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File MS-1995-160
Date 9/27/99

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, not all entries designated to be scanned, are present in the file. There are also documents specific to certain files, not found on the standard list. For this reason, a checklist has been included. Remaining items, (not selected for scanning), will be marked present on the checklist. This index can serve as a quick guide for the contents of each file. Files denoted with (**) are to be located using the ISYS Query System. Planning Clearance will need to be typed in full, as well as other entries such as Ordinances, Resolutions, Board of Appeals, and etc.
X	X	***Summary Sheet – Table of Contents**
X	X	Application form
X	X	Receipts for fees paid for anything
X	X	***Submittal checklist**
X	X	***General project report**
		Reduced copy of final plans or drawings
X	X	Reduction of assessor's map
		Evidence of title, deeds
X	X	***Mailing list**
		Public notice cards
		Record of certified mail
X	X	Legal description
		Appraisal of raw land
		Reduction of any maps – final copy
		***Final reports for drainage and soils (geotechnical reports)**
		Other bound or nonbound reports
		Traffic studies
		Individual review comments from agencies
X	X	***Consolidated review comments list**
		***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**
		***Letters and correspondence dated after the date of final approval (pertaining to change in conditions or expiration date)**

DOCUMENTS SPECIFIC TO THIS DEVELOPMENT FILE:

X		Form for approval of filing & recording			
X		Posting of Public Notice Signs			
X	X	Letter from Bill Nebeker to Vince Popish – 10/5/95			
X	X	Aerial Photo			
X	X	Letter from Edward M. Morris to Keenan Construction, Inc.-8./9/95			
X		Commitment for Title Insurance from Chicago Title			
X		Treasurer's Certificate of Taxes Due-6/16/95			
X	X	Composite Plan – Grading & Stormwater Management Plan			
X		Radiation Report – no tailings found			
X		Final Plat			

SUBMITTAL CHECKLIST

MINOR SUBDIVISION

Location: 2715 G Road Project Name: Minor Subdivision

Date Received 9-1-95

Receipt # 2848

File # MS-95-160

ITEMS		DISTRIBUTION																													
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	○ County Building Department	● County Surveyor	○ Walker Field	● School Dist. #51	● Irrigation District Grand Valley	○ Drainage District Grand Junction	● Water District Ute	○ Sewer District	● U.S. West	● Public Service	○ GVRP	○ CDOT	○ Corps of Engineers	○ Colorado Geologic Survey	○ U.S. Postal Service	X Persigo WWTF	● TCI Cable			TOTAL REQ'D.
● Application Fee #400	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	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	1	1			
● Reduction of 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	1	1			
● Evidence of Title	VII-2	1			1			1																								
○ Appraisal of Raw Land	VII-1	1			1	1																										
● Names and Addresses*	VII-2	1																														
● Legal Description*	VII-2	1			1																											
○ Deeds	VII-1	1			1			1																								
○ Easements	VII-2	1	1	1	1			1													1	1	1									
○ Avigation Easement	VII-1	1			1			1							1																	
○ ROW	VII-3	1	1	1	1			1													1	1	1									
○ Covenants, Conditions & Restrictions	VII-1	1	1					1																								
○ Common Space Agreements	VII-1	1	1					1																								
● County Treasurer's Tax Cert.	VII-1	1																														
○ Improvements Agreement/Guarantee*	VII-2	1	1	1				1																								
○ CDOT, 404, or Floodplain Permit	VII-3,4	1	1																													
● General Project Report	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	1	1			
● Location Map	IX-21	1																														
● Composite Plan	IX-10	1	2	1	1																											
● 11"x17" Reduction Composite Plan	IX-10	1				1	1	1	8	1	1	1	1				1	1	1	1	1	1	1	1	1	1		1	1			
● Final Plat	IX-15	1	2	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
○ 11"x17" Reduction of Final Plat	IX-15	1							8	1	1	1			1	1	1	1	1	1	1	1	1				1		1			
○ Cover Sheet	IX-11	1	2																													
● Grading & Stormwater Mgmt Plan	IX-17	1	2															1							1	1						
○ Storm Drainage Plan and Profile	IX-30	1	2															1			1	1	1									
○ Water and Sewer Plan and Profile	IX-34	1	2	1															1	1	1	1	1					1	1			
○ Roadway Plan and Profile	IX-28	1	2															1														
○ Road Cross-sections	IX-27	1	2																													
○ Detail Sheet	IX-12	1	2																													
○ Landscape Plan	IX-20	2	1	1																												
○ Geotechnical Report	X-8	1	1										1													1						
○ Phase I & II Environmental Report	X-10,11	1	1																													
○ Final Drainage Report	X-5,6	1	2															1														
○ Stormwater Management Plan	X-14	1	2															1							1							
○ Sewer System Design Report	X-13	1	2	1																1												
○ Water System Design Report	X-16	1	2	1															1													
○ Traffic Impact Study	X-15	1	2																					1								
○ Site Plan	IX-29	1	2	1	1		1		8																							

NOTES: * An asterisk in the item description column indicates that a form is supplied by the City.

DEVELOPMENT APPLICATION

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

Receipt _____
Date _____
Rec'd By _____
File No. MS-95-160

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
☒ Subdivision Plat/Plan	☒ Minor ☐ Major ☐ Resub	½ acre	2715 G Road Grand Jct.	RSF-5	residential
☐ Rezone				From: To:	
☐ Planned Development	☐ ODP ☐ Prelim ☐ Final				
☐ Conditional Use					
☐ Zone of Annex					
☐ Variance					
☐ Special Use					
☐ Vacation					☐ Right-of Way ☐ Easement
☐ Revocable Permit					

☒ PROPERTY OWNER	☐ DEVELOPER	☐ REPRESENTATIVE
William H, Kain Kevin M. Keenan		
Name Alpine Bank Building 611 225 N. 5th St.	Name	Name
Address	Address	Address
Grand Jct. CO 81501		
City/State/Zip	City/State/Zip	City/State/Zip
970-241-2969		
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 required 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.

Kevin M. Keenan — 9/1/95
Signature of Person Completing Application — Date

Kevin M. Keenan — 9/1/95
William H Kain — 9/1/95
Signature of Property Owner(s) - attach additional sheets if necessary — Date

GENERAL PROJECT REPORT FOR
KAIN/KEENAN MINOR SUBDIVISION LOCATED AT:
2715 G ROAD, GRAND JUNCTION, CO 81506,

As of September 1, 1995:

This property was purchased by William H. Kain and Kevin M. Keenan on June 30, 1995. We are currently in the process of splitting the property into 2 lots with the intention of building 2 houses, owner build, to live in.

