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Name: Corona Del Rey (El Corona/Patterson) - Rezone from RSF-5 to PR-6-Final Plat /Plan File_1990-0009 A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the in some с instances, not all entries designated to be scanned by the department are present in the file. There are also documents a specific to certain files, not found on the standard list. For this reason, a checklist has been provided. n Remaining items, (not selected for scanning), will be marked present on the checklist. This index can serve as a quick n guide for the contents of each file. e d 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 **Table of Contents Review Sheet Summary** Application Form **Review Sheets** Receipts for fees paid for anything *Submittal checklist XX *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 X 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 X X *Petitioner's response to comments *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 X Action Sheet X X Subsurface Soils Exploration – 2/26/90 X X Review Sheet Summary Letter from Wayne H. Lizer, W.H. Lizer & Assoc. to Linda Weitzel X X re: following changes or additions need to be inc. into the project narrative -2/21/90X Review Sheets X Letter from Don Newton to Wayne H. Lizer re: comments on plan-Х 3/1/90 X X Development Summary – 3/7/90 Public Hearing Agenda - 2/27/90, 3/14/90 Х Development Application - 2/1/90 Name of Mission Viejo Planned Unit Development changed to X Х X Corona Del Rey - 6/26/90 Х Public Notice Posting - 2/21/90 Х X Letter from Don Newton to David Wood re: items listed in letter of 10/24/90 have bee satisfactorily completed and has accepted drainage improvements - 3/21/91 Certification of Plat - 7/20/90 X X Patterson Road Corridor Guideline - ** Х X X Planning Commission Meeting Agenda - 3/6/90 Χ X Development Improvements Agreement - ** - 4/25/90 City Council Minutes - ** - 3/21/90 X X Release of Improvements Agreement - ** - 9/19/95 Х Х Notice of Public Hearing - 3/6/90 X Building Permit Guarantee From - 3/5/90 - ** X Х Request for Treasurer's Certificate of Taxes Due - 1/29/90 Recorded agreement from Dick Miller re: replat approved by Utilities X X Coordinating Committee Special Warranty Deed - Ivan Wood and Jane Wood and Marilyn R. Wood and Replat of Lot 15 and Lot 1

Central Bank - 1/3/90

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PROJECT NARRATIVE AND IMPACT STATEMENT

FOR

MISSION VIEJO - A PLANNED UNIT DEVELOPMENT (A REPLAT OF LOTS 1 THROUGH 10 INCLUSIVE AND LOT 15 OF EL CORONA SUBDIVISION)

CITY OF GRAND JUNCTION, MESA COUNTY, COLORADO

FEBRUARY 1990

DEVELOPERS:

David L. and Marilyn R. Wood 1998 Bison Court Grand Junction, Colorado

Ivan and Jane Wood 3548 G Road Palisade, Colorado

ENGINEER:

W.H. LIZER & ASSOCIATES Engineering Consulting and Land Surveying 576 25 Road, Unit #8 Grand Junction, Colorado 81505 241-1129 Original No. 2007 Remove From Office

MISSION VIEJO - A PLANNED UNIT DEVELOPMENT (A Replat of Lots 1 through 10 inclusive, and Lot 15 of El Corona Subdivision)

COMPATIBILITY WITH THE SURROUNDING USES

This development, as well as Mantey Heights which lies to the East, are zoned RSF5. To the South is Arbor Village Subdivision which is zoned PR8 and to the West is the Intermountain Bible College property which is also zoned PR8. To the North is Spring Valley Subdivision which is zoned RSF5 and to the Northeast is Spring Valley Townhomes which is zoned PR8.

ACCESS TO THE SUBDIVISION

Access is off "F" Road using the existing El Corona Drive. All lots will be accessed from El Corona Drive.

AMOUNT OF TRAFFIC GENERATED

There will be 32 lots within the subdivision. It is estimated that each lot will generate an average of 4 trips per day or 128 trips per day total.

LAND USE SUMMARY

Total	Number	of Lots				32		
Total	Area of	Lots			2.31	Acres	or	43%
Total	Area of	Streets				0		
Total	Area of	Private	Open	Space	3.04	Acres	or	57%

PUBLIC SERVICES AND UTILITY SUMMARY

GRAND JUNCTION FIRE DEPARTMENT GRAND JUNCTION CITY WATER GRAND JUNCTION CITY SANITATION PUBLIC SERVICE GAS & ELECTRIC U.S. WEST TELEPHONE OR OTHERS GRAND JUNCTION DRAINAGE DISTRICT GRAND VALLEY WATER USERS

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MISSION VIEJO - A PLANNED UNIT DEVELOPMENT Project Narrative and Impact Statement February 1990

Page 2

FEATURES TO BE PART OF THE PLAN

Mission Viejo is a proposed planned community of ground-level doublyattached residences with two occurring singly. The residences are to be exclusive, low maintenance buildings, ranging from 1100 to 1800 square feet per unit, each with a double-car garage. Our market research indicates the need for ground-level residences located close to town for the older generation in our community.

Individual residences may be either 2 bedroom or 3 bedroom units depending on the market, in which case the building footprint will be adjusted accordingly within the lot boundary.

An association will be formed for the purpose of maintenance of the private open space landscaping and of the irrigation system.

DEVELOPMENT SCHEDULE

El Corona Street will be paved with asphalt with curb and gutter installed during the first year after the recording of the plat, together with utility stub-outs to each unit.

Development will begin with the construction of units on the Southern end of the property on both sides of El Corona Street, then proceeding Northward. It is expected that the development will be completed in 5 years.

Sidewalks, landscaping, screened fencing, and the irrigation system will be installed with each unit as part of the development schedule.

The proposed setbacks for the units are as follows:

Front Setback from El Corona Drive - 18.5 feet

Rear Setback from the Exterior Subdivision Property Line - 7 feet

Respectfully submitted,

Warne W Lie Wayne H. Lizer, P.E., P.L.S.

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WHL/s1

MISSION VIEJO - PUD Adjacent Property Owners

9 90

THELMA PEASE 2777 F ROAD GRAND JUNCTION CO 81506 2945-121-00-003

2945-121-01-009

DAVID OLSON 364 RIDGE CIRCLE DRIVE GRAND JUNCTION CO 81503

2945-121-01-017

BURTON BURKHALTER 130 EL CORONA DRIVE GRAND JUNCTION CO 81506

2945-121-01-015

RALPH MULFORD 134 EL CORONA DRIVE GRAND JUNCTION CO 81506

2945-121-01-016

CHARLES KEY 130 EL CORONA GRAND JUNCTION CO 81506

2945-121-01-018

THELMA PEASE 2777 F ROAD GRAND JUNCTION CO 81506

2945-121-02-001 thru 004

GENE TAYLOR 633 FLETCHER LANE GRAND JUNCTION CO 81505

2945-121-02-005

ROBERT AHRENS 110 MT VIEW GRAND JUNCTION CO 81506

2945-121-02-006

GERRE HAY 113 MANTEY HEIGHTS GRAND JUNCTION CO 81501

2945-121-02-007

TERRY LARSON 2994 BROOKWOOD GRAIND JUNCTION CO 81504 2945-121-02-008

AMON DEAN 115 MANTY HEIGHTS GRAND JUNCTION CO 81501

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2945-121-02-009

JOHN NILSON 118 MOUNTAIN VIEW DRIVE GRAND JUNCTION CO 81501

2945-121-02-010

RAYMON MC GUINNESS 117 MANTY HEIGHTS GRAND JUNCTION CO 81501

2945-121-02-011

GLORIA PELOQUIN 124 MOUNTAIN VIEW GRAND JUNCTION CO 81501

2945-121-02-012

DONALD RAWSON 123 MANTEY HEIGHTS GRAND JUNCTION CO 81501

2945-121-02-013

CARL BURLEY 126 MOUNTAIN VIEW DRIVE GRAND JUNCTION CO 81506

2945-121-02-014 & 015

JOE PROCOPIO 125 MANTEY HEIGHTS DRIVE GRAND JUNCTION CO 81501

2945-121-02-019

CHARLES SOURS 2**55/** SANTA FE DRIVE GRAND JUNCTION CO 81501

2945-121-02-022

HOLLY KISSICK 17957 MEADOW CREEK DRIVE EAGLE RIVER AK 99577

2945-121-30-001

RICHARD WALDREF 2520 BOOKCLIFF GRAND JUNCTION CO 81501 2945-121-30-002

RICHARD WILL 2506 BOOKCLIFF GRAND JUNCTION CO 81501

2945-121-30-003

ALEXANDER SPOMER 2444 BOOKCLIFF GRAND JUNCTION CO 81501

2945-121-30-004

BOBBIE SUNDERMEIER 2430 BOOKCLIFF AVENUE GRAND JUNCTION CO 81501

2945-121-30-005

JOHN SCHLAUGER 2424 BOOKCLIFF GRAND JUNCTION CO 81501

2945-121-29-013

KURT FREEBURG 2164 NORTH 24TH STREET GRAND JUNCTION CO 81501

2945-121-32-004

BLAIN FORD 2522 MIRA VISTA DRIVE GRAND JUNCTION CO 81501

2945-014-42-022

PAUL BARRY C/O P.O. BOX 40 GRAND JUNCTION CO 81502

2945-014-00-054

MILDRED SHAW 2778 F ROAD GRAND JUNCTION CO 81506

2945-014-09-001

ISABEL VENTURES LTD. 2720 BEECHWOOD STREET GRAND JUNCTION CO 81506

WAYNE H. LIZER W H LIZER & ASSOCIATES 576 25 ROAD, UNIT #8 GRAND JUNCTION, CO 81505



RECEIVED GRAND JUNCTION PLANNING DEPARTMENT

MAR 0 9 1990







W.H. LIZER & ASSOCIATES Engineering Consulting and Land Surveying 576 25 Road, Unit #8 Grand Junction, Colorado 81505 241-1129

February 19, 1990

RECEIVED GRAND JUNCTION PLANNING DEPARTMENT

FEB 26 1990

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DRAINAGE REPORT FOR MISSION VIEJO

A REPLAT OF LOT 15 AND LOTS 1 THROUGH 10, INCLUSIVE, OF EL CORONA SUBDIVISION, MESA COUNTY, COLORADO

GENERAL

Mission Viejo is located on the South side of Patterson Road between 27 1/2 and 28 Roads. This proposed subdivision is bounded on the West by Intermountain Bible College, on the East by Mantey Heights Subdivision, on the South by the Grand Valley Canal, and on the North by Patterson Road.

The property is more or less divided by an irrigation lateral two-thirds of the way back from Patterson Road. This lateral essentially divides the drainage area for the project. The area to the North of the lateral drains to the North which will also be the area of development. The area that drains to the South will be designated as "Private Open Space" and the drainage pattern is not expected to change from the historical rate.

The average slope for the basin for the proposed area of development from the lateral to Patterson Road is approximately 1.9%.

The average slope for the area from the lateral to the Grand Valley Canal is 21.4%. Since there is not expected to be any development for this area, the drainage analysis will focus on that area to be developed; that is, between the lateral and Patterson Road.

METHOD OF ANALYSIS

The Rational Method was used to determine the amount of storm runoff, using the formula, $Q = CC_f IA$, since this is a very small area,

where Q = runoff in cfs

C = runoff coefficient

 C_{f} = rainfall frequency factor = 1 for a 10-year storm

I = rainfall intensity (in./hr.)

A = area in acres

W.H. Lizer & Associates Drainage Report for Mission Viejo Febraury 19, 1990

Page 2

For historic runoff, a value of 0.37 was used for "C" for an unimproved area.

For runoff after development, a value of 0.61 was used for "C", which was determined by the composit method.

The area used for both historical and after development was 5.0 acres, which includes El Corona Drive, a dirt road at the present time.

Runoff coefficients for the developed area, which includes the proposed structures, driveways, paving and sidewalks on El Corona Drive, and landscaping in the "Private Open Space", was determined to be 0.83 for asphalt, concrete, and roofs, and 0.25 for the landscaped areas.

There is approximately 3.1 acres in asphalt, concrete, and roofs, and 1.9 acres in landscaping. There is no exterior contribution.

A 10-year frequency storm was used for computing the historic rate of runoff, runoff after development, and for sizing the storm retention area.

Values of "I" were determined from intensity duration curves for the Grand Junction area (graph attached).

COMPUTATIONS

Historic

$$T_{c} = \frac{1.87 (1.1 - C)D^{\frac{1}{2}}}{S^{1/3}}$$

where T_c = Time of Concentration, minutes

S = Slope of Basin, %

C = Rational Method Runoff Coefficient

D = Length of Basin, feet

or

$$T_{\rm C} = \frac{1.87 \ (1.1 - 0.37)(782)^{\frac{1}{2}}}{(1.9)^{1/3}}$$

= 31 min.

