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File 1990-0026 Name: Mesa View Final Plat/Plan

Present	Scanned	
		A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record. In some instances, entries are recorded documents designated to be scanned, copies kept for Commun Dev. and the original sent to City Clerk for retention, these files are denoted with (**) and will be found on the ISYS Query system in their designated categories. **There are also documents specific to certain files, not found on the standard checklist, they are listed on the bottom of the page and marked scanned.** **Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file. Correspondence can be queried by contents or date.** **When querying, 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**
X	X	**Review Sheet Summary**
		Application from
		Review Sheets
		Receipts for fees paid for anything
		***Submittal checklist**
X	X	***General project report**
		Reduced copy of final plans or drawings
X		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
X	X	Reduction of any maps – final copy
X	X	***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**

DOCUMENT DESCRIPTION:

X	X	Review Sheet Summary	X		Commitment for Title Insurance – First American Title Insurance Company
X	X	Action Sheet – Approved CC-8/1/90 PC-7/10/90	X		Request for Treasurer's Certificate of Taxes Due
X		Development Application – 6/1/90	X		Subsurface Soils Exploration
X	X	Ordinance No. 2485 - **	X		Subdivision Summary Form
X		Planning Commission Minutes – ** - 7/10/90	X	X	Traffic Analysis
X		Notice of Public Hearing Correspondence – 6/29/90	X	X	Letter from Homeowners of Northridge Subdivision to Planning Commissioners re: items opposed to – 7/6/90
X	X	Final Plat	X	X	Improvements Escrow Agreement
X	X	Site Plan / Preliminary Site Plan	X		Memo from Don Newton to Karl Metzner re: review of revised plans, drainage report and the petitioner's response satisfactory
X	X	Elevation Map			

X	X	Floor Plan	X		Letter from Pat Edwards to Planning Dept. re: realignment of Horizon Pl. on the east side of the existing Mesa View Property will be by separate deed- 5/31/90
X		Public Notice Posting – 7/3/90	X	X	Letter from Karl Metzner to William D. Merkel re: time limit for recording of the previously approved final subdivision plat has expired and reactivation of the project - no date
X	X	Development Summary	X	X	Letter from William Merkel to Karl Metzner re: asking to put the project on hold – 12/16/91
X	X	Declaration of Covenants, Conditions and Restrictions	X	X	Traffic Analysis
X		Letter from Frederick Aldrich to Planning Commission re: Comments – 7/6/90			
X	X	Letter from John Shaver to Natalie Meyer re: enclosing letter from John Elmer conflict of interest– 7/12/90			
X	X	Letter from Timothy V. Mannion to City Council re: protest of final plat and plan submitted by Colson & Colson Construction Company re: 7/13/90			
X	X	Development Improvements Agreement – unsigned – no date – memo from John Shaver			

#26 90 Orig

DO NOT Remove From Office

JUN 1 1990

La Verne E. Grosse
3304 Music Lane
Grand Junction, Colo. 81506

John P. Gormley
361 Music Lane
Grand Junction, Colo. 81506

Larry Filner
357 Music Lane
Grand Junction, Colo. 81506

Allen Schoenborn
341 Music Lane
Grand Junction, Colo. 81506

Richard A. Thompson
325 Music Lane
Grand Junction, Colo. 81506

Michael R. Hoffman
311 Music Lane
Grand Junction, Colo. 81506

Jerry Bartley
3038 Northridge Dr.
Grand Junction, Colo. 81506

Eark Rhodes
3026 Northridge Dr.
Grand Junction, Colo. 81506

Daniel J. Baldwin
3010 Northridge Dr.
Grand Junction, Colo. 81506

Rick M. Jussel
3037 Northridge Dr.
Grand Junction, Colo. 81506

Gregory L. Coren
3025 Northridge Dr.
Grand Junction, Colo. 81506

Ronald F. Gray
3009 Northridge Dr.
Grand Junction, Colo. 81506

Gary S. Ellibee
627 ½ Sage Ct.
Grand Junction, Colo. 81506

William E. Putnam
627 Sage Ct.
Grand Junction, Colo. 81506

Jonathan H. Ross
628 Sage Ct.
Grand Junction, Colo. 81506

Harry K. Webster
629 Sage Ct.
Grand Junction, Colo. 81506

Patricia M. Kephart
2491 I. Road
Grand Junction, Colo. 81506

Richard L. Herald
140 Willowbrood Rd.
Grand Junction, Colo. 81506

Verna R. Pottorff
150 Willowbrook Rd.
Grand Junction, Colo. 81506

Marion F. Childs
160 Willowbrook R.
Grand Junction, Colo. 81506

Deborah C. Smith
200 Willowbrook Rd.
Grand Junction, Colo. 81506

David L. Flower
216 Willowbrook Rd.
Grand Junction, Colo. 81506

Lloyd O. Davis
220 Willowbrook Rd.
Grand Junction, Colo. 81506

Lewis D. Prouty
222 Willowbrook Rd.
Grand Junction, Colo. 81506

Herman L. Crist
145 Willowbrook Rd.
Grand Junction, Colo. 81506

Sylvia Seiler
155 Willowbrook Rd.
Grand Junction, Colo. 81506

James M. Flynn
165 Willowbrook Rd.
Grand Junction, Colo. 81506

Richard D. O'Connor
205 Willowbrook Rd.
Grand Junction, Colorado 81506

Gary H. Pfander
209 Willowbrook Rd.
Grand Junction, Colo. 81506

Frank J. Chiaro
213 Willowbrook Rd.
Grand Junction, Colo. 81506

#26 90

David G. Summers
360 Northridge Dr.
Grand Junction, Colorado 81506

John Robson
~~105 Elgers St.~~
~~Grand Junction, Colo. 81506~~
10705 Elgers St
Cerritos, CA 90701

JUN 1 1990

May Belle Daniel
~~20~~ 130 Bookcliff Ave.
Grand Junction, Colo. 81501

Remove from Office

Charles Kerr
354 Northridge Dr.
Grand Junction, Colorado 81506

Paul L. Reddin
3110 Cloverdale Ct.
Grand Junction, Colo. 81506

Marsha J. Meacham
147 Bruster Rd.
Grand Junction, Colo. 81503

Latrisa Mannion
3038 Cloverdale Ct.
Grand Junction, Colo. 81506

Gerald W. Krebill
3112 Cloverdale Ct.
Grand Junction, Colo. 81506

Douglas C. Lockhart
3126 Cloverdale Ct.
Grand Junction, Colo. 81506

Edward W. Nottingham
3138 Cloverdale Ct.
Grand Junction, Colo. 81506

John S. Brink
3140 Cloverdale Ct.
Grand Junction, Colo. 81506

Gregory W. Petersburg DO
3139 Cloverdale Ct.
Grand Junction, Colorado 81506

Richard L. Fowler
3137 Cloverdale Ct.
Grand Junction, Colo. 81506

John Colosimo
3125 Cloverdale Ct.
Grand Junction, Colo. 81506

James Walters
3111 Cloverdale Ct.
Grand Junction, Colo. 81506

Curt W. Hauer
3037 Cloverdale Ct.
Grand Junction, Colo. 81506

Carolyn L. Behrhorst
3025 Cloverdale Ct.
Grand Junction, Colo. 81506

Milton D. Henry
3009 Cloverdale Ct.
Grand Junction, Colo. 81506

Mark A. Hermundstad
3328 Star Ct.
Grand Junction, Colo. 81506

Michael A. Nordine
3332 Star Ct.
Grand Junction, Colo. 81506

Brett A. Winder
357 Northridge Dr.
Grand Junction, Colo. 81506

James Archibald Jr.
363 Northridge Dr.
Grand Junction, Colo. 81506

Dean V. Bright
357 Northridge Dr.
Grand Junction, Colo. 81506

Roger Shenkel
3333 Music Lane
Grand Junction, Colo. 81506

Timothy L. Heckel
3323 Music Lane
Grand Junction, Colo. 81506

John Mazza
362 Music Lane
Grand Junction, Colo. 81506

C. C. Talbott
356 Music Lane
Grand Junction, Colo. 81506

Frederick G. Aldrich
340 Music Lane
Grand Junction, Colo. 81506

Herbert A. Hirschman
324 Music Lane
Grand Junction, Colo. 81506

Russell D. Doran
3350 Music Lane
Grand Junction, Colo. 81506

W. L. Webb
3334 Music Lane
Grand Junction, Colo. 81506

April Rarick
3324 Music Lane
Grand Junction, Colo. 81506

Robert H. Ruggeri
3314 Music Lane
Grand Junction, Colo. 81506

#26 90

JUN 1 1999

Remove
from Office

Charmaine A. Hacker
217 Willowbrook Rd.
Grand Junction, Colo. 81506

Lloyd A. Extrom
221 Willowbrook Rd.
Grand Junction, Colo. 81506

William F. Serviss
225 Willowbrook Rd.
Grand Junction, Colo. 81506

Gregg L. Cranston
308 Willowbrook Rd.
Grand Junction, Colorado 81506

Warren L. Jones
2624 F 1/8 Road
Grand Junction, Colo. 81506

C. J. Desrosiers
2643 F ½ Road
Grand Junction, Colo. 81506

Clayton A. Carstens
2645 F ½ Road
Grand Junction, Colo. 81506

Raymond R. Williams
324 Patterson Rd.
Grand Junction, Colo. 81506

Edward R. Matthews
614 26 Road
Grand Junction, Colo. 81506

Mildred M. Vandover
604 Meander Dr.
Grand Junction, Colo. 81506

Mercedes Cameron
621 26 ½ Road
Grand Junction, Colorado 81506

Bernice L. Long
105 Riverside Dr. #1
Palisade, Colo. 81526

Clayton A. Carstens
2645 F ½ Road
Grand Junction, Colo. 81506

Clarence L. Files
631 26 ½ Road
Grand Junction, Colo. 81506

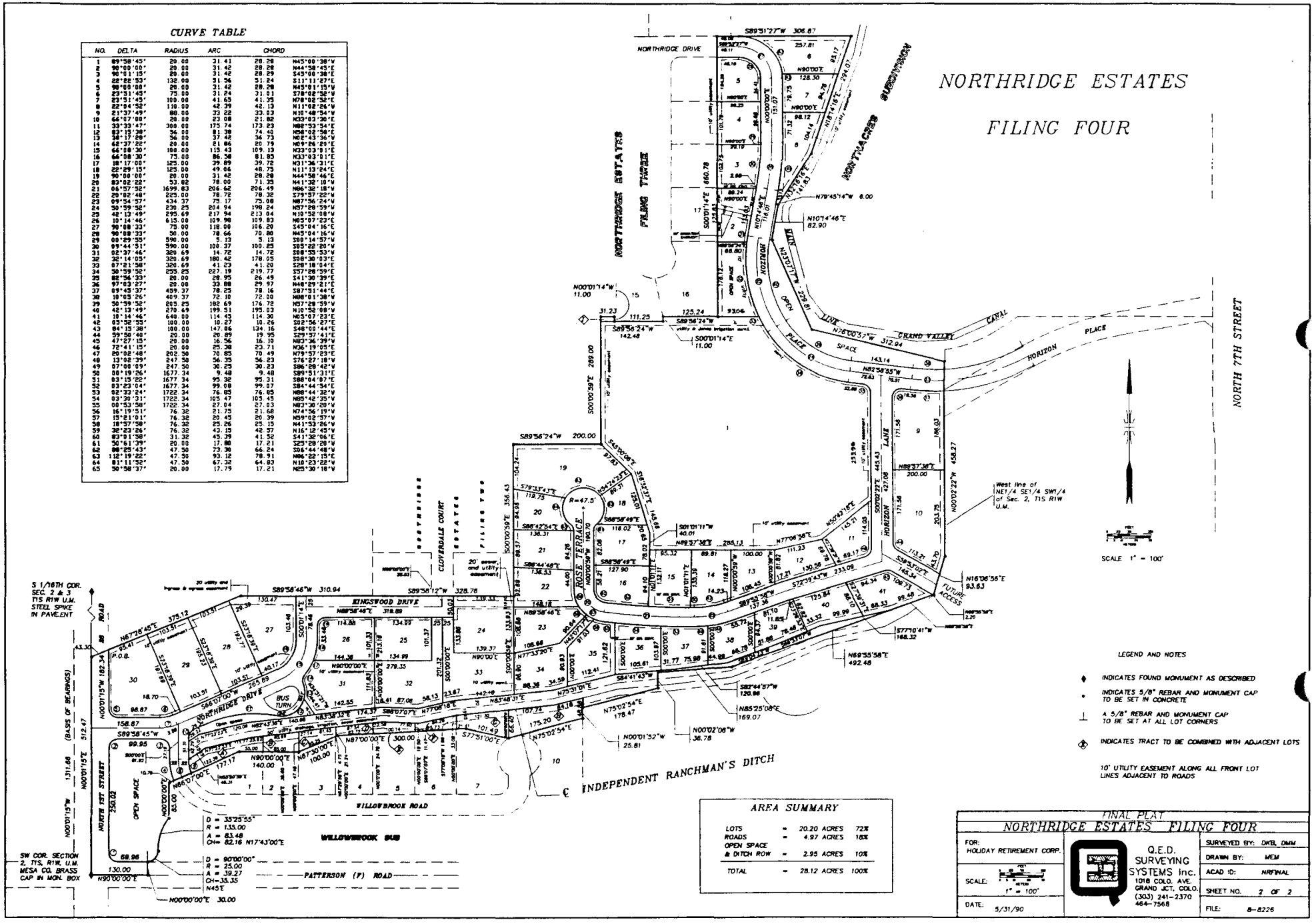
Mesa View Retirement Residence
2741 12th St. SE
Salem, OR 97302

NORTHRIDGE ESTATES

FILING FOUR

CURVE TABLE

NO.	DELTA	RADIUS	ARC	CHORD	
1	89°58'45"	20.00	31.41	28.28	N45°00'38"W
2	90°00'00"	20.00	31.42	28.28	N44°58'45"E
3	90°01'15"	20.00	31.42	28.29	S45°00'38"E
4	89°58'45"	20.00	31.41	28.28	S44°58'45"W
5	90°00'00"	20.00	31.42	28.28	N45°01'15"W
6	23°51'45"	75.00	31.24	31.01	S78°02'52"W
7	23°51'45"	100.00	41.65	41.35	N78°02'52"E
8	22°04'52"	110.00	42.39	42.13	N11°02'26"W
9	21°37'49"	88.00	33.22	33.03	N10°48'54"W
10	64°07'00"	20.00	23.08	21.88	N33°03'30"E
11	33°33'47"	300.00	175.74	173.23	N82°53'54"E
12	83°15'28"	56.00	81.38	74.40	N58°02'58"E
13	58°17'28"	56.00	37.42	36.73	N31°43'36"W
14	62°37'22"	20.00	21.86	20.79	N69°26'20"E
15	66°08'30"	100.00	115.43	109.13	N33°03'01"E
16	66°08'30"	75.00	86.58	81.85	N33°03'01"E
17	18°17'00"	125.00	39.89	39.72	N31°36'31"E
18	22°29'15"	125.00	49.06	48.75	N11°13'24"E
19	90°00'00"	20.00	31.42	28.28	N44°58'46"E
20	83°02'22"	53.82	78.00	71.35	N41°32'10"W
21	06°57'52"	1699.83	206.62	206.49	N86°32'18"W
22	20°02'48"	225.00	78.72	78.32	S79°57'22"W
23	09°54'57"	434.37	75.17	75.08	N87°56'24"W
24	30°59'52"	230.25	204.94	198.24	N57°28'59"W
25	42°13'49"	295.69	217.94	213.04	N10°52'08"W
26	10°14'46"	615.00	109.98	109.83	N25°07'22"E
27	90°00'33"	75.00	118.00	106.20	S45°04'16"E
28	90°00'33"	50.00	78.66	70.80	N45°04'16"W
29	00°29'55"	590.00	5.13	5.13	S88°14'57"W
30	09°44'51"	590.00	100.37	100.25	S85°22'20"W
31	02°37'46"	320.69	14.72	14.72	S80°53'53"W
32	32°14'05"	320.69	180.42	178.05	S65°30'03"E
33	07°21'58"	320.69	41.23	41.20	S28°18'04"E
34	50°59'52"	255.25	227.19	219.77	S37°28'59"E
35	82°54'33"	20.00	28.95	26.49	S41°30'39"E
36	97°03'27"	20.00	33.88	29.97	N48°29'21"E
37	09°45'37"	459.37	78.25	78.16	S87°31'44"E
38	10°03'26"	409.37	72.10	72.00	N88°01'38"W
39	58°59'52"	265.25	182.69	176.72	N57°28'59"W
40	42°13'49"	270.69	199.51	195.03	N10°52'08"W
41	18°14'45"	640.00	114.45	114.30	N65°07'23"E
42	03°58'55"	100.00	10.27	10.26	S02°02'27"E
43	84°15'38"	100.00	147.06	134.16	S48°00'44"E
44	39°58'40"	20.00	20.85	19.95	S23°37'41"E
45	47°27'19"	20.00	16.56	16.10	N83°36'39"W
46	72°41'15"	20.00	25.38	23.71	N36°19'05"E
47	29°02'48"	262.50	20.85	20.49	N79°57'23"E
48	13°08'39"	247.50	56.23	56.23	S76°27'18"W
49	07°08'09"	247.50	30.25	30.23	S86°28'42"W
50	08°19'26"	1677.34	9.48	9.48	S89°51'31"E
51	03°13'22"	1677.34	95.32	95.31	S88°04'07"E
52	03°23'04"	1677.34	99.08	99.07	S84°44'54"E
53	02°33'24"	1722.34	76.85	76.85	N88°44'36"W
54	03°30'13"	1722.34	105.45	105.43	N85°42'25"W
55	00°53'58"	1722.34	27.04	27.03	N83°30'20"W
56	16°19'51"	76.38	21.75	21.68	N74°56'19"W
57	15°21'01"	76.38	20.45	20.39	N59°02'57"W
58	18°57'58"	76.38	25.26	25.15	N41°53'26"W
59	32°23'26"	76.38	43.15	42.57	N16°12'45"W
60	87°01'58"	31.38	47.29	42.82	S41°32'06"E
61	50°61'39"	20.00	17.80	17.21	S25°28'20"W
62	88°25'43"	47.50	73.30	66.24	S36°44'48"W
63	112°19'22"	47.50	93.12	78.91	N86°32'15"E
64	81°11'52"	47.50	67.32	64.83	N10°23'22"W
65	50°58'37"	20.00	17.79	17.21	N25°30'18"W



AREA SUMMARY

LOTS	=	20.20 ACRES	72%
ROADS	=	4.97 ACRES	18%
OPEN SPACE & DITCH ROW	=	2.95 ACRES	10%
TOTAL	=	28.12 ACRES	100%

LEGEND AND NOTES

- ♦ INDICATES FOUND MONUMENT AS DESCRIBED
- • INDICATES 5/8" REBAR AND MONUMENT CAP TO BE SET IN CONCRETE
- ⊥ A 5/8" REBAR AND MONUMENT CAP TO BE SET AT ALL LOT CORNERS
- ◈ INDICATES TRACT TO BE COMBINED WITH ADJACENT LOTS

10' UTILITY EASEMENT ALONG ALL FRONT LOT LINES ADJACENT TO ROADS

FINAL PLAT
NORTHRIDGE ESTATES FILING FOUR

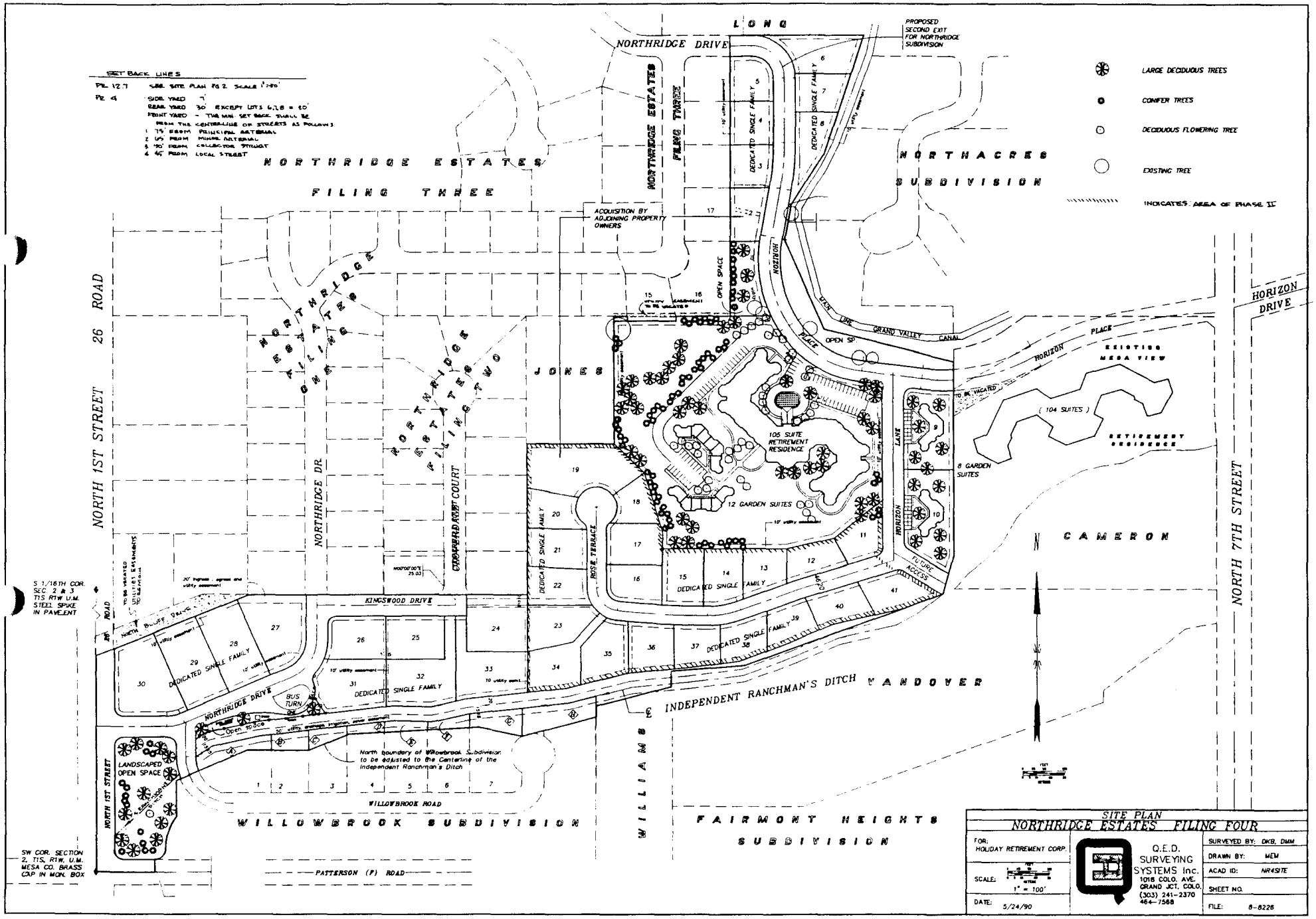
FOR: HOLIDAY RETIREMENT CORP.

SCALE: 1" = 100'

DATE: 5/31/90

Q.E.D. SURVEYING SYSTEMS Inc.
1018 COLO. AVE.
GRAND JCT, COLO.
(303) 241-2370
464-7568

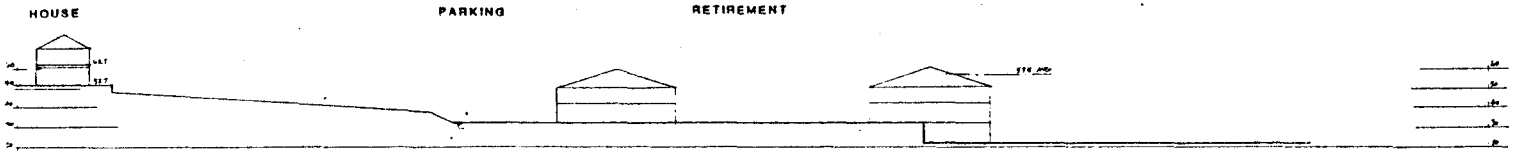
SURVEYED BY: DKB, DMM
DRAWN BY: MEM
ACAD ID: NRFINAL
SHEET NO. 2 OF 2
FILE: 8-8226



SITE PLAN
NORTHRIDGE ESTATES FILING FOUR

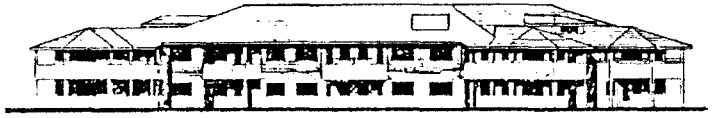
FOR: HOLIDAY RETIREMENT CORP.	SURVEYED BY: DKB, DMM
SCALE: 1" = 100'	DRAWN BY: MEM
DATE: 5/24/90	ACAD ID: NR4SITE
	SHEET NO.
	FILE: 8-8226

Q.E.D. SURVEYING SYSTEMS Inc.
1018 COLO. AVE.
GRAND JCT, COLO.
(303) 241-2370
464-7568



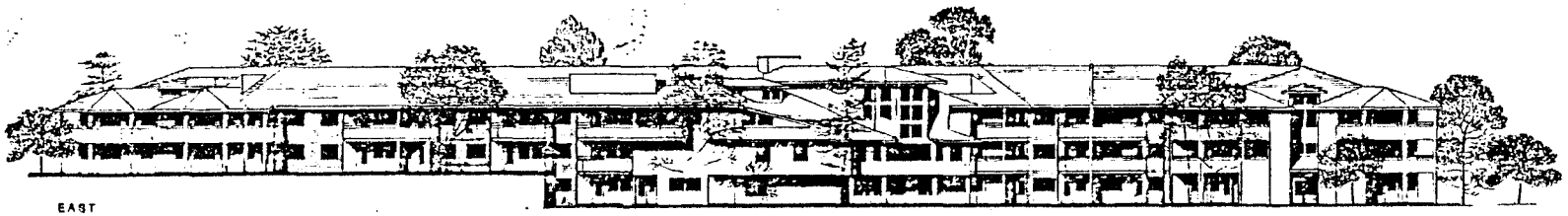
CROSS SECTION

ENTRY



SOUTH

GARDEN SUITES



EAST

WEST

Architects

HOLIDAY RETIREMENT CORP.