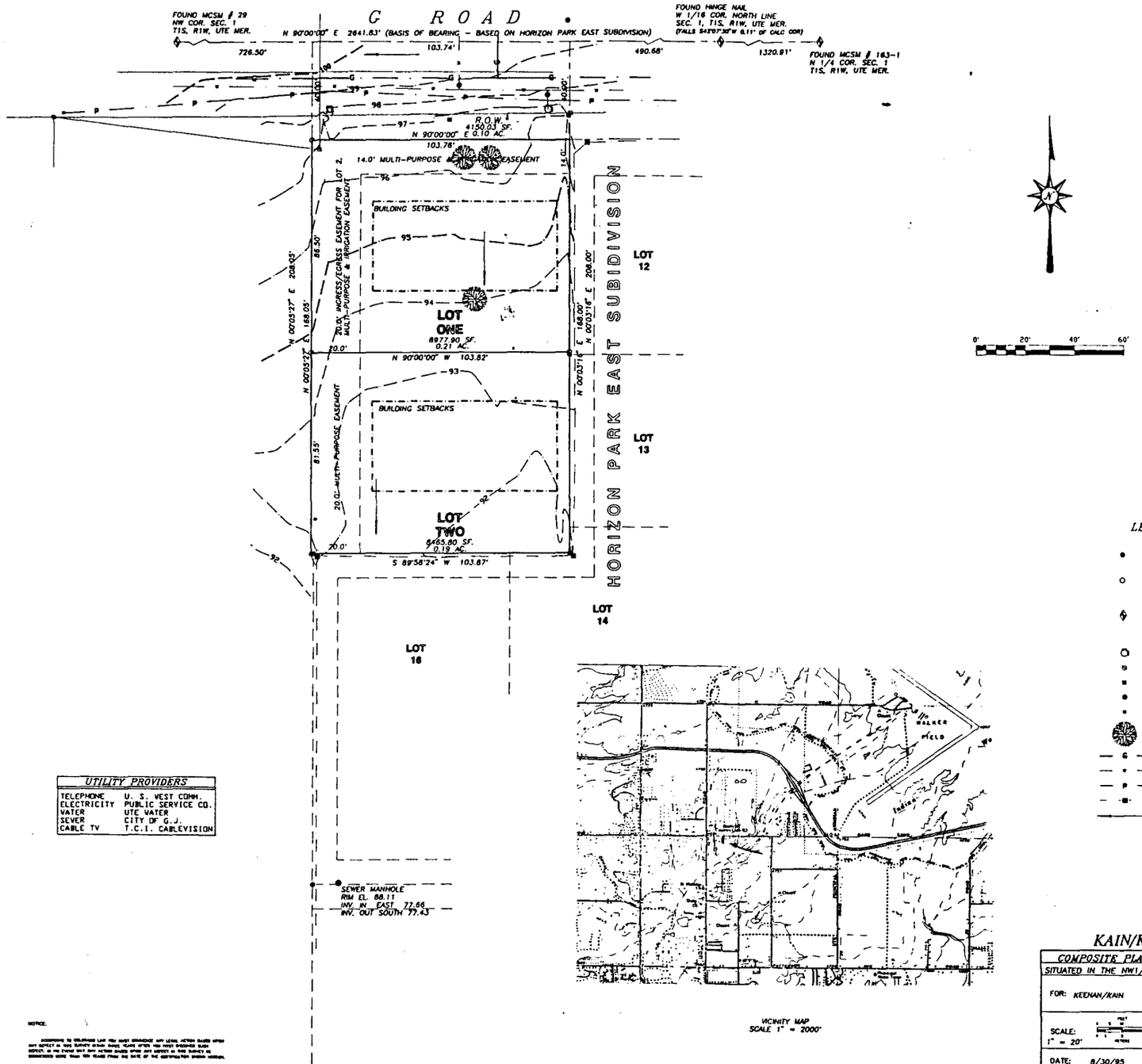
We have hired a person by the name of Clarence Schrock. Clarence Schrock is a licensed general contractor for the City of Grand Junction, CO. He has been in contact with the sewer department and building department to make sure we have access where necessary.

Kevin Keenan now has a general contractor's license for the City of Grand Junction, CO.

Kevin Keenan obtained a demolition permit for the removal of the small old house on this property, which has now been removed.

Kevin Keenan has been to Ute Water getting this account into the name of Kain/Keenan.

We have hired QED Survey Company to do the composite maps needed for the packets to submit to the city and are awaiting approval from the city to build 2 houses on this property.



VICINITY MAP
SCALE 1" = 2000'

LEGEND & NOTES

- FOUND #5 REBAR AS NOTED
- SET NO. 5 RE-BAR W/CAP L.S. 16413
- FOUND SURVEY MONUMENTS AS NOTED
- FIRE HYDRANT
- POWER/TELEPHONE POLE
- WATER METER
- WATER VALVE
- TELEPHONE PEDISTAL
- SIGNIFICANT TREES
- G — UNDERGROUND GAS LINE
- W — 16" UTE WATER LINE
- P — UNDERGROUND PHONE LINE
- FENCE LINE W/CONC. PILLARS
- DRAINAGE DIRECTION

UTILITY PROVIDERS	
TELEPHONE	U. S. WEST COMM.
ELECTRICITY	PUBLIC SERVICE CO.
WATER	UTE WATER
SEWER	CITY OF G.J.
CABLE TV	T.C.I. CABLEVISION

NOTICE:

ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

KAIN/KEENAN MINOR SUBDIVISION

COMPOSITE PLAN - GRADING & STORMWATER MANAGEMENT PLAN

SITUATED IN THE NW1/4, NW1/4, SEC. 1 TOWNSHIP 1 SOUTH, RANGE 1 WEST, UTE MER.

FOR: KEENAN/KAIN

SCALE: 1" = 20'

DATE: 8/30/95

Q.E.D. SURVEYING SYSTEMS Inc.
1018 COLO. AVE.
GRAND JUNCTION
COLORADO 81501
(303) 241-2370
464-7568

SURVEYED BY: SB RM
DRAWN BY: VAP
ACAD ID: KENANSIT
SHEET NO. 1 OF 1
FILE: 95200.3

MS-95-160

2701-363-16-016
Rod Geddes LOU
2700 G Rd Apt 11B
Grand Junction,CO
81506-1408

2701-363-16-018
Walter I Holmes
Marie M
2700 G Rd Apt 11D
Grand Junction, CO 81506

2701-363-16-038
Everhart Family Rovocable
Living Trust
2700 G Rd Apt 10D
Grand Junction, CO 81506

2701-363-16-055
Norwest Bank Grand Jct.NA
1740 Broadway #8691
Denver, CO 80274-8691

2701-363-16-056
Shirley M. Woodward
P.O. Box 2087
Grand Junction, CO 81502

2701-363-16-057
Shirley A Gardner
2700 G Rd Apt 9C
Grand Junction, CO 81506

2701-363-16-058
D Jeanne Motz
2700 G Rd Apt 9D
Grand Junction, CO 81506

2701-363-16-035
Mable Patsantaras
2700 G Rd Apt 10A
Grand Junction, CO 81506

2701-363-16-036
Gean F Lipson
Robert Lee LipsonIII
2700 G Rd Apt 10B
Grand Junction, CO 81506

2701-363-16-037
Ruth L Hockensmith
Frank M
2700 G Rd Apt 10C
Grand Junction, CO 81506

2701-363-16-015
Reta R Maxfield
2700 G Rd Apt 11A
Grand Junction, CO 81506

2945-012-61-002
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, 81501-3102

2945-012-61-001
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-003
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-004
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-005
Horizon Park East
Development Park East
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-006
Horizon Park East
Development Park East
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-007
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-009
Horizon Park East
Development CO.
1015 N. 7th St.
Grand Junction, CO 81501