W.H. Lizer & Associates Drainage Report for Mission Viejo February 19, 1990

Page 3

From graph,
$$I_{10} = 1.45$$

 $Q_{10} = CC_{f}IA = (0.37)(1)(1.45)(5)$
 $= 2.68 cfs$

Runoff After Development

Composit Runoff Factor

$$\sum \frac{\text{CiAi}}{A_{t}} = \frac{(0.83)(3.1) + (0.25)(1.9)}{5}$$
$$= 0.61$$
$$T_{c} = \frac{1.87 (1.1 - 0.61)(782)^{\frac{1}{2}}}{(1.9)^{1/3}}$$

= 21 min.

1.85

Η

From Graph, I₁₀

 $Q_{10} = CC_{fIA} = (0.61)(1)(1.85)(5)$ = 5.64 cfs

A Detention Area is required which will be located North of Lot 1, Block 2 of the proposed subdivision.

The Detention Volume was determined by the Triangular Method:

$$V = T_{C} \frac{(Q_{d} - Q_{h})^{2}}{Q_{d}}$$
 60 where $V =$ Volume to be stored, cu.ft.
 $T_{C} =$ Time of Concentration, (for historic area), min.

- Qd = Maximum runoff rate when fully developed, cfs
- Q_h = Maximum release rate for design storms under conditions prior to development, cfs

or V =
$$\frac{31(5.64 - 2.68)^2}{5.64}$$
 60

= 2889 cu.ft.

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y y 9

W.H. Lizer & Associates Drainage Report for Mission Viejo February 19, 1990

Page 4

A Detention Basin 4 feet deep with side slopes of 2:1 having average dimensions of 20' x 36' at 2 feet above the bottom of the detention basin will be required or a basin of equivalent size.

One six-inch diamenter PVC pipe will be required to discharge stormwater from the detention pond to a drop inlet pipe which is located on the South side of Patterson Road.

Respectfully submitted,

Wayne H. Lizer, P.E., P.L.S.

WHL/s1



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INTENSITY DURATION CURVES GRAND JUNCTION, COLORADO



W.H. LIZER & ASSOCIATES Engineering Consulting and Land Surveying 576 25 Road, Unit #8 Grand Junction, Colorado 81505 241-1129

February 19, 1990

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MISSION VIEJO

EL CORONA DRIVE

STREET STRUCTURAL DESIGN

18^k EDLA

From the Project Narrative, it is estimated that there will be 224 trips per day from the project or 112 trips each direction. There are 4 additional single-family lots that are either built upon or potentially could be built upon that would add 28 trips per day or 14 trips each direction or a total of 126 trips in each direction.

It is estimated that 80% of this traffic will be passenger cars and 20% pickups or very light trucks. It is anticipated that 1 trip per day will be made by a combination truck, such as a trash pick-up truck, concrete truck, moving van or some similar-type vehicle.

The 18^kEDLA would then be as follows:

Passenger car:	126	x 0.80	x 0.0008	=	0.08
Pickup & Light Truck:	126	x 0.20	x 0.006846	=	0.17
Combination Truck:	1	x	1.024367	=	1.02
-			TOTAL		1.27

Since this is a dead-end street with a cul-de-sac and cannot be extended to the South in the future because of a high bluff which is directly South of the cul-de-sac, it is not expected to have any future traffic increase.

A safety factor of 2 was used to account for other local traffic such as mail delivery, emergency vehicles, and visitors giving the 18^kEDLA a value of 2.54.

W.H. Lizer & Associates Mission Viejo/El Corona Drive Street Structural Design February 19, 1990

Page 2

From the soils analysis, the R value is 13. The Regional Factor used was 10. From the Design Nomograph, the WSN for this street is 1.4.

3 inches of asphalt required = $3 \times 0.44 = 1.32$ 6 inches Class 6 (min. thickness) = $6 \times 0.14 = 0.84$ 2.16

2.16 is greater than 1.40, therefore, 3 inches of asphalt with a 6-inch Class 6 base will be used.

Respectfully submitted,

Warne

WHL/sl



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Wayne H. Lizer, P.E., P.L.S.



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DECLARATION

OF COVENANTS, CONDITIONS AND RESTRICTIONS OF MISSION VIEJO

THIS DECLARATION, Made on the date hereinafter set forth

hereinafter referred to as "Declarant."

by

WITNESSETH:

WHEREAS, Declarant is the owner of certain property in Grand Junction, County of Mesa, State of Colorado, which is more particularly described as:

MISSION VIEJO SUBDIVISION, a replat of Lots 1 through 10 and Lot 15, El Corona Subdivision.

NOW, THEREFORE, Declarant hereby declares that all of the properties described above shall be held, sold and conveyed subject to the following easements, restrictions, covenants and conditions which are for the purpose of protecting the value and desirability of, and which shall run with, the real property and be binding on all parties having any right, title or interest in the described properties or any part thereof, their heirs, successors and assigns, and shall inure to the benefit of each owner thereof.

ARTICLE I

DEFINITIONS-

Section 1. "Association" shall mean and refer to Mission Viejo Homeowners Association, its successors and assigns.

Section 2. "Owner" shall mean and refer to the record owner, whether one or more persons or entities, of a fee simple title to any Lot which is a part of the Properties, including contract sellers, but excluding those having such interest merely as security for the performance of an obligation.

Section 3. "Properties" shall mean and refer to that certain real property hereinbefore described, and such additions thereto as may hereafter be brought within the jurisdiction of the Association.

<u>Section 4.</u> "Common Area" shall mean all real property (including the improvements thereto) owned by the Association for the common use and enjoyment of the owners. The Common Area to be owned by the Association at the time of the conveyance of the first lot is described as follows:

All of Mission Viejo Subdivision, a replat of Lots 1 through 10 and Lot 15, El Corona Subdivision, EXCEPT through ______, as shown on the plat thereof.

<u>Section 5.</u> "Lot" shall mean and refer to any plot of land shown upon any recorded subdivision map of the Properties with the exception of the Common Area.

Section 6. "Declarant" shall mean and refer to

, its successors and assigns if such successors or assigns should acquire more than one undeveloped Lot from the Declarant for the purpose of development.

ARTICLE II

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PROPERTY RIGHTS

Section 1. Owners' Easement of Enjoyment. Every Owner shall have a right and easement of enjoyment in and to all of the Common Area which shall be appurtenant to and shall pass with the title to every Lot, subject to the following provisions:

(a) The right of the Association to adopt reasonable rules and regulations for the use of the Common Area.

(b) The right of the Association to suspend the voting rights and right to use of the common area by an Owner for any period during which any assessment against his Lot remains unpaid; and for a period not to exceed 60 days for any infraction of its published rules and regulations.

(c) The right of the Association, subject to the provisions of the Articles of Incorporation, to dedicate or transfer all or any part of the Common Area to any public agency, authority, or utility for such purposes and subject to such conditions as may be agreed to by the members.

No such dedication or transfer referred to in (c) shall be effective unless an instrument signed by at least seventyfive percent (75%) of each class of members agreeing to such dedication or transfer has been recorded.

Section 2. Delegation of Use. Any Owner may delegate, in accordance with the By-Laws, his right of enjoyment to the Common Area to the members of his family, his tenants, or contract purchasers who reside on the property.

Section 3. Parking Rights. Ownership of each Lot shall entitle the Owner or Owners thereof to the use of two (2) automobile parking spaces within the perimeter of each Lot.

Section 4. General Restrictions

(a) Antennae. No exterior radio and/or television antennae shall be erected or maintained in Mission Viejo.

(b) Insurance Rates. Nothing shall be done or kept in Mission Viejo which will increase the rate of insurance on any Association Property without the approval of the Board, nor shall anything be done or kept in Mission Viejo which would result in the cancellation of insurance on any Association Property or which would be in violation of any law.

(c) No Further Subdividing. No Lot may be further subdivided, nor may any easement or other interest therein less than the whole be conveyed by the Owner thereof; provided, however, that nothing herein shall be deemed to prevent or require the approval of the Board for the transfer or sale of any Lot to more than one person to be held by them as tenants in common or joint tenants.

(d) Signs. No sign of any kind shall be displayed to the public view without the approval of the Architectural Committee, except such signs as may be used by Declarant in connection with the development of Mission Viejo and sale of residences and Lots and except such signs of customary and reasonable dimensions as set forth by the Committee as may be displayed on or from a residence advertising the residence for sale or lease. All signs, except such signs as may be used by Declarant, shall be placed on the exterior of the residence parallel to the exterior wall. Any "For Sale" or "For Lease" signs not more than three (3) feet by two (2) feet, plain white with black block letter, shall not require Committee approval.

(e) Animals. No animals of any kind shall be raised,
bred or kept, except that a reasonable number of dogs, cats
or other household pets may be kept, provided that they are
not kept, bred or maintained for any commercial purpose.
A "Reasonable Number" as used in this Section shall ordinarily
mean no more than two (2) pets per household, provided, however,
that the Association (or the Architectural Committee or such

other person or entity as the Association may from time to time designate) may determine that a Reasonable Number in any instance may be more or less.

(f) Air Conditioning. No window air conditioning units shall be installed. Central air conditioning systems may be installed by Owner at any time. Placement of condenser must be approved by the Architectural Committee, and the Owner must submit a placement drawing for approval.

(g) Nuisances. No rubbish or debris of any kind shall be placed or permitted to accumulate upon any property within Mission Viejo, and no odors shall be permitted to arise therefrom so as to render any such property or any portion thereof unsanitary, unsightly, offensive or detrimental to any other property in the vicinity thereof or to its occupants. Without limiting the generality of any of the foregoing provisions, no exterior speakers, horns, whistles, bells or other sound devices (other than security devises used exclusively for security purposes) shall be located, used or placed on any such property without the prior written approval of the Board of Directors of Mission Viejo Homeowners Association.

(h) Exterior Maintenance and Repair. No Improvement upon any property within Mission Viejo shall be permitted to fall into disrepair, and each Improvement shall at all times be kept in good condition and repair.

In the event an Owner of any Lot in the Properties shall fail to maintain the premises and the improvements situated thereon in a manner satisfactory to the Board of Directors, the Association, after approval by two-thirds (2/3) vote of the Board of Directors, shall have the right, through its agents and employees, to enter upon said parcel and to repair, maintain, and restore the Lot and the exterior of the buildings and any other improvements erected thereon. The cost of such exterior maintenance shall be added to and become a part of the assessment to which such Lot is subject.

The Association shall be responsible for the removal of snow and ice from the streets and walks included within the Common Area. Each Owner shall be responsible for the removal of snow and ice from his driveway and from the walks included within the boundaries of the Owner's Lot.

(i) Payment of Utilities. Each Owner shall be responsible for the payment of all utilities, including gas, electricity, telephone, trash removal, water and sewer which are provided to each Owner's Lot. Said utilities shall be flat rate or metered, as appropriate, and bills for each shall be sent to each Lot Owner, or tenant thereof, by the utility companies providing said services, where feasible.

(j) The Association shall landscape or plat and maintain in a neat and attractive condition the Common Area.

(k) Violation of Mission Viejo Rules. There shall be no violation of the Mission Viejo Rules once adopted by the Board after Notice and Hearing. If any Owner, his family, or any licensee, lessee or invitee violates the Mission Viejo Rules, the Board may suspend the right of such person to use the Association properties, under such conditions as the Board may specify, for a period not to exceed thirty (30) days for each violation. Before invoking any suspension, the Board shall give such person Notice and Hearing. In the event any Owner of any Lot shall violate any Mission Viejo Rule or regulation which shall result in damage to any part of the Common Area or Improvements thereon, the Board of Directors shall have the right after Notice and Hearing to assess the cost of repair of such damages against the Lot of the Owner or Owners responsible for such damage. Such assessment shall be added to and become a part of the Assessment to which such Lot is subject. Notwithstanding anything to the contrary in this Declaration, the Board shall not have the power to bar any Owner from use of the Common Area necessary to allow the Owner free access to and from his Lot, his parking areas, and a public way, whether as a pedestrian or in or upon any appropriate vehicle.

(1) Drainage. There shall be no interference with the established drainage pattern over any property within Mission Viejo unless adequate provision is made for proper drainage and is approved by the Architectural Committee. For the purposes hereof, "Established Drainage" is defined as the drainage which exists at the time the overall grading of any Association Property is completed, or which is shown on any plans approved by the Architectural Committee. A permanent easement across the Common Area for drainage purposes is hereby granted.

(m) No Hazardous Activities. No activities shall be conducted on any Property and no Improvements constructed on any property which are or might be unsafe or hazardous to any Person or property.

(n) No Temporary Structures. No tent or shack or other temporary building, Improvement or structure shall be placed upon any property.

(c) Improvements and Alterations. There shall be no excavation or construction or alteration which in any way alters the exterior appearance of any Improvement within Mission Viejo, nor removal of any Improvement in Mission Viejo, (other than repairs or rebuilding pursuant to Section 4(h) hereof) without the prior approval of the Architectural Committee pursuant to Article V hereof.

(p) Residential Use: Rentals. No residence shall be used for any purpose other than single-family residential purposes. No gainful occupation, profession, trade or other non-residential use shall be conducted on any such Residential Area, provided, however, that nothing in this Declaration shall prevent the rental or property within a Residential Area by the Owner thereof for residential purposes, subject to all the provisions of Mission Viejo Restrictions.