2741 12TH STREET SE
SALEM, OREGON 97302

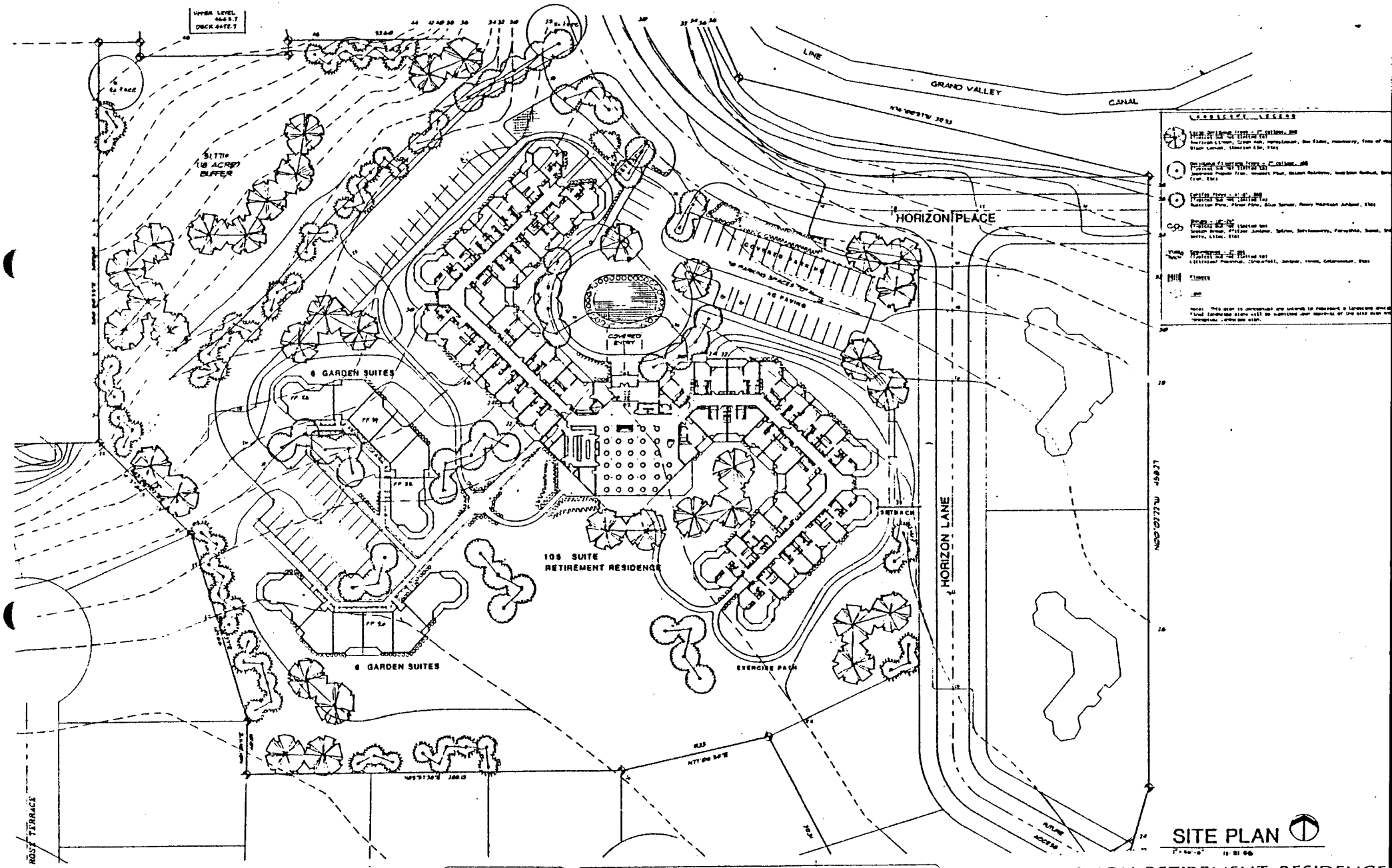
P.O. BOX 14111
SALEM, OR 97309

PHONE (503) 370-7070

COLSON
COLSON
CONSTRUCTION

GRAND JUNCTION RETIREMENT RESIDENCE

GRAND JUNCTION, COLORADO



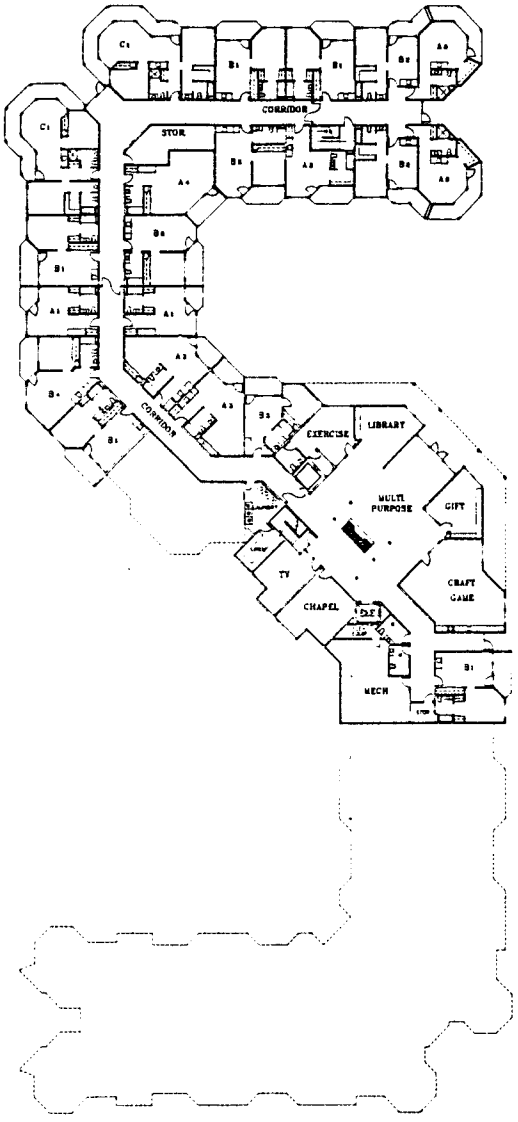
SITE PLAN

Architects

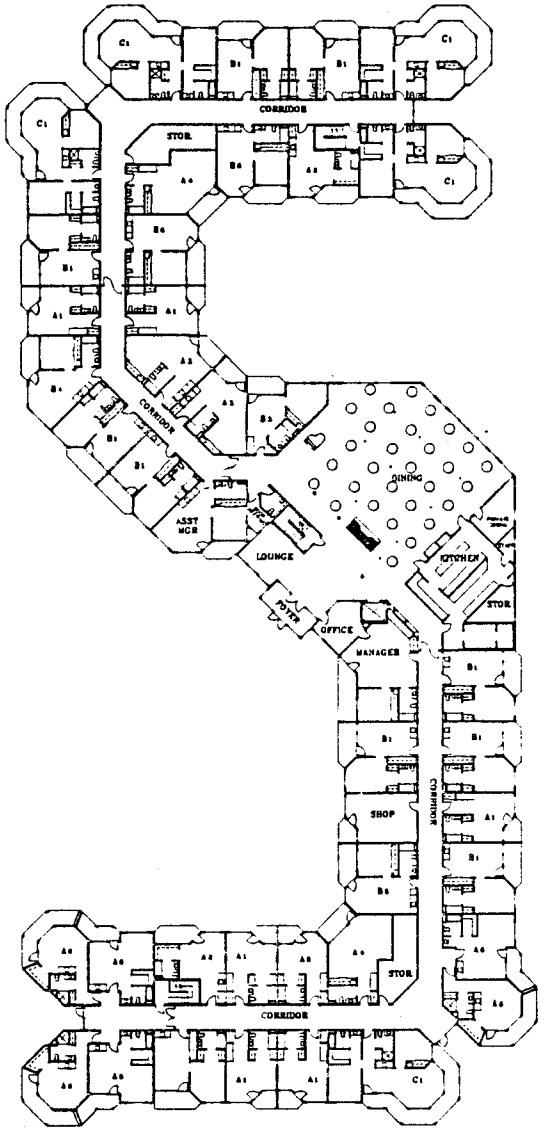
HOLIDAY RETIREMENT CORP.
2761 12TH STREET SE
SALEM, OREGON 97302
P.O. BOX 14111
SALEM, OR 97309
COLSON
COLSON
PHONE (503) 370-7070

GRAND JUNCTION RETIREMENT RESIDENCE

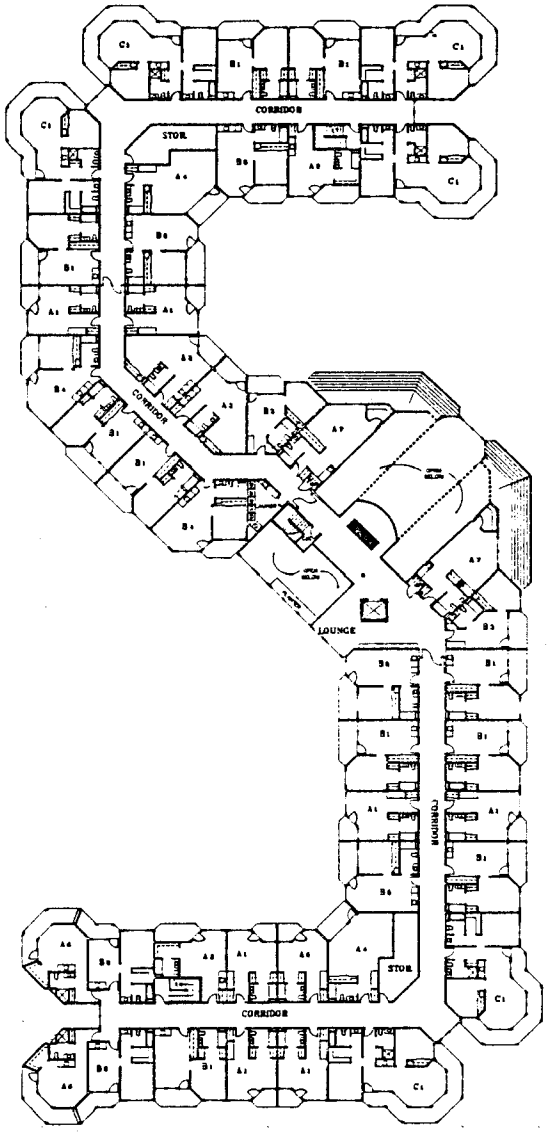
GRAND JUNCTION, COLORADO



BASEMENT



FIRST



SECOND

Architects

HOLIDAY RETIREMENT CORP.
2741 12TH STREET SE SALEM, OREGON 97302
P.O. BOX 14111 SALEM, OR 97309
PHONE (503) 370-7070
COLSON CONSTRUCTION

GRAND JUNCTION RETIREMENT RESIDENCE

1"=20'-0" 11-21-86

GRAND JUNCTION, COLORADO

#26 9

JUN 1 1990

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DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

FOR

NORTHRIDGE ESTATES SUBDIVISION, FILING NO. 4

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR NORTHRIDGE ESTATES SUBDIVISION, FILING NO. 4, ("Declaration") is made and effective this _____ day of _____, 1990, by COLSON & COLSON CONSTRUCTION CO., an Oregon general partnership ("Declarant"), as the sole owners of all that certain tract of land in Mesa County, Colorado, which has been designed, platted and subdivided as Northridge Estate Subdivision, Filing No. 4 ("Subdivision"). It is the intent and desire of Declarant in making this Declaration to restrict the type and location, construction, specification and uses within the Subdivision in order to preserve the character and nature of the Subdivision, as well as surrounding subdivisions, and to maintain the value of each lot therein.

R E C I T A L S:

WHEREAS, it is the intention of Declarant to develop a retirement residence as part of the Subdivision and to develop the remaining portion of the Subdivision into lots for single-family residential construction. It is further the purpose of Declarant that these covenants, conditions and restrictions as to the retirement residence shall be characterized in conformance with Declarant's petition for a rezone of the Subdivision and that the single-family residences comply and comport with equivalency of the surrounding subdivisions, including Northridge Estates, Filing Nos. 1, 2 and Three ("Northridge"), Northacres Subdivision ("Northacres") and Willowbrook Subdivision ("Willowbrook"), with specific reference to the restrictive covenants set forth in the Declaration of Covenants, Conditions and Building Restrictions for Northridge Estates, "Restrictions on Uses"; and

WHEREAS, the Declarant hereunder states that the Subdivision, identified more specifically on Exhibit "A" attached hereto and incorporated herein by reference, will comport with representations made to the City of Grand Junction ("City") and surrounding land owners pursuant to its petition for rezone in Case No. 48-89. In that regard, the portion of the Subdivision to be developed as the retirement residence shall be in accordance with the site plan, elevations and floor plan attached hereto as Exhibit "B" and by this reference incorporated herein, and the portion of the Subdivision to be developed as single-family residences shall be developed in accordance with the final

plat attached hereto as Exhibit "C" and by this reference incorporated herein.

NOW, THEREFORE, in consideration of the Recitals above, Declarant does hereby make and declare that the Subdivision shall be subject to and burdened by the covenants, conditions and restrictions set forth below which are deemed to be covenants that touch and concern, are appurtenant to and shall run with the Subdivision to bind Declarant and any person or entity having at any time any interest or estate in the Subdivision:

A. Retirement Residence.

1. Development. Declarant agrees that the portion of the Subdivision shown on Exhibit "B" as the retirement residence shall be developed in the manner and form shown with the same location, shape, style, character and with no greater density of the improvements than as shown on Exhibit "B," except that Declarant may construct accessory improvements in the nature of gazebos, covered parking, storage and covered walkways, provided Declarant first obtains the written approval of two-thirds (2/3) of the property owners in Northridge, Willowbrook and Northacres contiguous to the retirement residence shown on page one of Exhibit "B."

2. Use Restrictions. The retirement residence shall be used solely for the occupancy of elderly persons of retirement age, who no longer work and are primarily capable of independently attending to their daily living needs. The retirement residence shall not be used for any other purpose, such as, but not limited to, a dormitory, a nursing care facility or home, a place of incarceration, a mental hospital, a facility for the treatment of any mental or physical condition or disorder or a school or college. In addition, the following restrictions shall apply:

a. There shall be no business or commercial enterprise conducted in, on or about the retirement residence solely excepting the normal operation and maintenance of the retirement residence which may include the provision on site of goods and services to residents and their guests;

b. There shall be no public gatherings or assembly of persons in, on or about the retirement residence;

c. There shall be no parking or storage of any vehicle of any type excepting within those areas designated for the parking of vehicles as shown on Exhibit "B";

d. There shall be no trash or debris allowed to accumulate upon the grounds of the retirement residence, and all

trash shall be kept in covered containers out of view from adjoining neighbors;

e. No supplies, materials or equipment of any type shall be stored on the grounds of the retirement residence, excepting this restriction shall not apply during the period of construction or remodeling;

f. There shall be no extraction of gas, oil, minerals or other substances from the surface or subsurface;

g. There shall be no fences or plantings in the nature of a fence except as shown on Exhibit "B"; and

h. In any area designated as a "Buffer Zone" on Exhibit "B," only landscaping together with utility and irrigation easements shall be allowed along with such improvements as may be needed to maintain such landscaping.

3. Maintenance.

a. All buildings, structures and other improvements, including, but not limited to, parking areas and walkways, shall be kept and maintained in a neat, clean and well-repaired condition, and replaced when necessary if damaged beyond repair;

b. All repair, reconstruction or replacement of the retirement residence or any other improvements situate thereon, including, but not limited to, any buildings, structures, parking areas and walkways, shall be done in conformity with the original improvements as shown on Exhibit "B"; and

c. All trees, shrubs, grass and other plantings shall be trimmed, properly irrigated and maintained in proper health, including the control of infestation and to be replaced when dead or dying.

B. Single-Family Residential.

1. Development. Declarant agrees that the portion of the Subdivision shown on Exhibit "C" as single-family residences shall be developed in a manner and form consistent with the location, shape, style and character of all improvements shown on Exhibit "C." For the purpose of this paragraph, "developed" shall mean and include the submittal of the final development plat and plan for single-family residences to the City and the subsequent installation and construction of all streets, curbs, gutters, sidewalks, utilities and the configuration of lots. Declarant may designate utility easements upon the final development plan and plat, and may make insignificant

modifications necessary to meet utility and/or City engineering specifications or requirements so long as such will not change or modify the overall design, location or characteristics of the improvements and design shown on Exhibit "C." Notwithstanding the foregoing, that portion of the Subdivision shown as single-family residences on Exhibit "C" shall meet the following specifications:

a. The minimum lot area shall be eight thousand five hundred (8,500) square feet;

b. The minimum street frontage shall be twenty (20) feet;

c. The maximum height of any structure shall be thirty-two (32) feet from finished grade;

d. The minimum lot width at the structure site for the principal structure shall be seventy-five (75) feet;

e. The minimum side yard setback shall be seven (7) feet for the principal structure and three (3) feet for any accessory structures on the rear half of the parcel;

f. The minimum rear yard setback shall be thirty (30) feet for the principal structure and ten (10) feet for any accessory structure, except for Lots 5, 6 and 7 for which the rear yard setback shall be twenty (20) feet for the principal structure;

g. The minimum front yard setback from the center line of the right-of-way shall be seventy-five (75) feet from a principal arterial, sixty-five (65) feet from a minor arterial, fifty (50) feet from a collector street and forty-five (45) feet from a local street;

h. The maximum coverage of the lot by structure shall not exceed thirty-five (35) percent; and

i. The maximum units per gross acre shall not exceed four (4).

2. Use Restrictions.

a. That portion of the Subdivision shown as single-family residences on Exhibit "C" shall be solely used for single-family residential purposes.

b. That the covenants, conditions and building restrictions contained herein shall apply to all of the lots in Filing No. 4 of the Subdivision. No structures shall be erected, altered, placed or permitted on any lot within that portion of

the Subdivision shown on Exhibit "C" except for use as a single-family residence and a private garage of a size not larger than required to house three (3) automobiles and other buildings incidental to residential use of the lot. Not more than one (1) residential building shall be permitted per lot as shown on Exhibit "C" of the Subdivision.

c. Only new construction shall be permitted within the portion of the Subdivision shown on Exhibit "C," and no structure for occupancy as residences shall be moved upon lots within the portion of the Subdivision shown on Exhibit "C." No temporary building or structure of any type or kind shall be used at any time for a residence, either temporary or permanent. No mobile homes, trailer homes or other movable structures shall be permitted as dwellings within that portion of the Subdivision shown on Exhibit "C."

d. The storing of automobiles, trucks, campers, boats, snowmobiles, motorcycles, motorbikes or any vehicle of any other description in the street, driveway, yards of residences or in the front of the principal building setback lines is specifically prohibited. Such vehicles may be stored behind such setback lines within the boundaries of such lots provided such stored vehicles are concealed from the neighborhood by placing the same behind the main structure or in the garage or other outbuildings. Storage of vehicles shall not bar access to adjoining owner's roof eaves, water drainage or building maintenance.

e. Landscaping shall be of a type complimentary to the residential character of the Subdivision. No fence, foliage, trees or hedge in the nature of a fence, with a height in excess of six and one-half (6½) feet, shall be planted or maintained and shall not be constructed or erected nearer than thirty (30) feet to the front lot line or nearer than thirty (30) feet to the side street line. Each owner shall keep all shrubs, trees, grass and plantings of every kind on his lot, and all planted areas between his lot and adjacent streets, if any, neatly trimmed, properly cultivated and free of trash, weeds and other unsightly materials.

f. No noxious or offensive trade or activity shall be carried on within any lot or shall anything be done thereon which may be or become an annoyance or nuisance to the neighborhood. No lot may be used for commercial purposes except for home occupations. "Home occupations" as used herein means an occupation by the resident conducted totally within the principal building which does not entail the employment of third persons on the premises and does not entail the delivery of goods and services to customers upon the premises. For example, an insurance agent may use his residence as a personal office so long as customers are not permitted to come to the residence; but

the establishment of a barber shop or a beauty shop is prohibited. Fruit stands, machinery repair and all other occupations requiring external buildings are specifically prohibited.

g. No lot shall be used as a dumping ground for rubbish. All garbage, rubbish and trash shall be placed and kept in covered containers and shall not be allowed to accumulate on any lot. In no event shall any container be maintained where visible from the neighboring property except to make the same available for collection and then only for a period of twenty-four (24) hours.

h. No animals other than a reasonable number of household pets shall be maintained on any lot, and then only if they are kept, bred or raised thereon solely as household pets for private use and not for commercial purposes. No such animal may be kept which is a nuisance or annoyance to other owners in the neighborhood.

i. All homes to be constructed shall have wood-frame windows and be constructed from wood or masonry.

j. The ground floor area of the main structure, exclusive of open porches and garages, shall not be less than one thousand six hundred fifty (1,650) square feet, outside measurement; provided, however, the following exceptions shall be applicable:

(i) If said residence shall have a full basement, the ground floor area of the main structure, exclusive of open porches and garages, shall not be less than one thousand five hundred (1,500) square feet, outside measurement.

(ii) If the residence shall have a second story, the ground floor area of the main structure, exclusive of the open porches and garages, shall not be less than one thousand one hundred fifty (1,150) square feet, outside measurement, with a total living space on the first and second floors of two thousand (2,000) square feet, outside measurement.

(iii) If the residence shall be a split-level residence, the greatest outside measurement, exclusive of open porches and garages, shall be used to determine the square footage, and therefore, different floor levels which are superimposed upon each other shall be included only once in such measurement. In such split-level residences, the total "greatest outside measurement" as used in the preceding sentence shall not be less than one thousand three hundred (1,300) square feet with a minimum of two thousand (2,000) square feet of living space, outside measurement.

(iv) "Basement" as used herein shall mean a floor space, the floor of which is more than four (4) feet below the grade of the surface at the exterior of the building, and split-level structures having a living space, the floor of which is less than four (4) feet below the grade of the surface, shall not be deemed basement structures but shall be deemed "living space" as the term is used above.

(v) However, Lots 11 and 41 of that portion of the Subdivision shown as single-family residential on page one of Exhibit "C" shall be excepted from the minimal structure size insofar as Declarant may construct houses containing not less than one thousand three hundred fifty (1,350) square feet exclusive of basement area on Lots 11 and 41.

k. Lots of the Subdivision identified on Exhibit "C" attached hereto abutting the Grand Valley Canal are prohibited from the dumping of debris or the constructing of fencing upon the Grand Valley Canal right of way.

l. Lots of the Subdivision identified on Exhibit "C" attached hereto abutting the Independent Ranchman's Ditch are prohibited from the dumping of debris and from watering or otherwise saturating the soils upon the Independent Ranchman's Ditch right of way.

m. The dumping or discharging of contaminants into drainage areas feeding into the Independent Ranchman's Ditch is prohibited.

3. Street Design. At no time shall Declarant configure the lots or streets within the Subdivision shown on Exhibit "C" in such a manner as to connect North First Street with North Seventh Street via existing Northridge Drive and proposed Kingswood Drive, or in any other manner. This Paragraph B(3) is neither intended nor shall it be interpreted to preclude the construction of Horizon Place to its connection with Northridge Drive at the northeast corner of Northridge, as shown on Exhibit "B."

C. Enforcement.

1. Benefit and Burden. It is the intent of Declarant that this Declaration be binding upon Declarant and its successors in interest or title to the Subdivision as covenants running with the land. It is also the intent of Declarant that this Declaration be for the benefit of, and be enforceable by, the owners of residences in Northridge, Northacres and Willowbrook. It is understood that the City of Grand Junction has no obligation to enforce any provision of this Declaration.

2. Remedies. Declarant acknowledges that any failure to perform, or the violation of, any of the covenants, conditions or restrictions set forth herein may cause immediate and irreparable injury to the residents of Northridge, Northacres and Willowbrook such that they may have no adequate remedy at law. In such case, these covenants, conditions and restrictions may be enforceable in equitable proceedings, including, but not limited to, injunctive and/or specific performance relief; provided, the availability and exercise of any equitable remedy shall not be deemed to preclude the recovery of damages for violations hereof.

3. Recovery of Costs. In the event legal proceedings are brought to enforce the provisions of this Declaration, the prevailing party in such legal proceedings shall be entitled to recover its or their costs for the same, including reasonable attorney fees.

Dated the year and day first above written.

COLSON & COLSON CONSTRUCTION CO.,
an Oregon general partnership

By_____

STATE OF OREGON)
) ss.
COUNTY OF MARION)

The foregoing instrument was acknowledged before me this _____ day of _____, 1990, by _____, as _____ of COLSON & COLSON CONSTRUCTION CO., an Oregon general partnership.

WITNESS my hand and official seal.

