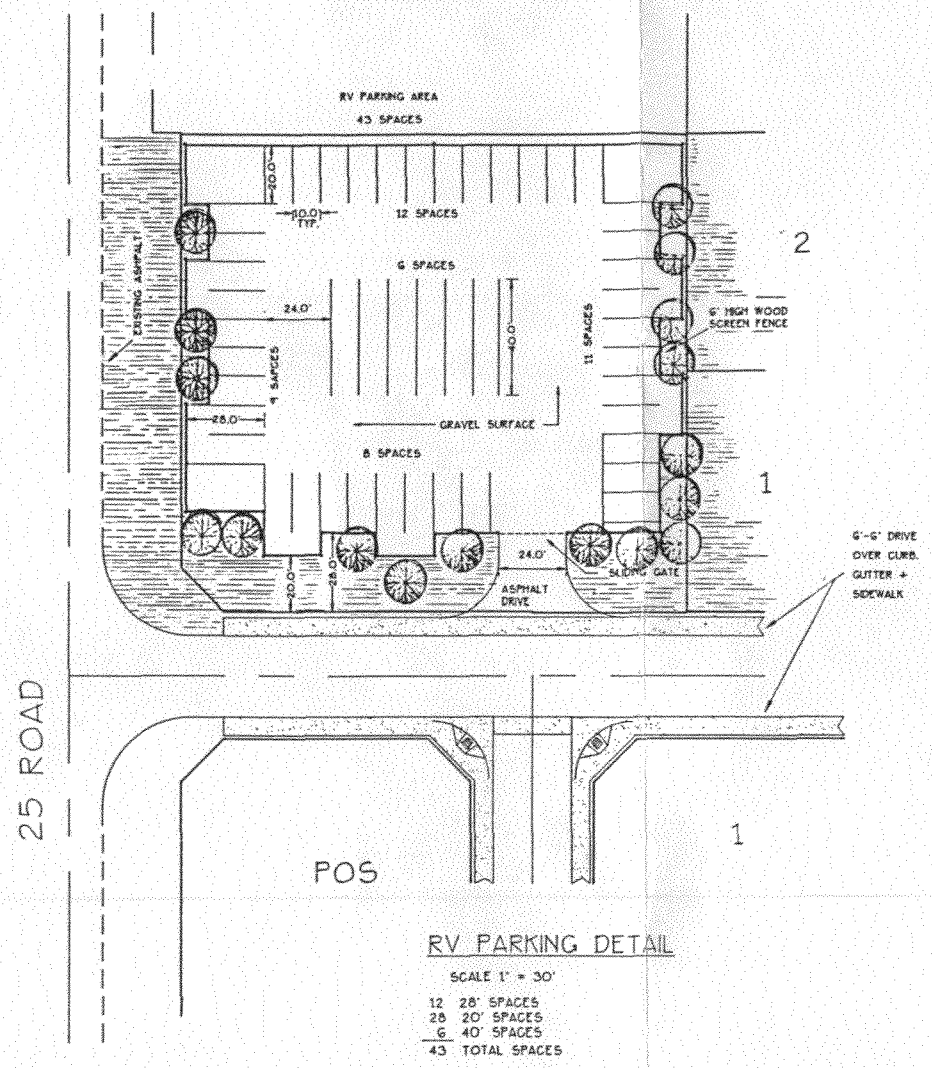
EXHIBIT A



TOWNHOME DETAIL

SCALE 1" = 50'

TOTAL UNITS	48
PARKING SPACES	24 COVERED
	70 OPEN
TOTAL PARKING	94
SPACES PER UNIT	1.96



RV PARKING DETAIL

SCALE 1" = 30'

12	28' SPACES
28	20' SPACES
6	40' SPACES
43	TOTAL SPACES

BENCHMARK IS THE NW CORNER OF SECTION 3 ELEV=4590.82

PHILIP M. HART
REGISTERED PROFESSIONAL ENGINEER
P.E. NO. 19348

DETAIL SHEET

COUNTRY CROSSING SUBDIVISION

LANDesign, Ltd.
ENGINEERS SURVEYORS PLANNERS
200 NORTH 6TH STREET SUITE 102
GRAND JUNCTION, COLORADO 81501 (303) 244-9150

PROJECT NO. 93088	DRAWN BY	SHEET	OF
DATE: OCTOBER, 1994		COP-2	5

OPEN SPACE

OPEN SPACE

BLOCK 1

LOT 21 LOT 22 LOT 23 LOT 24 LOT 25 LOT 26 LOT 27 LOT 28 LOT 29 LOT 30 LOT 31 LOT 32 LOT 33 LOT 34 LOT 35 LOT 36

LOT 20 LOT 19 LOT 18 LOT 17 LOT 16 LOT 15 LOT 14 LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6 LOT 5 LOT 4 LOT 3 LOT 2 LOT 1

BLOCK 2

LOT 9 LOT 10 LOT 11 LOT 8 LOT 12 LOT 7 LOT 13 LOT 6 LOT 14 LOT 15 LOT 5 LOT 4 LOT 3 LOT 2 LOT 1

BLOCK 2

LOT 18 LOT 19 LOT 20 LOT 21 LOT 17 LOT 22 LOT 16 LOT 23 OPEN SPACE

BLOCK 1

LOT 39 LOT 40 LOT 38 LOT 41 LOT 37 LOT 42 LOT 43

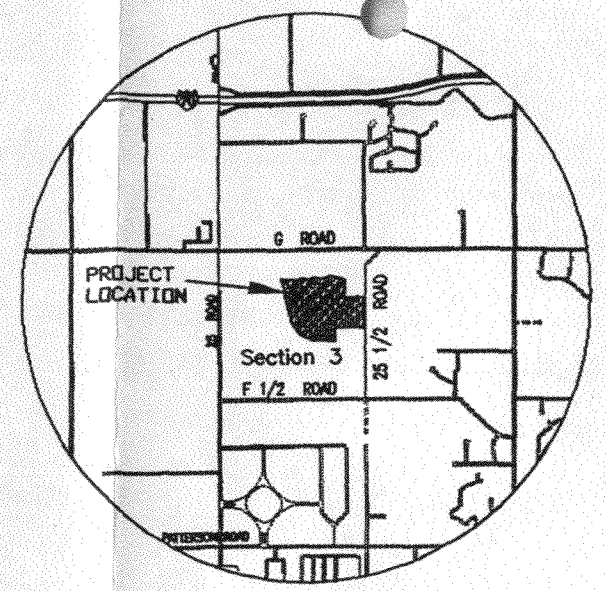
BLOCK 1

LOT 5 LOT 4 LOT 3 LOT 2 LOT 1 LOT 6 LOT 7 LOT 8 LOT 9 LOT 10 LOT 11 LOT 12

25 1/2 ROAD

OPEN SPACE/LANDSCAPING AREA

SE Cor NE1/4 NW1/4
Sec 3, T1S, R1W, U.M.



LOCATION MAP

SCALE: 1" = 60'

0' 60' 120' 180'

ROLLAND ENGINEERING
405 Ridges Blvd
Grand Jct, CO 81503
(303) 243-8300

OFFICIAL DEVELOPMENT PLAN

MOONRIDGE FALLS

LOCATED IN NE1/4 NW1/4 Section 3, T1S, R1W, U.M., MESA COUNTY, CO.

Designed	MDY	Checked	TDR	ODP.DWG	Sheet 1
Drawn	CFD	Date	11/94	RV 11/29/94	OF 1

C:\MOONRIDG\ODP Tue Nov 29 14:39:01 1994 ROLLAND ENGINEERING