(q) Vehicle Storage and Repair. No house trailer, camping trailer, hauling trailer, running gear or boat or accessories thereto, truck or pickup or van or camper van in excess of three-fourths (3/4) ton size shall be parked, stored, repaired, or maintained on any Lot or the Common Area. This restriction shall not apply to commercial or other vehicles making business or service calls or deliveries to the residents or Owners of the Lots or to the Association or to contractors within the Properties. No vehicle of any type shall be parked on any Lot or Common Area for the purpose of making any kind of repairs, other than routine maintenance work (e.g. engine oil change, waxing, minor engine tune-up).

(r) Exemption of Declarant. Nothing in the Mission Viejo Restrictions shall limit the right of Declarant to complete excavation, grading and construction of Improvements to any property within Mission Viejo owned by Declarant, or to alter the foregoing or to construct such additional Improvements as Declarant deems advisable in the course of development of Mission Viejo so long as any Lot in Mission Viejo remains unsold, or to use any structure in Mission Viejo as a model home or real estate sales or leasing office. Declarant need not seek or obtain Architectural Committee approval of any Improvement constructed or placed by Declarant on any property in Mission Viejo owned by Declarant. The rights of Declarant hereunder and elsewhere in these restrictions may be assigned by Declarant.

Section 5. Easements.

(a) Reciprocal Easements. The Declarant hereby reserves for itself and the Association, their successors and assigns, a right of way and easement for exterior maintenance and repair of all Improvements, and the installation and continued operation, maintenance, repair, alteration, inspection and replacement of utility lines, including but not limited to, water lines, sewer lines, gas lines, telephone lines, television cable antenna lines and such other utility lines and incidental equipment thereon, over, under and across the Common Area and that portion of any Lot situate between any Improvement and the street adjacent thereto. Declarant or Association shall, except in cases of emergency, furnish to all affected Owners twenty-four (24) hours' notice before exercising the rights granted by this Article. Perpetual reciprocal easements for the aforementioned purposes shall exist both for the benefit and burden of all of the Owners.

(b) Easements for Encroachments. If any portion of an Improvement encroaches upon the Common Area, or upon an adjoining Improvement, a valid easement for the encroachment and for the maintenance of same, so long as it stands, shall and does exist. If any portion of the Common Area encroaches upon an Improvement a valid easement for the encroachment and for the maintenance of same, so long as it stands, shall and does exist. Such encroachments and easements shall not be considered or determined to be encumbrances either on the Common Area or the Improvement.

(c) Reservation of Easements. Declarant reserves for itself and the purchaser of the existing Mission Viejo property the use of the easements set forth in this Article II which are intended to and shall be for the benefit of all Owners, and no reference thereto need be made in any Deed, instrument of conveyance or any other instrument.

(d) Easement for Utilities." The Declarant hereby grants a right of way and easement for utility purposes including, but not limited to, water lines, sewer lines, gas lines, telephone lines, television cable antenna lines and such other utility lines and incidental equipment over, under and across the Common Area. Such utility easements and rights of way shall be binding upon the Declarant and the Association and their respective successors and assigns.

<u>Section 6.</u> <u>Insurance</u>. Every Owner of a Lot shall maintain in full force an insurance policy, including fire and extended insurance coverage protection, on his unit's contents, including personal property, wall coverings, appliances and similar such possessions. The insurance coverage shall be in a face amount equal to at least eighty percent (80%) of the replacement value of such contents determined as of the effective date of the policy. Each Owner, or his representative, shall furnish to the Association, not later than thirty (30) days after the effective date or renewal date of any such insurance policy, a written statement prepared and signed by the insurer acknowledging the amount of coverage in force and stipulating that all necessary premiums have been paid for the period of coverage set forth in the statement. Each Owner shall further advise his insurer to furnish the Association with a copy of any Notice of Termination of Coverage forwarded to the insured. This Section shall apply to each Owner, irrespective of whether or not he occupies the Improvements on any Lot(s) owned by him.

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ARTICLE III

MEMBERSHIP AND VOTING RIGHTS

Section 1. Every owner of a Lot which is subject to assessment shall be a member of the Association. Membership shall be appurtenant to and may not be separated from ownership of any Lot which is subject to assessment.

Section 2. The Association shall have two classes of voting membership:

<u>Class A</u>. Class A members shall be all Owners, with the exception of the Declarant, and shall be entitled to one vote for each Lot owned. When more than one person holds an interest in any Lot, all such persons shall be members. The vote for such Lot shall be exercised as they determine, but in no event shall more than one vote be cast with respect to any Lot.

<u>Class B.</u> The Class B member(s) shall be the Declarant and shall be entitled to three (3) votes for each Lot owned. The Class B membership shall cease and be converted to Class A membership on the happening of either of the following events, whichever occurs earlier:

(a) when the total votes outstanding in the Class A membership equal the total votes outstanding in the Class B membership,

i. -

(b) on July 1, 1995.

or

ARTICLE IV

COVENANT FOR MAINTENANCE ASSESSMENTS

Section 1. Creation of the Lien and Personal Obligation of Assessments. The Declarant, for each Lot owned within the Properties, hereby covenants, and each Owner of any Lot by acceptance of a deed therefor, whether or not it shall be so expressed in such deed, is deemed to covenant and agree to pay to the Association: (1) annual assessments or charges, and (2) special assessments for capital improvements, such assessments to be established and collected as hereinafter provided. The annual and special assessments, together with interest, costs, and reasonable attorney's fees, shall be a charge on the land and shall be a continuing lien upon the property against which each such assessment is made. Each such assessment, together with interest, costs, and reasonable attorney's fees, shall also be the personal obligation of the person who was the Owner of such property at the time when the assessment fell due. The personal obligation for delinquent assessments shall not pass to his successors in title unless expressly assumed by them.

Section 2. Purpose of Assessments. The assessments levied by the Association shall be used exclusively to promote the recreation, health, safety, and welfare of the residents in the Properties and for the improvement and maintenance of the Common Area.

Section 3. <u>Maximum Annual Assessment</u>. Until January 1 of the year immediately following the conveyance of the first Lot to an Owner, the maximum annual assessment shall be One Thousand Two Hundred Dollars (\$1,200.00) per Lot.

(a) From and after January 1 of the year immediately following the conveyance of the first Lot to an Owner, the maximum annual assessment may be increased each year not more than 5% above the maximum assessment for the previous year without a vote of the membership. (b) From and after January 1 of the year immediately following the conveyance of the first Lot to an Owner, the maximum annual assessment may be increased above 5% by a vote of two-thirds (2/3) of each class of members who are voting in person or by proxy, at a meeting duly called for this purpose.

(c) The Board of Directors may fix the annual assessment at an amount not in excess of the maximum.

Section 4. Special Assessments for Capital Improvements. In addition to the annual assessments authorized above, the Association may levy, in any assessment year, a special assessment applicable to that year only for the purpose of defraying, in whole or in part, the cost of any construction, reconstruction, repair or replacement of a capital improvement upon the Common Area, including fixtures and personal property related thereto, provided that any such assessment shall have the assent of two-thirds (2/3) of the votes of each class of members who are voting in person or by proxy at a meeting duly called for this purpose.

Section 5. Notice and Quorum for Any Action Authorized Under Sections 3 and 4. Written notice of any meeting called for the purpose of taking any action authorized under Section 3 or 4 shall be sent to all members not less than 30 days nor more than 60 days in advance of the meeting. At the first such meeting called, the presence of members or of proxies entitled to cast sixty percent (60%) of all the votes of each class of membership shall constitute a quorum. If the required quorum is not present, another meeting may be called subject to the same notice requirement, and the required quorum at the subsequent meeting shall be one-half ($\frac{1}{2}$) of the required quorum at the preceding meeting. No such subsequent meeting shall be held more than 60 days following the preceding meeting.

Section 6. Uniform Rate of Assessment. Both annual and special assessments must be fixed at a uniform rate for all Lots and may be collected on a monthly basis.

Section 7. Date of Commencement of Annual Assessments: Due Dates. The annual assessments provided for herein shall commence as to all Lots on the first day of the month following the conveyance of the Common Area. The first annual assessment shall be adjusted according to the number of months remaining in the calendar year. The Board of Directors shall fix the amount of the annual assessment against each Lot at least thirty (30) days in advance of each annual assessment period. Written notice of the annual assessment shall be sent to every Owner subject thereto. The due dates shall be established by the Board of Directors. The Association shall, upon demand, and for a reasonable charge, furnish a certificate signed by an officer or the association setting forth whether the assessments on a specified Lot have been paid. A properly executed certificate of the Association as to the status of assessments on a lot is binding upon the Association as of the date of its issuance.

Section 8. Effect of Nonpayment of Assessments: Remedies of the Association. Any assessment not paid within thirty (30) days after the due date shall bear interest from the due date at the rate of 12 percent per annum. The Association may bring an action at law against the Owner personally obligated to pay the same, or foreclose the lien against the property. No owner may waive or otherwise escape liability for the assessments provided for herein by non-use of the Common Area or abandonment of his Lot.

Section 9. Subordination of the Lien to Mortgages. The lien of the assessments provided for herein shall be subordinate to the lien of any first mortgage. Sale or transfer of any Lot shall not affect the assessment lien. However, the sale or transfer

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Section 10

of any Lot pursuant to mortgage foreclosure or any proceeding in lieu thereof, shall extinguish the lien of such assessments as to payments which became due prior to such sale or transfer. No sale or transfer shall relieve such Lot from liability for any assessments thereafter becoming due or from the lien thereof.

ARTICLE V

ARCHITECTURAL CONTROL

No building, fence, wall or other structure shall be commenced, erected or maintained upon the Properties, nor shall any exterior addition to or change or alteration therein be made until the plans and specifications showing the nature, kind, shape, height, materials, and location of the same shall have been submitted to and approved in writing as to harmony of external design and location in relation to surrounding structures and topography by the Board of Directors of the Association, or by an architectural committee composed of three (3) or more representatives appointed by the Board. In the event said Board, or its designated committee, fails to approve or disapprove such design and location within thirty (30) days after said plans and specifications have been submitted to it, approval will not be required and this Article will be deemed to have been fully complied with.

ARTICLE VI

PARTY WALLS

Section 1. General Rules of Law to Apply. Each wall which is built as a part of the original construction of the homes upon the Properties and placed on the dividing line between the Lots shall constitute a party wall, and, to the extent not inconsistent with the provisions of the Article, the general rules of law regarding party walls and liability for property damage due to negligence or willful acts or omissions shall apply thereto.

Section 2. Sharing of Repair and Maintenance. The cost of reasonable repair and maintenance of a party wall shall be shared by the Owners who make use of the wall in proportion to such use.

<u>Section 3.</u> Destruction by Fire of Other Casualty. If a party wall is destroyed or damaged by fire or other casualty, any Owner who has used the wall may restore it, and if the other Owners thereafter make use of the wall, they shall contribute to the cost of restoration thereof in proportion to such use without prejudice, however, to the right of any such Owners to call for a larger contribution from the others under any rule of law regarding liability for negligent or willful acts or omissions.

Section 4. Weatherproofing. Notwithstanding any other provision of this Article, an Owner who by his negligent or willful act causes the party wall to be exposed to the elements shall bear the whole cost of furnishing the necessary protection against such elements.

<u>Section 5.</u> <u>Right to Contribution Runs With Land</u>. The right of any Owner to contribution from any other Owner under this Article shall be appurtenant to the land and shall pass to such Owner's successors in title.

<u>Section 6.</u> Arbitration. In the event of any dispute arising concerning a party wall, or under the provisions of this Article, each party shall choose one arbitrator, and such arbitrators shall choose one additional arbitrator, and the decision shall be by a majority of all the arbitrators.

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ARTICLE VII

GENERAL PROVISIONS

Section 1. Enforcement. The Association, or any Owner, shall have the right to enforce, by any proceeding at law or in equity, all restrictions, conditions, covenants, reservations, liens and charges now or hereafter imposed by the provisions of this Declaration. Failure by the Association or by any Owner to enforce any covenant or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter.

<u>Section 2.</u> <u>Severability</u>. Invalidation of any one of these covenants or restrictions by judgment or court order shall in no way affect any other provisions which shall remain in full force and effect.

<u>Section 3.</u> <u>Amendment</u>. The covenants and restrictions of this Declaration shall run with and bind the land, for a term of twenty (20) years from the date this Declaration is recorded, after which time they shall be automatically extended for successive periods of ten (10) years. This Declaration may be amended during the first twenty (20) year period by an instrument signed by not less than ninety percent (90%) of the Lot Owners, and thereafter by an instrument signed by not less than seventy-five percent (75%) of the Lot Owners. Any amendment must be recorded.

Section 4. FHA/VA Approval. As long as there is a Class B membership, the following actions will require the prior approval of the Federal Housing Administration or the Veterans Administration: Dedication of Common Area, and amendment of this Declaration of Covenants, Conditions and Restrictions.

IN WITNESS WHEREOF, the undersigned, being the Declarant herein, has hereunto set its hand and seal this _____ day of _____, 1990.