My commission expires:

_____
Notary Public

A tract of land located in a part of the SW¼ of Section 2, Township 1 South, Range 1 West of the Ute Meridian, being more particularly described as follows:
Beginning at the Southwest Corner of said Section 2;
thence North 90°00'00" East along the South line of the SW¼ of said Section 2, a distance of 130.00 feet;
thence North 00°00'00" East 30.00 feet;
thence along the arc of a curve to the left whose radius is 25.00 feet and whose long chord bears North 45°00'00" East 35.35 feet;
thence along the arc of a curve to the right whose radius is 135.00 feet and whose long chord bears North 17°43'00" East 82.16 feet;
thence North 00°00'00" East 85.00 feet to the North boundary of Willowbrook Subdivision Replat;
thence along said North boundary by the following six (6) courses and distances:

1) North 66°07'00" East 177.17 feet;
2) North 90°00'00" East 140.00 feet;
3) North 67°30'00" East 100.00 feet;
4) North 87°00'00" East 300.00 feet;
5) South 77°51'00" East 101.49 feet;
6) North 75°02'54" East 175.20 feet to the Northeast Corner of said Willowbrook Subdivision Replat;

thence North 00°01'52" West 25.81 feet;
thence North 75°02'54" East 178.47 feet to a point on the East line of the W½ SW¼ of said Section 2;
thence North 00°02'06" West along said East line W½ SW¼ of said Section 2 a distance of 36.78 feet;
thence North 85°25'08" East 169.07 feet;
thence North 69°55'58" East 492.48 feet;
thence North 16°06'56" East 93.63 feet to a point on the West line of the NE¼ SE¼ SW¼ of said Section 2;
thence North 00°02'22" West along said West line NE¼ SE¼ SW¼ of said Section 2 a distance of 458.27 feet to a point on the Southerly right-of-way of the Grand Valley Canal;
thence along said Southerly and the Westerly right-of-way of the Grand Valley Canal by the following five (5) courses and distances:

1) North 76°00'57" West 312.93 feet;
2) North 23°07'17" West 229.81 feet;
3) North 10°14'46" East 82.90 feet;
4) North 32°16'16" East 141.83 feet;
5) North 18°14'16" East 294.07 feet;

thence South 89°51'27" West 306.87 feet to a point on the Easterly boundary of Northridge Estates Filing No. Three;
thence South 00°01'14" East along said Easterly boundary of Northridge Estates Filing No. Three 660.78 feet to the Southeast Corner of Lot 16, Block 2 of said Northridge Estates Filing No. Three;
thence South 89°56'24" West 125.22 feet;
thence South 00°01'14" East 11.00 feet;
thence South 89°56'24" West 111.25 feet;
thence North 00°01'14" West 11.00 feet;
thence South 89°56'24" West 31.23 feet;
thence South 00°00'59" East 300.00 feet;
thence South 89°56'24" West 200.00 feet to a point on the Easterly boundary of Northridge Estates Filing No. Two;
thence South 00°00'59" East along said Easterly boundary 356.43 feet to the Southeast Corner of Lot 14, Block 5 of said Northridge Estates Filing No. Two;
thence South 89°58'12" West 328.76 feet to the Southwest Corner of Lot 1, Block 5 of said Northridge Estates Filing No. Two;
thence South 89°58'46" West 310.94 feet to the Southwest Corner of Lot 1, Block 1 of Northridge Estates Filing No. One;
thence South 67°28'45" West 375.12 feet to a point on the West line SW¼ of said Section 2;
thence South 00°01'15" East 512.47 feet along said West line SW¼ of said Section 2 to the Point of Beginning;
EXCEPT that part of Northridge Estates Filing No. One and Two dedicated as streets.
ALL IN MESA COUNTY, COLORADO.

NORTHRIDGE ESTATES FILING FOUR

SITUATED IN THE SW1/4 SECTION 2, T1S, R1W, U.M., MESA COUNTY, COLORADO

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, _____ are the owners of that real property situated in the City of Grand Junction, Colorado, County of Mesa, State of Colorado and being a part of the SW 1/4 Section 2, Township 1 South, Range 1 West, Ute Meridian as shown on the accompanying plat thereof, said real property being described as follows: Considering the West line of the SW1/4 SW1/4 of said section 2 to bear N00°01'15"W and all other bearings contained herein to be relative thereto;

Beginning at the SW corner of said Section 2; thence N89°00'00"E along the South line of the SW1/4 of said Section 2, a distance of 130.00 feet; thence N00°00'00"E 30.00 feet; thence along the arc of a curve to the left whose radius is 25.00 feet and whose long chord bears N45°00'00"E 35.35 feet; thence along the arc of a curve to the right whose radius is 135.00 feet and whose long chord bears N17°43'00"E 82.18 feet; thence N00°00'00"E 85.00 feet to the North boundary of Willowbrook Subdivision Replat; thence along said North boundary by the following six (6) courses and distances: 1. N66°07'00"E 177.17 feet; 2. N90°00'00"E 140.00 feet; 3. N67°30'00"W 100.00 feet; 4. S87°00'00"E 300.00 feet; 5. S77°51'00"E 101.49 feet; 6. N75°02'54"E 175.20 feet to the Northeast corner of said Willowbrook Subdivision Replat; thence N00°01'52"W 25.81 feet; thence N75°02'54"E 178.47 feet to a point on the east line of the W1/2 SW1/4 of said Section 2; thence N00°02'08"W along the said East line of the W1/2 SW1/4 of said Section 2 a distance of 36.78 feet; thence N85°25'08"E 169.07 feet; thence N69°55'58"E 492.48 feet; thence N16°06'56"E 93.63 feet to a point on the West line of the NE1/4 SE1/4 SW1/4 of said Section 2; thence N00°02'22"W along said West line of the NE1/4 SE1/4 SW1/4 of said Section 2 a distance of 458.27 feet, to a point on the southerly right-of way of the Grand Valley Canal; thence along said Southerly and Westerly right-of-way of the Grand Valley Canal the following Five (5) courses and distances: 1. N76°00'57"W 312.93 feet; 2. N23°07'17"W 229.81 feet; 3. N10°14'46"E 82.90 feet; 4. N32°16'16"E 141.83 feet; 5. N18°14'16"E 294.07 feet; thence S89°51'27"W 308.87 feet to a point on the easterly boundary of Northridge Estates Filing No. Three; thence S00°01'14"E along the Easterly boundary of Northridge Estates Filing No. Three 660.78 feet to the Southeast Corner of Lot 16, Block 2 of said Northridge Estates Filing No. Three; thence S89°56'24"W 125.24 feet to the Southeast corner of Lot 15 Block 2 of said Northridge Estates Filing Two; thence S00°01'14"E 11.00 feet; thence N89°58'24"W 111.25 feet; thence N00°01'14"W 11.00 feet to the Southeast corner of said Lot 15; thence N89°56'24"W 31.23 feet to the NE corner of a parcel of land recorded in Book 968 at Page 993 of the Mesa County Clerk and Recorders Office; thence S00°00'59"E 300.00 feet along the East line of said parcel to the SE corner of said parcel; the S89°56'24"W 200.00 feet to the SW corner of said parcel being on the easterly boundary of Northridge Estates Filing No. Two; thence S00°00'59"E along said easterly boundary 358.43 feet to the Southeast corner of Lot 14, Block 3 of said Northridge Estates Filing No. Two; thence S89°58'12"W 328.78 feet to the Southwest corner of Lot 1, Block 3 of said Northridge Estates Filing No. Two; thence S89°58'46"W 310.94 feet to the Southwest corner of Lot 1, Block 1 of Northridge Estates Filing No. One; thence S87°28'45"W 373.12 feet to a point on the west line of the SW1/4 of said Section 2; thence S00°01'15"E 512.47 feet along said line west of the SW1/4 of said Section 2 to the Point of Beginning; EXCEPT that part of Northridge Estates Filings No. One and Two dedicated as streets.

That the said owners have caused the said real property to be laid out and surveyed as NORTHRIDGE ESTATES FILING FOUR, a subdivision of the City of Grand Junction, County of Mesa, State of Colorado.

That said owners do hereby dedicate and set apart all of the streets and rights-of-way as shown on the accompanying plat to the City of Grand Junction, for the use of the public forever and dedicate to the CITY OF GRAND JUNCTION, for the use of the public those portions of said real property which are labeled as utility easements on the accompanying plat as perpetual easements for the installation and maintenance of utilities, irrigation, and drainage facilities, including but not limited to electric lines, gas lines, sewer lines, telephone lines, and appurtenances together with the right to trim interfering trees and brush; with perpetual right of ingress and egress for installation and maintenance of such lines, and said owners hereby dedicate all common areas to the use and benefit of the owners of the lots hereby platted. Such easements and rights shall be utilized in a reasonable and prudent manner. The areas shown as ingress and egress and utility easements are dedicated to the owners of the property within said NORTHRIDGE ESTATES FILING FOUR, for perpetual ingress and egress for themselves and the general public, including the postal service, trash, fire, police, emergency vehicles, and the City of Grand Junction.

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

_____ _____

STATE OF COLORADO)
) SS
COUNTY OF MESA)

The foregoing instrument was acknowledged before me this _____ day of _____ A.D. 1990 . by _____

_____ _____

Witness my hand and official seal. My commission expires: _____

Notary public _____

CLERK AND RECORDERS CERTIFICATE

STATE OF COLORADO)
) SS
COUNTY OF MESA)

I, hereby certify that this instrument was filed in my office at _____ O'clock _____ M. this _____ day of _____ A.D. 199__, and is duly recorded in _____ Plat Book _____, Page _____.

Fees: $

_____ _____

Clerk and Recorder Deputy

CITY APPROVAL

This plat of NORTHRIDGE ESTATES FILING FOUR, a subdivision of the City of Grand Junction, County of Mesa, and State of Colorado was approved and accepted this _____ day of _____ A.D. 199__.

_____ _____

City Manager President of Council

_____ _____

Director of Development Chairman, Grand Junction Planning Commission

_____

Grand Junction City Engineer

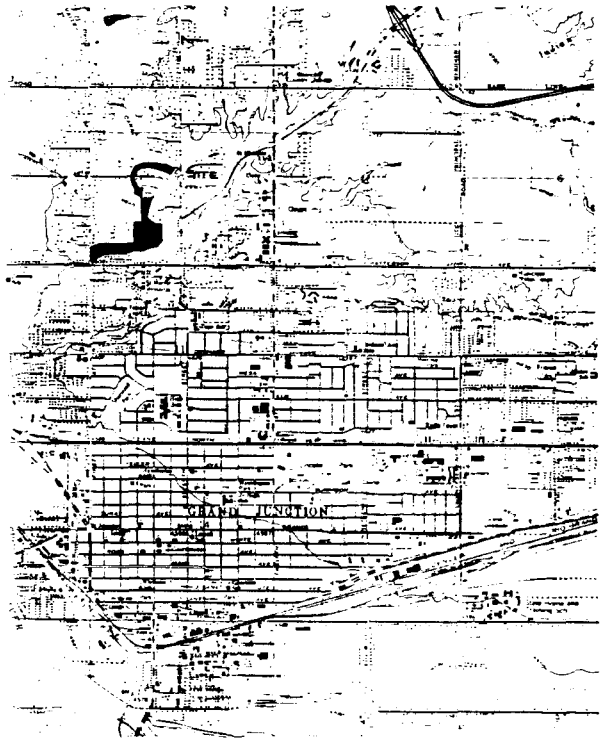
SURVEYORS CERTIFICATE

I, Max E. Morris, do hereby certify that the accompanying plat of NORTHRIDGE ESTATES FILING FOUR, a subdivision of the City of Grand Junction, County of Mesa, State of Colorado, has been prepared by me and accurately represents a field survey of same.

_____ 6/11/90

Colorado Registered Professional Land Surveyor LS 16413
Max E. Morris

MAX EUGENE MORRIS 16413 REGISTERED LAND SURVEYOR STATE OF COLORADO



VICINITY MAP

SCALE: 1"IN = 2000'FT

NORTHRIDGE ESTATES FILING FOUR		
SITUATED IN THE SW1/4 SECTION 2, T1S, R1W, U.M., MESA COUNTY, COLORADO		
FOR: HOLIDAY RETIREMENT CORP.	Q.E.D. SURVEYING SYSTEMS Inc. 1018 COLO. AVE. GRAND JUNCTION COLORADO 81501 464-7468 241-2370	SURVEYED BY: DKB
		DRAWN BY: MEM
SCALE: 1"IN = 100'FT		ACAD ID: NRDIED
DATE: 5/19/90		SHEET NO. 1 OF 2
		FILE: 98226

Original
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From Office

JUN 1 1990

#26 90

SUBSURFACE SOILS EXPLORATION

MESA VIEW II RETIREMENT RESIDENCE

GRAND JUNCTION, CO

Prepared For:

Cliff Curry, Architect
Curry Brandaw Architects
P.O. Box 40
Salem, Oregon 97308-0040

Prepared By:

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

May 10, 1990

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

May 10, 1990

Cliff Curry, Architect
Curry Brandaw Architects
P.O. Box 40
Salem, Oregon 97308-0040

Re: SUBSURFACE SOILS EXPLORATION

MESA VIEW II RETIREMENT RESIDENCE

GRAND JUNCTION, CO

Dear Sir:

Transmitted herein are the results of a Subsurface Soils Exploration for the proposed Mesa View II Retirement Residence.

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: _____
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. 72165-J

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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.

This report provides site specific information for the construction of a multi-story retirement residence and medium-sized single-family residential structures. Included in this report are recommendations regarding general site development and foundation design criteria.

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.

4. Develop geotechnical criteria for site grading and earthwork.

5. Identify potential construcion 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 April 23 and 24, 1990, and consisted of a site reconnaissance by our geotechnical personnel and the drilling of 11 exploration borings. These 11 shallow exploration borings were drilled within the proposed buildings near the locations indicated on the Boring Location Plan. The 11 exploration borings were located to obtain a reasonably good profile of the 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 9 to 20 feet. Samples were taken with a standard split spoon sampler, a California lined sampler, thin-walled Shelby 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 Southwest Quarter of Section Two, Township One South, Range One West of the Ute Principal Meridian, Mesa County, Colorado. More specifically the site is located approximately one and one half miles north of the main business district of downtown Grand Junction. It is bounded on the south by a natural drainage feature which originates in the Bookcliffs to the north and is incorporated into the Independent Ranchman's Ditch. The tract is bounded on the west by North First Street on the north and northwest Northridge Estates Filing No.s 1, 2, and 3 and to the northeast by North Acres Subdivision. This particular tract is refered to as North Ridge Filing No. 4 and contains 28 acres.

The topography of the site is quite variable as it is located within the juncture of two natural drainages. The extreme northern and northwestern portion of this

subdivision rises to the north and northwest, creating gentle to moderate hillsides. The majority of the tract is relatively flat with a general overall gradient to the south and southwest. The exact direction of surface runoff on this site will be controled by the proposed contruction and road improvements and therefore will be variable. In general, surface runoff is expected to travel to the south to the Independent Ranchman's Ditch, eventually entering the Colorado River. Surface and subsurface drainage on this site would be described as fair to poor.

On-site erosion can be a significant problem if drainage and vegetation are not carefully controlled. Vegetation will probably be maintained in the immediate area around the building sites, but special care should be taken to maintain vegetation on the steeper slopes. We recommend that runoff from these slopes be carefully controlled to prevent erosion caused by irrigation practices, sheetwash or seepage. It may be necessary to provide culverts or drainage ways to prevent excessive erosion along steeper slopes.

GENERAL GEOLOGY AND SUBSURFACE DESCRIPTION

The geologic materials encountered under the site consist of alluvial silty clays, sandy clays, clayey sands and gravels, all of which overly the Mancos Shale Formation. The geologic and engineering properties of the materials found in our 11 exploration borings will be discussed in the following sections.

The surface soils on this site consist of a rather complicated deposit placed by the actions of ancient

debris flows which originated in the Bookcliffs to the north. These debris flow deposits have covered an erosional surface of the Mancos Shale Formation, which is considered to be bedrock in this area. The debris flow deposits tend to be quite variable as the actual debris flows deposited on a sporatic basis which created a stratification of the final soil profile. This stratification of upper soils results in a layered system of silts and clays with thin interbedded sand and gravel lenses which often times overlay a sandy gravel deposit. Generally the silts and clays are soft, wet, and of low density. Soil density decreases and the moisture content increases with depth. The upper one to five feet of the soil profile tends to be stiffer and relatively dry due to surface desiccation.

Soil Type No. I was encountered on the ground surface in all of the exploration borings. This soil type will probably provide foundation bearing for the single-family residences and will be utilized in the street construction.

This soil type was classified as a silty clay (CL) under the Unified Classification System. The Standard Penetration Tests ranged from 2 blows per foot to 19 blows per foot. Penetration tests of this magnitude indicate that the soil is variable and of low density. The moisture content varied from 5.5% to 29.1%, indicating a relatively wet 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 900 psf were

found to be typical. These expansive pressures were measured on remolded soil specimens which would represent the soil densities of a mechanically compacted soil section. This material will also consolidate upon saturation or excessive loading. If recommended bearing values are not exceeded, such settlement will remain within tolerable limits. The allowable maximum bearing value was found to be on the order of 800 psf for the very low density very wet condition and 1400 psf for the stiffer, non-saturated soils. A minimum dead load of 200 psf will be required.

Soil Type No. II represents a very coarse-grained version of Soil Type No. I. Soil Type No. II contains gravel-sized fragments of sandstone, siltstone, mudstone, and shale from the rock formations in the Bookcliffs. These fragments were transported by higher velocity portions of the debris flows and may occasionally be encountered as relatively clean sands and gravels in thin lenses and strata within Soil Type No. I.

This Soil Type is classified as a silty and clayey gravel mixture (GM/GC) of medium-grain size under the Unified Classification System. This soil type is firm and of medium density. This soil will have virtually no tendency to expand upon the addition of moisture. Settlement will be minimal under the recommended foundation loads. This soil will undergo elastic settlement upon application of static foundation pressures. Such settlement is characteristically rapid and should be virtually complete by the end of construction. If the recommended allowable bearing values are not exceeded, and if all

other recommendations are followed, differential movement will be within tolerable limits. At shallow foundation depths this soil was found to have an average allowable bearing capacity of 1800 psf. It must be noted that this Soil Type is often found in thin lenses and strata and the characteristics of the underlying soil will probably dictate the actual on-site bearing capacity.

Soil Type No. III was encountered in thin strata in several test borings across the site and are generally within a matrix of Soil Type No. I.

This Soil Type was classified as a silty sandy 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, 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 1000 psf, with 200 minimum dead load pressure required. The finer grained portion of Soil Type No. III contains sulfates in detrimental quantities.

Soil Type No. IV was encountered in all the exploration borings across the site. This soil type represents the Mancos Shale Formation which is the bedrock beneath this site.

The Mancos Shale is described as a thin-bedded, drab, light to dark gray marine shale, with thinly inter-bedded 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 all of the exploration borings, at depths ranging from 8 feet to 23 feet. It is anticipated that this formational shale will affect the construction and the performatnce of the foundations across the majority of the site. This Soil Type is plastic, is sensitive to changes in moisture content, and upon increased moisture will tend to expand. Expansion tests were performed on typical samnples of the soils and expansion pressures on the order of 2500 psf were found to be typical. Some areas of very weathered Mancos Shale was encountered at the contact of the surface soils and the Mancos Shale Formation. When deep foundation systems are utilized, the quality of the Mancos Shale must be evaluated to ensure that an unweathered portion of formation is being utilized for foundation bearing purposes. For the slightly weathered portions of the Mancos Shale the allowable maximum bearing value was found to be on the order of 15000 psf. A minimum dead load of 2500 psf will be required.

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.

GROUND WATER:

A free water table came to equilibrium during drilling at 3 to 15 1/2 feet below the present ground surface, across the majority of the tract. This is probably very

close to the true phreatic surface rather than a perched water table. In our opinion the subsurface water conditions shown are a permanent feature on this site. The depth to free water would be subject to fluctuation on this site depending upon external environmental effects.

Because of capillary rise, the soil zone within a few feet above the free water level identified in the borings will 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.

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 areas of high water table and the soft foundation soils.

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 founda-

tions differ from those encountered, or in our opinion, are not capable of supporting the applied loads. additional recommendations could be provided at that time.

No major difficulties are anticipated in the course of excavating into the surficial soils on the site. It is probable that safety provisions such as sloping or bracing the sides of excavations over 4 feet deep will be necessary. Any such safety provisions shall conform to reasonable industry safety practices and to applicable OSHA regulations.

SITE PREPARATION

It is recommended that site preparation begin with the removal of all vegetation, existing man-made fill and other deleterious materials. This applies both to areas to be filled and areas to be cut. The removed materials should be legally disposed of off-site or, if appropriate, stockpiled for later use in non-structural areas or landscaping. In the case of existing man-made fill, we recommend that it be removed completely. It is recommended that the exposed native soil be scarified to a depth of 12 inches, brought to near optimum moisture conditions and recompacted to a minimum of 90% of maximum dry density as determined by ASTM D 1557.

We recommend that all backfill placed around the exterior of the building, and in utility trenches which are outside the perimeter of the building and not located beneath roadways or parking lots, be compacted to a minimum of 85% of its maximum Proctor dry density (ASTM D 698).

We recommend that the amount of cut and fill be kept to a minimum on this site. Specifically, we recom-

mend that any cut or fill which reduces the stability of native slopes be avoided. This includes any cut at the toe of a slope and any fill placed at the top of a slope. We recommend that any cut or fill over 4 feet in height be analyzed for stability of the final slope prior to construction.

FILL PLACEMENT AND COMPACTION:

We recommend that structural fill placed beneath floor slabs, foundations and parking lots be compacted to a minimum of 90% of its maximum modified Proctor dry density (ASTM D 1557). The structural fill shall be placed and compacted at a moisture content within +/- 2% of optimum moisture.

In general, we recommend all structural fill in the area beneath any proposed structure or roadway be compacted to a minimum of 90% of its maximum modified Proctor dry density (ASTM D1557). We recommend that fill be placed and compacted at approximately its optimum moisture content (+/-2%) as determined by ASTM D 1557. Structural fill should be a granular, non-expansive soil.

We recommend that the amount of structural fill placed on the site during construction, either for the purpose of site grading or to raise floor slabs to a desired elevation, be kept to a minimum. The surcharge applied by a structural fill may consolidate the soft, fine grained soils on this site. If the underlying soils consolidate as a result of this applied surcharge, structural movement will follow.

FIELD OBSERVATION AND TESTING:

The opinions and conclusions of a

geotechnical report are based on the interpretation of information obtained by random borings. Therefore the actual site conditions may vary somewhat from those indicated in this report. It is our opinion that field observations by the geotechnical engineer who has prepared this report are critical to the continuity of the project.

DRAINAGE AND GRADIENT:

Adequate site drainage should be provided in the foundation area 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 structure be graded so that surface water will be carried quickly away from the building. The minimum gradient within 10 feet of the building 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 structure. Planters, if any, should be so constructed that moisture is not allowed to seep into foundation areas or beneath slabs or pavements.

If adequate surface drainage cannot be maintained, or if subsurface seepage is encountered during excavation for foundation construction, a full perimeter drain is recommended for this building. It is recommended that this drain consist of a perforated drain pipe and a gravel collector, the whole being fully wrapped in a geotextile filter fabric. We recommend that this drain be constructed with a gravity outlet.

If sufficient grade does not exist on the site for a gravity outlet, then a sealed sump and pump is recommended. Under no circumstances should a dry well be used on this site.

The high water level found on this site may require controling to prevent large upward fluctuations of this water surface. For this purpose, we recommend that this be accomplished by construction of an area drain beneath the affected building area. To control water surface movement, it is recommended that the drain outfall in a free gravity drain. If a gravity outfall is not possible, a sealed sump and pump is recommended to remove the water.

The existing drainage on the site 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 building. 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 this site.

To give the building extra lateral stability and to aid in the rapidity of runoff, it is recommended that all backfill around the building and in utility trenches in the vicinity of the building be compacted to a minimum of 85% of its maximum Proctor dry density, ASTM D 698. The native soils on this site 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 this

site.

Should an automatic lawn irrigation system be used on this site, we recommend that the sprinkler heads be installed a minimum of 5 feet from the building. 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.

The slope areas immediately adjacent to the Independent Ranchman's Ditch can be considered potentially unstable due to the threat of on-going erosion. A minimum setback should be established between the proposed construction and the edge of existing slope scarps. We recommend that the setback distance be established by laboratory analysis of the shear strength and stability of specific locations along the banks. In addition, mitigation systems are recommended to control the on-going erosion caused by the creek. Such mitigation could include retaining walls, riprap, gabions or other stabilization materials.

FOUNDATIONS FOR SINGLE-FAMILY STRUCTURES

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 soft, alluvial soils of Soil Types I, II, and II may be designed on the basis of an allowable bearing capacity of 800 to 1400 psf maximum, depending

upon the specific soils conditions for each site. A minimum dead load of 200 psf must be maintained. Contact stresses beneath all continuous walls should be balanced to within + or - 200 psf 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.

The six building lots at the extreme north portion of the subdivision, where North Ridge Drive enters North Ridge Estates Filing No. 3, will probably encounter the expansive clays of the Manocs Shale Formation during the course of foundation excavation. Shallow foundation systems resting on the weathered clays of the Mancos Shale Formation may be designed on the basis of an allowable bearing capacity of 6500 psf maximum. A minimum dead load of 2500 psf must be maintained beneath all structural portions. Contact stresses beneath all continuous walls should be balanced to within + or - 150 psf at all points. Isolated interior column footings should be designed for contact stresses of about 200 psf more than the average used to balance the continuous walls. The criteria for balancing will depend somewhat upon the nature of the structure. Single-story slab on grade and crawlspace structures should be balanced on the basis of dead load only. Multi-story structures may be balanced

on the basis of dead load plus one half live load for up to three 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 conventional footing in the areas of soft alluvial soils and the no footing and the use of voids for the excavations which encounter the formational Mancos Shale on this site.

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 consolidation of the soft alluvial soils or the heaving of the expansive Mancos Shale.

SETTLEMENT:

We anticipate that total and/or differential settlements for the proposed structures may be considered to be within tolerable limits, provided the recommendations presented in this report are fully complied with. In general, we expect total settlements for the proposed structure to be less than 1 inch.

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 single-family residences. small attached residences, and a 105 suite multi-story retirement residence. A vicinity map is included in the Appendix of this report.

To assist in our exploration, we were provided with a site plan of the development. The Boring Location Plan attached to this report is based on that plan provided to us.

We understand that the proposed single-family residential structures will probably consist of one and two-story wood-frame structures with possible full basements and floor slabs on grade. Structures of this type typically develop wall loads on the order of 800 to 2000 plf and column loads on the order of 5 to 14 kips.

We understand that the proposed 105 suite retirement residence will consist of a three-story wood-frame structure with a concrete floor slab 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 2000 to 3500 plf and column loads on the order of 60 to 80 kips.

The characteristics of the subsurface materials encountered were evaluated with regard to the type of

FROST PROTECTION

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.