2945-012-61-011
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-012
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-013
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-016
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-017
Horizon East Park
Development CO.
Grand Junction, CO 81501

2945-012-61-018
Horizon Park East
Development CO.
Grand Junction, CO 81501

2945-012-61-019
Horizon Park East
Development CO.
Grand Junction, CO 81501

2945-012-61-020
Horizon Park East
Development CO
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-021
Horizon Park East
Development CO,
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-022
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

MS-95-160

2945-012-61-023
Horizon Park East
Development CO.
1015 N 7th St.
Grand Junction, CO 81501

2945-012-61-014
Sidney J. Squirrell
4339 Racquet Ct.
Grand Junction, CO 81506

2945-012-61-015
Marlene J. Spiecker
4329 Racquet Ct.
Grand Junction, CO 81506

2945-012-61-008
Marvin L. Crawford
Edith M. Crawford
4340 Racquet Ct.
Grand Junction, CO 81506

2945-012-61-010
James E. Fuocco
Afton C. Fuocco
4360 Racquet Ct.
Grand Junction, CO 81506

2945-012-00-015
G Road Investments
814 25 Rd
Grand Junction, CO 81505

2945-012-00-018
G Road Investments
2328 1-70 Frontage Rd
Grand Junction, CO 81505

2945-012-00-019
G Road Investments
814 25 Road
Grand Junction,CO 81505

2945-012-00-021
G Road Investments
2823 1-70 Frontage Road
Grand Junction, CO 81505

2945-012-00-022
Donald Edward Tyre
Sharon Marie
694 Westcliff Dr.
Grand Junction, CO 81506

2945-012-00-013
Clifford Allison
2711 G Road
Grand Junction, CO 81506

2701-363-16-017
Jose F. Agapito
Veronica H. Agapito
2700 G Road #11C
Grand Junction, CO 81506

Kevin H. Kain
Kevin M. Keenan
225 N 5th Street, #611
Grand Junction, CO 81501

City of Grand Junction
Community Development Dept.
250 N 5th Street
Grand Junction, CO 81501

Lincoln DeVore, Inc.
Geotechnical Consultants
1441 Motor St.
Grand Junction, CO 81505

TEL: (303) 242-8968
FAX: (303) 242-1561

August 29, 1995

Keenan Construction, Inc.
225 N. 5th Street, Suite 611
Grand Junction, CO 81501

RE: Subsurface Soils Exploration
2715 G Road, Grand Junction, CO

As requested, Lincoln DeVore personnel have completed a geotechnical exploratory program at the above referenced site. Two shallow exploration holes were drilled in the vicinity of the proposed building pads as shown on the attached sketch. The purpose of these holes were to determine the types and character of the underlying soils and to relate these characteristics to the proposed foundation system. This letter contains general recommendations for construction of a residential foundation, but is not a foundation design and cannot be used as such. Our conclusions and recommendations for this site are presented below.

Soil Classification: The soils at foundation level on this site were found to the Weathered Mancos Shale of low expansive properties. The Mancos Shale is covered by approximately 1'-1 1/2' of silty clays which are derived from the Mancos Shale Formation.

The foundation soil type was classified as a very silty clay (CL) under the Unified Classification System. The Standard Penetration Tests ranged from 41 blows per foot to in excess of 88 blows per foot. Penetration tests of this magnitude indicate that the soil is very stiff and of medium to high density. The moisture content varied from 7.4% to 9.9%, indicating a relatively dry soil. This soil is plastic and is sensitive to changes in moisture content. With decreased moisture, it will tend to shrink, with some cracking upon desiccation. Upon increasing moisture, it will tend to expand. Expansion tests were performed on typical samples of the soil and expansive pressures on the order of 1400 psf were found to be typical. The allowable maximum bearing value was found to be on the order of 5500 psf for shallow foundation systems. A minimum dead load of 1800 psf will be required. This soil was found to contain sulfates in detrimental

quantities.

Man-made Fill: The soils encountered in our test borings appear to be native to the site. All building foundations must penetrate any man-made fills which are present at the site at this time, as well as any fills which result from the excavation process. Careful examination of the open excavation will be necessary to determine the presence or absence of man-made fills. The open excavation must be examined prior to the placement of concrete to establish that materials of proper design bearing capacity have been exposed and that no soft spots or debris are present in the foundation area. A 24 hour notice is required for all field examinations to enable Lincoln DeVore to schedule personnel and provide service when needed.

Soil Moisture Conditions: No free water was encountered during drilling on this site to a total depth of 14 1/2'. In our opinion the true free water surface is fairly deep in this area, and hence, should not affect construction. Seepage moisture may affect construction if surface drainage is not properly controlled.

Free water is often times encountered in the fractures of the Mancos Shale and in some thin beds of siltstone and sandstone. Based upon excavations in this general area, free water may be encountered at depths ranging from 7'-15' below the present ground surface.

Foundation Type Recommended: At this time, Lincoln DeVore has not been provided with a copy of the foundation/building plans and is, therefore, not informed as to the precise wall or column loading planned within the building. Therefore, three foundation types which could be utilized for a building of this type are recommended, based on our experience in this area. The choice between these foundation types depends on the internal loading of the foundation members and the amount of excavation planned to achieve the finished floor elevations.

The three foundation types preliminarily recommended are as follows:

1. The voided wall on grade foundation system with the stem wall resting directly on the Shale Formation.
2. The isolated pad and grade beam foundation system in

which the grade beam is voided and loads are transferred to the isolated pads.

3. The drilled pier and fully voided grade beam system with the loads transferred to the piers.

Recommendations given in this letter report are given for the shallow and deep foundation types.

DRILLED PIERS: Under some loading conditions we recommend that a deep foundation system consisting of drilled piers be used to carry the weight of the proposed structure. We recommend that drilled piers have a minimum shaft length of 7 feet and be embedded at least 7 feet into the Mancos Shale Formation. At this level, these piers may be designed for a maximum end bearing capacity of 25,000 psf, plus 1800 psf side support considering only the side wall area embedded in the bedrock. Due to the expansive potential of the bedrock, a minimum dead load uplift is required, consisting of a point uplift of 1800 psf and 270 psf side uplift, based on the side wall embedded in the bedrock. The overburden is soft and no supporting or uplift values are assigned to this material. The weight of the concrete in the pier may be incorporated into the required dead load.

It is recommended that the bottoms of all piers be thoroughly cleaned prior to the placement of concrete. The amount of reinforcing in each pier will depend on the magnitude and nature of loads involved. As a rule of thumb, reinforcing equal to approximately 1/2 of 1% of the gross cross- sectional concrete area should be used. Additional reinforcing should be used if structural conditions warrant. We recommend that reinforcing extend through the full length of pier.

To minimize the possibility of voids developing in drilled piers, concrete with a slump of 5 to 6 inches is recommended. We recommend that piers be dewatered and thoroughly cleaned of all loose material prior to placing the steel cage and concrete. The pier excavation should contain no more than 2 inches of free water unless the concrete is placed by means of a tremie extending to the bottom of the pier. A free fall in excess of 5 feet is not recommended when placing concrete in drilled piers. We recommend that casing be pulled as the concrete is being placed and that a 5 foot head of concrete be maintained while pulling the casing. It is recommended that drilled piers be plumb with 2% of their length and that the shaft maintain a constant diameter for the full length of the pier and not allowed to "mushroom" at the top.