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	•		Title:	<u></u>		
STATE OF)			•	
COUNTY OF) SS.)			́.	
Subsc	ribed and	sworn to be , 1990, by _	fore me this _	day	of	
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Witness my hand and official seal. My commission expires:

Notary Public

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SUBSURFACE SOILS EXPLORATION Replat of El Corona Subdivision Grand Junction, Colorado

Prepared For:

Ivan Wood 3548 G Road Palisade, CO 81526

Prepared By:

LINCOLN-DEVORE, INC. 1441 Motor Street Grand Junction, CO 81505

February 8. 1990



Lincoln DeVore, Inc. Geotechnical Consultants -1441 Motor St. Grand Junction, CO 81505 (303) 242-8968

February 8, 1990

Ivan Wood 3548 G Road Palisade, CO 81526

Re:

SUBSURFACE SOILS EXPLORATION

Replat of El Corona Subdivision

Grand Junction, Colorado

Dear Sir:

Transmitted herein are the results of a Subsurface Soils Exploration for the proposed

If you have any questions after reviewing this report, please feel free to contact this office at any time. This opportunity to provide Geotechnical Engineering services is sincerely appreciated.

Respectfully submitted,

LINCOLN-DeVORE, INC.

By: Ø

Edward M. Morris Western Slope Branch Manager Grand Junction, Office

Reviewed by: George D. Morris, P.E. Colorado Springs Office

EMM/rl

LDTL Job No. 72133-J

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INTRODUCTION

PROJECT DESCRIPTION

This report presents the results of our geotechnical evaluation performed to determine the general subsurface conditions of the site applicable to construction of approximately 32 single-family residences. A vicinity map is included in the Appendix of this report.

To assist in our exploration, we were provided with a subdivision plat. The Boring Location Plan attached to this report is based on that plan provided to us. We understand that the proposed struct-

ures will be one or two story, wood-framed structures with the possibility of full basements and concrete floor slabs on grade. Lincoln DeVore has not seen a full set of building plans, but structures of this type typically develop wall loads on the order of 1000 to 2500 plf and column loads on the order of 5 to 15 kips.

The characteristics of the subsurface materials encountered were evaluated with regard to the type of construction described above. Recommendations are included herein to match the described construction to the soil characteristics found. The information contained herein may or may not be valid for other purposes. If the proposed site use is changed or types of construction proposed, other than noted herein, Lincoln Devore should be contacted to determine if the information in this report can be used for the new construction without further

field evaluations.

PROJECT SCOPE

The purpose of our exploration was to evaluate the surface and subsurface soil and geologic conditions of the site and, based on the conditions encountered, to provide recommendations pertaining to the geotechnical aspects of the site development as previously described. The conclusions and recommendations included herein are based on an analysis of the data obtained from our field explorations, laboratory testing program, and on our experience with similiar soil and geologic conditions in the area.

The scope of our geotechnical exploration consisted of a surface reconnaissance, a geophoto study, subsurface exploration, obtaining representative samples, laboratory testing, analysis of field and laboratory data, and a review of geologic literature.

Specifically, the intent of this study

is to:

- 1. Explore the subsurface conditions to the depth expected to be influenced by the proposed construction.
- 2. Evaluate by laboratory and field tests the general engineering properties of the various strata which could influence the development.
- 3. Define the general geology of the site including likely geologic hazards which could have an effect on site development.
- Develop geotechnical criteria for site grading and earthwork.
- 5. Identify potential construction difficulties and provide recommendations concerning these problems.

6. Recommend an appropriate foundation system for the anticipated structure and develop criteria for foundation design.

FIELD EXPLORATION AND LABORATORY TESTING

A field evaluation was performed on January 23, 1990, and consisted of a site reconnaissance by our personnel and the drilling of geotechnical six shallow exploration borings. These shallow exploration borings were drilled within the proposed building near the locations indicated on the Boring Location Plan. The six shallow exploration borings located to obtain a reasonably good profile of the were subsurface soil conditions. All exploration borings were drilled using a CME 45-B, truck mounted drill rig with continuous flight auger to depths of approximately twenty feet. Samples were with a standard split spoon sampler, "thin-walled Shelby taken Tubes and by bulk methods. Logs describing the subsurface conditions are presented in the attached figures.

Laboratory tests were performed on representative soil samples to determine their relative engineering properties. Tests were performed in accordance with test methods of the American Society for Testing and Materials or other accepted standards. The results of our laboratory tests are included in this report. The in-place moisture content and the standard penetration test values are presented on the attached drilling logs.

FINDINGS

SITE DESCRIPTION

The project site is located in the Northeast Quarter of the Northeast Quarter of Section 12, Township One South, Range One West of the Ute Principal Meridian, Mesa County, Colorado. More specifically the site is located in the general area of Grand Junction known as Mantey Heights and is bounded on the North by Patterson Road and on the East by Mount View Drive.

The topography of the site is fairly flat with a slight overall gradient to the North. The exact direction of surface runoff on this site will be controlled by the proposed construction and therefore will be variable. In general, surface runoff is expected to travel to the north, and be intercepted by the storm-drain works on Patterson Road, eventually entering the Colorado River. Surface and subsurface drainage on this site would be described as poor.

GENERAL GEOLOGY AND SUBSURFACE DESCRIPTION

The geologic materials encountered under the site consist of a thin to thick cover of low density debris fan derived soils which overlay the formational Mancos Shale. The geologic and engineering properties of the materials found in our six shallow exploration borings will be discussed in the following sections.

The debris fan materials which comprise the surface materials on this site are derived from the

Bookcliffs to the North of the Grand Junction area. These deposits are thickest in the east and northeast portion of the site with depths ranging from 16 feet in the vicinity of Test Hole No. 1 to five an one half feet in the vicinity of Test Hole No. 3. The west portion of the subdivision contains a very thin amount of this debris fan soil. These upper soils tend grade into the weathered clays of the underlying Mancos Shale. Differentiating the debris fan materials from the soils derived from in-place weathering of the Mancos Shale can be very difficult as much of the debris fan materials is derived from the Mancos Shale portion of the Bookcliffs formation to the north of Grand Junction.

The Mancos Shale is described as a thinbedded, drab, light to dark gray marine shale, with thinly interbedded fine grain sandstone and limestone layers. Some portions of the Mancos Shale are bentonitic, and therefore, are highly expansive. The majority of the shale, however, has only a moderate expansion potential. Formational shale was encountered in Test Boring No. 1, 2, and 3 at depths of five and one half to sixteen feet and at Test Borings 4, 5, and 6 at depths of two to two and one half feet. It is anticipated that this formational shale on the west side of the subdivision will affect the construction and the performance of the foundations on the site. The presence of the formational shales on the east portion of the subdivision may or may not effect the proposed construction, depending upon the final grade elevations of the lowest portion of the structures and the actual foundation systems which are utilized.
The boring logs and related information show subsurface conditions at the date and location of this exploration. Soil conditions may differ at locations other than those of the exploratory borings. If the structure is moved any appreciable distance from the locations of the borings, the soil conditions may not be the same as those reported here. The passage of time may also result in a change in the soil conditions at the boring locations.

The lines defining the change between soil types or rock materials on the attached boring logs and soil profiles are determined by interpolation and therefore are approximations. The transition between soil types may be abrupt or may be gradual.

Soil Type No. I is derived from the debris fan deposits which originate in the Bookcliffs to the north of Grand Junction.

This Soil Type was classified as a silty clay (CL) under the Unified Classification System. This material is of low plasticity, of low to moderate permeability, and was encountered in a low density, very moist to wet condition. It undergoes mild expansion with the entry of small amounts of moisture, but will undergo long-term consolidation upon the addition of larger amounts of moisture. This soil will settle after being loaded. The maximum allowable bearing capacity for this soil was found to be 900 psf, with 200 minimum dead load pressure required. The finer grained portion of Soil Type No. I contains sulfates in detrimental quantities.

Soil Type No. II represents the weathered and slightly weathered portions of the Mancos Shale Formation. The Mancos Shale Formation is considered to be bedrock in this area.

This soil type was classified as а low plastic silty clay (CL) under the Unified Classification System. The Standard Penetration Tests ranged from 22 blows per foot to over 50 blows per foot. Penetration tests of this magnitude indicate that the soil is of high density. The moisture content varied from 6.1 to 10.6 percent, 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 dessication. 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 700 to 1900 psf were found to "be typical. This allowable maximum bearing value was found to be on the order of 3200 psf to in excess of 6000 psf. A minimum dead load of 1000 to 2200 psf will be required. The areas of lower bearing capacity were encountered in the wetter, very weathered portions of the Mancos Shale in the northeast portion of the tract. Unless a deep foundation of either drilled piers or driven piles is utilized, the lower bearing capacities of the Mancos Shale in this area probably will not effect the design of foundations.

The upper alluvial soils of Soil Type No. I, particularly in the northeast portion of the tract in the vicinities of Test Holes No.s 1 and 2 was not found to be highly suseptible to hydrocompaction or soil collapse. It must be noted however, that the soil types in the Grand Junction area have been identified as being metastable and it is recommended that precautions be taken which would assume that some amount of soil collapse is potentially present on this site.

A metastable soil is defined as an unsaturated soil that undergoes a radical rearrangement of particles and loss of volume upon wetting, with or without additional loading. The addition of moisture by any means whatever, will weaken the internal cohesion of the soil and saturation may destroy it until the granular structure is rearranged and a new stability achieved. Considerable settlement may take place before the internal structure is stabilized. Variable, deep wetting is the most serious settlement condition, since this causes uneven settlements. Protection from the addition of water, both surface and subsurface, is very important to maintaining stability in this soil.

Metastable soils (subject to internal collapse) must be kept at approximately the existing moisture content to avoid undue settlement. No water can be allowed to enter metastable soils, nor can the water table be allowed to rise in such soils. Allowing water to stand or pond in locations which allow it to infiltrate the soils beneath the building is not recommended. Sources of underground water should be fully investigated by a hydrologic engineer. If a water source exists

which is uncontrollable by virtue of being on the property of others, water will enter the soil and excess settlement must be anticipated. An underground water analysis of this type is beyond the scope of this report.

GROUND WATER:

No free water surface was encountered in any of the test borings to the depths drilled. However, very wet conditions were encountered in Test Boring No. 1. In our opinion this wet condition is the result of seepage from irrigation ditches and from irrigation practices in the vicinity. Due to the high moisture conditions encountered, it is recommended that basement or half basement foundations be used on only when precautions are taken for possible saturated conditions during some portions of the year. It is recommended that all floor slabs be constructed over a capillary break and vapor barrier.

Because of capillary rise, the soil zone within a few feet above a seasonal water level may be quite wet. Pumping and rutting may occur during the excavation process, particularly if the bottom of the foundations are near the capillary fringe. Pumping is a temporary, quick condition caused by vibration of excavating equipment on the site. If pumping occurs, it can often be stopped by removal of the equipment and greater care exercised in the excavation process. In other cases, geotextile fabric layers can be designed or cobble sized material can be introduced into the bottom of the excavation and worked into the soft soils. Such a geotextile or cobble raft is designed to stabilize the bottom of the excavation and to provide

a firm base for equipment.

Data presented in this report concerning ground water levels are representative of those levels at the time of our field exploration. Groundwater levels are subject to change seasonally or by changed environmental conditions. Quantitative information concerning rates of flow into excavations or pumping capacities necessary to dewater excavations is not included and is beyond the scope of this report. If this information is desired, permeability and field pumping tests will be required during the portions of the year when free water is encountered in the soils of this area.

CONCLUSIONS AND RECOMMENDATIONS

GENERAL DISCUSSION

No geologic conditions were apparent during our reconnaissance which would preclude the site development as planned, provided the recommendations contained herein are fully complied with. Based on our investigation to date and the knowledge of the proposed construction, the site condition which would have the greatest effect on the planned development is the expansive clays of the Mancos Shale formation and the low density debris fan soils encountered in the northeast portion of this site.

Since the exact magnitude and nature of the foundation loads are not precisely known at the present time, the following recommendations must be somewhat general in nature. Any special loads or unusual design conditions should be reported

to Lincoln DeVore so that changes in these recommendations may be made, if necessary. However, based upon our analysis of the soil conditions and project characteristics previously outlined, the following recommendations are made.

OPEN FOUNDATION OBSERVATION

Since the recommendations in this report are based on information obtained through random borings, it is possible that the subsurface materials between the boring points could vary. Therefore, prior to placing forms or pouring concrete, an open excavation observation should be performed by representatives of Lincoln DeVore. The purpose of this observation is to determine if the subsurface soils directly below the proposed foundations are similiar to those encountered in our exploration borings. If the materials below the proposed foundations differ from those encountered, or in our opinion, are not capable of supporting the applied loads, additional recommendations could be provided at that time.