FOUNDATIONS FOR RETIREMENT RESIDENCES

DEEP FOUNDATIONS:

We recommend that a deep foundation system, consisting of either drilled piers or driven piles be used to carry the weight of the proposed structure. Deep foundations must extend through the low density, upper lean clay materials and into the underlying Mancos Shale. Both types of foundation have advantages and disadvantages with respect to this site. Due to the low density, wet condition of the overburdened soils, squeezing, caving, and seepage moisture would be anticipated during installation of drilled piers, requiring that casing and dewatering equipment be on the site and available for use during construction. Based on this site condition it is recommended that driven piles be utilized for the deep foundation system for the three-story retirement residence.

DRIVEN PILES:

We recommend that driven piles bear in the competent materials of the underlying formation. We anticipate that pile driving refusal will be encountered within a few feet of penetration into the shale. Based on a static analysis, piles driven to refusal may be designed for an allowable tip

bearing capacity of 80,000 psf. To determine the bearing area of the pile, the area including the space between the flanges may be included. For example, an HB-12 pile may be assumed to have an end area of approximately 1 square foot. A round, closed-end pipe pile bearing area would be the area of the pile end plate. Pile driving refusal should be determined by our representative in the field. Generally, pile driving refusal is taken as a maximum of 15 blows per inch. If pile groups are used, the overall capacity of the pile group should be reduced in accordance with the appropriate efficiency formula (such as the Converse-Labarre method). If bearing capacities greater than those recommended above are necessary, we recommend that the pile bearing capacity be determined on the basis of static load tests.

It is anticipated that steel piling (either 'H' sections or concrete filled pipe) will be utilized in this construction. The following recommendations will assume the use of these materials. If wood or concrete piling are anticipated, recommendations can be readily provided.

Driving hammers should be of such size and type to consistently deliver effective dynamic energy suitable to the piles and materials into which they are to be driven. Hammers should operate at manufacturer's recommended speeds and pressures. We recommend that a pile driving hammer be used which is rated at at least 19,000 feet pounds. However, driving energy should not be so large that pile damage occurs.

Heave checks should be made on the first pile group driven. Check heave by taking an elevation on each

pile immediately after it has been driven and re-check the elevation after all the piles in the group have been driven. Redrive piles where tips heave more than 1/4 inch from the original elevation or as recommended by the Geotechnical Engineer. Where pile heave is encountered, continue the heave checks and redrive until pile heave does not occur.

Piles must be used in groups to provide for eccentricities in loading. The group capacity will be less than the summation of the individual pile capacities, depending upon the relative spacing of the piles. A conservative estimate of group capacity is two-thirds of the summation of the individual pile capacities.

We recommend that minimum spacing of the piles be twice the average pile diameter or 1.75 times the diagonal dimension of the pile cross-section, but no less than 24 inches. It is recommended that the tops of the piles extend a minimum of 4 inches into the pile cap. Based on the exploration borings no pile shorter than feet is recommended unless proper pile capacity is verified by field inspection by the Geotechnical Engineer. Vertical piles should not vary more than 2% from the plumb position. We further recommend that eccentricity of reaction on a pile group with respect to the load resultant not exceed a dimension that would produce overloads of more than 10% in any one pile.

Based on our analyses, a standard 10-3/4 inch diameter, 1/4 inch wall, pipe pile driven to refusal may be designed for an allowable capacity of 70 to 100 tons. On this site the capacity of the pile will govern allowable load. Pile

driving refusal required to obtain the recommended capacity was taken as 7 blows per inch with a 20 foot kip hammer. Driving hammers should be of such size and type to consistently deliver effective energy suitable to the piles and materials into which they are driven. Final pile driving refusal should be determined by representatives of Lincoln DeVore in the field.

Large horizontal loads are not anticipated on this site. However, if horizontal loads exist and exceed 1000 pounds per pile, batter piles will be required. It is recommended that hammer and cushioning be matched to the chosen pile type to provide design load capacity during driving.

Since the underlying bedrock is moderately expansive, we recommend a minimum of permanent pressure be maintained on each pier. The minimum pressure should be designed based on a tip uplift pressure of 1800 psf. The area used to consider the uplift pressure should be width times the depth of the pile section used when considering H piles. Round pipe piles will require an end uplift pressure of 1800 psf and a side uplift of 400 psf for the portion of the side wall in contact with the expansive formation.

Lincoln DeVore was not provided with elevations for the top of borings. Therefore, the estimated tip elevations cannot be determined. Based upon the subsurface logs, we anticipate that pile driving refusal will be encountered at depths varying from 12 to 19 feet below exisiting grade. The depth to bedrock will be shallower on the central portion and north end and deeper on the south end. The data indicates that

the capacity of piles driven to refusal will be a function of the structural capacity of the pile. We estimate that typical 10 5/8" concrete filled steel pipe sections, driven to refusal, as defined in this report could be designed for loads of approximately 70 to 100 tons. Although the bedrock in this area is relatively hard, a reinforced driving tip, in our opinion, would not be necessary in these materials. If the piles are driven to refusal, then no pile load tests are recommended.

DRIVEN PILE OBSERVATION:

Continuous observation of the pile driving operations and a pile load test, if required, should be performed by Lincoln DeVore as a representative of the owner. A continuous log should be maintained on the number of blows per foot required to drive each pile. Driving should be completed without interruption (except for splicing) and without jetting or pre-drilling unless the geotechnical engineer has been contacted for further recommendations.

GRADE BEAMS:

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

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 slab-structure 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.

It is recommended that slabs on grade be constructed over a capillary break of approximately 6 inches in thickness. We recommend that the material used to form the capillary break be free draining, granular material and not contain significant fines. A free draining outlet is also recommended for this break so that it will not trap water beneath the slab. A vapor barrier is recommended beneath the floor slab and above the capillary break. To prevent difficulty in finishing concrete, a 2 inch sand layer should be placed above the break.

Where the Mancos Shale Formation is quite close to the ground surface or the building excavation is such that floor slabs and grade will be quite close to the Mancos Shale, some movement of these slabs must be anticipated. The following recommendations are considered very important when slabs on grade are either in contact or very close to expansive clays.

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:

1. 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.

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:

1. 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.

EARTH RETAINING STRUCTURES

The active soil pressure for the design of earth retaining structures may be based on an equivalent fluid pressure of 38 pounds per cubic foot. The active pressure should be used for retaining structures which are free to move at the top (unrestrained walls). For earth retaining structures which are fixed at the top, such as basement walls, an equivalent fluid pressure of 47 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 214 psf per foot of depth. The coefficient of friction for concrete to soil may be assumed to be 0.3 for resistanse to lateral movement. When combining frictional and passive resistance, the latter must be reduced by approximately 1/3.

We recommend that the backfill behind any retaining wall be compacted to a minimum of 90% of its maximum modified Proctor dry density, ASTM D-698. The backfill material should be approved by the Soils Engineer prior to placing and a sufficient amount of field observation and density tests should be performed during placement. Placing backfill behind retaining walls before the wall has gained sufficient strength to resist the applied lateral earth pressures is <u>not</u> recommended.

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 placement 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.

Due to low toe pressure capacity of the soils over much of this site and in the area of Test Boring # 5a, it is recommended that high concrete-type retaining walls not be used on this site. Slopes can be successfully retained with staggered cribbed slopes or reinforced earth so long as they are properly drained.

PAVEMENTS

Samples of the surficial native soils at this property that may be required to support pavements have been evaluated using the Hveem-Carmany method to determine their support characteristics. The results of the laboratory testing are as follows:

R =	19
Expansion @ 300 psi =	.017
Displacement @ 300 psi =	3.85

All pavement should be protected from moisture migrating beneath the pavement structure. If surface

drainage is allowed to pond behind curbs, islands or other areas of the site and allowed to seep beneath pavement, premature deterioration or possibly pavement failure could result.

The owner of the structure should be aware that the traffic volume and the loads on pavement will be considerably higher during the construction phase than during the design life of the pavement structure. Therefore, some repair may be required after construction of the pavement is complete. An alternative would be to design a heavier pavement section at this time, utilizing the expected construction volume. It has been our experience that pavement failures during construction are minimal, and that it is more economical to repair localized failures due to contruction traffic rather than construct a heavier pavement section.

REACTIVE SOILS

Since groundwater in the Grand Junction area typically contains sulfates in quantities detrimental to a Type I cement, a Type II or Type I-II or Type II-V 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, Type I-II or Type II-V cement under any circumstances.

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.**

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 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.

SOILS DESCRIPTIONS:

SYMBOL	USCS	DESCRIPTION
		Topsoil
		Man-made Fill
	GW	Well-graded Gravel
	GP	Poorly-graded Gravel
	GM	Silty Gravel
	GC	Clayey Gravel
	SW	Well-graded Sand
	SP	Poorly-graded Sand
	SM	Silty Sand
	SC	Clayey Sand
	ML	Low-plasticity Silt
	CL	Low-plasticity Clay
	OL	Low-plasticity Organic Silt and Clay
	MH	High-plasticity Silt
	CH	High-plasticity Clay
	OH	High-plasticity Organic Clay
	Pt	Peat
	GW/GM	Well-graded Gravel, Silty
	GW/GC	Well-graded Gravel, Clayey
	GP/GM	Poorly-graded Gravel, Silty
	GP/GC	Poorly-graded Gravel, Clayey
	GM/GC	Silty Gravel, Clayey
	GC/GM	Clayey Gravel, Silty
	SW/SM	Well-graded Sand, Silty
	SW/SC	Well-graded Sand, Clayey
	SP/SM	Poorly-graded Sand, Silty
	SP/SC	Poorly-graded Sand, Clayey
	SM/SC	Silty Sand, Clayey
	SC/SM	Clayey Sand, Silty
	CL/ML	Silty Clay

ROCK DESCRIPTIONS:

SYMBOL	DESCRIPTION
	SEDIMENTARY ROCKS
	CONGLOMERATE
	SANDSTONE
	SILTSTONE
	SHALE
X X X X X X	CLAYSTONE
	COAL
	LIMESTONE
	DOLOMITE
	MARLSTONE
	GYPSUM
	Other Sedimentary Rocks
	IGNEOUS ROCKS
	GRANITIC ROCKS
+ + + + + +	DIORITIC ROCKS
	GABBRO
	RHYOLITE
	ANDESITE
	BASALT
	TUFF & ASH FLOWS
	BRECCIA & Other Volcanics
	Other Igneous Rocks
	METAMORPHIC ROCKS
	GNEISS
	SCHIST
	PHYLLITE
	SLATE
	METAQUARTZITE
	MARBLE
	HORNFELS
	SERPENTINE
	Other Metamorphic Rocks

SYMBOLS & NOTES:

SYMBOL	DESCRIPTION
	9/12 Standard penetration drive Numbers indicate 9 blows to drive the spoon 12" into ground.
	ST 2-1/2" Shelby thin wall sample
	W_o Natural Moisture Content
	W_x Weathered Material
Free water	Free water table
	γ^o Natural dry density
	T.B. – Disturbed Bulk Sample
	② Soil type related to samples in report
15' W_x Form.	Top of formation
	Test Boring Location
	Test Pit Location
	Seismic or Resistivity Station. Lineation indicates approx. length & orientation of spread (S = Seismic, R = Resistivity)

Standard Penetration Drives are made by driving a standard 1.4" split spoon sampler into the ground by dropping a 140 lb. weight 30". ASTM test des. D-1586.

Samples may be bulk, standard split spoon (both disturbed) or 2-1/2" I.D. thin wall ("undisturbed") Shelby tube samples. See log for type.

The boring logs show subsurface conditions at the dates and locations shown, and it is not warranted that they are representative of subsurface conditions at other locations and times.

LINCOLN DeVORE TESTING LABORATORY

COLORADO: Colorado Springs, Pueblo, Glenwood Springs, Montrose, Gunnison, Grand Junction. – WYO. – Rock Springs

EXPLANATION OF BOREHOLE LOGS AND LOCATION DIAGRAMS

BORING NO. 1

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION	PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
			FINE SILT WITH THIN STRATA OF SILTY CLAY			
		I	LOW TO MEDIUM DENSITY	C.S. 2/6 4/12	104.2 #A3	18.8%
5			VERY MOIST TO NEAR SATURATION	6/18		
			SOFT COMPRESSIBLE			
			WATER TABLE 7'-3" SULFATES			
		I		S.P.T. 1/6 2/12 3/18		29.1%
10			LOW PLASTIC SILT LOW DENSITY			
			THIN - GRAVEL STRATA SATURATED			
			SOFT - COMPRESSIBLE SILTS			
15			THIN SILTY CLAY STRATA SULFATES			
			THIN GRAVEL STRATA			
			SATURATE			
20		II	ALLUVIAL - SILTY GRAVELS - LOW DENSITY			
			Km 21'-4"			
		IV	VERY WEATHERED MANCOS SHALE			
			INCREASING DENSITY WITH DEPTH. HIGH SULFATES	S.P.T. 13/6 37/12		14.7%
			TD 24' MEDIUM PLASTIC - SILTY CLAY - EXPANSIVE			
25						
			FREE WATER @ 7'-3" 4-27-90			

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS · GEOLOGISTS

COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS

NORTHRIDGE ESTATES # 4 Gd. Jct. Colo.

DATE 4-25-90

JOB NO. 72165-J

BORING NO. 2

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION		PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
		I	Low Density, Low Plastic Silt Occ. Sandy Strata	S.T.		90.7 #/ft³	26.8%
5			Very High Moisture - Sulfates Compressible				
		II	Free H_2O 7'-6" During Drilling — Silty Gravels - Very Sandy Saturated - Low Density	S.T.		94.3 #/ft³	27.2%
10			Very Low Plastic Silty Clay Strata Sulfates — Low Density				
		II	Fine Gravels with Sand Fines Silt Strata — Low Density	S.P.T.	15/6 32/12 52/18		16.7%
15			Saturated - Silty, Sandy Gravels Low Density, Non Plastic Fines				
			TD-18'				
20							

Hole1 Drilled To 18' - Immediately Caved To 15' before sampling, Caved Back To 6' Before Final H_2O Level Could Be Obtained

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS. GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	NORTHRIDGE ESTATES # 4	DATE 4-25-90
		JOB NO. 72165-J	

BORING NO. 3

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION		PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
			VERY LOW PLASTIC SILTS – ALLUVIAL				
		I	STRATIFIED				
			COMPRESSIBLE – VERY MOIST TO NEARLY SAT.	S.T.		90.7#/ft³	26.8%
5			SULFATES				
			OCC THIN STRATA - SILTY CLAY AND FINE SANDS				
		I					
				S.P.T.	3/6 3/12 4/18		25.8%
10			FREE WATER 10½' LOW DENSITY - ALLUVIAL SILT				
			OCC SAND and SILTY CLAY STRATA.				
			SATURATED - LOW DENSITY - COMPRESSIBLE				
15		II	INTERBEDDED SILTY GRAVEL and SILT				
		II	INCREASING DENSITY – ALLUVIAL	S.P.T.	11/6 22/12 44/18		16.1%
20			T.D. 19½'				

FREE WATER @ 10½' - 4-27-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS · GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	NORTH RIDGE ESTATES #4	DATE 4-25-90
		JOB NO. 72165-J	

BORING NO. 4

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION	PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
		I	Low Plastic Silt - Medium Density			
			Slighty Moist - Increasing With Depth			
			Thin Strata of Gravels S.T.		105.7 #A3 AT	5-5%
5'		II	Alluvial			
			Stratified Silty, Sandy Gravels and Silts			
		I	Slightly Moist - Low to Medium Density S.P.T.	12/6 29/12		5-7%
10		II	Sulfates	39/18		
		I	Increasing Moisture			
		II	Consistant Silty, Sandy Gravels S.P.T.	6/6 12/12		13.0%
15			Free Water 15½' Non Plastic - Medium Density	22/18		
			Stratified - Soft Strata - Very Silty? S.P.T.	4/6 24/12		11.8%
20			T.D. 19½'	61/18		

Free Water @ 15½ Feet - 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS · GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	North Ridge Estates #4	DATE 4-24-90
		JOB NO. 72165-J	

BORING NO. 5

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION	PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
	III		SILTS and SILTY CLAY STRATA			
	I		MOIST – MEDIUM TO HIGH DENSITY STRATA			
	III		SILTY CLAY STRATA ARE EXPANSIVE	S.T.	121.0 #A-3	10.3%
5			INCREASING DENSITY SULFATES			
			MANCOS SHALE 5½'			
	IV		WEATHERED MANCOS SHALE –			
			LOW TO MEDIUM PLASTIC CLAY – VERY MOIST	S.P.T.	18/6 40/12	17.1%
			INCREASING DENSITY WITH DEPTH.			
10			T.D. 9½' VERY EXPANSIVE IN SOME STRATA	70/18		

NO FREE WATER – 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS-GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	NORTH RIDGE ESTATES #4	DATE 4-24-90
		JOB NO. 72165-J	

BORING NO. 5A – RETAINING WALL

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION		PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
		III	LOW DENSITY SILTY CLAY and SILT				
		I	LOW MOISTURE – STRATIFIED				
		III	SULFATES	S.T.		97.8 #/ft³	6.1%
5		I	COMPRESSIBLE ALLUVIAL				
			INCREASING MOISTURE WITH DEPTH				
		III	INCREASING DENSITY				
		IV	WEATHERED MANCOS SHALE IN SPOON TIP	S.P.T.	9/6 26/12		14.0%
10			EXPANSIVE – V. MOIST – SULFATES		43/18		
			T.D. 9½'				

NO FREE WATER 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS · GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	NORTH RIDGE ESTATES #4	DATE 4-24-90
		JOB NO. 72165-J	

BORING NO. 6

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION		PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
			SILTY CLAYS - LOW PLASTIC				
			VERY MOIST				
			FREE WATER 3'				
		III	LOW DENSITY - SULFATES	S.T.			18.7%
5			SILTY SAND STRATA SATURATED				
			LOW PLASTIC - SILTY CLAYS - COMPRESSIBLE				
			WEATHERED MANCOS SHALE				
		IV	8'-5"	S.P.T.	3/6 9/12		17.9%
10					27/18		
			VERY HARD MANCOS SHALE				
			STRATIFIED - Dark Gray V. MOIST				
			GRAY — EXPANSIVE - FRACTURED				
		IV	LOW TO MEDIUM PLASTICITY - SULFATES	S.P.T.	20/6 50/12		22.2%
15			T.D. 14½'				

FREE WATER @ 3' - 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS · GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	NORTH RIDGE ESTATES #4	DATE 4-24-90
		JOB NO. 72165-J	

BORING NO. 7

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION	PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
	I		MEDIUM DENSITY SILT V. MOIST			
			THIN SILTY SAND STRATA			
	II		SILTY SANDY GRAVELS - LOW DENSITY	S.T.	108.5 #/ft3	11.9%
5	I		V. MOIST			
	II		STRATIFIED SULFATES ALLUVIAL			
	I		COMPRESSIBLE			
			FREE WATER 9'	S.P.T. 3/6 4/12 6/18		21.4%
10	III		SILTY CLAY - MEDIUM TO LOW DENSITY			
			SULFATES SOFT STRATA			
			MANCOS SHALE - VERY WEATHERED 13'-8"	S.P.T. 4/6 11/12 22/18		20.0%
15			EXPANSIVE			
			HARD MANCOS SHALE @ 16'			
			STRATIFIED Low Plastic and Medium Plastic Strata			
			EXPANSIVE SULFATES			
			FRACTURED - VERY MOIST	S.P.T. 12/6 24/12 48/18		21.6%
20			T.D. 19½'			

FREE WATER @ 9' - 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS. GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	NORTH RIDGE ESTATES #4	DATE 4-24-90
		JOB NO. 72165-J	

BORING NO. 8

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION	PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
		III	Low Plastic Silty Clay Low Density Low Moisture Sulfates			
		I	V. Fine Silt - low Density - Moist			
		II	Low Density Silty Sandy Gravels Silt and Sandy Silt Strata	S.T.	102.9 #/ft3	5.7%
5			Mancos Shale 1' Firm — Moist to Very Moist			
		IV	Dense - Expansive — Sulfates	S.P.T. 22/6		23.3%
			T.D. 9' Very Moist To Near Saturation	69/12		
10						

No Free Water — 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS. GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	North Ridge Estates #4	DATE 4-24-90
		JOB NO. 72165-J	

BORING NO. 9

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION	PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
			VERY LOW PLASTIC SILT MOIST			
			MEDIUM DENSITY			
		I	THIN STRATA OF SILTY CLAY	S.P.T. 7/6 16/12		6.1%
5			FIRM			
			OCC. SANDS	26/18		
			SULFATES			
			INCREASING MOISTURE			
		I	VERY STRATIFIED			
			SILTS - V. LOW PLASTIC SILTY CLAY	S.T. 111.7		9.2%
10			FREE WATER 10½'			
			PERCHED? LOW COMPRESSIBILITY UNDER MODERATE LOADS			
			WATER APPEARS TO BE IN STRATA			
			MEDIUM DENSITY THIN CLAYEY STRATA			
			THIN SANDY ZONES			
15			MANCOS SHALE 16'			
		IV	V. FIRM TO HARD LOW and MEDIUM PLASTIC CLAYS	S.P.T. 49/6		13.6%
			EXPANSIVE SULFATES			
			TD 18½'			
20						

FREE WATER @ 10½' 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS · GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	NORTH RIDGE ESTATES #4	DATE 4-23-90
		JOB NO. 72165-J	

BORING NO. 10

ELEVATION:

DEPTH (FT)	SYMBOL	SAMPLE	DESCRIPTION	PENETRATION RESISTANCE	IN-SITU DENSITY (PCF)	MOISTURE CONTENT (%)
		III	Low Plastic Silty Clay			
			Medium Density Firm			
		III	Slighty Expansive - Moist	S.T.	108.0	11.1%
5		I	Silt Strata Firm Very Low Plastic			
		III	Silty Clay Moist			
			Medium Density Alluvial	S.P.T. 6/6 13/12		9.9%
10			Stratified	20/18		
			Increasing Moisture			
		I	Sulfates			
			Free Water 14'			
		II	Silty Sandy Gravels - Low Density	S.P.T. 3/6 7/12		18.2%
15			Stratified Saturated	11/18		
			Mancos Shale 17'			
		IV	Expansive Low and Medium Plasticity	S.P.T. 26/6 50/9		14.6%
			Very Firm - Moist Sulfates			
20			T.D. 19½'			

Free Water @ 14' 4-25-90

LOG OF SUBSURFACE EXPLORATION

LINCOLN DeVORE ENGINEERS. GEOLOGISTS	COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS	North Ridge Estates # 4	DATE 4-23-90
		JOB NO. 72165-J	

SUMMARY SHEET

Soil Sample FINE SILT (ML) Test No. 72165-J

Location NORTHRIDGE #4 Date 4-30-90

Boring No. 1 Depth 3

Sample No. (I) Test by DPW

Natural Water Content (w) 18.8 %

Specific Gravity (Gs) 2.58 In Place Density (γ_o) 104.2 pcf

SIEVE ANALYSIS:

Sieve No.	% Passing
1 1/2"	
1"	
3/4"	
1/2"	
4	
10	
20	
40	100.0
100	91.2
200	76.0

HYDROMETER ANALYSIS:

Grain size (mm)	%
.02	64.3
.005	24.6

Plastic Limit P.L. 17.0 %

Liquid Limit L. L. 20.6 %

Plasticity Index P.I. 3.6 %

Shrinkage Limit ____ %

Flow Index ____

Shrinkage Ratio ____ %

Volumetric Change ____ %

Lineal Shrinkage ____ %

MOISTURE DENSITY: ASTM METHOD

Optimum Moisture Content - w_o 12.5%

Maximum Dry Density - γ_d 116.5 pcf

California Bearing Ratio (av) ____ %

Swell: 1 Days 0.06 %

Swell against 901 psf Wo gain 9.8 %

BEARING:

Housel Penetrometer (av) 800 to 1400 psf

Unconfined Compression (qu) ____ psf

Plate Bearing: ____ psf

Inches Settlement ____

Consolidation 1.65% under 2042 psf

T-B-# 9 @ 8'

PERMEABILITY:

K (at 20°C) ____

Void Ratio ____

Sulfates 2000+ ppm.

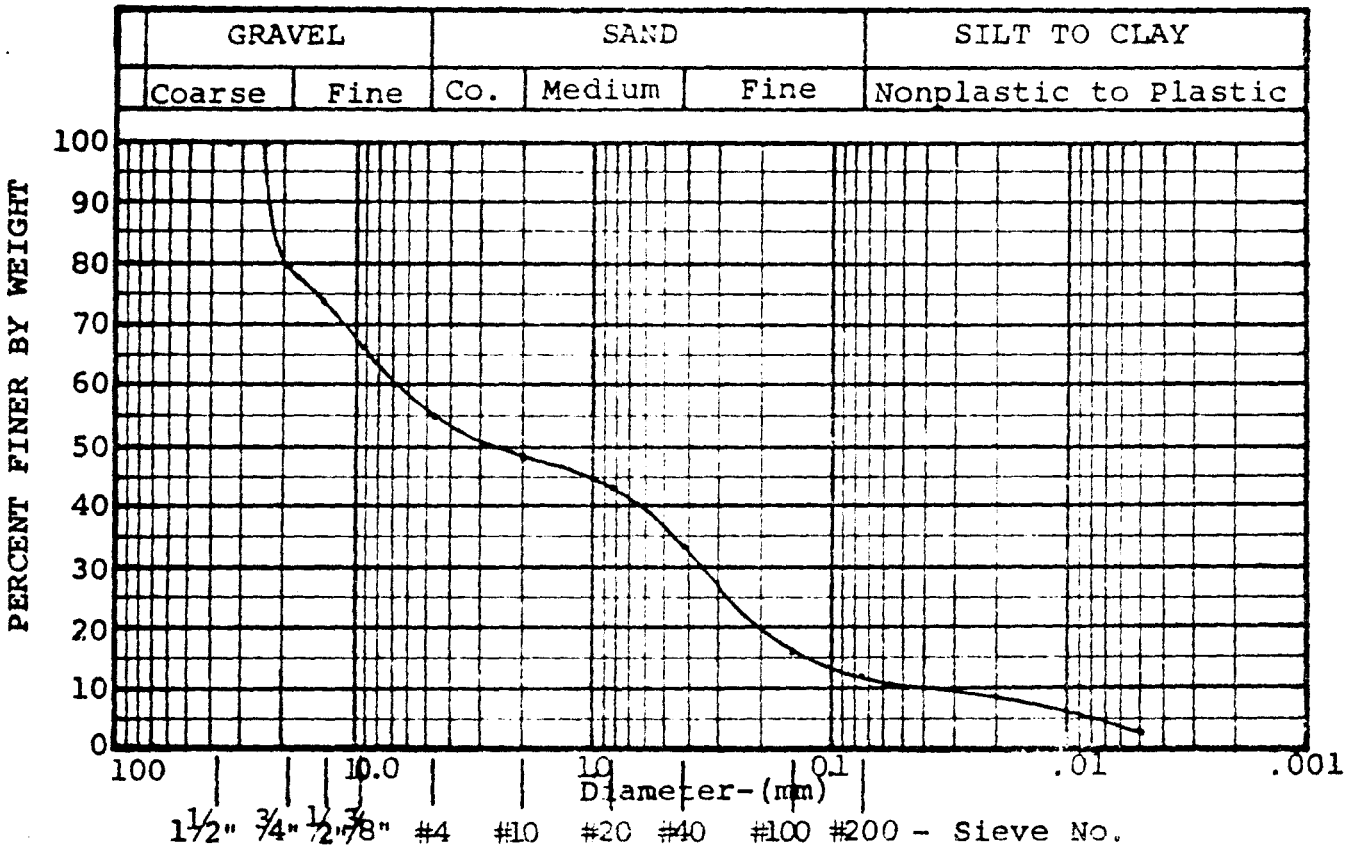
SOIL ANALYSIS

LINCOLN-DeVORE TESTING LABORATORY
COLORADO SPRINGS, COLORADO

Soil Sample FINE SANDY GRAVEL (GM/GP) Test No. 72165J

Project NORTHRIDGE #4 Date 4-30-90

Sample Location T.H. #2 @ 7' Test by DPW



Sample No. (II)

Specific Gravity

Moisture Content 27.2 %

Effective Size .04

Cu 168.