DRILLED PIER OBSERVATION: The foundation installation for drilled piers should be continuously observed by a representative of Lincoln DeVore to determine that the recommended bearing material has been adequately penetrated and that soil conditions are as anticipated by the exploration. This observation will aid in attaining an adequate foundation system. In addition, abnormalities in the subsurface conditions encountered during foundation installation can be identified and corrective measures taken as required. Lincoln DeVore requires a minimum of one working day's notice, and a copy of the foundation plan, to schedule any field observation.

GRADE BEAMS: A reinforced concrete grade beam is recommended to carry the exterior wall loads in conjunction with the deep foundation system. We recommend that this grade beam be designed to span from bearing point to bearing point and not be allowed to rest on the ground surface between these points. We recommend a void space be left between the bottom of the grade beam and the subgrade below due to the expansive nature of the subgrade soils.

Voids Beneath Foundation Walls: Voids are required to mitigate expansive pressures on this site. A foundation design for this specific site and soil conditions will be necessary to accomplish this.

Reinforcing: The foundation shall be reinforced as shown on the foundation design. No changes shall be made to this placement of reinforcing without written approval of the design engineer or architect.

All foundation stem walls should be designed as "grade beams" capable of spanning at least 14 feet or from bearing point to bearing point. Where the foundation stem walls are relatively shallow in height, vertical reinforcing will not be necessary. However, in the walls retaining soil in excess of 4 feet in height, vertical reinforcing may be necessary to resist the lateral pressures (restrained case) of the soils along the wall exterior. To aid in designing such vertical reinforcing, an equivalent fluid pressure (E.F.P) on the order of 65 pcf would be appropriate.

Floor Slabs: Floor slabs on grade, if any, should be positively separated from all structural portions of this building and allowed to float freely. Frequent scoring (control joints) of the slabs should be provided to allow for possible shrinkage cracking of the slab. These control joints should be placed to provide maximum slab areas of approximately 200 to 360 square feet. Any man-made fill placed below floor slabs on grade should be compacted to a minimum of 90% of its maximum Modified Proctor dry density, ASTM D-1557. These soils should be placed at a moisture content conducive to the required compaction (usually Proctor optimum moisture content ±2%.

The magnitude of expansion measured of the soils on this site is such that floor slab movement should be expected if slab-on-grade construction is used. Non-bearing partitions resting on slabs should be constructed with a minimum 1 1/2 inch void space, preferably at the bottom, to allow for freedom of movement without affecting the roof or floor above (see attached suggested detail). All bearing partitions should have their own foundations. If this is a basement or multi-level type construction, stairways between floors should not be constructed as a rigid connection, but should allow for vertical movement of the floor slab.

The partition wall void space is not intended to allow for all potential slab movement, but is intended to serve as an indicator of slab movement. The void space should be maintained for the life of the structure.

Where floor slabs are cast on expansive clay soils, no known method of construction will prevent all future slab movement. If the builder and future owner are willing to risk the possibility of some damage due to concrete floor slab movement, the recommendations contained herein should be carefully followed and can help minimize such damage. Any subsequent owner should be advised of the soil conditions and advised to maintain the surface and subsurface drainage, framing of partitions above floor slabs, drywall and finish work above floor slabs, etc.

Drainage and Grading: Surface grading should be completed in such a manner that all runoff moisture is removed from the vicinity of the structure as quickly as possible. It is recommended that a minimum surface gradient of 8% be maintained away from the structure for the first 10 feet. Roof downspouts and sill cocks should be carried across all backfill areas and allowed to discharge well away from the building. Proper dis-

charge of roof drain downspouts may require the use subsurface piping in some areas. All lawn sprinkling heads should be placed at least 10 feet away from the foundation. Future owners of this structure should be advised to fill in any settled yard areas to eliminate ponding of water near the structure and to provide adequate slope for proper drainage away from the structure and off the site at all times.

Provided all recommendations found herein pertaining to site surface drainage, grading and soil compaction are very closely followed, a perimeter foundation drain would not be required for a deep foundation system, utilizing caissons. If a shallow foundation system, either a voided wall on grade or a stemwall and pads are used, a perimeter foundation drain will be required (see attached suggested detail). For fully finished basements, however, the use of a perimeter foundation drain would significantly reduce potential moisture related problems which can arise from subsequent area development.

Backfill: To reduce settlement and aid in keeping water from reaching beneath this building, all backfill around this building should be mechanically compacted to 80% of its maximum Modified Proctor dry density ASTM D-1557. The only exception to this would be the components of the perimeter foundation drain, if any. All backfill should be composed of the native soils and should not be placed by soaking, jetting or puddling. All backfill placed in utility trenches around this structure or below foundation walls should be mechanically compacted to a minimum of 90% of its maximum Modified Proctor dry density ASTM D-1557. These soils should be placed at a moisture content conducive to the required compaction (usually Proctor optimum content ±2%.

Cement Type: Type II, Type I-II or Type II-V cement is recommended for all concrete which is in contact with the soils on this site. Calcium chloride should not be added to a Type II, Type I-II or Type II-V cement under any circumstances.

Remarks: The bottoms of all exterior foundations should be located a minimum of 24 inches below finished grade for frost protection.

Senate Bill 13 Discussion: This particular residence is being constructed on foundation soils which possess a 'significant potential for expansion'. Therefore, in compliance with Senate Bill 13, we recommend that you provide the owner with the following:

1) a copy of this summary report of our soil analysis and recommendations.
2) a copy of Special Publication 11, "Home Construction on Shrinking and Swelling Soils.
3) a copy of Special Publication 14, "Home Landscaping and Maintenance on Swelling Soils.

Both publications are available through the Colorado Geological Survey, 1313 Sherman St., Room 715, Denver, CO. 80203, or phone (303) 866-2611.

Respectfully submitted,

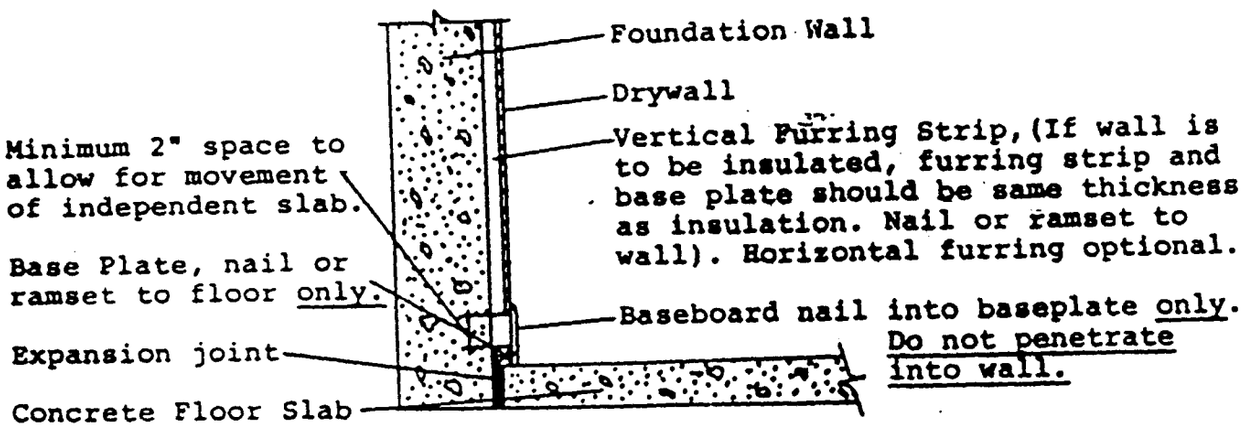
LINCOLN-DeVORE, INC.