DRAINAGE AND GRADIENT:

Adequate site drainage should be provided in the foundation areas both during and after construction to prevent the ponding of water and the saturation of the subsurface soils. We recommend that the ground surface around the structures be graded so that surface water will be carried quickly away from the buildings. The minimum gradient within 10 feet of the buildings will depend on surface landscaping. We recommend that paved areas maintain a minimum gradient of 2%, and that landscaped areas maintain a minimum gradient of 8%. It is further recommended that roof drain downspouts be carried across all

backfilled areas and discharged at least 10 feet away from the structures. Planters, if any, should be so constructed that moisture is not allowed to seep into foundation areas or beneath slabs or pavements.

We recommend that perimeter drains be placed around the exterior walls of the structures at foundation level or below. Drain of this type include a perforated pipe and an adequate gravel collector, the whole being wrapped in a geotextile filter fabric. We recommend that the discharge pipe for these drains be given a free gravity outlet to exit at ground surfaces. If daylight cannot be obtained, we recommend that sealed sump and pumps be used to discharge the seepage. Under no circumstances shall a dry well be used on thess sites.

The existing drainage on these sites must either be maintained carefully or improved. We recommend that water be drained away from structures as rapidly as possible and not be allowed to stand or pond near the buildings. We recommend that water removed from one building not be directed onto the backfill areas of adjacent buildings. We recommend that a hydrologist or drainage engineer experienced in this area be retained to complete a drainage plan for these sites.

To give the buildings extra lateral stability and to aid in the rapidity of runoff, it is recommended that all backfill around the buildings and in utility trenches in the vicinity of the buildings be compacted to a minimum of 85% of its maximum Proctor dry density, ASTM D 698. The native soils on these sites may be used for such backfill. We recommend that all

backfill be compacted using mechanical methods. No water flooding techniques of any type may be used in placement of fill on these sites.

Should an automatic lawn irrigation system be used on these sites. we recommend that the sprinkler heads be installed a minimum of 5 feet from the buildings. In addition, these heads should be adjusted so that spray from the system does not fall onto the walls of the building and that such water does not excessively wet the backfill soils.

FOUNDATIONS

We recommend the use of a conventional shallow foundation system consisting of continuous spread footings beneath all bearing walls and isolated spread footings beneath all columns and other points of concentrated load. Such a shallow foundation system, resting on the Mancos Shale formation over the majority of the tract and the debris flow soils on the east portion of the tract, may be designed on the basis of an allowable bearing capacity of 4800 psf for the shales and 900 psf for the debris flow soils. A minimum dead load of 2200 psf must be maintained for all foundations which are founded within five feet of the Mancos Shale formation. Contact stresses beneath all continuous walls should be balanced to within + or -150 psf more than the average used to balance the continuous walls at all points. Isolated interior column footings should be designed for contact stresses of about 150 psf less than the average used to balance the continuous walls. The criterion for

balancing will depend somewhat upon the nature of the structure. Single-story, slab on grade structures may be balanced on the basis of dead load only. Multi-story structures may be balanced on the basis of dead load plus 1/2 live load. for up to 3 stories.

It should be noted that the term "footings" as used above includes the wall on grade or no footing" type of foundation "system. On this particular site, the use of a more conventional footing, the use of a no footing", or the use of voids will depend entirely upon the foundation loads exerted by the structure. We would anticipate the use of a nofooting with voids on the portions of the tract with the Mancos Shale formation at shallow depths. A footing and stemwall type of foundation system is anticipated in the northeast portion of the tract which is underlain by the thicker debris fan depsit.

Stem walls for a shallow foundation system should be designed as grade beams capable of spanning at least 14 feet. These grade beams should be horizontally reinforced both near the top and near the bottom. The horizontal reinforcement required should be placed continuously around the structure with no gaps or breaks. A foundation system designed in this manner should provide a rather rigid system and, therefore, be better able to tolerate differential movements associated with either the expansive properties of the Mancos Shale or minor differential settlement of the debris fan soils.

We recommend that the bottom of all foundation components rest a minimum of two feet below finished grade or as required by the local building codes. Foundation

components must not be placed on frozen soils.

CONCRETE SLABS ON GRADE

Slabs could be placed directly on the natural soils or on a structural fill. We recommend that all slabs on grade be constructed to act independently of the other structural portions of the building. One method of allowing the slabs to float freely is to use expansion material at the slabstructure interface.

Any partitions which will be located on slabs on grade should be constructed with a minimum space of 2 inches at the bottom of the wall. This space should allow for any future potential upward movement of the floor slabs and minimize damage to the walls and roof sections above the slabs.

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. If this is a multi-level type construction, stairways between basement or floors should not be constructed as a rigid connnection but should allow for vertical movement of the floor slab. No known method of construction will prevent all future slab movement. If the builder and future owners are willing to risk the possibility of some damage due to concrete slab movement, the recommendations herein should be carefully followed and can help minimize such Any subsequent owners should be advised of the damage. soil conditions and advised to maintain the surface and subsurface drainage, framing of partitions above floor slabs, dry wall and

finish work above floor slabs, etc.

The first alternative is to dispense with slab-on-grade construction and use a structural floor system. A structural floor system may be either a structural reinforced concrete slab or a structural wood floor system suspended with floor joists. Each system would utilize a crawl space. This alternative would substantially reduce a potential for post construction slab difficulties due to the expansive properties of the Mancos Shale.

The second alternative is to install a three foot 'buffer zone' of non-expansive, granular soil beneath the slab. This would mitigate the potential for slab movement; however, some potential for movment still exists. Should this alternative be selected, we would recommend that the following be performed:

- Non-expansive granular soils should be selected for the "buffer zone". The granular soils should contain less than 20% of the material, by dry weight, passing the U.S. No. 200 Sieve. We recommend that the geotechnical engineer be contacted to examine the soils when they are selected, to substantiate that they comply with the recommendations.
- 2. The perimeter drain for the structures should be located at the elevation equal to or deeper than the "buffer zone". This is to reduce the potential for a "bathtub" effect which may cause the slab to heave. The "bathtub effect" is created when water is allowed to seep into the "buffer zone" and then becomes trapped since the underlying clay soils have a much lower permeability rate than the "buffer zone" material. Therefore, water may accumulate in the buffer zone and subsequently wet the clay soils and cause them to expand.
- 3. All the non-bearing partitions which will be located on the slabs should be constructed with a minimum 2 inches of void space at the bottom of the wall. This space would allow for the future upward movement of the floor slabs and minimize damage to walls and roof sections

above the slabs. The space may require rebuilding after a period of time, since heaving produced by the soils may exceed 2 inches.

4. We recommend that all slabs being placed on the buffer zone be constructed to act independently of the other structurall portions of the building. One method of allowing the slabs to float freely is to use expansion material at the slab-structure interface. Control joints should be placed 20 feet on center in each direction. These control joints should control the cracking of the slab should the under-lying soils come in contact with water.

If the slab is to be placed directly

on the expansive soils or on a thin fill overlying these soils, the risk of slab movement is high and stringent mitigation techniques are recommended. No design method known at this time will prevent slab movement should moisture enter the expansive soils below. Therefore, to mitigate the effects of slab movement should they occur, we recommend the following:

- Control joints should be placed in such a manner that no floor area exceeding 400 square feet remains without a joint. Additional joints should be placed at columns and at inside corners. These control joints should minimize cracking associated with expansive soils by controlling location and direction of cracks.
- 2. We recommend that all slabs on grade be isolated from structural members of the building. This is generally accomplished by an expansion joint at the floor slab / foundation interface. In addition, positive separation should be maintained between the slab and all interior columns, pipes and mechanical systems extending through the slab.
- 3. The slab subgrade should be kept moist 3 to 4 days prior to placing the slab. This is done by periodically sprinkling the subgrade with water. However, under no circumstances should the subgrade be kept wet by the flooding or ponding water.
- 4. Any partitions which will rest on the slabs on grade should be constructed with a minimum void space of 2 inches at the bottom of the wall see figure in the Appendix). This base should allow for future upward movement of the floor slabs and minimize movement and

damage in walls and floors above the slabs. This void may require rebuilding after a period of time. should heave exceed 2 inches.

EARTH RETAINING STRUCTURES

The active soil pressure for the design of earth retaining structures may be based on an equivalent fluid pressure of 53 pounds pér cubic foct. The active pressure should be used for retaining structures which are free to move at the top funrestrained walls. For earth retaining structures which are fixed at the top, such as basement walls, an equivalent fluid pressure of 68 pounds per cubic foot may be used. It should be noted that the above values should be modified to take into account any surcharge loads, sloping backfill or other externally applied forces. The above equivalent fluid pressures should also be modified for the effect of free water, if any.

The passive pressure for resistance to lateral movement may be considered to be 153 pcf per foot of depth. The coefficient of friction for concrete to soil may be assumed to be 0.16 for resistance to lateral movement. When combining frictional and passive resistance, the latter must be reduced by approximately 1/3.

Drainage behind retaining walls is considered critical. If the backfill behind the wall is not well drained, hydrostatic pressures are allowed to build up and lateral earth pressures will be considerably increased. Therefore, we recommend a vertical drain be installed behind any impermeable retaining walls. Because of the difficulty in place-

ment of a gravel drain, we recommend the use of a composite drainage mat similar to Enkadrain or Miradrain. An outfall must be provided for this drain.

REACTIVE SOILS

Since groundwater in the Mantey Heights area typically contains sulfates in quantities detrimental to a Type I cement, a Type II cement is recommended for all concrete which is in contact with the subsurface soils and bedrock. Calcuim chloride should not be added to a Type II cement under any circumstances.

LIMITATIONS

This report is issued with the understanding that it is the responsibility of the owner, or his representative to ensure that the information and recommendations contained herein are brought to the attention "of the architect and engineer for the project, and are incorporated into the plans. In addition, it is his responsibility that the necessary steps are taken to see that the contractor and his subcontractors carry out these recommendations during construction. The findings of this report are valid as

of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. In addition, changes in acceptable or appropriate standards may occur or may result from legislation or the broadening of engineering knowledge. Accordingly, the findings of this report may be invalid, wholly or partially, by changes

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outside our control. Therefore, this report is subject to review and should not be relied upon after a period of 3 years. The recommendations of this report pertain only to the site investigated and are based on the assumption that the soil conditions do not deviate from those described in this report. If any variations or undesirable conditions are encountered during construction or the proposed construction will differ from that planned on the day of this report, Lincoln DeVore should be notified so that supplemental recommendations can be provided, if appropriate.

Lincoln DeVore makes no warranty, either expressed or implied, as to the findings, recommendations, specifications or professional advice, except that they were prepared in accordance with generally accepted professional engineering practice in the field of geotechnical engineering.

It is extremely important, due to the nature of data obtained by the random sampling of such a heterogeneous material as soil, that we be informed of any changes in the subsurface conditions observed during construction from those outlined in the body of this report. Construction personnel should be made familiar with the contents of this report and instructed to relate any differences immediately, if encountered. Caution: Failure to follow these recommendations will void part or all of the recommendations contained in this report.

SOILS	DESC	RIPTIONS	ROCK	DESCRIPTIONS:	SYMUOLS & NOTES:
SYMBOL	<u>USCS</u>	DESCRIPTION	SYMBOL	DESCRIPTION DIMENTARY ROCKS	<u>SYMBOL DESCRIPTION</u>
2 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		Topsoil	0.0	CONGLOMERATE	9/12 Standard nenetration drive
\square	<u></u>	-Man-made Fill		SANDSTONE	Numbers indicate 9 blows to drive the spoon 12" into ground.
000000	GW	Well-graded Gravel		SILTSTONE	ST 2-1/2" Shelby thin wall sample
00000	GP	Poorly-graded Gravel		SHALE	(III Alative I Maisture Contrat
	GM	Silty Gravel	X X X X X X	CLAYSTONE	
000	GC	Clayey Gravel		COAL	W _X Weathered Material
	SW	Well-graded Sand		LIMESTONE	₩ater Free water table
	SP	Poorly-graded Sand		DOLOMITE	Y ^o Natural dry density
	SM	Silty Sand		MARLSTONE	T.B Disturbed Bulk Sample
	SC	Clayey Sand		GYPSUM	Soil type related to samples in report
	ML	Low-plasticity Silt		Other Sedimentary Rocks	
\mathbb{Z}	CL	Low-plasticity Clay		GRANITIC ROCKS	<u>15' Wx</u> Top of formation Form.
	OL	Low-plasticity Organic Silt and Clay	+ + + + + + + + +	DIORITIC ROCKS	Test Boring Location
	MH	High-plasticity Silt		GABBRO	Test Pit Location
محود	СН	High-plasticity Clay		RHYCLITE	
Z-Z -+-	OH	High-plasticity Organic Clay		ANDESITE	Lineation indicates approx. length & orientation of spread
un	Pt	Peat		BASALT	(5 = Seismic, R=Resistivity)
	GW/GM	Well-graded Gravel, Silty		TUFF & ASH FLOWS	[#] Standard Penetration Drives are made by driving a standard I.4" split spoon
0000	GW/GC	Well-graded Gravel, Clayey	00	BRECCIA & Other Volcanics	140 lb. weight 30". ASTM test des. D-1586.
00000	GP/GM	Poorly-graded Gravel, Silty	T L L L T L V A	Other Igneous Rocks	Samples may be bulk , standard split spoon (both disturbed) or 2-72" I.D.
0000	GP/GC	Poorly-graded Gravel, Clayey		CNEISS	thin wall ("undisturbed") Shelby tube samples. See log for type.
	GM/GC	Silty Gravel, Clayey		SCHIST	The boring logs show subsurface conditions . at the dates and locations shown .and it is
	GC/GM	Clayey Gravel, Silty		PHYLLITE	not warranted that they are representative of subsurface conditions at other locations
	SW/SM	Well-graded Sand, Silty		SLATE	and times.
	SW/SC	.Well-graded Sand, Clayey	<u>A</u>	METAQUARTZITE	
	SP/SM	Poorly-graded Sand, Silty	000	MARBLE	
	SP/SC	Poorly-graded Sand, Clayey	VVVV	HORNFELS	
	SM/SC	Silty Sand, Clayey		SERPENTINE	
	SC/SM	Clayey Sand, Silty		Other Metamorphic Rocks	
HH	CL/ML	Silty Clay	D LINCOLN DeVORE TESTING	COLORADO: Colorado Springs, Pueblo, Gienwood Springs, Montrose, Gunnison, Grand Junction WYQ Rock Springs	EXPLANATION OF BOREHOLE LOGS AND LOCATION DIAGRAMS