Cc .43

Fineness Modulus

L.L. % P.I. NP %

BEARING psf

Sieve Size	% Passing
1 1/2"	
1"	100.0
3/4"	79.4
1/2"	74.0
3/8"	65.9
4	54.6
10	48.3
20	43.7
40	33.4
100	15.9
200	12.0
0200	8.1
.005	2.7

Sulfates 500 ppm

GRAIN SIZE ANALYSIS

LINCOLN-DeVORE TESTING LABORATORY
COLORADO SPRINGS, COLORADO

SUMMARY SHEET

Soil Sample SILTY CLAY (CL-ML) Some Gravels Test No. 7Z165-J

Location NORTHRIDGE #4 Date 4-30-90

Boring No. 5 Depth 3

Sample No. III Test by DPW

Natural Water Content (w) 10.3 %

Specific Gravity (Gs) _____ In Place Density (γo) 121.0 pcf DENSE COND.

SIEVE ANALYSIS:

Sieve No.	% Passing
1 1/2"	
1"	
3/4"	
1/2"	
4	
10	
20	
40	100.0
100	96.9
200	83.6

HYDROMETER ANALYSIS:

Grain size (mm)	%
.02	70.9
.005	30.1

Plastic Limit P.L. 16.3 %

Liquid Limit L. L. 21.6 %

Plasticity Index P.I. 5.3 %

Shrinkage Limit _____ %

Flow Index _____

Shrinkage Ratio _____ %

Volumetric Change _____ %

Lineal Shrinkage _____ %

MOISTURE DENSITY: ASTM METHOD

Optimum Moisture Content - wo _____ %

Maximum Dry Density - γd _____ pcf

California Bearing Ratio (av) _____ %

Swell: 1 Days 3.1 %

Swell against 1403 psf Wo gain 3.7 %

DENSE CONDITION ONLY — CAUTION —

BEARING:

Housel Penetrometer (av) 1000 psf

Unconfined Compression (qu) _____ psf

Plate Bearing: _____ psf

Inches Settlement _____

Consolidation % under psf

PERMEABILITY:

K (at 20°C) _____

Void Ratio _____

Sulfates 1500+ ppm.

SOIL ANALYSIS

LINCOLN-DeVORE TESTING LABORATORY
COLORADO SPRINGS, COLORADO

SUMMARY SHEET

Soil Sample MANCOS SHALE (CL) LOW PLASTIC CLAY Test No. 72165-J

Location NORTHRIDGE #4 Date 4-30-90

Boring No. 5 Depth 8

Sample No. IV Test by DPW

Natural Water Content (w) 17.1 %

Specific Gravity (Gs) _____ In Place Density (γ_o) 114.8 pcf

SIEVE ANALYSIS:

Sieve No.	% Passing
1 1/2"	
1"	
3/4"	
1/2"	
4	
10	
20	
40	100.0
100	91.4
200	85.1

HYDROMETER ANALYSIS:

Grain size (mm)	%
.02	76.1
.005	41.3

Plastic Limit P.L. 24.1 %

Liquid Limit L. L. 45.7 %

Plasticity Index P.I. 21.6 %

Shrinkage Limit _____ %

Flow Index _____

Shrinkage Ratio _____ %

Volumetric Change _____ %

Lineal Shrinkage _____ %

MOISTURE DENSITY: ASTM METHOD

Optimum Moisture Content - w_o _____ %

Maximum Dry Density - γ_d _____ pcf

California Bearing Ratio (av) _____ %

Swell: 1 Days 5.6 %

Swell against 2490 psf Wo gain 4.4 %

BEARING:

Housel Penetrometer (av) 15,000 psf

Unconfined Compression (qu) _____ psf

Plate Bearing: _____ psf

Inches Settlement _____

Consolidation % under psf

PERMEABILITY:

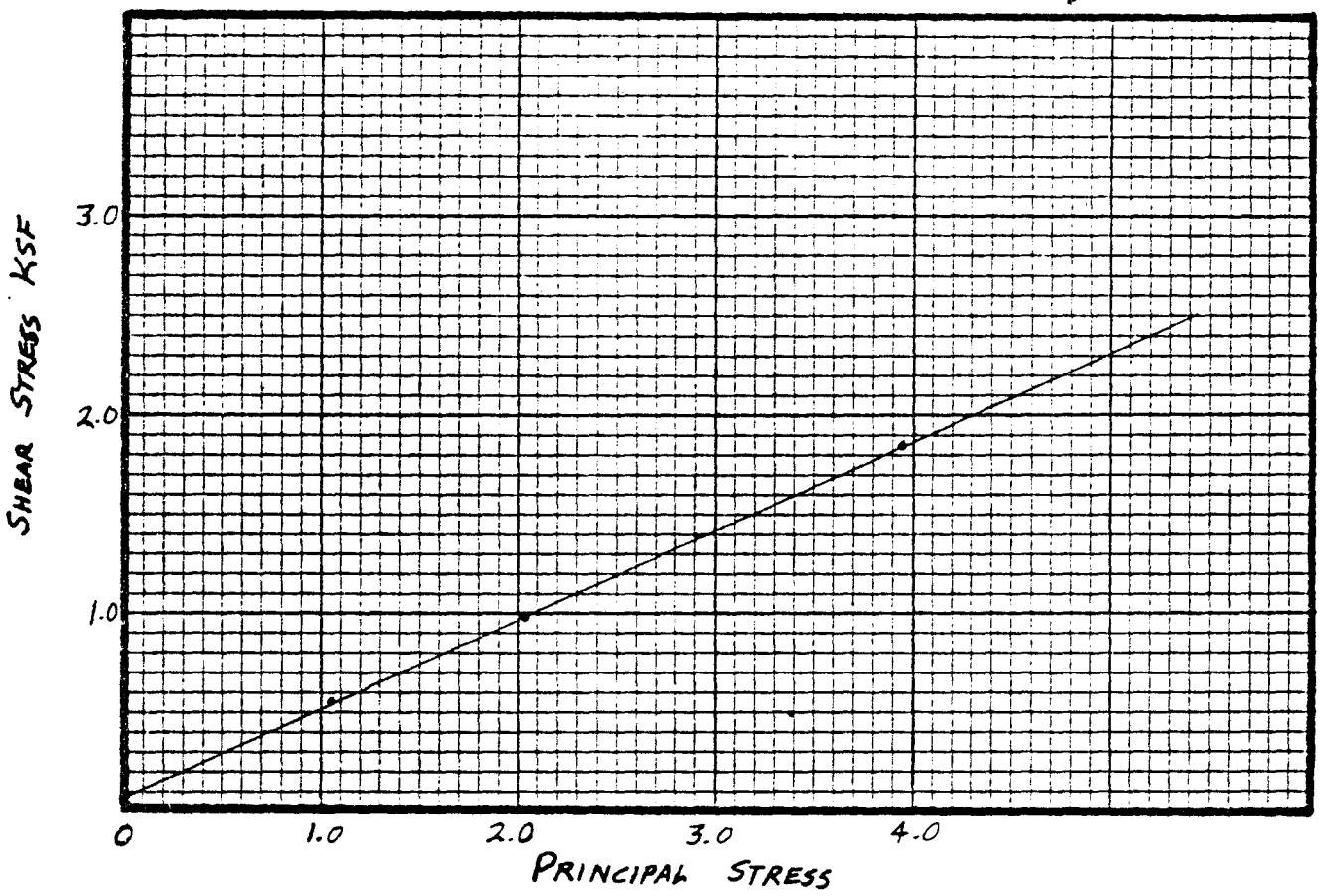
K (at 20°C) _____

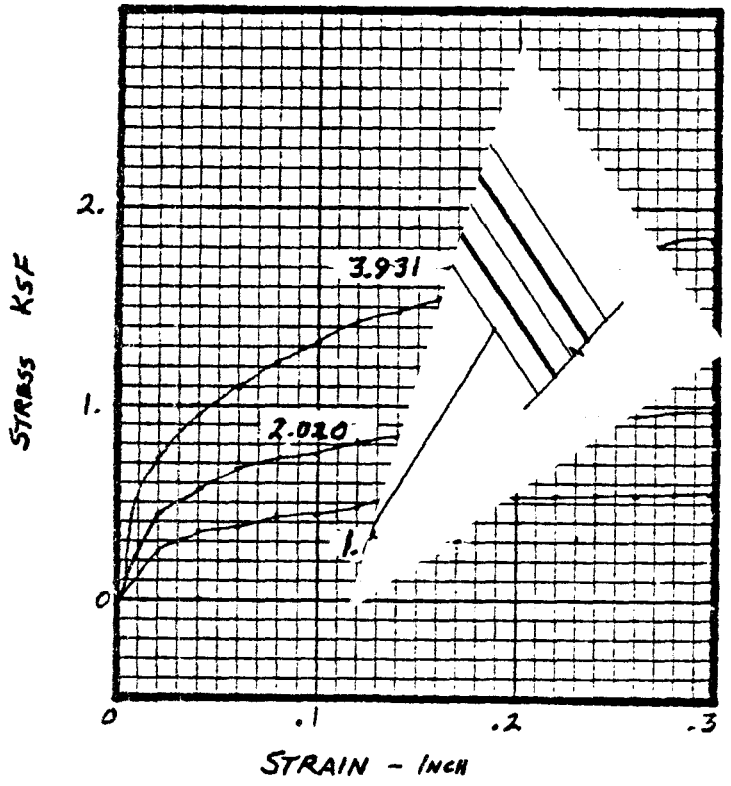
Void Ratio _____

Sulfates 2000+ ppm.

SOIL ANALYSIS

LINCOLN-DeVORE TESTING LABORATORY
COLORADO SPRINGS, COLORADO





TEST	1	2	3
PRINCIPAL STRESS KSF	1.058	2.020	3.931
SHEAR STRESS KSF	0.549	0.983	1.859
DRY DENSITY pcf	90.3	89.7	88.6
MOISTURE CONTENT %	23.0	22.2	19.3

TYPE TEST SATURATED - DRAINED

C 85 psf

ϕ 24° - 10'

tan ϕ 0.449

NORTH RIDGE ESTATES # 4

DIRECT SHEAR TESTING

RETAINING WALL - T.H. # 5A - 0'-4'

LINCOLN DeVORE ENGINEERS GEOLOGISTS

COLORADO: COLORADO SPRINGS
GRAND JUNCTION, PUEBLO,

LD #-72165-J

PROJECT Northridge Estates #4

CLIENT Colson Colson Const.

SAMPLE LOCATION T-H. # 1+2 Composite

SOIL TYPE I (ML) Silt - Some Silty Clay (CL-ML)

TEST NO. 72165-J

DATE 5-1-90

TEST BY CMB

TYPE TEST ASTM, D-698-A

MAX. DRY DENSITY 116.5 pcf

OPTIMUM MOISTURE 12.5 %

FRACTION USED -#4

MOLD SIZE 1/30 cu. ft.

SIEVE SIZE	% PASSING
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	100.0
100	91.2
200	76.0
.0200	64.3
.005	24.6

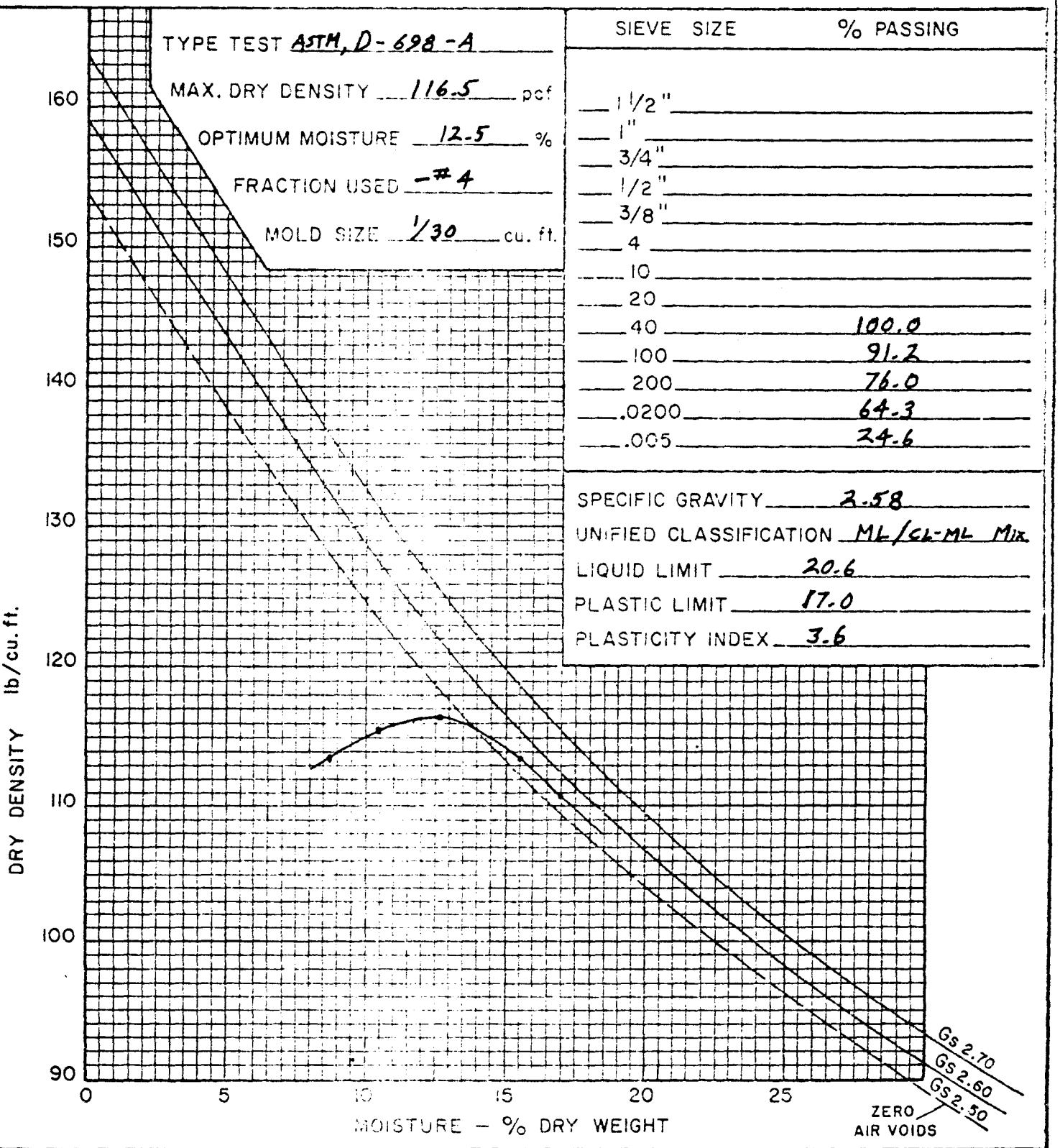
SPECIFIC GRAVITY 2.58

UNIFIED CLASSIFICATION ML/CL-ML Mix

LIQUID LIMIT 20.6

PLASTIC LIMIT 17.0

PLASTICITY INDEX 3.6



MOISTURE — DENSITY RELATION

LINCOLN DeVORE ENGINEERS. GEOLOGISTS

COLORADO: COLORADO SPRINGS, GRAND JUNCTION, PUEBLO, GLENWOOD SPRINGS
WYOMING: EVANSTON

#26 90 #26

JUN 1 1990

Remove
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DRAINAGE ANALYSIS, REPORT & DESIGN
for
NORTHRIDGE ESTATES FILING 4

This study presents the analysis of the existing drainage considerations and the impact on this existing drainage that will be caused by the developmentof the proposed Northridge Estates Filing 4. The engineering design to control the impacted drainage is identified and is shown on the Grading & Drainage Plan.

Figure 1 shows the existing Northridge Subdivision and the proposed Filing 4 and also delineates the separation of the total area into three drainage basins A, B & C.

In summary, normal storm drainage will be conducted to the Independent Ranchmans Ditch via an underground storm drain system. Additional storm waters resulting from a 10 and 100 year storm will be conducted to the Independent Ranchmans Ditch via a combination of storm drains and the city streets thru the proposed Filing 4. A total of 7.5 cfs additional water for a 10 year storm and an additional 12.7 cfs for a 100 year storm will result from the proposed development of Filing 4. The engineering and design planning has been coordinated with Grand Valley Irrigation who control the Independent Ranchmens Ditch.

DRAINAGE BASIN A

The majority of the storm water for Drainage Basin A originates from the existing Northridge Subdivision and flows into the proposed development from the northeast end of Northridge Drive.

For purposes of calculations (Reference: 'PROCEDURES for DETERMINING PEAK FLOWS IN COLORADO') a run-off coefficient of 0.95 was used for impervious surfaces of streets, roofs & driveways and a 0.35 run-off coefficient was used for pervious lawns & gardens with a 50-50 split between pervious and impervious areas for the developed zones.

Table of calculated storm waters for Basin A

	Existing Developed area	Filing 4 undeveloped	Filing 4 Developed	Developed total	Additional Drainage due to proposed development
10 year storm	26.3 cfs	5.0	6.7	33	1.7 cfs
100 year storm	43.9	8.3	11.3	55	3.0 cfs

Storm water will be conducted to the Independent Ranchmans Ditch via a 24" storm drain. Additional floodwaterwill be carried via the city streets and a short 24" storm drain in Filing 4 (in Basin B) to the same ditch with some ponding in city streets for a 100 year storm.

DRAINAGE BASIN B

Drainage Basin B is entirely contained in the proposed Filing 4 and will consist of 21 single family lots.

	Undeveloped	Developed	Increase due to Development
10 year storm	3.7 cfs	6.8 cfs	3.1 cfs
100 year storm	6.1 cfs	11.4 cfs	5.3 cfs

Storm water will be primarily carried in the city streets to catch basins at the low point and thence to the Independent Ranchmans Ditch thru a short 24" storm drain.

DRAINAGE BASIN C

This drainage basin consists of 8.5 acres of the existing Northridge Subdivision and 6 acres of the proposed Filing 4. The storm water from the existing Northridge Subdivision is already conducted to the Independent Ranchmans Ditch via drainage swales along Northridge Drive to catch basins at the intersection of Northridge Drive and Willowbrook Road and thence via an existing 12" storm drain. The drainage swales will be eliminated by the addition of curb & gutter along Northridge Drive and Kingswood Drive such that the storm water will be confined to the city streets.

	Existing Developed Area	Filing 4 Existing Undeveloped	Filing 4 Developed	Developed total	Additional drainage due to Filing 4 Development
10 year storm	8.2 cfs	3.2	5.9	14.1	2.7 cfs
100 year storm	13.7	5.3	9.7	23.4	4.4 cfs

GENERAL

Drainage from the retirement center itself such as parking areas, irrigation run-off, etc. will primarily be captured on-site and ponded in a gentle swale on the south side of the site. Overflow provisions from this swale will be controlled by an overflow standpipe to a 12" CMP storm drain system. Roof water will be controlled with roof gutters and down spouts to a perimeter drain and carried to this same storm drain system.

The Independent Ranchmans Ditch water is carried out to the Mall area and used for irrigation in that area. Consequently, it is important that contaminants such as petroleum products, solvents, grass clippings, brush, etc. not be introduced into the storm drain system.

Robert S. Coburn P.E.

Q.E.D.
SURVEYING SYSTEMS
P.O. Box 186 Palisade, CO 81526
464-7568 241-2370 243-0977

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT

JUN 21 1990

6/21/90

DESCRIPTIONS FOR VACATIONS OF A PORTION OF HORIZON PLACE & NORTH BLUFF DRIVE

1. A part of Horizon Place

A parcel of land situated in the SE1/4 SW1/4 Section 2, Township 1 South, Range 1 West, of the Ute Meridian being a part of Horizon Place as dedicated on the plat of Mesa View Retirement Residence, recorded in Book 13 Page 334 of the Mesa County Clerk and Recorders Office, being described as follows:

Beginning at a point on the West line of Lot 1 Mesa View Retirement Residence as recorded in Book 13 Page 334 of the Mesa County Clerk and Recorders Office being 700.02 feet S70°16'44"W of the NE corner of the SE1/4 SW1/4 Section 2, T1S, R1W, U.M. and considering the North line of the SE1/4 SW1/4 Section 2, T1S, R1W, U.M. to bear N89°56'38"E and all bearings contained herein to be relative thereto; thence N00°02'22"W 60.61 feet; thence 216.62 feet along the arc of a curve to the left with a radius of 459.37 feet and whose chord bears N73°44'55"E 214.62 feet; thence S29°45'35"E 2.50 feet to the point of curvature for the South right-of-way line for Horizon Place as shown on the plat of Mesa View Retirement Residence; thence S69°14'21"W 238.73 feet along said Southerly right-of-way to the point of beginning, containing 4,720 sq. ft. as described.

2. North Bluff Drive

A parcel of land situated in the SW1/4 SW1/4 Section 2, Township 1 South, Range 1 West of the Ute Meridian being known as North Bluff Drive and being described as follows:

Beginning at a point of the West line of Section 2, T1S, R1W, U.M. being 512.47 feet N00°01'15"W of the SW corner of Section 2, T1S, R1W, U.M. and considering the West line of the SW1/4 SW1/4 of Section 2, T1S, R1W, U.M. to bear N00°01'15"W and all bearings contained herein to be relative thereto; thence N00°01'15"W 43.30 feet to the North line of North Bluff Drive; thence N67°28'45"E 261.97 feet; thence N89°58'46"E 104.52 feet to the Southerly right-of-way line for North Bluff Drive; thence S67°28'45"W 375.12 feet to the point of beginning, containing 12,742 sq. ft. as described; EXCLUDING THEREFROM the right-of-way for North First Street across the West end of the above described parcel.

JUN 1 1990

#26 90

Original
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Real Estate
BROKERS

P.O. Box 4546, Grand Junction, Colorado 81502
Phone: (303) 243-9622

May 31, 1990

Planning Department
City of Grand Junction
559 White Ave. , Room 60
Grand Junction, Colorado 81501

Sirs:

To assist you in your review of the Final Plat and Plan for the Planned Development on the 28 acres known as Filing Four of Northridge Estates the following Project Narrative/Impact Statement is provided:

LOCATION, ADJACENT LAND USE & ZONING

The general location of the subject 28 acres is between North First Street & North Seventh Street, North of Patterson Road, between the Independent Ranchman's Ditch and the Grand Valley Canal.

	Land Use	Zoning
East of Subject	Mesa View Retirement Res. 104 Retirement Units	PR-28
North & West of Subject	Northridge Estates Filings 1, 2, & 3; existing single family residential	RSF-4
	Northacres Sub., existing single family residential	R1-A (County)
West of Subject	Vacant Land North First Street	PB&R (County)
South of Subject	Willowbrook Sub., existing single family residential	RSF-5
	Vacant Land Independent Ranchman's Ditch	RSF-4
Subject Property	Approximately 10 acres (105 Unit Retirement Res.) (20 Retirement Garden Units) (2 Single Family Lots)	PR-12.7
	Approximately 18 acres (34 single family lots)	PR-4

REALTOR® MLS

THE PROPOSED DEVELOPMENT

The Planned Development for the subject 28 acres provides for 41 lots and open space for the following uses, which uses, type of construction, specifications for construction etc. are governed by the enclosed, "Declaration of Covenants, Conditions & Restrictions".

(1) Lot 1---A 105 Unit Retirement Facility and 12 Retirement Garden Units for the elderly. The units are designed for those who are still ambulatroy, but in need of some support. Private rooms afford the advantage of independent living while the services included provide support, security and activities. The private suites include studio, one and two bedroom units. Each unit is similar to an apartment except a kitchen is not included.

Services include three prepared meals daily, housekeeping, laundering, private bus transportation and various activities. Staff are "in house" 24 hours a day. The monthly rental includes the private room, and all services and utilities.

Typically residents will be a single person in their late 70's or 80's. Approximately 10% of the rooms will be rented by couples, fewer than 25% of the residents will drive their own cars.

The building construction will be wood frame with stucco and wood siding.

The building interior design has common areas for a variety of uses. There is a common dining room and kitchen for shared meals. There will be a multi-purpose room, beauty shop, crafts room, TV room, lounges and exercise room. The circulation is organized around a central atrium.