COLORADO REGISTERED EDWARD M. MORRIS 30590 8-29-95 PROFESSIONAL ENGINEER

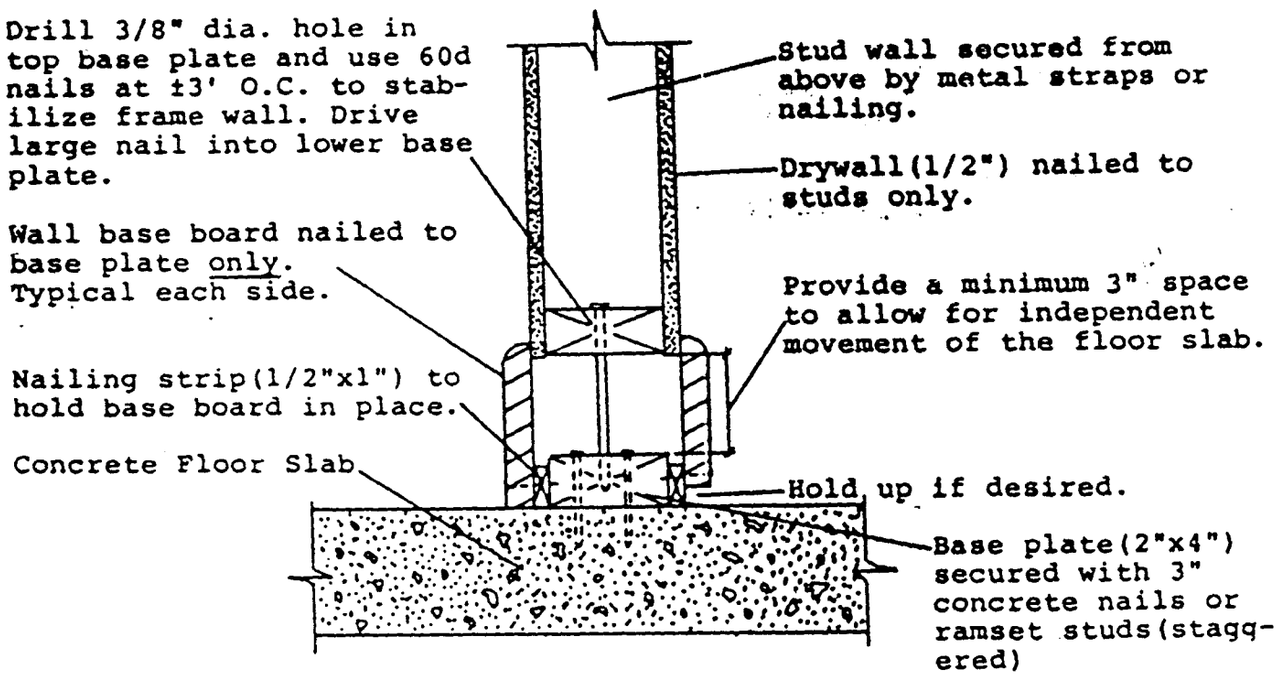
By: Edward M. Morris
Western Slope Manager

LDTL Job # 83494-J

FLOATED WALL DETAIL



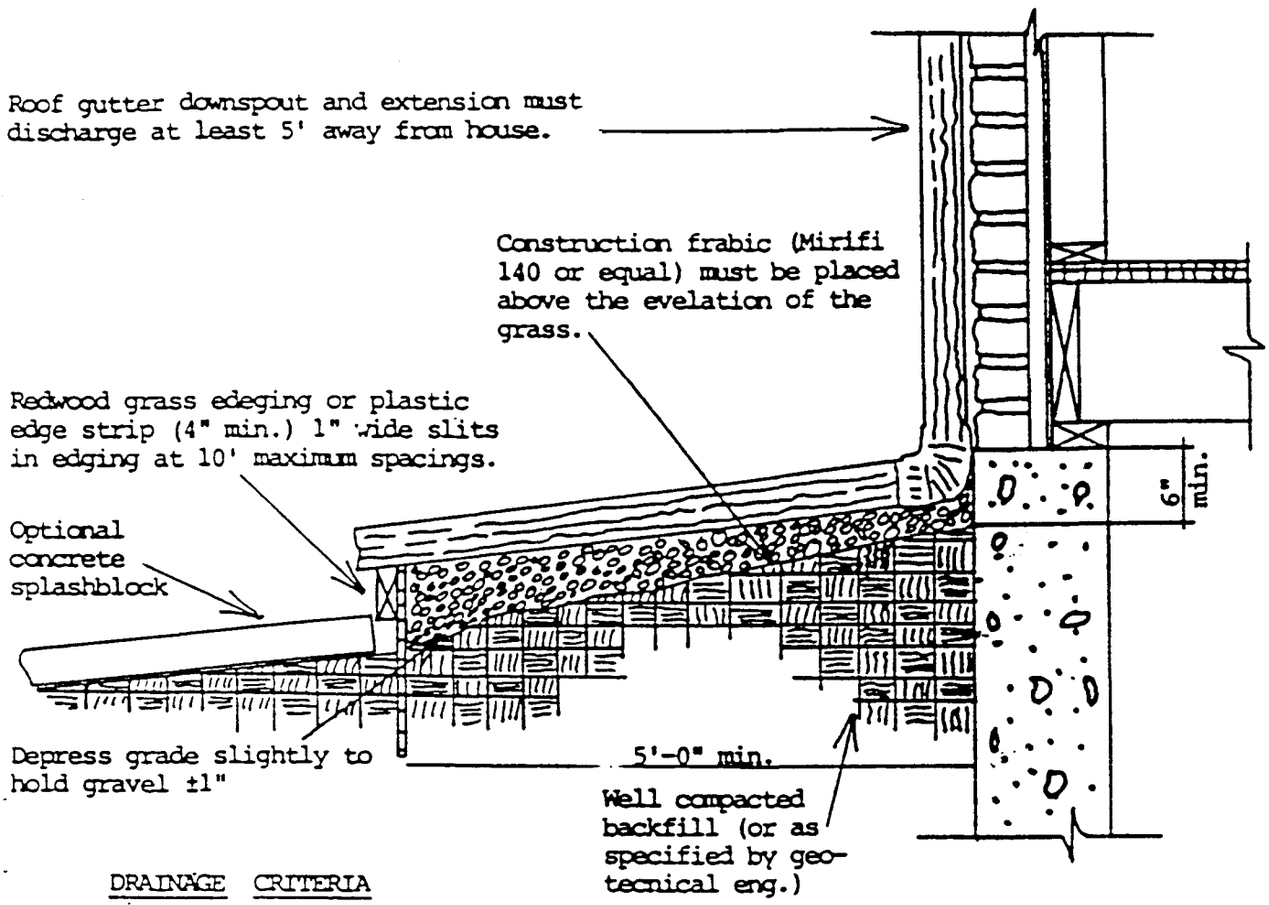
FINISH FRAMING AT FOUNDATION



FRAMING WALL

Lincoln DeVore, Inc. Geotechnical Consultants	Typical Bottom Floated Wall Detail	
		DATE 12/16/86
JOB NO.	DRAWN Rick	C5

LANDSCAPING DETAIL



DRAINAGE CRITERIA

1) Grading: Provide a minimum 6 inch slope change in the first 5 feet and a minimum slope of 10 inches in the first 10 feet away from the house. Do not change the grade of the yard in any manner that would impede rapid run-off of surface water. Maintain surface swales in order to prevent ponding and/or erosion.