	BORING NO. 1 ELEVATION:		RATION	J Y IPCF	URE NT [7.]
DEPTH	DESCRIPTION	••••••••••••••••••••••••••••••••••••••	PENETI	IN-SIT(MOIST
	ORGANIC - Clayey Topsoil	- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19			
	D LOW MOISTURE - LOW DENSIN	γ st	-		5.5%
	COMPRESSIBLE SILTY CLAYS, L	ow Plastic]		
5-	- LIGHT BROWN , STRATIFI - INCREASING MOISTURE	ieo , Alluvial Deoris Fan -		-	
	DENSITY, SILTY CLAY S	TRATIFIED -	1 .		
	- Moist, SULFATES, COMPR.	SPT ESSIBLE	6 10	8	10.7%
	LOW PLASTIC, DEBRIS FAA	ALLOVIAL	1		
	- D INCREASING MOISTURE - VE COMPRESSIBLE SILTY CLAYS	RY MOIST TO WET -	9, 13	8	15-7%
15-	We down from Frank			-	
	Km SILTY, MOIST , MEDIUM DENS				
	Expansive, Sulfattes,	-	22, 47		10.6
20-	INCREASING DENSITY	5PT-	1/12 1	8	
	-	<i>"</i>	4		
	- - N EDEC WASED IN EXMODATION PO				
-	No FREE WATER IN CAPACITION DON	s-90 -	-		
	-				
	- POSSIBLE SATURATED SOILS DURI - MONTHS.	ng-Irrigation			
	-	-			
-	-				- -
	-	-			
	-				
		LOG OF SUBSURF	ACE	EXPLOF	RATIO
LINCOL	N GOLORADO: COLORADO SPRINGS, GRAND JUNCTION PUERIO	WESTWOOD SUB.	Γ	DATE /-	13-90
	S. GLENWOOD SPRINGS	JOB NO. 72/335			

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H (FT)		E	BORING NO. 2			U TY (PCF)	URE ENT [%]
DEPTI	SYMBC	SAMP	DESCRIPTION		PENET	IN-SIT	MOIST
-		-	Low Plastic Clays - Organic Soils	-		1	
- - - 5 -		Ē	LIGHT BROWN SILTY CLAYS, LOW STRATIFIED, ALLUVIAL/DE, DRY, TO SLIGHTLY MONT SUI	DENSITY BRIS FAN S.T.			
]	\square		COMPRESSIBLE LOW DENSITY				
			DRY to SLIGHTLY MOIST, SILTY	CLAY SPT	11 21 12 /18		4.0%
10/2		F M	ANCOS SHALE FORMATION	-			
-		Ð	LAMINATED, EXPANSIVE, SL MEDIUM DENSITY, SILTY, FA	IGHTHY MOIST - CACTURED - SPT-	25 45		7.6%
			No Free Water In Explorati				
			POSSIBLE SATURATED SOILS DUR IRRIGATION MONTHS.	ING			
				-			
	INCO	LN	GOLORADO: COLORADO SPRINES,	WEST WOOD SUB.	ACE	EXPLO	HATION
	NGINEE	RE RS - STS	GRAND JUNCTION , PUEBLO , Glenwood Springs	JOB NO. 72133J		UATE /-	23-90

TH [FT]	30L	EL	BORING NO. 3 EVATION:		ETRATION	ITU SITY (PCF)	STURE TENT [4.]
DEP.	SYME	MAO	DESCRIPTION		PENE	IN-SI DEN	MOIS
			LOW DENSITY, SILTY CLAYS, SLIGHTLY MOIST TO MOIST, CO	ALLUVIAL/DEBRIS FAN MPRESSIBLE	-		
 		ł	SULFATES, STRATIFIED, LO	W PLASTE ST.]	108.8	7.8%
5/2		- Km	- MANCOS SHALE FORMATION WEATHERED SHALE SU	-			
-		Ð	EXPANSIVE, SULFATES DENSE, FRACTURED Law	Production	50/10"		7.9%
10-		F	GRAY TO GRAY BROWN	· , , , , , , , , , , , , , , , , , , ,			
		Ē	Expansive, Dense , Silty . Slightly Moist.	SHALE .	50/8"		0
15 		-			4		8-3%
		-		-	4		
		F	No FREE WATER IN EXPLORATION	BORING	4		
-		F		1-23-90	-		
		F					
		E		-			
				-	-		
		F		-			
		- -					
_		+					
	i	_ <u>_</u>					- I
					FACE	EXPLO	RATIO
)	DOVO	RE	GOLORADO:GOLORADO SPRINGS, Grand Junction, Pueblo, Glenwood Springs	GRAND JUNCTION	<u>'</u> ~	DATE /	- 23 -90
	GEOLOS	ISTS					

EPTH [FT] YMBOL	BORING NO. 5 ELEVATION:		ENETRATION ESISTANCE	-SITU ENSITY (PCF	OISTURE DNTENT [4.]
				N B	žυ
2'	WK MANCOS SHALE FORMATION KM DENSE, LOW PLASTIC, BROWN SHALE, EXPANSIVE SULEATE:	LOW MOISTURE S.T.			2-5%
	GRAY, EXPANSIVE, SILTY SH FRACTURED, DENSE	HALE - SPT_	50/7"		6-5%
	- No Free Water In Explora; -	тіан Borings _ I-23-90 -			
	r - - -	- - - -			
		"			
		LOG OF SUBSURFA	CE E	EXPLO	RATIO
	LN GOLORADO: GOLORADO SPRINGS, RE GRAND JUNCTION, PUEBLO, RS- GLENWOOD SPRINGS	WESTWOOD SUB- GRAND JUNCTION JOB NO. 72133J	C	DATE /-,	23-90

H [FT] OL	EL	BORING NO. 6		TRATION	ru ITY (PCF)	TURE ENT [%]
DEPT	SAMP	DESCRIPTION		PENE' RESIS	IN-SIJ	MOIS
21/2	Ð	LOW PLASTIC SILTY CLAYS, SOME LOW DENSITY, COMPRESSIBLE JX MANCOS SHALE FORMATION GRAY, LOW PLASTIC, SILTY O EXPANSIVE, DRY, DENSI	ORGANICS 	80/12		3.7%
10		SULFATES, FRACTURES INCREASING DENSITY SLIGHTLY MOIST, SULFA EXPANSIVE, SILTY	SPT_ TES -	50, " 8"		6-1%
		DENSE LOW PLASTIC, FRACTURED	SHALE SPT- 	50/12		6-670
		lo Free Water in Exploration I I	- BORING			
		GOLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO,	LOG OF SUBSURF Westwood SUB. GRAND JUNICTIO	ACE	EXPLO DATE /-	RATIOI -25-90
ENGINE	EERS -	GLENWOOD SPRINGS	JOB NO. 72/33 J			

SUMMA	RY SHEET
oil Sample <u>Aunivian Silvy Clay</u> (CL)	Test No. 72/33J
ocation WESTWOOD - MANTEY HEIGHTS	Dute 2-7-90
ample No Depth Depth	Test by Dos
Natural Water Content (w) <u>7-8</u> % Specific Gravity (Gs)	In Place Density (To) <u>108.8</u> pcf
SIEVE ANALYSIS:	
Sieve No. % Passing 1 1/2" 3/4"	Plastic Limit P.L. 20-1 % Liquid Limit L. L 21-9 % Plasticity Index P.I. 1-2 % Shrinkage Limit % % Flow Index
HYDROMETER ANALYSIS:	Swell againstpst wo gain%
Grain size (mm) % .07 15-5 .05 6-2	BEARING: Housel Penetrometer (av) <u>900</u> psf Unconfined Compression (qu)psf Plate Bearing:psf Inches Settlement Consolidation % under psf
	PERMEABILITY: K (at 20°C) Void Ratio Sulfates <i>2000+</i> ppm.
SOIL ANALYSIS	LINCOLN-DeVORE TESTING LABORATORY

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	E (CA)	Test No. 721390
Location WEST WARD - MAT	NTEY HEIGHTS	Dute 2-7-90
Boring No De Sample No	pth	Test by
Natural Water Content (Specific Gravity (Gs)	/w) <u>7.9</u> %	In Place Density (7 0)pcf
SIEVE ANALYSIS:		
Sieve No.	% Passing	Plastic Limit P.L <i>19.7</i> %
1 1 /0#	**	Liquid Limit L. L. <u>32.4</u> %
1 1/ <i>2</i>		Plasticity Index P.1/Z-7%
3/4 ⁿ		Flow Index
1/2"	100.00	Shrinkage Ratio%
4	99-5	Volumetric Change%
10	98.2	Lineal Shrinkage%
20	<u>94.5</u>	
40	97.5	
200	81.0	MOISTURE DENSITY: ASTM METHOD
HYDROMETER ANALYSIS:		Maximum Dry Density – 7dpcf Colifornia Bearing Ratio (av)% Swell:1Days0.45% Swell against <u>1836</u> psf Wo gain <u>20.4</u> %
Grain size (mm)	%	BEARING:
Grain size (mm)	% 	BEARING:
Grain size (mm)	% <u>47-1</u> 27.5	BEARING: Housel Penetrometer (av) <u>4800</u> psf
Grain size (mm)	% 	BEARING: Housel Penetrometer (av) 4800 psf Unconfined Compression (qu)psf Plate Bearing:psf
Grain size (mm)	% <u>47-1</u> 27.5	BEARING: Housel Penetrometer (av) <u>4800</u> psf Unconfined Compression (qu)psf Plate Bearing:psf Inches Settlementpsf
Grain size (mm)	% 	BEARING: Housel Penetrometer (av) <u>4800</u> psf Unconfined Compression (qu)psf Plate Bearing:psf Inches Settlementpsf Consolidation % under psf
Grain size (mm)	% 	BEARING: Housel Penetrometer (av) <u>4800</u> psf Unconfined Compression (qu)psf Plate Bearing:psf Inches Settlementpsf Consolidation % under psf
Grain size (mm)	%	BEARING: Housel Penetrometer (av) <u>4800</u> psf Unconfined Compression (qu) psf Plate Bearing: <u>psf</u> Inches Settlement Consolidation % under psf PERMEABILITY:
Grain size (mm)	%	BEARING: Housel Penetrometer (av) <u>4800</u> psf Unconfined Compression (qu) psf Plate Bearing: <u>psf</u> Inches Settlement. <u></u> Consolidation % under psf PERMEABILITY: K (at 20°C). <u></u> Void Ratio
Grain size (mm)	%	BEARING: Housel Penetrometer (av) <u>4600</u> psf Unconfined Compression (qu)psf Plate Bearing:psf Inches Settlementpsf Consolidation % under psf PERMEABILITY: K (at 20°C) Void Ratio
Grain size (mm)	%	BEARING: Housel Penetrometer (av)psf Unconfined Compression (qu)psf Plate Bearing:psf Inches Settlement. Consolidation % under psf PERMEABILITY: K (at 20°C)
Grain size (mm)	%	BEARING: Housel Penetrometer (av) 4800 psf Unconfined Compression (qu) psf Plate Bearing: psf Inches Settlement psf Consolidation % under psf PERMEABILITY: K (at 20°C) void Ratio Sulfates 2000+ ppm.

s ostandineire :

March 1, 1990

Wayne H. Lizer, P.E., P.L.S. W.H. Lizer & Associates 576 25 Road, Unit #8 Grand Junction, CO 81505

Dear Wayne,

RE: Mission Viejo Plan Review

I have reviewed the street and drainage plans and calculations for Mission Viejo development and have the following comments:

A. Show the following information on the street plan and profile sheet:

- 1. The sizes, elevations and type of pipes to be installed into and out of the detention basin.
- 2. In the title block show the subdivision name and drawing description.
- 3. Label the back of walk and ground lines on the street profile.
- 4. Show which direction the typical street section is shown.
- 5. Show the street right-of-way width.
- 6. Label the control line, centerline, survey line or monument line appropriately and show 100' stations along the line.
- 7. At station 0+74 show city standard inlet frame and grate with curb opening.
- 8. Show the street pavement section (can be shown on typical section). Pavement should be placed in two lifts.