Each room is connected to the manager with both emergency pull cords and voice communication. The building will be fully fire sprinkled.

The site is to be extensively landscaped. Useable outdoor spaces include extensive lawn and a partially covered patio off the craft and exercise rooms. There are paths which connect all exists from the building to provide walking areas for the residents.

Parking is provided for 70 cars as shown on the Site Plan.

The proposed Retirement Residence and detached Retirement Garden Units are a sister facility to the existing Mesa View Retirement Residence at 601 Horizon Place.

(2) Lots 9 & 10---Two four unit Retirement Garden Units for the elderly, with landscaping and parking for 8 cars.

(3) Lot 19----Is to be purchased by the adjoining landowner "Jones" to the North, with the same being added to Mr. Jones existing parcel (Tax No. 2945-023-00-048). Upon completion of Rose Terrace Mr. Jones will vacate his deeded acces to the south from Kingswood Drive, and will access from Rose Terrace.

(4) Lot 2---Is to be purchased by the adjoining landowner "Rugguri", with the same being added to his parcel (Lot 17, Block 2 of Northridge Estates Filing 3) with the conveyance containing a provision that the same is not a buildable parcel.

(5) The remaining 36 lots are to be developed as single family home sites, with the same encumbered with the building restrictions, as contained in the "Declaration of Covenants, Conditions & Restrictions" previousley referenced and enclosed herewith.

Re-cap of Platted Lots

Total Platted Lots	41
Lots conveyed to adjoining owners	2
Sub Total	39
Retirement Lots (1, 9 & 10)	3
Single Family Lots	36

Project Density

Retirement Units (Lots 1, 9 & 10)	125
Single Family Lots (Lots 11 & 41)	2
Total Units on Approximately 10 acres	127

127 Units on 10 gross acres equals 12.7 Units per acre.
34 single family lots on 18 gross acres equals 1.88 units per acre.
Average/Mean Density 161 Units on 28 gross acres equals 5.75 units per acre.

PROPERTY LINE ADJUSTMENTS

(1) Tracts "A thru H"----Will be conveyed to the respective adjoining landowner in the Willowbrook Subdivision, with provisions in the conveyance that the same are not buildable parcels.

(2) Tract "I"---Will be conveyed to the adjoining landowner to the North "Filner", with the conveyance containing a provision that the same is not a buildable parcel.

*****NOTE*****

Prior to the conveyance of lots to adjoining property owners and tracts for adjustment of boundary lines the "Declaration of Covenants, Conditions and Restrictions" will be placed of record.

OPEN SPACE

The open space areas at the intersection of North First Street & Patterson Road, the area between Lot 1 & 2 & the area adjacent to the Bus Turn-Around will be improved with landscaping as shown on the Final Plan. The same will be maintained by the Homeowners Association for Filing Four of Northridge Estates. The open space between Horizon Place and the Grand Valley Canal is within the Grand Valley ROW , no landscaping will be provided in this area.

BUS TURN-AROUND

The school bus turn-around in the southwest portion of the plan will be improved as shown on the final plan to include signage, a bench, trash recptacle and fencing along the Independent Ranchman's Ditch ROW. The Bus Turn-Around will be a part of the street dedication to the City of Grand Junction.

COVENANTS

See the enclosed "Declaration of Conditions, and Restrictions for Northridge Estates Filing No. 4.

DEVELOPMENT SCHEDULE

The Planned Development for the 28 acres will be platted as one filing, however, two phases of construction are scheduled.

Phase One (To be completed by December 1991)

Improvements to be completed during Phase One include the following:

Construction of the Retirement Residence, most landscaping and parking areas.
Utility extensions along existing Northridge Drive & Kingswood Drive.
Curb, gutter and sidewalk along existing Northridge Drive & Kingswood Drive.
Completion of the School Bus Turn-Around.
Utility extensions in the extension of Horizon Place and Horizon Lane.
Roadway extensions of Horizon Place & Horizon Lane, including curb, gutter and sidewalk.

Phase Two (To be completed by December 1992)

Improvements to be completed during Pahse Two include the following:

Construction of the Retirement Garden Units on Lot 1, 8 & 9, completion of landscaping and parking areas.
Complete utility extensions (Including looping of City Water Lines)
Complete utility extensions in Rose Terrace, and roadway extension of Rose Terrace, complete with curb, gutter and sidewalk.
Complete landscaping of Open Space Areas.

SPECIAL CONSIDERATIONS

The "Jones Irrigation Lines and Easements" along the South boundary of the Gormley & Filner properties and along the South and East boundaries of the Grosse property shall be relocated and vacated by Jones. The irrigation lines shall be relocated by Jones in the easement provided on the Final Plat.

The retaining wall along the South and East boundaries of the Grosse property shall be rebuilt by the petitioner, with the Petitioner providing a drain for the Grosse's swimming pool to the sewer line in Horizon Place.

Additional screening in the form of trees will be planted between the parking area North of the Retirement Residence and the proposed street Horizon Place.

Petitioner will construct a six foot, wood privacy fence, (finished side facing North) from the SE corner of the Gormley Property along the South boundary of the Gormley Property and the South Boundary of Tract "I" to the East boundary of the Jones Property.

All outdoor lighting in the parking areas and walking areas will be installed such that it will not directly shine on area residents.

Jones is to receive a new headgate and electrical source for irrigation purposes.

Test will be preformed to determine the amount of leeching and seeping from the Grand Valley Canal with an adequate drain line provided to direct the same to the storm drain system in Horizon Place.

SCREEINING/BUFFERING

Screeining and buffering of the Retirement Area is accomplished by site design, site size, location of improvements, elevation of improvements, designated buffer areas, landscape design and continuity of use between existing single family homes and the Retirement Area as follows:

The triangular area between the SE corner of the Jones Property and the SE corner of the Grosse Propertys is designated as a "Buffer Area". The 1.18 acre parcel is designated for landscaping and utility easements with only those improvements necessary to maintain such landscaping.

The site size is such that the 105 Unit Retirement Residence (building footprint) occupys less thant 1% of the area zoned at 12.7 units per acre, thus leaving approximately 7 acres of open landscaped area out of a total 10 acre area.

The improvements are located on the site as such to preserve a cone of vision for the existing residences to the North and West of the proposed Retirement Facility.

The parking area North and West of the Retirement Residence is at a lower elevation than the existing residences to the North and West, providing a buffer for that parking area. Covered parking in the North parking area acts as a buffer for existing residences to the North. Landscaping is designed and located to act as additional screening of the parking areas.

The elevation of the proposed Retirement Residence is such that the same will not preclude or block views of adjoining residents. The Retirement Garden Units are single story elevations.

Continuity of the Single Family use on both sides of Rose Terrace provides a buffer between the proposed Retirement Residence and the existing Single Family dwellings.

Perimiter landscaping provides additional screeining and buffering between the existing single family homes to the North and West of the proposed Retirement Facility.

As previousely mentioned all outdoor lighting will be located as such to not shine directly on adjoining existing residents.

The Retirement Building design in an "S" configuration is such that the building acts as a buffer, for the activity areas of the entry and dining room, from the existing single family areas.

VACATION OF ROW'S & EASEMENTS

The following easements and ROW'S are to be vacated by seperate deed simultaneous with the approval of the final plat and plan for the subject 28 acres.

(1) Vacation of North Bluff Drive (adequate utility easements to remain)
(2) Vacation of that portion of Horizon Place previousely dedicated on the Mesa View Property at 601 Horizon Place.
(3) Those unused utility easements along the South Boundary of the Grosse, Gormley and Filner Properties.

COMPATIBILITY WITH SURROUNDING USES

The proposed uses on the 28 acre Planned Development are residential. Those uses include 125 Units of Retirement Housing and 36 Single Family Home Sites. The adjoining use to the east is for Retirement Housing at a density of 28 units per acre. The balance of the 28 acre development is for single family home sites, encumbered with building restrictions compatible with the adjoining single family areas, at a density of 1.88 units per acre. Adjoining single family density ranges from 4 to 5 units per acre. The entire project density is 5.75 units per acre, with the Retirement density at 12.7 units per acre.

CONFORMANCE WITH THE PRELIMINARY PLAT AND PLAN

The proposed uses for the Planned Development of Retirement Housing and Single Family, are both allowed uses in a Planned Residential Zone. The density proposed in the Final Plat and Plan are in conformance with the existing approved zoning on the subject property, of PR-12.7 units per acre and PR-4 units per acre. The final Plat & Plan and accompaning documents (including street configuration, requested uses, development schedule, commitment to adjoining landowners, building locations etc.) are reflective of the preliminary Plat & Plan approved by the City of Grand Junction.

If you have questions or need additional information, please do not hesitate to contact us.

Sincerely,

Pat Edwards
For the Petitioner
Colson & Colson Construction Co.

ASSOCIATED
Real Estate
BROKERS

P.O. Box 4546, Grand Junction, Colorado 81502
Phone: (303) 243-9622

May 31, 1990

Planning Department
City of Grand Junction
559 White Avenue, Room 60
Grand Junction, Colorado 81501

RE: Final Plat and Plan (Northridge Estates Filing No. 4) Your file #48-89

Sirs:

The following agreements are submitted unsigned by the Petitioner Colson & Colson Construction Co. pending changes & modifications identified during the review process of the Final Plat & Plan:

(1) Declaration of Covenants, Conditions & Restrictions
(2) Improvements Escrow Agreement
(3) Improvements Agreement

The above documents with modifications, if any, will be executed by the Petitioner prior to The Planning Commission meeting relative to the referenced Plat & Plan.

Sincerely,

Pat Edwards
For The Petitioner, Colson & Colson Construction Co.

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NELSON, HOSKIN & FARINA
Professional Corporation
ATTORNEYS AT LAW

July 3, 1990

C. Joseph Croker, P.C.
610 Valley Federal Plaza
225 North Fifth Street
Grand Junction, Colorado 81501

Re: Northridge Estates Subdivision--Filing No. 4

Dear Joe:

The purpose of this letter is to respond to your letters of May 31, 1990 and June 5, 1990 concerning the proposed Declaration of Covenants, Conditions and Restrictions for Northridge Estates Subidivison, Filing No. 4, and the Improvements Escrow Agreement. My comments are as follows:

1. Declaration of Covenants, Conditions and Restrictions. I am enclosing your draft of the Declaration showing my red-penned changes. You will probably want to call to go over these changes with me in view of the fact that they may be difficult to read. Additionally, I note under paragraph A1 the omission of the sentence that begins, "For the purpose of this paragraph ..." in paragraph 1A of my draft. We would like that sentence added back in. Further, under paragraph B3 entitled "Street Design," a sentence was ommitted which we would like to have restored. Subject to these comments, your draft of the Declaration is acceptable.

2. Improvements Escrow Agreement. The City of Grand Junction Improvements Agreement for phase I and Phase II should be attached to the Improvements Escrow Agreement as Exhibits A and B, respectively. We suggest under paragraph 2B that the letter of credit be provided by a "financial institution or lender," which is "approved by the City of Grand Junction." Similarly, in paragraph 2C, we suggest that if a set-aside letter from a bank or institution is supplied, that it be by a bank or institution "approved by the City of Grand Junction." I note in paragraph 3 in

200 Grand Avenue, Suite 400, Post Office Box 40, Grand Junction, Colorado 81502 (303) 242-4903 FAX: (303) 241-3760

Gregory K. Hoskin
Terrance Farina
Frederick G. Aldrich
Gregg K. Kampf
Edward A. Lipton
Curtis G. Taylor
Theodore Allegra
David A. Younger
David M. Scanga
David A. Price
Michael J. Russell
Susan R. Lundberg
James E. Majors
Of Counsel:
William H. Nelson

the second line the reference to "Phase 1." That should probably be Phase II. Similar to paragraph 2, we suggest under paragraph 3B and C that the bank or lending institution be approved by the City of Grand Junction. Finally, as part of paragraph 3, we would like a statement to the effect that until such time as the conditions set forth in subparagraphs 3A, B or C are satisfied, the City of Grand Junction shall not issue any building permits with respect to lots within Phase II. Subject to these comments, the Improvements Escrow Agreement is acceptable.

As you may know, a meeting is set for the evening of July 5, 1990 at 7:00 to go over the various matters you, Pat Edwards and I discussed concerning changes to the final plat and plan. Hopefully you will be there to hear the comments of the neighborhood.

Very truly yours,

Frederick G. Aldrich

FGA:jhc

pc: Pat Edwards (w/encl.)
Terry Newton (w/encl.)

ASSOCIATED
Real Estate
BROKERS

P.O. Box 4546, Grand Junction, Colorado 81502
Phone: (303) 243-9622

July 6, 1990

Karl Metzner Director of Planning
City of Grand Junction
559 White Ave., Room 60
Grand Junction, Colorado 81501

RE: Review Agency comments Northridge Estates Filing Four--Final Plat & Plan

Mr. Metzner,

In response to the review agency comments the following are submitted:

(1) U.S. West--Mr. Peach 244-4964 will be contacted prior to ordering telephone facilities.

(2) Mesa County School District #51--The turning radiuses provided by the district are incorporated in the plan for the bus turn around. The plan has been revised incorporating the suggested "no parking" and the inside stripping.

(3) City Engineer--
- (a) The requested street & sidewalk profiles provided 7/6/90.
- (b) Right of way & easement dimensions requested included on the road and utility plan.
- (c) Requested curve data incorporated in the revisions.
- (d) Street lighting plan (showing existing and proposed street lights) submitted herewith. The same was prepared by Dale (P/S) Clawson and was approved by the Northridge Homeowners at a meeting on 7/5/90. The locations of the proposed street lights will be incorporated on the utility composite.
- (e) The soils lab (Linclon Devore) states that there is enough sand in the upper soil strata to give a good R value (soil support value). They note that the average for the valley in R=15. However, soil samples for the lab test were all from the southern and central part of the development and did not include samples from the north section where more clay exists. As road grade excavation is conducted additional testing will be accomplished as required and pavement design for specific areas will be reevaluated.

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(f) The pavement design calculations have been recalculated using the higher traffic equivalence factors. The minimum required standards exceed the design factors so no changes in pavement design are required.

(g) Pavement width for Rose Terrace is increased from 26 feet to 32 feet. Radius to the edge of the pavement in the cul-de-sac at the end of Rose Terrace increased from 38 feet to 41 feet. Right-of-way line in the Cul-de-sac remains at 47½ feet. Per discussions with City Engineer.

(h) Per discussions with City Engineer dirve over curb allowed along frontage of Lots 3,4,5,6,7 & 8. Balance of Horizon Place to be barrier curb.

(i) The irrigation system is a pressurized system and will provide irrigation water to the retirement center, all residential lots and landscaped open space. Additional information (line sizes) have been added to the drawings. Detail design and working drawings will be accomplished by the installation contractor subject to engineers approval.

(j) Details for existing Northridge Irrigation system submitted herewith. 3" water valve & drain to be increased to 10" Items submitted herewith approved by Northridge on 7/5/90 subject to increase in size referenced above.

(k) Updated drainage plans, hydrologic calculations etc., submitted to City Engineer 7/6/90. Drain pipe type changed from C.S.P. to concrete. All drainage facilities sized for a 10 year storm.
Grading and drainage plans for parking areas submitted herewith.
Proposed pavement section for parking areas submitted herewith.

City Parks & Recreation

Total Units calculated as follows:

Total Platted lots	41		
Lots conveyed to adjoining property owners	2		
Sub Total	39		
Retirement Lots (1,9 & 10)	3		
Single Family Lots			36
Retirement Units			
Lot #1			
Main Retirement Building		105	
Retirement Garden Units		12	
Lot #9			
Retirement Garden Units		4	
Lot #10			
Retirement Garden Units		4	
Total Retirement Units			125
Total Units			161

Public Service Co.

Electric--Requested easements to be provided on final plat and plan.

City Utilities Engineer

(1) Sewer & utility easement across Lot 24, re-defined, including dimensions from property line.
(2) Existing & proposed water and sewer lines to be labled on the utility composite.
(3) Eight fire hydrants included on revised utility composite with location of the same coordinated with the (Bennett) at the Fire Department. Locations more clearly indicated on the utility composite.
(4) Additional information relative to irrigation system (line sizes etc.) added to drawings. Detail design & working drawings will be accomplished by installation contractor subject to engineer approval.
(5) Compaction standards of 90% standard Proctor density included on sewer and water plan.
(6) Water & sewer lateral markings of service lateral changed to conform to City specs. Minimum cover of 48" to be complied with unless prior approval from the City is obtained.
(7) Water valve locations to be shown on plan in conformance with 800' spacing.
(8) Proposed & existing sewer & water lines to be labled on the plan.
(9) Sewer lateral reduced to 6" per discussion with City Utility Engnieer. No manhole required.
(10) Service & Manhole detail per city Specs. Per discussion with City Engineer.
(11) Minimum proposed water mains to be 8 inch.

Northgidge Homewoners Association

Requested provisions for Northridge irrigation system submitted herewith. Same approved at a meeting with the association on 7/5/90 subject to size increase for draining the syphon from 3" to 10".

City Property Agent

(1) R.O.W. for 1st Street & Patterson Road dimensioned & labled.
(2) Requested R.O.W.'s dimensions for Northridge Drive, Horizon Place, Horizon Lane, Rose Terrace & Street Stub out to be shown.
(3) Easement for Independent Ranchman's ditch provided across the open space area at 1st and Patterson Road.
(4) Dimensions & labeling of the G.V.I.C. R.O.W. to be included on final plat.
(5) Pedestrain easement to be provided.
(6) West lot line of lot #30 to be dimensioned.
(7) Required easements in Bk. 1692 at pages 932 thru 936 to be included on final plat.
(8) Easement across the open space at 1st & Patterson for the sewer trunk line to be provided on the final plat.
(9) Easement across tract "A" for sewer to be provided.
(10) Discrepancies relative to descriptions are corrected as noted.

City Attorney

Final Escrow agreement submitted to City Attorney 7/6/90.

City Fire Department

Location of Hydrants & Water Main size coordinated with (Bennett) at the Fire Department.
Complete set of working drawings to be provided to the Fire Department including sprinkling system.

City Planning Department

(1) Pedistrain easement to be provided between Rose Terrace and Kingswood Drive.

(2) Total Units 161 see break-out of type in Parks & Recreation response.

(3) The area between the south boundary of lots 31 thru 41 and the adjusted south boundary of the subject property (centerline of Independent Ranchman's ditch) shall be designated as R.O.W. for the Ranchman's ditch, subject to existing and proposed uitlity easements.
(4) As stated in the project narrative on page 3. The landscaped open space areas will be maintained by the Homeowners Association for Filing Four. The homeowners association for Filing Four consist of all lot owners in the filing excepting Lots 2 & 19 conveyed to adjoining property owners and Tracts A thru I conveyed for property line adjustments. The open space area between proposed Horizon Place and the water's edge of the Grand Valley Canal is within the Canal easement and therefore will not be landscaped or maintained by the new association.
(5) Flood plain information was not required as part of the final submital items. The 500 year designated floodplain is not a regulated area.
(6) The conformance requirement per section 6-8-2.A.1.b of the Zoning and Development Code will be included on the final Plat.
(7) The requested R.O.W. widths to be included on the final plat.
(8) Open Space to be relabled "Common Open Space".
(9) P.O.B. is at the SW Corner and is labled on the final Plat. The same is marked with a Mesa County Brass Cap in a Monument Box.
(10) Tic marks to be shown at PC's & PT's on Final Plat.
(11) Dimensions of all lots (including irrigular shaped lots) included on Final Plat.
(12) Lables & Width for easement on lot 30 included on final Plat.
(13) The open Space along the Grand Valley Canal falls within their prescriptive easement.
(14) Elevation benchmark to be provided at P.O.B. in the SW¼ of the subject property.
(15) All easements to be to scale.

The above responses were completed in a meeting between Q.E.D Surveying, Robert Coburn Registered Professional Engineer & Pat Edwards representive of the Petitioner Colson & Colson Construction Co.

If you have questions or need additional information do not hesitate to contact me.

Sincerely,

Pat Edwards
For the Petitioner Colson & Colson Construction Co.

July 6, 1990

Grand Junction Planning Commission
250 North Fifth Street
Grand Junction Colorado 81501

Dear Planning Commissioners:

The undersigned homeowners of Northridge Subdivision met with Mr. Pat Edwards and legal council of Colson and Colson on Thursday, July 5, and reviewed the Final Plan and Plat and narrative summary of Mesa View II (Item 26-90 on the July 10 Public Hearing). We offer the following regarding the final plan, as submitted, as well as other desired changes proposed to us during the meeting, which we understand are not currently submitted.

1) We oppose the shortening of Kingswood Drive and the elimination of the two cul-de-sacs (Kings Court and Rose Court) that previously extended south of Kingswood Drive, and their replacement by flag lot access. The proposed flag lot accesses are between 90' and 100' long. Flag lots are not characteristic of the adjoining subdivision, there is no provision for their improvement in the adopted development covenants and restrictions, and they are a deviation from the last approved plan and representations made to Planning Commission, City Council, and the public.

2) We oppose the change in rear yard setbacks, from 30 feet to 20 feet, for lots 5, 6, an 7. In our concerns expressed throughout this approval/public hearing process, we were assured by the petitioner that the proposed single family lots could be developed compatibly, and within the adopted covenants and restrictions. Our specific concerns identified these very lots, in our presentations to Planning Commission on October 3, 1989 and to City Council on October 18, 1989. As part of our list of technical concerns, we expressed the following, verbally, and in writing :

> "I would guess that technical concerns fall under this evaluation criteria: Of the 28 acres being approved for a Planned Development, only 10 acres house the retirement residence. There are about 37 single family homesites, many of which have extremely irregular lots and are going to be difficult to develop within the guidelines of the Northridge Homeowner's Covenants. I believe several of the lots also have questionable ultimate marketability given their proximity to

major thoroughfares, the main retirement structure and adjoining garden suites. Additionally, there appear to be some problems with the proposed landscaping as opined by the Grand Valley Irrigation Co. and City Engineer, there are no specific proposals for all areas designated open space and there is no existing or proposed irrigation shown on the plan. I'm concerned about the lots in the Northern most neck of the project, and question their ultimate development as planned because of surface water and unstable soil on lots 6, 7, & 8 as well as their irregular shape, canal Right of Ways and setbacks. The single family deficiencies indicate to me that there is a good chance the single family homesites may ultimately be rearranged or never be developed, in which case there will be future developer pressure, by whoever that ends up being, to allow for a modified use or plan variance. Additionally, any future proposals would then have benefit of the area already being transitional, of the only development completed being high density, and the single family area being unworkable."

In response to these and other technical concerns raised, we were promised by the petitioner, and further guaranteed as a condition to approval by City Council (excerpted from the City Council Resolution) that:

"7. Development of the balance of the property (approximately 18 acres) as detached single family dwelling units to a standard and quality equivalent to the existing Northridge subdivision;"

and

"8. Any lots which are not buildable due to drainage or groundwater or similar technical constraints shall be dedicated permanently to open space and maintained in perpetuity as open space;"

It now appears that Colson and Colson's cure to one of these technical constraints is a variance to the setback proposal, a variance we find unacceptable.

It is my understanding, and I quote from the City Council Resolution:

"Conditions. The several promises, some in writing and some made at the hearings before the Planning Commission and this Council, are integral parts of this approval, i.e., each and every promise made by the agent of the developer is made a condition of this rezoning approval and of the preliminary plan."

In Colson and Colson's representations before Planning Commission and City Council, they submitted " Declarant may designate utility easements upon the final development plan and plat, and may make insignificant modifications necessary to meet utility and/or City Engineering specifications or requirements so long as such will not change or modify the overall design, location or characteristics of the improvements and design shown on Exhibit C."

These two changes identified above we believe to be integral parts of the approval and therefore a variance from the conditions of the rezone approval and acceptance of the preliminary plan. It was emphasized by Mr. Mike Sutherland, during one of the early Planning Commission meetings, held December 13, 1988, that any changes to the planned development, basically allowed the petitioner to resubmit the plan and re-seek approval, beginning with a revised preliminary plan. If the plan has been altered, as it has, and conditions of the rezone approval violated, as they have, we would ask that they either be disallowed, or the petitioner start his approval and rezone request over again.

In addition to these concerns regarding the submitted final plan and plat, Mr. Edwards proposed additional changes, which we understand are not currently incorporated in the final plan, but may become requested revisions at a future time.

1) Mr. Edwards requested our input regarding relaxing the Declaration of Covenants, Conditions and Restrictions to allow for 1400 square foot, high quality single family retirement homes on all or portions of Rose Terrace. He suggested these would be marketed to more independent retired couples, and perhaps even restricted to this age group, if legally allowable. During our meeting, Mr. Crocker, council for Colson & Colson, referenced their marketing concern for the single family units that directly adjoined the retirement residence, unless some accommodation like this was allowed.

In anticipation of this issue becoming a requested revision at some future time, we would like to pre-register our total and complete disapproval of this concept. We have, for over two years, heard the virtues of placing the retirement residence amongst a single family residential neighborhood. How it will enhance the neighborhood, compliment the residences, and how anyone could question this enhancement factor was completely contrary to their actual operating

experiences in 12 other locations around the nation. Colson and Colson was so committed to the fact that this retirement residence was not going to detract from the existing, as well as proposed, neighborhood, that they were taking the economic and marketing investment in the additional 18 acres that were to be developed single family, just like the existing Northridge subdivision. Mr. Edwards testified during the October 1989 Planning Commission meeting, and from these minutes I quote:

> "The opposition has expressed concern on whether or not single family homes will be developed, Mr. Edwards continued, those lots are of adequate size, comparable to those in Northridge subdivision, would be under the same covenants and building restrictions, and would be very marketable to the pre-retirement age group."

Two bedroom patio homes of 1400 square feet, limited in sale to retired couples, is a substantial deviation from the plans we all heard espoused over the last two years.

2) Mr. Edwards expressed a desire to revise the Improvements Guarantee Agreement, to eliminate the cash escrow requirement for Phase II (the above mentioned Rose Terrace). To instead, work from a building permit hold back arrangement. After hearing the expressed concerns about the single family development in this area, we do not see any possible positive outcome from modifying the Improvement Guarantee. At this point we would much prefer to see the improvements happen, as represented, in the time frames proposed, and eliminate the uncertainty surrounding this development and restore some much needed stability to the impacted adjoining homeowners. We believe adherence to the existing escrow agreement an important component to this end.