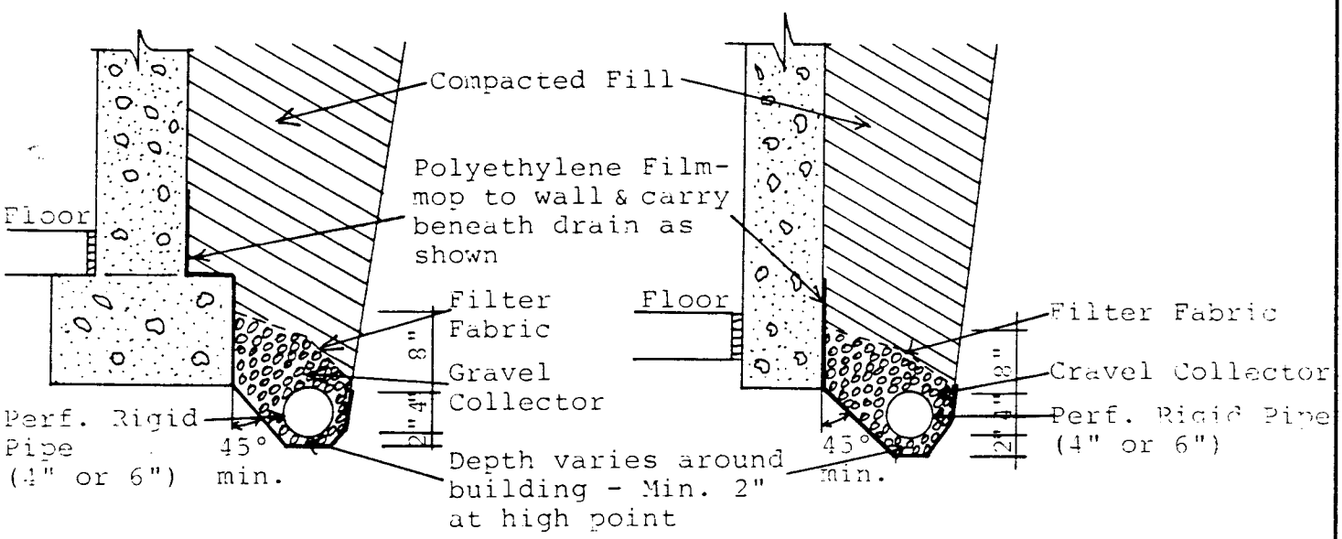
2) Splashblocks: Downspouts and hose bibbs should discharge onto concrete splashblocks with minimum lengths of 4 feet when the ground surface is not protected by concrete slabs or asphalt topping.

3) Irrigation: Sprinkler systems should not be installed adjcent to foundation walls. Sprinkler heads should be placed so that the sprays from the heads, under full pressure, do not fall within 5'-0" of the foundation walls. Trees or shrubs requiring only natural precipitation for survival are allowable within 5 feet of the building.

Lincoln DeVore, Inc.
Geotechnical Consultants

		DATE
JOB NO.	DRAWN	

EXTERIOR DRAIN DETAIL



SPREAD FOOTING TYPE

WALL-ON-GRADE TYPE

NOTES:

*Diameter of perforated pipe varies with amount of seepage expected. 4" diameter is most common.
*The required size of drain components should be determined by Lincoln DeVore, Inc. personnel.
*Gravel size depends on size of pipe perforation: 85% gravel 2 x diameter of perforation.
*All pipe to be perforated VCP or PVC.
*4" flexible pipe may be used depth of 4 feet, but must be carefully graded. Discharge portion of all drain pipe should be non-perforated.
*Rigid pipe only to be used below backfill depths greater than 4 feet.
*All pipe to be laid at a minimum grade of 1.0% around building foundations.
*Outfall to be free, gravity outfall if at all possible. Use sump and pump only if no gravity outfall exists.
*Filter fabric may be any type, equivalent to Mirafi 140N.
*Lincoln DeVore personnel should examine the drain system after it is installed and prior to backfilling.
*Exterior earth backfill material should be compacted to at least 90% maximum Modified Proctor.
*Observations of foundation drain should be completed:
1) With pipe exposed and at 1% slope.
2) When pipe is covered and wrapped with Mirafi 140N or equal.
3) When gravity outlet or sump pit and pump is completed.

Lincoln DeVore, Inc.
Geotechnical Consultants

Exterior Drain Detail		
		DATE 5/14/87
JOB NO.	DRAWN Rick	D 2

G Road
27 Road
Subject Property

REVIEW COMMENTS

FILE #MS-95-160 **TITLE HEADING:** Kain/Keenan Minor Subdivision

LOCATION: 2715 G Road

PETITIONER: William H. Kain & Kevin M. Keenan

PETITIONER'S ADDRESS/TELEPHONE: Alpine Bank Building
225 N 5th Street, #611
Grand Junction, CO 81501
241-2969

PETITIONER'S REPRESENTATIVE: Kevin Keenan

STAFF REPRESENTATIVE: Bill Nebeker

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., SEPTEMBER 25, 1995.

CITY POLICE DEPARTMENT **9/7/95**
Dave Stassen **244-3587**

I see nothing in this proposal that would cause any concern for the Police Department.

CITY FIRE DEPARTMENT **9/8/95**
Hank Masterson **244-1414**

The Fire Department has no problems with this Minor Subdivision.

COMMUNITY DEVELOPMENT DEPARTMENT **9/13/95**
Mike Pelletier **244-1437**

1. Lot 2 must be extended to have 20' of street frontage onto G Road. The ingress/egress easement does not satisfy Code requirements in Section 4-2-5-C-1.
2. Designate on the plat what will be the front, rear and side yards for Lot 2.
3. The front yard setback for Lot 1 is 65' since G Road is a minor arterial road. The building setback for Lot 1 on the site plan is correct.

CITY DEVELOPMENT ENGINEER **9/13/95**
Jody Kliska **244-1591**

No comment.

PUBLIC SERVICE COMPANY **9/15/95**
John Salazar **244-2781**

No objections.

UTE WATER **9/15/95**
Gary R. Mathews **242-7491**

No objections. Policies and fees in effect at the time of application will apply.

CITY UTILITY ENGINEER **9/18/95**
Trent Prall **244-1590**

WATER - UTE
SEWER - CITY

1. A connection to sewer will be mandatory. Sewer is presently available through an existing easement across the westerly portion of the lot to the south of the proposed development. The approximate distance to the sewer is 100-120' from the southwest corner of proposed development.
2. As the sewer was installed by the developer of the Horizon Park East Subdivision, a sewer "payback" will be required prior to giving approval for the plat to be filed.