Mission Viejo Page 2 March 1, 1990

B. Show the following information on the Utility Composite and Drainage Plan.

- 1. Drainage pipe sizes and type at detention basin.
- 2. Type of water and sewer pipe if known.
- 3. Proposed irrigation lines if known.
- 4. Extension of sidewalks at Patterson Road.
- 5. Show stationing of water and sewer service lines on record drawings.

I would also recommend that sewer depth be checked to make sure sewer services do not conflict with water main.

After making the above revisions and additions, you may consider the street and drainage plans approved for construction.

The appropriate test results, inspection reports and record drawings will be required prior to acceptance of the street improvements by the City.

Please call if you have any questions or need additional information.

Sincerely, Don Hout

J. Don Newton, P.E. City Engineer

xc: Karl Metzner Bill Cheney Jim Shanks

ckb/missionv

David and Ivan Wood 3548 G Road Palisade, Colorado 81526

June 26, 1990

The Grand Junction Planning Department 250 North 5th Street Grand Junction, Colorado 81501

Attn: Karl Metzner, Planning Director

Dear Karl:

This letter is to inform you we have changed the name of the Mission Viejo Planned Unit Development on El Corona Drive in Grand Junction. The new name is Corona Del Rey. The name change is required because a developer from California has been using the name Mission Viejo in the Denver area and other parts of the country.

Sincerely,

Ivan Wood



City of Grand Junction, Colorado 81501–2668 250 North Fifth Street

March 21, 1991

Mr. David Wood 960 Belford Ave., Ste. E Grand Junction, CO 81501

Dear Mr. Wood:

RE: Mission Viejo Street and Drainage Improvements

Upon recent inspection of El Corona Drive, we found that all of the items listed in my letter of October 24, 1990, have been satisfactorily completed. Therefore, I hereby accept the street and drainage improvements on behalf of the City of Grand Junction. The City will perform regular and routine maintenance of the street beginning on March 21, 1991.

You will remain responsible for the repair or maintenance of defective materials or workmanship for a period of one year from the date of final inspection which was October 23, 1990.

Sincerely,

xc:

A. Don Newton

J. Don Newton, City Engineer

Doug Cline, Street Superintendent Walt Hoyt, Senior Construction Inspector Bennett Boechenstein, Community Development Don Hobbs, Parks & Recreation Department RECEIVED GRAND JUNCTION PLANNING DEPARTMENT APR 0 3 1991

REVILW SHEET SUMMARY

FILE NO. <u>#9-90</u>	TITLE HEAD	DING Corona 1	Del Rey	DUE DATE
ACTIVITY - PET	ITIONER - LOCAT	ION - PHASE - AC	RES	
Rezone from F	SF-5 to PR-6 ar	nd a Final Plat	& Plan for Mi	ission Viejo
PETITIONER:	David and Ivan	Wood		
LOCATION: E	Corona Drive a	and Patterson Ro	ad	
32 Lots on a	proximately 5.3	35 acres.	<u> </u>	Response Nederanny
PETITIONER ADD	RESS <u>3548 G R</u>	oad, Palisade, C	0 81526	by MAR 2 1939
ENGINEER <u>Way</u>	ne H. Lizer, 570	6 25 Road, Grand	l Jct, CO	· · · · · · · · · · · · · · · · · · ·
DATE REC.	AGENCY	COMMENTS		
MISSION VI	IMUM OF 48 HO	MMENTS (Page	THE FIRST	SCHEDULED PUBLIC HEARING.
02/13/90	Fire Depar	tment	The foll met prio	owing requirements are to b r to our approval;
			One add minimum line.	itional Fire hydrant on of an eight inch (8") suppl
			a. The f one of th to LOT 12 DRIVE or TWO.	fire hydrant may be located and the following locations nex of BLOCK ONE NORTH OF PRIVAT between LOTS 12 & 13 of BLOC

b. The fire hydrant must be installed prior to any construction beginning, and an agreement must be signed to ensure compliance with the above.

If you have any questions please call me at 244-1400, G Bennett.

Will need open space fee based upon

total number of units.

02/05/90

· · ·

Grand Valley Water Users Assoc.

Parks & Recreation

Grand Valley Water Users Association (Assoc.) has no objection to this Mission Viejo proposal, provided the irrigation lateral easement as shown on "Replat of Lot 15 and Lots 1 through 10 inclusive of El Corona Subdivision" is fully respected at all times. An Assoc. irrigation lateral has long existed within said easement which is needed for operation and maintenance of such lateral.

Irrigation water from the Assoc. for proposed Mission Viejo is pending upon further negotiations between the developers and the Assoc.

<u>PLAT</u>

1. Show R.O.W. widths on El Corona Drive and on Patterson Road.

02/08/90

City Engineer

Original Do NOT Remove From Office

02/03/90

MISSION VIEJO REVIEW CUMMENTS (Page 2 of 4)

02/08/90

City Engineer (continued)

2. Show radii on R.O.W. at Patterson and El Corona intersection.

3. Show curve data on cul-de-sac.

4. Show widths of ingress/egress and utility easements.

5. Provide sufficient ingress/egress easement for turn around at Lot 15.

6. Dedication: 1st paragraph refers to Lots 1-10. What about Lots 11 through 14?

7. Lot layout does not allow for adequate on street parking. (Too many driveways, too closely spaced.) Need 54' for on street parking (2 stalls) and 10' min. between driveways at B.O.W.

8. Surveyors certificate needs to be modified per City Development Code.

DEVELOPMENT PLAN

1. Building layout does not allow adequate on street parking. (Should have at least 22' spaces each side of street.)

2. Sidewalks shall be construct as a monolithic section with the curb and gutter. Sidewalk should be extended to center of curb radii at Patterson Road.

3. Show size of existing water line.

4. Provide street profile showing existing ground lines and street grade at center line and/or back of walk on each side. Show tie in elevations at Patterson Road.

5. Show street typical section including cross slopes, pavement section, R.O.W. width, street widths, etc. (Provide pavement design calcs.)

6. Provide drainage calculations and report addressing runoff volumes, detention facilities, effect on down stream facilities, etc.

7. Show construction bench mark.

8. Place statement on plans that all construction shall be in accordance with City of Grand Junction standards and specifications.

9. Show location of existing or proposed stop sign at Patterson Road.

10. Provide turn around at Lot 15.

11. Show proposed sewer and water tap locations.

No problems noted.

Original Do NOT Remove From Office

02/14/90

Police Department

	MISSION VIEJ	O REVIEW COMMENTS (Page 3	of 4)
	02/20/90	City Attorney	1. Need consent of owner (Central Bank).
. X			2. Interface between 1951 covenants and the proposed plan; will the plan conflict with # 1?
			3. No replat was included in my packet.
	02/15/90 ,	Mesa County Planning	The proposed density is compatible with zoning in the area; however, adjacent properties have not built out the zoned densities. Adequate screening and landscaping should be required to minimize impacts on adjacent properties.
			The estimated traffic to be generated by the development appears to be low. Based on "Trip Generation" single family residential uses can be expected to generate approximately 10 average trips per day per dwelling unit, and condominiums average 5.1 trips per day per unit.
			If these items are adequately addressed, we have no objection to the proposal.
	02/08/90	Utilities Engineer	Water and Sewer - See comments from City Engineer.
			Sewer - Although sewer has been in the subdivision for a number of years, the manholes will need to be inspected at the completion of the street work.
	•		General - Zoning and Development Code. The following items were not addressed on the Development Plan: 5-6-5 A-2, 3, 4, 5, 6, 7 and 8. 5-6 ⁴ 5 B-2, 3, 4, 5, and 6.
			Water and sewer service lines shall be extended to property lines prior to paving due to the number of services that will be required for the density shown.
	02/05/90	U.S. West	New or additional telephone facilities necessitated by this project may result in a "contract" and up-front monies required from developer prior to ordering or placing of said facilities. For more information, please call Leon Peach 244-4964.
	02/09/90	Public Service	ELECTRIC & GAS - Request that "Private Open Space" around townhomes as shown on plat be designated as utility easement. Also, to facilitate installation of electric distribution, services and street lights. G.L. 2/8/90.

1. Developer needs to survey limits of west pavement line for Mount View Drive and dedicate right-of-way sufficient to contain the existing pavement and shoulder (4' for shoulder if possible).

02/21/90

Property Agent

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MISSION VIEJO REVIEW ComMENTS (Page 4 of 4)

02/21/90

Property Agent (continued) 2. Parameters of the irrigation lateral within the subdivision limits needs to be described and set aside as an irrigation easement.

3. The original plat for El Corona went south to the south line of the NE1/4 NE1/4 of the section, which incorporated the Grand Valley Canal within the subdivision. The replat only goes south to the north bank of the Grand Valley Canal, leaving "No Man's Land" to the south. I suggest the replat go to the south line of the NE1/4 NE1/4 of the Section and then set aside additional area as an easement for the Grand Valley Irrigation Co.

1. All street improvements including curb, gutter and sidewalk are to be installed at one time. Constructing these improvements in a piece-meal fashion is not acceptable.

2. Fencing along the exterior boundary of the development is to be installed as a complete package all at the same time. Constructing the fence in a piece-meal fashion is not acceptable.

3. Building envelopes need to be set back at least 7' along Mount View Drive.

4. All comments and items on Review Sheet Summary are to be resolved by 5:00 p.m., March 2, 1990 or this item will be tabled until the next hearing.

5. Tax Certificate, Soils Report, Improvements Agreement, Roadway Plan, and Utility Composite are all still needed.

6. Plat needs to show dedication statement, surveyors certificate, dimensions, easement for irrigation, and width of El Corona Drive.

02/21/90

GJ Planning Dept

Original Do NOT Remove From Office

#9 90

W.H. LIZER & ASSOCIATES Engineering Consulting and Land Surveying 576 25 Road, Unit #8 Grand Junction, Colorado 81505 241-1129

February 21, 1990

RECEIVED GRAND JUNCTION PLANNING DEPARTMENT

FEB 26 1990

Linda Weitzel City Planner City of Grand Junction 250 N. 5th Street Grand Junction, CO 81501

Do NOT Remove

From Office

RE: Mission Viejo, A Replat of Lot 15 and Lots 1 through 10, inclusive, of El Corona Subdivision, Grand Junction, Mesa County, Colorado Response Letter to Review Agency Comments Received by the City Planning Department as of February 16, 1990

Dear Linda,

The following responses are made in the same order as the Review Agency Comments on the consolidated list picked up by W.H. Lizer & Associates on February 16, 1990. (Copy attached)

Fire Department:

The developers will place a fire hydrant between Lots 12 and 13 of Block Two.

Parks and Recreation:

The open space fee will be paid prior to recording the plat.

Grand Valley Water Users Association:

The lateral has a designated 30-foot ROW according to the recorded plat of El Corona Subdivision and it will not be infringed upon. The developers have come to an agreement with Grand Valley Water Users Association to reinstate irrigation rights for the property.

City Engineer:

PLAT - Items 1 through 8

All items were addressed at a staff planning meeting on Feb. 9, 1990. Present at the meeting were Linda Weitzel, Don Newton, David Thornton, Ivan and David Wood, and Wayne Lizer. These items are being incorporated into the Development Plan and Final Plat. W.H. Lizer & Associates Mission Viejo/Response Letter Review Agency Comments February 21, 1990

Page 2

DEVELOPMENT PLAN - Items 1 through 8

These items were also addressed at the above-mentioned planning staff meeting.

In addition to the Development Plan, a Street Design has been completed on El Corona Drive, including Pavement Structural Calculations, and a Utility Composite has also been completed.

A Drainage Report for the subdivision has also been completed showing the volume and discharge rate for a storm detention area.

The Street Design, Pavement Structural Calculations, Drainage Report, Utility Composite, and Subsurface Soils Report are being submitted with this response letter.

The Final Plat with all pertinent survey data and revisions will be submitted to you by February 26, 1990.

Should you have any questions, please contact me at your convenience.

Sincerely yours, Wayne A. Lyes

Wayne H. Lizer, P.E., P.L.S.

Milli

WHL/sl Attachment

Rough Draf

02/13/90

Fire Department

The following requirements are to be met prior to our approval;

One additional Fire hydrant on a minimum of an eight inch (8") supply line.

a. The fire hydrant may be located at one of the following locations -- next to LOT 12 of BLOCK ONE NORTH OF PRIVATE DRIVE or between LOTS 12 & 13 of BLOCK TWO.

b. The fire hydrant must be installed prior to any construction beginning, and an agreement must be signed to ensure compliance with the above.

If you have any questions please call me at 244-1400, G Bennett.

Will need open space fee based upon total number of units.

Grand Valley Water Users Association (Assoc.) has no objection- to this Mission Viejo proposal, provided the irrigation lateral easement as shown on "Replat of Lot 15 and Lots 1 through 10 inclusive of El Corona Subdivision" is fully respected at all times. An Assoc. irrigation lateral has long existed within said easement which is needed for operation and maintenance of such lateral.