Thank you for your consideration in these items and especially for your previous diligence and support.

Sincerely,

Russell Doran
Frederick Aldrich
Terry Newton
Timothy Mannion
Milton Henry
Lucy Henry

Daniel Baldwin

cc:
Mr. Karl Metzner
Director of Planning
Grand Junction Planning Department

Mr. Pat Edwards
Associated Real Estate Brokers
P.O. Box 4546
Grand Junction, Colorado 81502

(NRTRDG09.DOC)

ASSOCIATED
Real Estate
BROKERS

P.O. Box 4546, Grand Junction, Colorado 81502
Phone: (303) 243-9622

July 10, 1990

Karl Metzner
Director of Planning
City of Grand Junction
559 White Ave., Room 60
Grand Junction, Colorado 81501

RE: Grand Valley Irrigation Company Review Agency Comments, relative to Filing Four Northridge Estates (Comments recieved July 10, 1990 10:30 a.m.)

Mr. Metzner,

The following response to the review comments submitted by Grand Valley Irrigation are submitted, with the same hand delivered to Grand Valley Irrigation together with the requested items:

(1) The conveyance of Tracts A thru H are conveyed for the purpose of deeding the area south of the Ranchman's ditch to the landowners in Willowbrook Subdivision. The conveyance will contain a provision that the same are not buildable parcels, and that the same are subject to existing and proposed easements, and rights-of-way. Prior to the conveyance the "Declaration of Covenants, Conditons & Restrictions will be placed of record (meaning the property will be subject to the restrictions contained therein) which restrictions cover fencing of the ditch right of way, the dumping of debris on the right of way, watering the right of way, and the dumping or discharging of contaminants into the drainage areas feeding the Independent Ranchman's ditch.

(2) Fencing along the bus turn around will not be on the Independent Ranchman's right of way, and will not by height or location preclude access to the right of way or normal maintenance of the ditch.

(3) Copy of the Covenants for Filing Four were included in the orgingal package of information to the Co. A duplicate copy of the same delivered today.

(4) The open space area at First & Patterson will neither be fenced or piped, the landscaping for that area will not interfer with maintenance or access to the ditch right of way.

REALTOR® MLS EQUAL HOUSING OPPORTUNITY

(5) Paragraph 2.k. of the Declaration of Covenants, Conditons & Restrictions prohibit fencing of the Canal Right of Way.

(6) The sewer line along the Independent Ranchman's ditch is bedded in mill tailings, with the same to be removed by UNC.

(7) Irrigation plan included in orginal submital, duplicate copy delivered to the irrigation Co. today. Point of delivery (headgate locations have been and will be discussed with the Irrigation Company.

(8) Declaration of Covenants, Conditions and Restrictions preclude the dumping of contaminants into the drainage system as contained in paragraph 2. m. on page 7.

(9) Previous comments were reviewed and incorporated into the Plan, Plat, and Declarations. Other items such as landscaping north of proposed Horizon Place in the Canal right of way are covered in the narrative of page 5 under special considerations. Seeping or leaching from the canal is covered in the narrative under Special Considerations on page 5.

If you have additional questions do not hesitate to call.

Sincerely,

Pat Edwards For the Petitioner
Colson & Colson Construction Co.

REVIEW SHEET SUMMARY

FILE NO. #26-90 **TITLE HEADING:** Northridge Estates Filing #4

ACTIVITY: Final Plan and Plat, Vacation of R.O.W.'s & Easement

PETITIONER: Colson & Colson Construction Co.

REPRESENTATIVE: Pat Edwards

LOCATION: Northeast 1st Street & Patterson Road

PHASE: Final **ACRES:** 28.12

PETITIONER'S ADDRESS: PO Box 14111, Salem, Oregon 97309

ENGINEER:

NOTE: WRITTEN RESPONSE BY THE PETITIONER TO THE REVIEW COMMENTS IS REQUIRED A MINIMUM OF 48 HOURS PRIOR TO THE FIRST SCHEDULED PUBLIC HEARING.

06/11/90 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.

06/15/90 MESA COUNTY SCHOOL DISTRICT #51

The District has provided turning radiuses for the bus loop to the developer. The bus loop will need to be properly paint striped and signs will need to be installed. It is suggested that the inside circle of the loop be cross-hatched to indicate "no-parking". It is further recommended that the design of the inside area be revised.

See attached copy "A".

06/13/90 CITY ENGINEER

I need street sidewalk profiles and 50' cross-sections to see how the streets match existing ground elevations.

Show street right-of-way and easement dimensions on all road and utility plans.

Show street curve data and beginning and ending locations of all curves. Where curve radii are indicated on the plans, show what they are for.

An approved street light will be required at each street intersection, at the neck of each cul-de-sac and at maximum intervals of 250' along all streets. Show the location of each street light on the utilities composite and on the road plans.

06/13/90 CITY ENGINEER continued

Rose Terrace does not meet city criteria for a court because it is over 600 feet in length and it has a short radius 90 degree curve. Therefore, the minimum pavement width for Rose Terrace shall be 32 feet. The minimum radius to the edge of pavement in the cul-de-sac at the end of Rose Terrace shall be 40'. The radius to the right-of-way line in the cul-de-sac may be reduced to 46.5'.

Horizon Place will be considered a Residential Collector Street on which drive over curbs will not be approved. Use vertical curb with monolithic gutter and sidewalk (same as on Northridge Drive).

Is there an irrigation system proposed for the residential lots? If not, there should be. Various irrigation lines shown on the utility composite are not labeled existing or proposed, gravity or pressure. Very poor detail shown for all irrigation lines.

What will be done with the existing irrigation lines which serve existing Northridge Subdivision? No detail or facilities shown at three locations where these lines are flushed (at or near proposed lots 2, 26, and 27).

The storm drainage report is incomplete.

No hydrologic or hydraulic calculations or hydrographs have been submitted.

"Figure 1" is missing.

No provisions have been made for detention of runoff in excess of historic rates. No outlet or facilities shown for runoff from Cloverdale Court. Is the pond on the retirement center site designed for retention or detention? How were the pond and outlet pipe sized? Due to corrosive soils, corrugated steel pipe (C.S.P.) is not allowed within any drainage systems in the city. See City Specifications for types of pipe which can be used.

All drainage facilities shall be sized for historic (undeveloped) flow rates from a 10 year storm. Detention volumes shall be determined from triangular hydrographs developed using the Bureau of Reclamation or S.C.S. method (see procedure attached "B" & "C").

Detention basins shall be sized to contain the excess runoff created by the development from a 10 year storm.

What is the grading and drainage plan for the proposed parking lots at the retirement center? What is the proposed pavement section for the parking areas?

06/06/90 POLICE DEPARTMENT

No problems noted.

06/08/90 CITY PARKS & RECREATION

Using the Subdivision summary form, there are 169 units being constructed. 169 x $225.00 each = $38,025.00 open space fees due to this department.

06/15/90 CITY UTILITIES ENGINEER

1. 20' "sewer and utility" easement across Lot 24 is not adequately defined. Give dimensions showing distance from property lines, etc.

2. Utility Composite -

   (1) Existing utility lines will have to be differentiated from proposed utilities.

   (2) It doesn't appear that fire hydrant locations are shown. If they are, they will need to be shown more clearly.

   (3) Irrigation lines are not adequately shown on either the "Typical Drive Section" or the plan of the subdivision.

   (4) No compaction standards are noted or referenced on the drawing.

3. Sewer and Water Plan -

   (1) Sewer Notes: Item 3 - Minimum length of pipe is 18 feet, not 18 inches. Item 5 - This specification does not comply with City of Grand Junction specifications for marking sewer service laterals. Item 6 - Minimum cover shall be 48", unless prior approval is obtained from the City Utility Engineer.

   (2) Water Notes: Item 4 - This specification does not comply with City of Grand Junction specifications for marking water services when a meter pit is not installed. Item 6 - Minimum pipe diameter will be 8".

4. Plan -

   (1) Proposed valves on the water line need to be shown. Minimum spacing between the line valves shall not exceed 800' on any line.

   (2) Differentiate between proposed and existing lines for both water and sewer.

   (3) An 8" sewer lateral will not be allowed, unless a manhole is installed on the main line where the connection is shown at station 5+83.

   (4) No service detail or manhole detail is included on either "Utility Composite" or "Sewer and Water Plan". This will have to be submitted prior to approval.

06/18/90 NORTHRIDGE HOMEOWNER'S ASSOCIATION

The Northridge irrigation system crosses the canal and proposed filing at Lot 2. There is a 15" siphon pipe that extends from the east side of the Grand Valley Canal to the east property line of existing Northridge Subdivision. At the lowest point of the siphon, there is a tee and a valve for flushing and draining the irrigation system. The valve drains into an existing drainage ditch. There is a 4" valve and drain pipe that extends south of Kingswood Drive to a ditch which is located in Lot 26. There is a 2" valve and drain pipe on the west side of Northridge Drive which empties

06/18/90 CITY PROPERTY AGENT continued

Right-of-way dimensions need to be shown for Northridge Drive, Horizon Place, Horizon Lane, Rose Terrace, and the street stub-out at the southern end of Horizon Lane.

An easement for Independent Ranchman's Ditch should be provided across the open space area at North 1st Street and Patterson Road.

That portion of the GVIC right-of-way located within or being common with the plat boundary should be dimensioned and labeled as GVIC right-of-way.

The bus turnaround is a good idea; however, it is directly accessible only by Lots 24 thru 33. Recommend dedicating a pedestrian easement within the sewer and utility easement adjacent to Lots 22, 23, & 24.

The west line of Lot 30 needs to be dimensioned.

The existing utility easements located on the open space parcel at North 1st Street & Patterson Road, as recorded in Book 1692, Pages 932 thru 936, need to be shown.

Easement for the existing sewer trunk line across the open space parcel at 1st and Patterson needs to be shown on plat.

Easement for existing sewer across Tract A needs to be shown on plat.

The following discrepancies arise when comparing the dedication with the plat:

- Course #3 along the north line of Willowbrook Subdivision (dedication shows a northwest bearing; plat shows a northeast bearing).

- Course #4 along the north line of Willowbrook (dedication shows a southeast bearing; plat shows a northeast bearing).

- Course #1 along the Grand Valley Canal (dedication gives a distance of 312.93 feet; plat shows 312.94 feet.

- Call of N 89°56'24" W 111.25 feet on dedication conflicts with bearing on plat of S 89°56'24" W.

- In Dedication, call of N 00°01'14" W 11.00 feet is collateralized to the Southeast corner of Lot 15 - Should this be the Southwest corner of Lot 15?

- Call of N 89°56'24" W 31.23 feet on dedication conflicts with bearing on plat of S 89°56'24".

- Call of S 00°00'59" E 300.00 feet on dedication conflicts with distance on plat of 289.00 feet. I realize the difference is due to Tract I and recommend giving a distance of 300.00 feet on the west side of Lot 1 and a distance of 289.00 feet on the east.

06/19/90 CITY ATTORNEY

Escrow agreement needs to be written to incorporate the following changes:

3b. "Escrow Agent shall be provided with a bank letter of credit in an amount necessary to complete the improvements in Phase II as identified on Exhibit "B" **along with the written approval of said set-aside letter by City Attorney."**

3c. Add after "Phase II" - **"along with the written approval of said set-aside letter by City Attorney."**

4. Add after "Phase II" - **"along with the written approval of said set-aside letter by City Attorney."**

5. "Upon certification of completion of the improvements in Phase II and acceptance **evidenced** by **a writing of the City Engineer**, this escrow agreement shall ...."

06/18/90 CITY FIRE DEPARTMENT

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

Fire hydrants on a minimum of an eight inch (8") looped supply line - the location is to be discussed with a representative to ensure that amounts are correct.

The building is to be fully sprinkled and equiped with a fire alarm systems--plans for both systems are to be reviewed by our office. A fire flow survey must be completed by our office--a complete set of building plans must be submitted for this.

Adequate access must be provided for fire emergency vehicles with adequate turn-arounds provided.

The above requirements can be discussed with the representative to ensure compliance. Please call if there are any questions. George Bennett 244-1400.

06/18/90 COUNTY PLANNING

County zoned property in the area is generally R-1-A with a minimum lot size of one acre.

The entire area is within the Persigo 201 Planned Development Overlay Zone, which encourages sewer service and higher densities. The landscaping and buffering plans are well done and should enhance the site.

No objections.

06/22/90 CITY PLANNING

A pedestrian easement should be provided between Rose Terrace and Kingswood Dr. to provide convenient circulation to the other lots and bus-turn-around. Provisions for maintenance should be provided in covenants.

The total number of units and break-out of type needs to be clarified; there are conflicting numbers in the file.

Could access along the Independent Ranchman's Ditch be provided for public use?

Some type of guarantee should be provided for improvement and maintenance of private open space at 1st Street and Patterson Road and at the bus-turn-around.

A portion of Filing 4 is within the designated floodplain as shown by FEMA. A description of the floodplain boundaries as related to any of the proposed lots should be provided.

As per section 6-8-2.A.1.b of the Zoning and Development Code the plat must contain a statement that it conforms with all applicable requirements of the City Zoning and Development Code...

All widths of Right-of-Ways must be shown.

The dedicated open space, if it is to be dedicated to all lot owners should be labeled as "Common Open Space".

The POB at the NW corner is unclear.

It's unclear as to where points are set along curved lot lines.

All dimensions and areas of irregularly shaped lots shall be indicated for each lot (section 6-8-2.A.1.1).

Need a label and width for the easement shown along the west line of lot 30.

Does the canal easement continue under the open space?

At least one elevation benchmark is required (section 6-8-2.A.3.c).

Easements shown are not all to scale.

GRAND VALLEY IRRIGATION **07/03/90**

After review of the final plat of Northridge Estates filing four, we bring the following concerns to your attention:

1. We object and question the conveyance of Tract A through H to landowners of the Willowbrook Subdivision.

2. To better understand the irrigation needs and usage, we request a review of the filings irrigation plan.

3. Need to be more clear and specific on bus turn around area, i.e., fence height and type; how is bus area to be monitored.

4. Need to see copy of covenants for filing #4. How do they relate to our canals, i.e. encroachment, horizontal and vertical, trash, grass clippings, water management, drainage of Lots 31 through 41, plus open space drainage, type of fences allowed, access to back of lots.

5. Will the open space and spaces near First Street and Willowbrook Crossing be piped or fenced.

6. What kind, if any, of fencing or fence by developer or individuals along the south boundary of Lots 31 through 41. Will the fence carry a proper set back respecting canal R.O.W.

7. Sewer line on south of filing, in and next to canal Right-of-Way is HOT. How is this going to handled for safety, etc.

8. Keep in mind single point of delivery headgate for filings irrigation needs.

9. If 24" drain storm system is a source of pollution to the Independent Ranchman feeder ditch, we reserve the right to close, shut or stop that pollution from entering canal. Please note Robert Coburn, P.E., comments on the matter.

10. Not clear on how future access road (southeast area of filing) will effect Independent Ranchman Canal and adjacent properties.

11. Please review previous comments attached to new comments (Exhibit D).

If there are any questions call Grand Valley Irrigation Company office at 242-2762.

FF

ACTION SHEET

#26 90

ACRES 28

UNITS

DENSITY

FINAL

Original! DO NOT Remove From Office

FILE NUMBER 48-89

ZONE PR-4 & PR-12.7

TAX SCHEDULE # 2945-023-00-062

ACTIVITY Northridge Filing #4

PHASE FINAL PLAN & PLAT

COMMON LOCATION NE 1ST & PATTERSON

DATE SUBMITTED _____ DATE MAILED OUT _____ DATE POSTED _____

_____ DAY REVIEW PERIOD RETURN BY _____

OPEN SPACE DEDICATION (acreage) _____ OPEN SPACE FEE REQUIRED $_____ PAID RECEIPT #_____

RECORDING FEE REQUIRED $_____ PAID (Date) _____ DATE RECORDED _____

REVIEW AGENCIES

A B C X E F G H X X X L M N O P Q R S T U V W X Y Z A BB CC DD EE FF GG

- ● Planning Department
- ● City Engineer
- ○ Transportation Engineer
- ● City Parks/Recreation
- ● City Fire Department
- ● City Police Department
- ● County Planning
- ○ County Engineer
- ○ County Health
- ○ Floodplain Administration
- ○ G.J. Dept. of Energy
- ○ Walker Field
- ○ School District
- ● Irrigation G.V.
- ⊗ Drainage
- ⊗ Water (Ute, Clifton)
- ○ Sewer Dist. (FV, CGV, OM)
- ● U.S. West
- ● Public Service (2 sets)
- ○ State Highway Department
- ○ State Geological
- ○ State Health Department
- ● City Property Agent
- ● City Utilities Engineer
- ● City Attorney
- ○ Building Department
- ○ DDA
- ● GJPC (7 packets)
- ○ CIC (11 packets)
- ○ Other
- ○
- ○
- ○

TOTALS

ITEM # 26-90 (Page 1 of 1)

INITIATED BY Colson & Colson Const Co, Pat Edwards

ACTION PROPOSED Consideration of ROW & Easement Vacations ~~Final Plat and Plan.~~

PRESENTED BY Karl Metzner

COMMENTS

SEE REVIEW AGENCY SUMMARY SHEET

SUGGESTED MOTION MOVED BY _____

APPROVAL: "Mr. Chairman, on item #26-90, consideration of Final Plan & Plat for Northridge Filing 4, I move that we approve this subject to the review agency sheet comments."

DENIAL: "Mr. Chairman, on item #26-90, consideration of Final Plan & Plat for Northridge Filing 4, I move that we deny this for the following reasons (STATE REASONS)."

APPROVAL: "Mr. Chairman, on item #26-90, consideration of easement vacations for Northridge Filing 4, I move that we approve this subject to the review agency sheet comments."

DENIAL: "Mr. Chairman, on item #26-90, consideration of easement vacations for Northridge Filing 4, I move that we deny this for the following reasons (STATE REASONS)."

APPROVAL: "Mr. Chairman, on item #26-90, consideration of right-of-way vacations for Northridge Filing 4, I move that we forward this on to City Council with a recommendation of approval."

DENIAL: "Mr. Chairman, on item #26-90, consideration of right-of-way vacations for Northridge Filing 4, I move that we deny this for the following reasons (STATE REASONS)."

YES _____ NO _____ TABLE _____

development summary

File # 26-90 Name Northridge Filing 4 Date 07/10/90

PROJECT LOCATION: Northwest of 1st Street & Patterson Road

PROJECT DESCRIPTION:

Vacating North Bluff Drive and a portion of Horizon Place

REVIEW SUMMARY (Major Concerns)

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

* See explanation below

STATUS & RECOMMENDATIONS:

North Bluff Drive is a 40' unimproved right-of-way running northeasterly of 1st Street.

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

July 12, 1990

Natalie Meyer
Colorado Secretary of State
1560 Broadway, Suite 200
Attention: Elections
Denver, CO 80202

Dear Deputy Secretary:

Please find enclosed an original and a photocopy of a letter signed by John Elmer. Commissioner Elmer has written this letter for purposes of disclosing his potential conflict of interest and has given it to me to forward to you for purposes of recordation and filing.

Please also find enclosed a self-addressed stamped envelope for purposes of returning a receipted photocopy of the letter to the City Administration.

Thank you for your assistance in this matter.

Office of the City Attorney
Grand Junction, Colorado
Dan E. Wilson, City Attorney

By: _____
John P. Shaver
Assistant City Attorney

JPS:jj

Enclosure

CITY OF GRAND JUNCTION PLANNING COMMISSION
c/o Steve Love, Chairman

Fellow Planning Commission Members,

The purpose of this letter is to memorialize my disclosure of a potential conflict of interest. The potential conflict was discussed and made of record at the regular meeting of July 10, 1990 and pertains to item number 26-90.

The Petitioner on item 26-90 has indicated that they have retained services of ARIX Inc. which company I work for.

My employment does not in regular course bring me into contact with the subject property in item 26-90 nor do I have special information or relationship with the Petitioner.

I will receive no special or extraordinary benefits from ARIX or the Petitioner as a result of any decision I have made or will make as a Planning Commissioner.

Information that I may possess by virtue of my employment does not impair my judgment or create a predisposition in consideration of item 26-90.

John Elmer 7/12/90

John Elmer
Grand Junction Planning Commission

c: Planning Commission Members
Planning Department
Dan Wilson, City Attorney

City Council
City of Grand Junction
250 North 5th Street
Grand Junction, CO 81501

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT
JUL 16 1990

7-13-90

Dear Sirs,

This letter is to protest the Grand Junction Planning Commission's approval of the final plat and plan submitted by Colson & Colson Construction Co. for Filing Four of Northridge Estates Subdivision.

The Findings Concerning The Rezone Request For Northridge Filing #4 and #5, which was voted on and passed by the City Council stated "Conditions. The several promises, some in writing and some made at the hearings before the Planning Commission and this Council, are integral parts of the approval, i.e., each and every promise made by the agent of the developer is made a condition of this rezoning approval and of the preliminary plan."

One of the promises Colson & Colson made (in writing) said "For the purpose of this paragraph, "developed" shall mean and include the submittal of the final development plat and plan for single family residences to the City and the subsequent installation and construction of all streets, curbs, gutters, sidewalks, utilities and the configuration of lots. Declarant may designate utility easements upon the final development plan and plat, and may make insignificant modifications necessary to meet utility and/or City engineering specifications or requirements so long as such will not change or modify the overall design, location or characteristics of the improvements and design shown on Exhibit C."

As Colson & Colson have chosen to make substantial changes to the plat and plan which were not insignificant and were not to meet utility and/or City engineering specification or requirements they have constructively voided their conditional approval of rezoning. I would therefore ask the City Council to take whatever formal action is necessary to rescind the rezoning granted to Colson & Colson for Filing Four of Northridge Estates Subdivision.

Respectfully,

Timothy V. Mannion

Timothy V. Mannion
3038 Cloverdale Ct.
Grand Junction, Co
81506

C. JOSEPH CROKER, P.C.

ATTORNEY AT LAW

C. JOSEPH CROKER

MARNA M. LAKE

VALLEY FEDERAL PLAZA, SUITE 601
225 NORTH FIFTH STREET
GRAND JUNCTION, COLORADO 81501

Telephone: (303) 241-1616

Telecopier: (303) 241-9579

July 17, 1990

Mr. Carl Metzner, Director
Grand Junction Planning Department
City Hall
250 North Fifth Street
Grand Junction, CO 81501-2668

Re: Northridge Estates Subdivision, Filing No. Four
Planning Department Hearing: July 10, 1990, re Final Plat Approval/Protest Letter of Timothy V. Mannion

Dear Mr. Metzner:

This correspondence is sent in response to a "letter of protest" filed by Mr. Timothy V. Mannion, received by the Grand Junction Planning Department on July 16, 1990.

Our firm represents Colson & Colson Construction Co., and in this capacity, we would ask that the protest letter of Mr. Mannion be discounted and denied for the following reasons:

The Grand Junction Zoning and Development Code adopted July 5, 1989, specifies in paragraph 2-2-2(c)(3) in Chapter Two thereof that planning commission decisions may be appealed to the governing body in writing to the administrator within three working days following the decision of the planning commission.

Mr. Mannion's protest letter was not directed to the administrator and was not received by the administrator within three working days following the final plat approval of the planning commission on July 10, 1990. In fact, Mr. Mannion's letter was not received by the Grand Junction Planning Department until July 16, 1990, four working days following applicant, Colson & Colson Construction Co.'s, hearing for approval of their final plat and plan.

Further, the correspondence of Mr. Mannion simply restates a position filed prior to the hearing on item 26-90 and again stated by public comment at the time of the hearing for consideration by the planning department. It would further seem inappropriate for the governing body to consider Mr. Mannion's

request of rescission of the rezone granted based upon the contents of his correspondence recognizing that the rezone request and ballot issue involved applicant's request to rezone from PR-4 to PR-12.7 rather than conditions as put forth by Mr. Mannion.

In conclusion, Colson & Colson Construction Co. requests the governing body through its administrator to deny the letter of protest of Mr. Mannion in that this protest letter was neither submitted to the administrator nor was it submitted within three working days as required in the Grand Junction Zoning and Development Code. Further, the planning department had considered the concerns of Mr. Mannion prior to its approval, and it is noted that, pursuant to paragraph 6-8-1(F) in Chapter Six of the code, a final plat may be approved when it has been modified to reflect improvements in design or changes occurring subsequent to the time of preliminary plan review and approval.

Respectfully submitted,

C. JOSEPH CROKER, P.C.

By _____
C. Joseph Croker

cmb
pc: Dan E. Wilson, Esq.
Mr. Pat Edwards

HAND DELIVER

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT
JUL 17 1990

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(303) 244-1430 FAX (303) 244-1599

William D. Merkel, M.D.
2525 N. 8th Street
Grand Junction Co. 81501

RE: Northridge Estates Subdivision Filing # 4, request to place project on inactive status

Dear Dr. Merkel:

I have received your letter of December 16, 1991 requesting that the previous approval of zoning and development plans for Northridge Estates Filing # 4 be placed on inactive status. This request is in accordance with section 7-5-7A.3. of the Grand Junction Zoning and Development Code and under the provisions of that section this project is hereby placed on inactive status. Activation of this project will require the procedure outlined in section 7-5-7B. of the Code. As you are aware, the time limit for recording of the previously approved final subdivision plat has expired and reactivation of the project will also require processing and re-review of the plat as per procedures for final subdivision plats.

Please contact me at such time as you may wish to reactivate the project or if you have any questions concerning this process.

Sincerely

Karl G. Metzner
Planner

WILLIAM D. MERKEL, M.D.

December 16, 1991

City Planning Department
Mr. Carl Metzner
559 White Avenue, Room 60
Grand Junction, Colorado 81501

RE: NORTHRIDGE ESTATES SUBDIVISION FILING #4
TAX SCHEDULE #2945-023-00-062

Mr. Metzner:

I have recently purchased the remaining balance of the "Northridge" property formerly presented to you for planning, plat and zoning by Colson and Colson.