MESA COUNTY SCHOOL DISTRICT #51 **9/18/95**
Lou Grasso **242-8500**

SCHOOL	ENROLLMENT/CAPACITY	IMPACT
Tope Elementary	554 / 452	1
West Middle School	530 / 500	0
Grand Junction High School	1548 / 1630	0

TO DATE, NO COMMENTS HAVE BEEN RECEIVED FROM:

City Property Agent
City Attorney
Mesa County Surveyor
Grand Valley Irrigation

STAFF REVIEW

FILE:	MS-95-160
DATE:	October 3, 1995
STAFF:	Bill Nebeker
REQUEST:	Minor subdivision for two residential lots
LOCATION:	2715 G Road
	South side of G Road, 800' east of 27 Road (12th St)
	Tax Parcel #2945-012-013
APPLICANT:	William Kain & Kevin Keenan

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Two Single Family Homes

SURROUNDING LAND USE:

NORTH:	Multi-Family Residential
SOUTH:	Single Family Residential
EAST:	Single Family Residential
WEST:	Vacant

EXISTING ZONING: RSF-5

SURROUNDING ZONING:

NORTH:	PR8/PR5.2
SOUTH:	PR6
EAST:	PR6
WEST:	RSF-5

RELATIONSHIP TO COMPREHENSIVE PLAN: The preferred alternative for the Growth Plan (Concentrated Urban Growth) recommends that this area develop at 4-8 dwelling units per acre. The density of this minor subdivision is approximately 5 dwellings per acre.

STAFF ANALYSIS: The applicant requests a two lot minor subdivision on the south side of G Road, approximately 800 feet east of 27 Road. The Horizon Park East Subdivision wraps around the minor subdivision on the south and east. The subdivision divides a 17,443.7 square foot parcel (0.4 acres) into two lots of 8977.9 and 8465.8 square feet. RSF-5 zoning requires a minimum lot size of 6500 square feet. Lot One has frontage along G Road, an 80 foot wide minor arterial. Lot Two has been redesigned to a flag lot to provide a minimum 20 foot of frontage along G Road as required in the RSF-5 zoning district.

G Road is paved with no curb, gutter or sidewalk. A Traffic Capacity Payment will be required to assist with future widening and improvements. Access to G Road will be limited to a single driveway, shared between the two residences. A connection to city sewer is required. A sewer line was previously installed by the developer of the Horizon Park East Subdivision and is located in an existing easement across the northerly portion of the lot to the south of the proposed development. A sewer payback will be required. The following city fees per lot will be required for this subdivision:

TCP	$500 (for 1 lot)
PIF	$750
Sewer Payback	$422.95 plus interest
Open Space	$225 (for 1 lot)

Other non-city fees not shown above also apply to this development.

Although prior staff comments to the applicant requested that setbacks be shown on the plat for Lot Two, the final copy of the subdivision should show no setbacks. However an inset should be provided showing the location of the front, side and rear yards. No Covenants, Conditions and Restrictions (CCRs) have been submitted for this subdivision. The applicant has one year from final Planning Commission approval to record the subdivision plat.

STAFF RECOMMENDATION: Approval with the following conditions:

1. The applicant shall obtain all necessary permits prior to construction and the final plat shall comply with all applicable codes and regulations.

2. Access to G Road for both lots shall be limited to a single driveway with one future curb cut. A notation on the final plat shall state the following: "Lot 1 and 2 are limited to a single driveway access onto G Road." A dimensioned Ingress/Egress easement, minimum 20 foot wide, shall be shown on the final plat at the location of the proposed driveway entrance. The dedication statement on the plat shall include the following: "All Ingress/Egress Easements to the owners of lots or tracts specifically identified on the plat as perpetual easements for ingress and egress purposes for the use by said lot or tract owners, their guests, and invitees, and also for use by public services, including but not limited to, postal service, trash collection, fire, police, emergency vehicles, and the City of Grand Junction."

3. Remove all references to building setbacks from the primary portion of the subdivision plat. An inset shall be included for information purposes that shows the location of the front, side and rear yard of lot 2. Setbacks are as shown on the resubmitted plat. No dimensions or building envelopes shall be shown.

RECOMMENDED PLANNING COMMISSION MOTION:

Mr. Chairman, on item 95-160, I move that we approve the Kain/Keenan Minor Subdivision at 2715 G Road with the conditions in the staff recommendation:

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (303) 244-1599

October 5, 1995

Vince Popish
QED Surveying Systems Inc.
1018 Colorado Avenue
Grand Junction, CO 81501

Dear Vince:

As I mentioned to you on the phone today, the Kain/Keenan Minor Subdivision was approved by the Planning Commission on October 3, 1995 with 3 conditions. Those conditions are included in the attached copy copy of the staff report to the Planning Commission. Please make the necessary changes to the plat and submit a paper copy for review before submitting the mylar with signatures.

If you have any questions please call me at 241-1447.