Irrigation water from the Assoc. for proposed Mission Viejo is pending upon further negotiations between the developers and the Assoc.

PLAT

1. Show R.D.W. widths on El Corona Drive and on Patterson Road.

2. Show radii on R.D.W. at Patterson and El Corona intersection.

3. Show curve date on cul-de-sac.

4. Show widths of Ingress/Egress and utility easements.

02/05/90

02/03/90

Grand Valley Water Users Assoc.

Parks & Recreation

ague to pay Fee

02/08/90

City Engineer

02/08/90

City Engineer (continued)

5. Provide sufficient Ingress/Egress easement for turn around at Lot 15.

6. Dedication: 1st paragraph refers to Lots 1-10. What about Lots 11 through 14?

7. Lot layout does not allow for adequate on street parking. (Too many driveways, too closely spaced.) Need 54' for on street parking (2 stalls) and 10' min. between driveways at B.D.W.

8. Surveyors certificate needs to be modified per City Development Code.

DEVELOPMENT PLAN

1. Building layout does not allow adequate on street parking. (Should have at least 22' spaces each side of street.

2. Side walks shall be construct as a monolithic section with the curb and gutter. Sidewalk should be extended to center of curb radii at Patterson Road.

3. Show size of existing water line.

4. Provide street profile showing existing ground lines and street grade at center line and/or back of walk on each side. Show tie in elevations at Patterson Road.

5. Show street typical section including cross slopes, pavement section, R.O.W. width, street widths, etc. (Provide pavement design calcs.)

6. Provide drainage calculations and report addressing runoff volumes, detention facilities, effect on down stream facilities, etc.

7. Show construction bench mark.

8. Place statement on plans that all construction shall be in accordance with City of Grand Junction standards and specifications.

9. Show location of existing or proposed stop sign at Patterson Road.

10. Provide turn around at Lot 15.

11. Show proposed sewer and water tap locations.
#9 90

From Office

W.H. LIZER & ASSOCIATES Engineering Consulting and Land Surveying 576 25 Road, Unit #8 Grand Junction, Colorado 81505 241-1129

February 21, 1990

RECEIVED GRAND JUNCTION PLANNING DEPARTMENT FEB 26 1990

Linda Weitzel City Planner City of Grand Junction 250 N. 5th Street Grand Junction, CO 81501

> RE: Mission Viejo, A Replat of Lot 15 and Lots 1 through 10, Inclusive, of El Corona Subdivision, Grand Junction, Mesa County, Colorado Supplementary Data to be Incorporated into the Project Narrative

Dear Linda,

On February 9, 1990, a staff planning meeting was held to address questions for the Mission Viejo Development. Present at this meeting were yourself, Don Newton, Dave Thornton, Ivan and David Wood, and Wayne Lizer.

The following changes or additions need to be incorporated into the Project Narrative:

AMOUNT OF TRAFFIC GENERATED

Revise from 4 trips per day to 7 trips per day per unit giving a total of 224 trips per day for the development.

DEVELOPMENT SCHEDULE

El Corona Drive

Don Newton, City Engineer, requested that a monolithic curb, gutter, and sidewalk section be used for the street and that this should be placed at the same time the street is constructed instead of constructing the sidewalk as the buildings are constructed. The developers have agreed to this request.

Screened Fencing

Perimeter screened fencing will be constructed with each unit as the unit is built, or at the end of two years from the recording of the plat, the entire exterior screened fencing will be completed regardless of how many units have been constructed.

W.H. Lizer & Associates Mission Viejo/Supplementary Data for **Project Narrative** February 21, 1990

Page 2

Landscaping

The private open space South of the irrigation lateral to the Grand Valley Canal will be left in a natural condition.

Respectfully submitted,

Wayne A Ligin

Wayne H. Lizer, P.E., P.L.S.

David Leb

WHL/s1

STAFF REPORT - MISSION VIEJO

- -- Development located off Patterson at approx. 28 Road
- -- Ingress and egress will be off Patterson only
- -- 32 units total 15 duplex & 2 single
- -- Density is approx. 6 units per acre
- -- Requesting PR-6 from RSF-5
- -- Current zone of RSF-5 would not give much flexability since front yard setbacks would be required on lots between El Corona and Mount View Drive
- -- Minimum setback from Mount View is 7 feet
- -- Street improvements and street lights will be constructed at the same time
- -- Perimeter screened fencing will be constructed with each unit as the unit is built or at the end of two years from the recording of the plat no matter how many lots are developed
- -- All buildings will be single level
- -- 2 & 3 beedroom units will be built upon the building envelope
- -- Each unit has a two car garage with space in the driveway to park two cars side by side
- -- Ten on-street parking spaces have been provide on El Corona Drive

<u>Note:</u> They have given us everything we have wanted. Only exception is the compromise with the development schedule for the fence along the perimeter of the project.

-- ORIGINAL COVENANTS of Subdivision Allowed single family & Duplek -- Zoning surrounding the development is compatible ranging from Residential - 5 wits per Acre to 8 units per Acre,

Legality - RSF-5

W.H. LIZER & ASSOCIATES Engineering Consulting and Land Surveying 576 25 Road, Unit #8 Grand Junction, Colorado 81505 241-1129

February 27, 1990

'CE. 20 GRAND 'LANNING DEPARTMENT

FEB 27 1990

Linda Weitzel, City Planner City Planning Department City of Grand Junction 250 N. 5th Street Grand Junction, CO 81501

> RE: Mission Viejo, A Replat of Lot 15 and Lots 1 Through 10, Inclusive, of El Corona Subdivision, Grand Junction, Mesa County, Colorado -Response Letter to Review Agency Comments Summary Received by Wayne H. Lizer on February 26, 1990

Dear Linda,

1

The following responses are made in the same order as the Review Agency Comments appear on the Review Agency Comments Summary given to Wayne H. Lizer on February 26, 1990.

Fire Department:

- a. The developers will place a fire hydrant between Lots 12 and 13 of Block 2.
- b. The fire hydrant will be installed prior to building construction with agreements signed by the developers for compliance with this request upon approval of final plans by "the City Council.

Parks and Recreation:

The open space fee will be paid prior to recording the plat.

Grand Valley Water Users Association:

The lateral has a designated 30-foot ROW according to the recorded plat of El Corona Subdivision and it will not be infringed upon.

The developers have come to an agreement with Grand Valley Water Users Association to reinstate irrigation rights for the property by paying the back taxes incurred by previous owners.

In addition, the developers have been requested by the Grand Valley Water Users Association to construct a holding pond that can fill up from the irrigation lateral during low-use irrigation periods such as at night. The stored irrigation water can then be used for watering within the development without taxing the lateral during high-use periods of irrigation. W.H. Lizer & Associates

Mission Viejo/ Response to Review Agency Comments Summary February 27, 1990

Page 2

City Engineer:

Plat - Items 1 through 4 will be shown on the Final Plat

- 1. ROW widths on El Corona Drive and Patterson Road.
- 2. Radii on ROW at Patterson Road and El Corona Drive intersection.
- 3. Curve data on cul-de-sac.
- 4. Widths of ingress/egress and utility easements.
- 5. Sufficient ingress/egress for turn around on Lot 15 has been shown on the Development Plan.
- 6. Dedication This refers to the lots of the replat of El Corona Subdivision and not the new lot configurations. This item was clarified with the City Engineer at a staff planning meeting including Linda Weitzel, Dave Thornton, Don Newton, Ivan Wood, Dave Wood, and Wayne Lizer on February 9, 1990.
- 7. On-street parking This item was also addressed at the staff planning meeting mentioned in item 6 above. Ten on-street parking spaces have been provided and are shown on the Development Plan.
- 8. Surveyor's Certificate The data has been provided to the surveyor as per City Development code and will be shown on the Final Plat.

Development Plan

- 1. See item 7 above on "Plat".
- 2. Sidewalks Monolithic Pour: The sidewalks and curb and gutter section will be constructed with the street including installing the sidewalk to center of curb radii on Patterson Road. This is shown on the Street Plans which have been submitted to the City Engineer.
- 3. The size of the existing water line is shown on the Utility Composite which has been submitted.
- 4. Street Plans have been submitted showing tie-in to Patterson Rd.
- 5. Street section with cross slopes, pavement section, and pavement design calculations have been submitted.
- 6. Drainage calculations with retention basin data have been submitted.
- 7. Construction bench mark is shown on Street Plans which have been submitted.

W.H. Lizer & Associates Mission Viejo/Response to Review Agency Comments Summary February 27, 1990

Page 3

- 8. Statement regarding construction to be done in accordance to City of Grand Junction Standards and Specs is shown on Street Plans which have been submitted.
- 9. Location of stop sign is shown on Development Plan which has been submitted.
- 10. Turn around for Lot 15 shown on Development Plan which has been submitted.
- 11. Proposed sewer and water tap locations are shown on the Utility Composite which has been submitted.

Police - No problems noted.

City Attorney

- 1. New Warranty Deed has been submitted to the City of Grand Junction Planning Department showing ownership.
- Interface between 1951 covenants and proposed plan questions have been resolved between City Attorney and developers, i.e., the 1951 covenants only allow single-family residences and du-plexes. The proposed buildings will be du-plexes.
- 3. A replat with a copy of the responses has been delivered to the City Attorney.

Mesa County Planning

Landscaping and screening is shown on the Development Plan. In addition, a screening fence will be constructed around the perimenter of the subdivision and is addressed in the Supplement to the Project Narrative which has been submitted.

The trip generation has been changed from 5 trips per day to 7 trips per day and is addressed in the Supplement to the Project Narrative which has been submitted.

Utilities Engineer

Sewer - The manholes will be inspected at the completion of the street work in the presence of the City Utilities Engineer to insure that the manholes are clean and the manhole rims have been raised to final grade.

General - Zoning and Development Code. Items 5-6-5 A-2 through A-8 and B-2 through B-6 are either shown on the Utility Composite, Street Plans, or Drainage Report which have been submitted since the review was made by the Utilities Engineer.

W.H. Lizer & Associates Mission Viejo/Response to Review Agency Comments Summary February 27, 1990

Page 4

US West

The developers will contact US West after final approval of the development and prior to construction to formalize any required agreements.

Public Service

Private Open Space will also be designated as Utility Easement on the Final Plat.

Property Agent

- 1. The limits of the West pavement line for Mount View Drive was located and at a meeting with the City Engineer, Don Newton, with Kurt Metzner, Dave Thornton, Ivan Wood, Dave Wood, and Wayne Lizer on February 21, 1990, a ROW line was agreed upon and is shown on the Utility Composite and the Development Plan which have been submitted. This ROW line will also be shown and designated on the Final Plat.
- 2. The irrigation lateral is shown as a ROW on the recorded plat of El Corona Subdivision and will not be infringed upon.
- 3. Lot 15 only goes to the North side of the Grand Valley Canal and this item has been resolved with the Property Agent.

GJ Planning Dept

- 1. Street improvements will be installed at one time and has so been indicated in the Supplement to the Project Narrative which has been submitted.
- 2. Fencing along the exterior boundary was also addressed in the Supplement to the Project Narrative.
- 3. Building envelopes have been set back 7 feet from the new ROW line on Mount View Drive.
- 4. Final Plat completion work will be done and submitted by March 2, 1990, i.e., revise surveyor's certificate, add curve and lot data, easements and ROW's to be dedicated to the City of Grand Junction in behalf of the General Public. This response to the comments and items will be submitted today.
- 5. Tax Certificate, Soils Report, Improvements Agreement, Roadway Plan, and Utility Composite have been submitted.

W.H. Lizer & Associates Mission Viejo/Response to Review Agency Comments Summary February 27, 1990

Page 5

6. Dedication statement, surveyor's certificate, dimensions, easement for irrigation, and width of El Corona Drive will be shown on Final Plat.

Respectfully submitted,

Wayne 7

Wayne H. Lizer, P.E., P.LS.

WHL/s1

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File # _____ Name _____ Date _____ Date _____

PROJECT LOCATION: El Corona Drive and Patterson Road.

PROJECT DESCRIPTION:

Rezone from RSF-5 (Residential Single Family at 5 units per acre) to PR-6 (Planned Residential at 6 units per acre), and a final plan and plat for Mission Viejo Subdivision consisting of 32 units on 5.35 acres.

REVIEW SUMMARY (Major Concerns)

POLICIES COMPLIANCE		NO*	TECHNICAL REQUIREMENTS	SATISFIED	NOT * SATISFIED
Complies with adopted policies			Streets/Rights Of Way	Х	
Complies with adopted criteria			Water/Sewer	X	·
Meets guidelines of Comprehensive Plan			Irrigation/Drainage	X	
			Landscaping/Screening	Χ.	
			Other:		

* See explanation below

STATUS & RECOMMENDATIONS:

The Planning Commission action resulted in a tie vote. A tie vote by the Commission has the effect of forwarding the item to the Council as a recommendation for denial. A positive vote of at least 5 council members will be required to overturn this recommendation.

Planning Commission Action