Sincerely,

Bill Nebeker

Bill Nebeker
Senior Planner

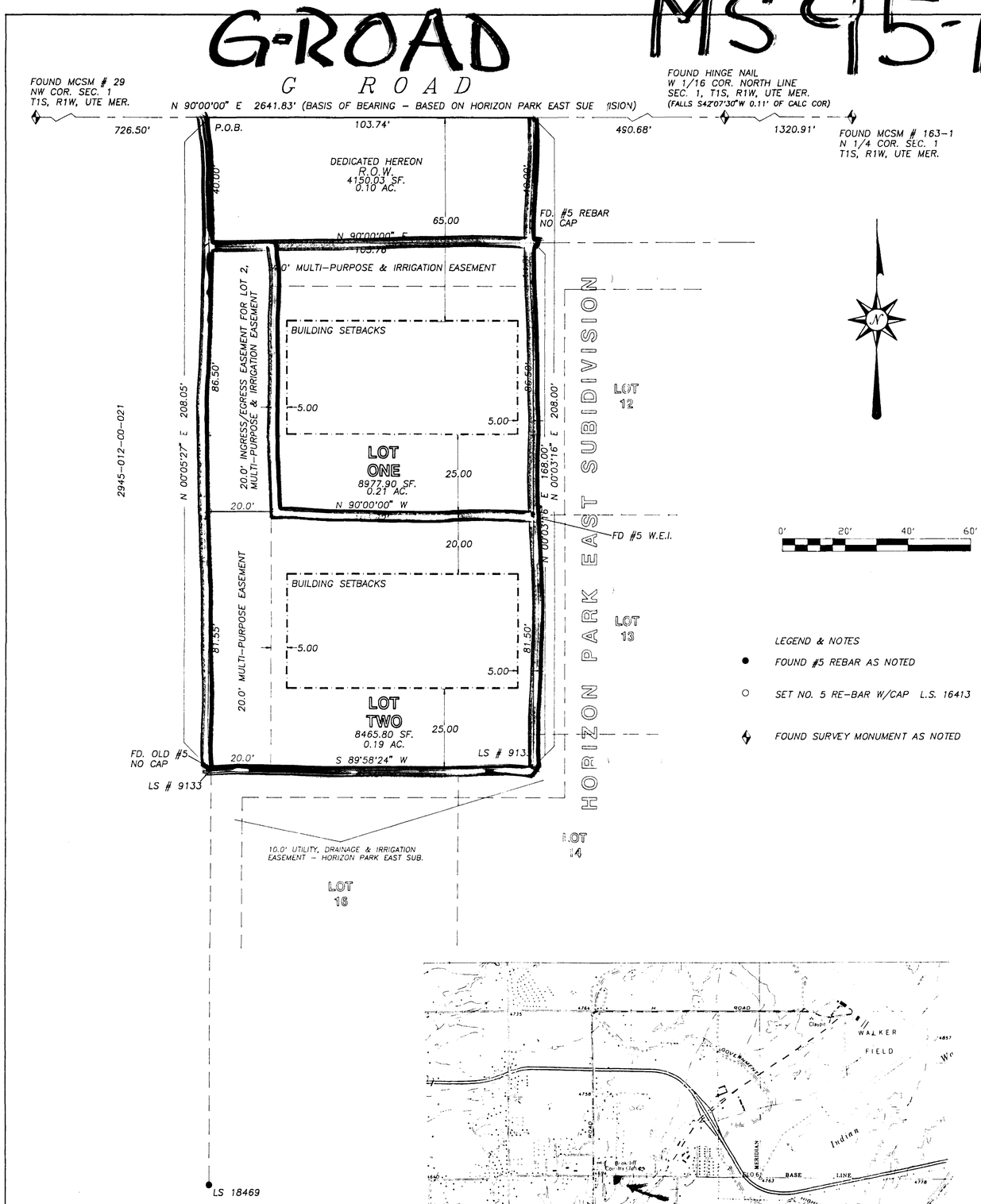
c: Kevin Keenan

G-ROAD

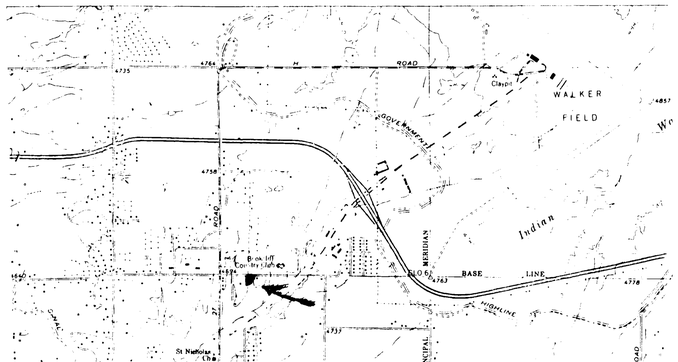
MS 95-160

ROAD

27



AREA SUMMARY



LEGEND & NOTES

- ● FOUND #5 REBAR AS NOTED
- ○ SET NO. 5 RE-BAR W/CAP L.S. 16413
- FOUND SURVEY MONUMENT AS NOTED

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, William H. Kain and Kevin M. Keenan, are the owners of that real property situated in the City of Grand Junction, County of Mesa, State of Colorado, and is described in Book 2156 at Page 480 of the Mesa County Clerk and Recorders Office, and being situated in the NW1/4 NW1/4 Section 1, Township 1 South, Range 1 West of the Ute Meridian, Mesa County, Colorado as shown on the accompanying plat, said property being additionally described as follows:

A parcel of land situated in the NW1/4 NW1/4 Section 1, T1S, R1W, Ute Meridian, being described as follows:

Beginning at a point which bears N90°00'00"E 726.50 feet from the NW Corner of said Section 1; and considering the North line of the NW1/4 Section 1, to bear N90°00'00"E and all bearings contained herein to be relative thereto; thence N90°00'00"E 103.74 feet; thence S00°03'16"W 208.00 feet; thence S89°58'24"W 103.87 feet; thence N00°05'27"E 208.05 feet to the Point of Beginning.

That said owners have caused the said real property to be laid out and surveyed as KAIN/KEENAN MINOR SUBDIVISION a subdivision of a part of City of Grand Junction, County of Mesa, State of Colorado.

That said owners do hereby dedicate and set apart real property as shown and labeled on the accompanying plat as follows:

All streets and rights-of-way as shown on the accompanying plat to the City of Grand Junction, for the use of the public forever;

All Multi-purpose easements to the City of Grand Junction for the use of the public utilities as perpetual easements for the installation, operation, maintenance and repair of utilities and appurtenances thereto including, but not limited to electric lines, cable TV lines, natural gas pipelines, sanitary sewer lines, water lines, telephone lines, and also for the installation and maintenance of traffic control facilities, street lighting, and grade structures;

All Irrigation Easements to the Property owners of the lots and tracts hereby platted as perpetual easements for the installation, operation, maintenance and repair of private irrigation systems;

All Ingress/Egress Easements to the owners of lots specifically identified on the plat as perpetual easements for ingress and egress purposes for the use by said lot owners, their guests, and invitees, and also for the use by public services, including but not limited to, postal service, trash collection, fire, police, emergency vehicles, and the City of Grand Junction.

All easements include the right of ingress and egress on, along, over, under, and through and across by the beneficiaries, their successors, or assigns, together with the right to trim or remove interfering trees and brush, and in Drainage and Detention/Retention easements, the right to dredge; provided, however, that the beneficiaries of said easements shall utilize the same in a reasonable and prudent manner. Furthermore, the owners of lots or tracts hereby platted not burden nor overburden said easements by erecting or placing any improvements thereon which may prevent reasonable ingress and egress to and from the easement.

That all expenses for street paving or improvements shall be furnished by the seller or purchaser, not the City of Grand Junction.

IN WITNESS WHEREOF said owners haves caused their names to be hereunto subscribed this _____ day of _____ A.D., 199__.

_____ William H. Kain

_____ Kevin M. Keenan

STATE OF COLORADO)
) S.S.
COUNTY OF MESA)

The foregoing instrument was acknowledged before me this _____ day of _____ A.D., 199__, by William H. Kain, and Kevin M. Keenan.

My commission expires: _____

_____ Notary Public

_____ Address

CLERK AND RECORDERS CERTIFICATE

STATE OF COLORADO)
) S.S.
COUNTY OF MESA)

I hereby certify that this instrument was filed in my office at _____ o'clock ____ M. this _____ day of _____ A.D., 199__, and is duly recorded in Plat Book No. _____, Page _____

CITY APPROVAL

This plat of KAIN/KEENAN MINOR SUBDIVISION a subdivision of the City of Grand Junction, County of Mesa, and State of Colorado was approved and accepted this _____ day of _____ A.D. 199___.

_____ City Manager

_____ President of Council

SURVEYOR'S CERTIFICATE

I, Max E. Morris, certify that the accompanying plat of KAIN/KEENAN MINOR SUBDIVISION a subdivision of a part of the City of Grand Junction, County of Mesa, State of Colorado has been prepared under my direct supervision and accurately represents a field survey of same. I further certify that this plat conforms to all applicable requirements of the Zoning and Development Code of the City of Grand Junction and all applicable state laws and regulations.

_____ Max E. Morris, Q.E.D. Surveying Systems Inc. Colorado Registered Professional Land Surveyor L.S. 16413

_____ Date