As of yet, I have not entirely decided upon my course of action with this property. I have, however, done a cursory review of the plan, zone and plat that was approved by City Planning and the City Council for the Colson and Colson project and find it to have considerable merit. I believe it to be possible, that in my future plans, I may incorporate all or part of that zoning, plan and plat. As I am in need of further time to fully evaluate this project and am not sure of the timing of future development, I hereby request that the Planning Department put this plan and zoning on hold for this project. It is my understanding that you can do this and that I may reactivate this plan and plat through a one-step process involving the City Council's approval only.

Your timely consideration on this matter is greatly appreciated as I understand the plan and zone may be lost by December 31, 1991. Please contact me with any questions regarding this proposal and your response to it by mail at 2525 North 8th, Grand Junction, Colorado 81501 or by phone at 242-9127.

Sincerely,

William D. Merkel

William D. Merkel, M. D.

MEMBER
AMERICAN SOCIETY OF
PLASTIC AND RECONSTRUCTIVE
SURGEONS, INC

2525 North Eighth Street
Grand Junction, Colorado 81501 (303) 242-9127

SET BACK LINES

PR. 12.7 SEE SITE PLAN PG 2 SCALE 1"=30'

PR 4
- SIDE YARD 7'
- REAR YARD 30' EXCEPT LOTS 6,7,8 = 20'
- FRONT YARD - THE MIN. SET BACK SHALL BE FROM THE CENTERLINE OF STREETS AS FOLLOWS:
  1. 75' FROM PRINCIPAL ARTERIAL
  2. 65' FROM MINOR ARTERIAL
  3. 50' FROM COLLECTOR STREET
  4. 45' FROM LOCAL STREET

NORTHRIDGE ESTATES FILING THREE

NORTHRIDGE ESTATES FILING ONE

NORTHRIDGE ESTATES FILING TWO

JONES SUBDIVISION

NORTHRIDGE DRIVE

NORTHRIDGE ESTATES FILING THREE

LONG

PROPOSED SECOND EXIT FOR NORTHRIDGE SUBDIVISION

NORTHACRES SUBDIVISION

LARGE DECIDUOUS TREES

CONIFER TREES

DECIDUOUS FLOWERING TREE

EXISTING TREE

INDICATES AREA OF PHASE II

ACQUISITION BY ADJOINING PROPERTY OWNERS

DEDICATED SINGLE FAMILY

10' utility easement

OPEN SPACE

HORIZON DRIVE

MAIN LINE GRAND VALLEY CANAL

OPEN SP.

HORIZON PLACE

EXISTING MESA VIEW

(104 SUITES)

RETIREMENT RESIDENCE

105 SUITE RETIREMENT RESIDENCE

12 GARDEN SUITES

8 GARDEN SUITES

HORIZON LANE

FUTURE ACCESS

TO BE VACATED

NORTH 1ST STREET

26 ROAD

NORTHRIDGE DR.

CROSSBRIDGE COURT

ROSE TERRACE

KINGSWOOD DRIVE

NORTH BLUFF DRIVE

20' ingress, egress and utility easement

TO BE VACATED UTILITIES EASEMENTS TO REMAIN

N00°00'00"E 25.03

S 1/16TH COR. SEC. 2 & 3 T1S R1W U.M. STEEL SPIKE IN PAVEMENT

BUS TURN

Open space

50' utility, drainage, irrigation, sewer easement

North boundary of Willowbrook Subdivision to be adjusted to the Centerline of the Independent Ranchman's Ditch

LANDSCAPED OPEN SPACE

WILLOWBROOK ROAD

WILLOWBROOK SUBDIVISION

INDEPENDENT RANCHMAN'S DITCH

VANDOVER

WILLIAMS

FAIRMONT HEIGHTS SUBDIVISION

PATTERSON (F) ROAD

SW COR. SECTION 2, T1S, R1W, U.M. MESA CO. BRASS CAP IN MON. BOX

N

CAMERON

NORTH 1ST STREET

FEET METERS

FINAL

SITE PLAN
NORTHRIDGE ESTATES FILING FOUR

FOR: HOLIDAY RETIREMENT CORP.

SCALE: 1" = 100'

DATE: 5/24/90

Q.E.D. SURVEYING SYSTEMS Inc.
1018 COLO. AVE.
GRAND JCT, COLO.
(303) 241-2370
464-7568

SURVEYED BY: DKB, DMM

DRAWN BY: MEM

ACAD ID: NR4SITE

SHEET NO.

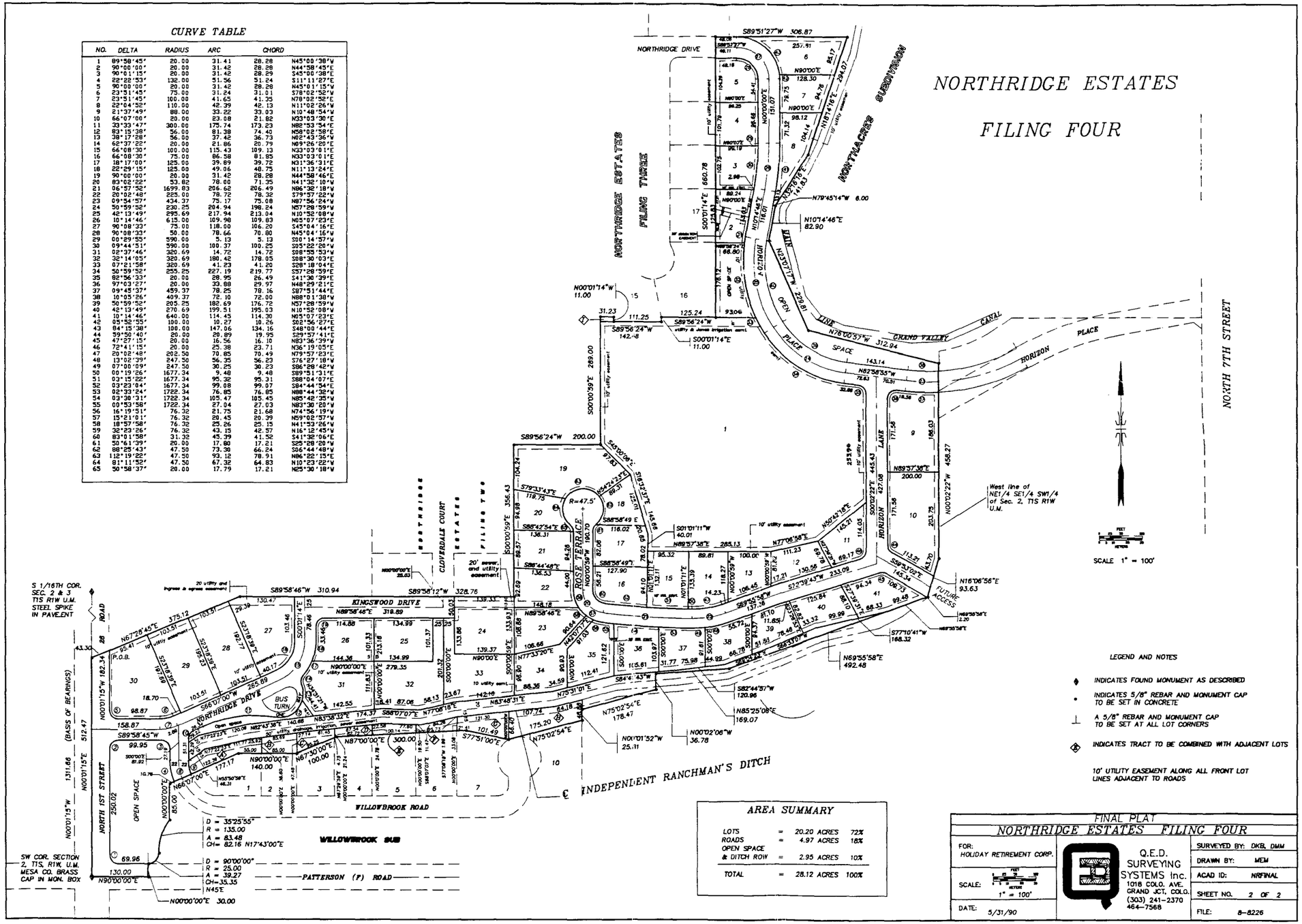
FILE: 8-8226

Remove
From Office
NOV 1 1990

#26 90

CURVE TABLE

NO.	DELTA	RADIUS	ARC	CHORD	
1	89°58'45"	20.00	31.41	28.28	N45°00'38"W
2	90°00'00"	20.00	31.42	28.28	N44°58'45"E
3	90°01'15"	20.00	31.42	28.29	S45°00'38"E
4	22°22'53"	138.00	51.56	51.24	S11°11'27"E
5	90°00'00"	20.00	31.42	28.28	N45°01'15"W
6	23°51'45"	75.00	31.24	31.01	S78°02'52"W
7	23°51'45"	100.00	41.65	41.35	N78°02'52"E
8	22°04'52"	110.00	42.39	42.13	N11°02'26"W
9	21°37'49"	88.00	33.22	33.03	N10°48'54"W
10	66°07'00"	20.00	23.08	21.82	N33°03'30"E
11	33°33'47"	300.00	175.74	173.23	N82°53'54"E
12	83°15'38"	56.00	81.38	74.40	N58°02'58"E
13	38°17'28"	56.00	37.42	36.73	N62°43'36"W
14	62°37'22"	20.00	21.86	20.79	N69°26'20"E
15	66°08'30"	100.00	115.43	109.13	N33°03'01"E
16	66°08'30"	75.00	86.58	81.85	N33°03'01"E
17	18°17'00"	125.00	39.89	39.72	N31°36'31"E
18	22°29'15"	125.00	49.06	48.75	N11°13'24"E
19	90°00'00"	20.00	31.42	28.28	N44°58'46"E
20	83°02'22"	53.82	78.00	71.35	N41°32'10"W
21	06°57'52"	1699.83	206.62	206.49	N86°32'18"W
22	20°02'48"	225.00	78.72	78.32	S79°57'22"W
23	09°54'57"	434.37	75.17	75.08	N87°56'24"W
24	50°59'52"	230.25	204.94	198.24	N57°28'59"W
25	42°13'49"	295.69	217.94	213.04	N10°52'08"W
26	10°14'46"	615.00	109.98	109.83	N05°07'23"E
27	90°08'33"	75.00	118.00	106.20	S45°04'16"E
28	90°08'33"	50.00	78.66	70.80	N45°04'16"W
29	00°29'55"	590.00	5.13	5.13	S00°14'57"W
30	09°44'51"	590.00	100.37	100.25	S05°22'20"W
31	02°37'46"	320.69	14.72	14.72	S08°55'53"W
32	32°14'05"	320.69	180.45	178.05	S08°30'03"E
33	07°21'58"	320.69	41.23	41.20	S28°18'04"E
34	50°59'52"	255.25	227.19	219.77	S57°28'59"E
35	82°56'33"	20.00	28.95	26.49	S41°30'29"E
36	97°03'27"	20.00	33.88	29.97	N48°29'31"E
37	09°45'37"	459.37	78.25	78.16	S87°51'44"E
38	10°05'26"	409.37	72.10	72.00	N88°01'38"W
39	50°59'52"	205.25	182.69	176.72	N57°28'59"W
40	42°13'49"	270.69	199.51	195.03	N10°52'08"W
41	10°14'46"	640.00	114.45	114.30	N05°07'23"E
42	05°52'55"	100.00	10.27	10.26	S02°56'27"E
43	84°15'38"	100.00	147.06	134.16	S48°00'44"E
44	39°50'40"	20.00	20.89	19.95	S39°57'41"E
45	47°27'15"	20.00	16.56	16.10	N83°36'39"W
46	72°41'15"	20.00	25.38	23.71	N36°19'05"E
47	20°02'48"	262.50	70.85	70.49	N79°57'23"E
48	13°02'39"	247.50	56.35	56.23	S76°27'18"W
49	07°00'09"	247.50	30.25	30.23	S86°28'42"W
50	00°19'26"	1677.34	9.48	9.48	S89°51'31"E
51	03°15'22"	1677.34	95.32	95.31	S88°04'07"E
52	03°23'04"	1677.34	99.08	99.07	S84°44'54"E
53	02°33'24"	1722.34	76.85	76.85	N88°48'36"E
54	03°30'31"	1722.34	105.47	105.45	N85°42'35"W
55	00°53'58"	1722.34	27.04	27.03	N83°30'20"W
56	16°19'51"	76.32	21.75	21.68	N74°56'19"W
57	15°21'01"	76.32	20.45	20.39	N59°02'57"W
58	18°57'58"	76.32	25.26	25.15	N41°53'26"W
59	32°23'26"	76.32	43.15	42.57	N16°12'45"W
60	83°01'58"	31.32	45.39	41.52	S41°32'06"E
61	50°51'39"	20.00	17.80	17.21	S25°28'20"W
62	88°25'43"	47.50	73.30	66.24	S36°44'48"W
63	112°19'22"	47.50	93.12	78.91	N86°22'15"E
64	81°11'52"	47.50	67.32	64.83	N10°23'22"W
65	50°58'37"	20.00	17.79	17.21	N25°30'18"W



LEGEND AND NOTES

- ♦ INDICATES FOUND MONUMENT AS DESCRIBED
- • INDICATES 5/8" REBAR AND MONUMENT CAP TO BE SET IN CONCRETE
- ⊥ A 5/8" REBAR AND MONUMENT CAP TO BE SET AT ALL LOT CORNERS
- ◈ INDICATES TRACT TO BE COMBINED WITH ADJACENT LOTS

10' UTILITY EASEMENT ALONG ALL FRONT LOT LINES ADJACENT TO ROADS

AREA SUMMARY

LOTS	=	20.20 ACRES	72%
ROADS	=	4.97 ACRES	18%
OPEN SPACE & DITCH ROW	=	2.95 ACRES	10%
TOTAL	=	28.12 ACRES	100%

FINAL PLAT
NORTHRIDGE ESTATES FILING FOUR

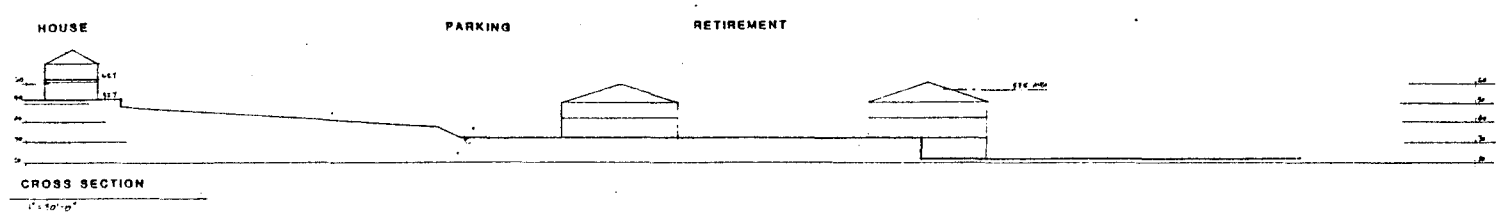
FOR: HOLIDAY RETIREMENT CORP.

SCALE: 1" = 100'

DATE: 5/31/90

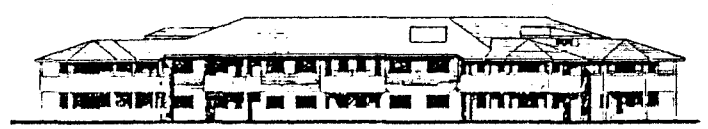
Q.E.D. SURVEYING SYSTEMS Inc.
1018 COLO. AVE.
GRAND JCT, COLO.
(303) 241-2370
464-7568

SURVEYED BY: DKB, DMM
DRAWN BY: MEM
ACAD ID: NRFINAL
SHEET NO. 2 OF 2
FILE: 8-8226



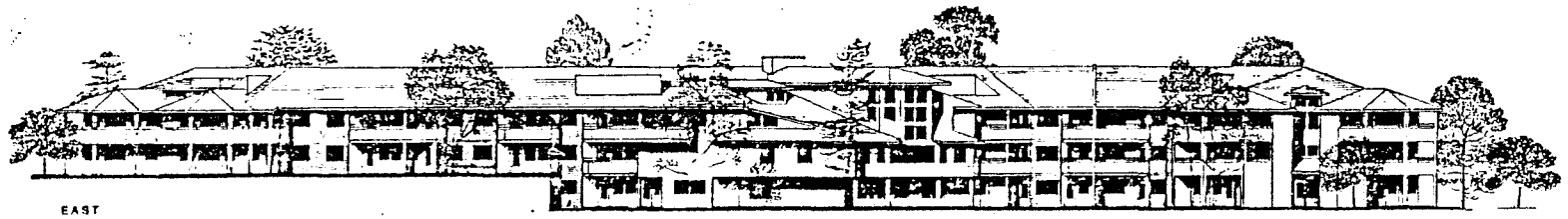
CROSS SECTION

ENTRY

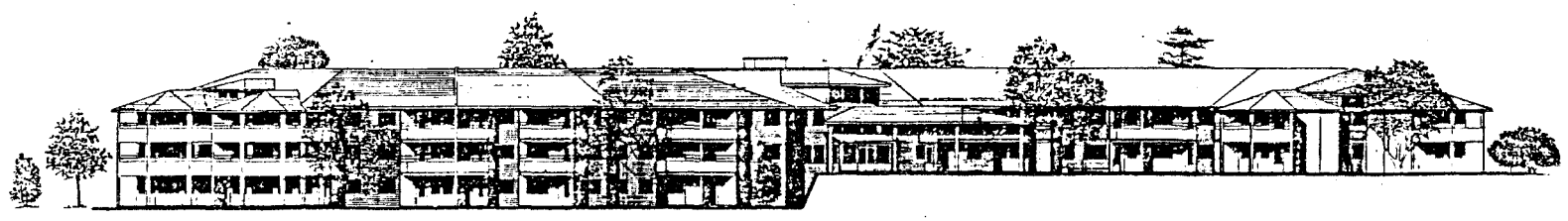


SOUTH

GARDEN SUITES



EAST



WEST

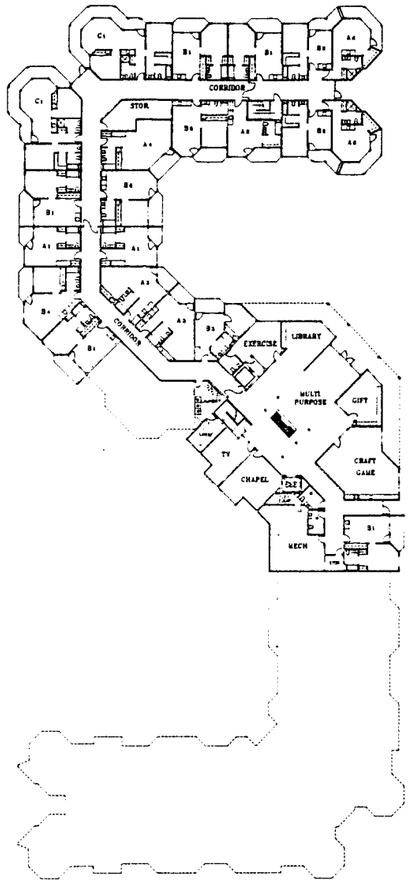
Architects

HOLIDAY RETIREMENT CORP.
3741 12TH STREET SE
SALEM, OREGON 97302
P.O. BOX 14111
SALEM, OR 97309
PHONE (503) 370-7070
COLSON
COLSON
CONSTRUCTION

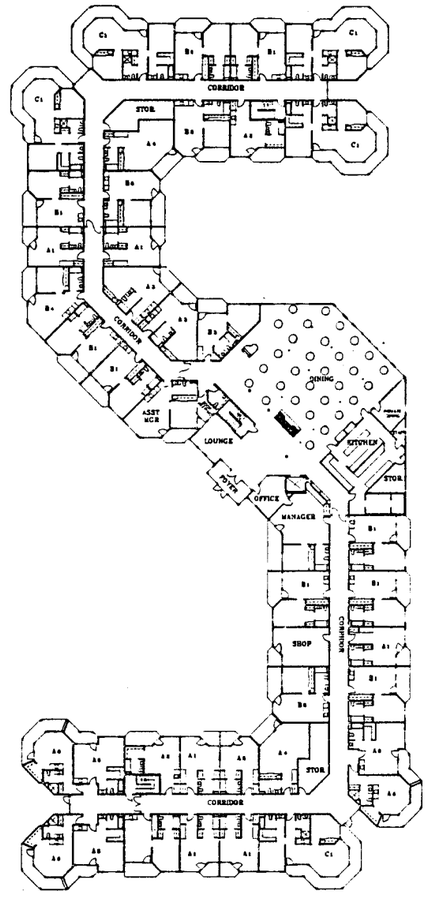
GRAND JUNCTION RETIREMENT RESIDENCE

11-81-66

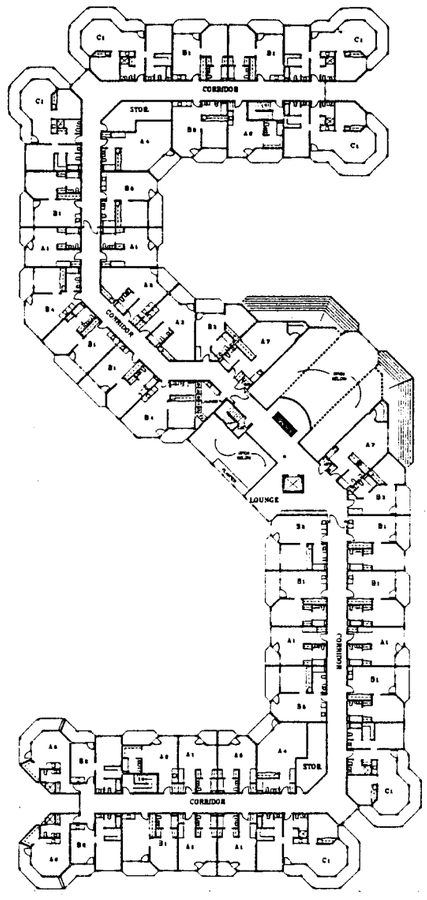
GRAND JUNCTION, COLORADO



BASEMENT



FIRST



SECOND

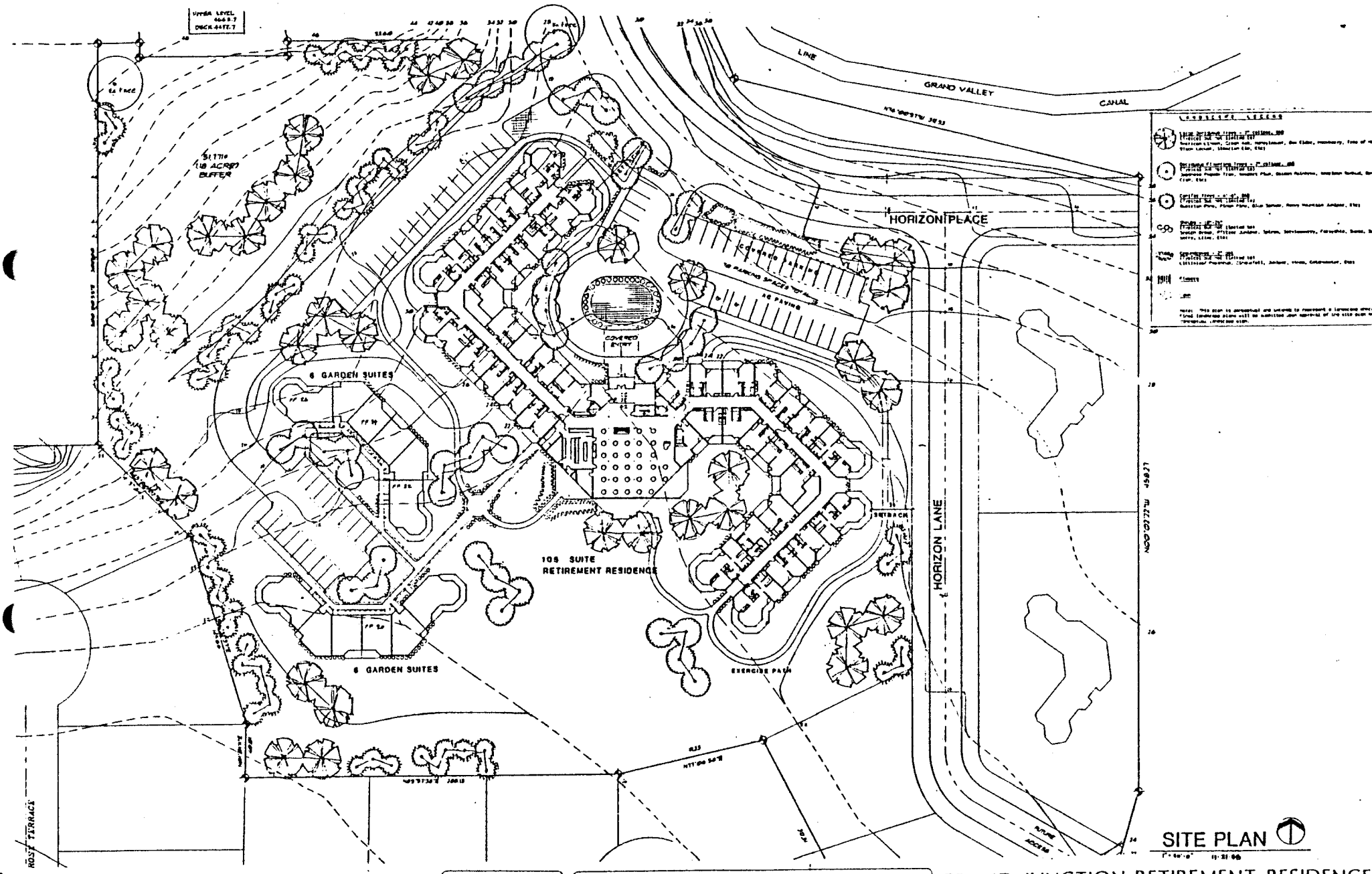
Architects

HOLIDAY RETIREMENT CORP.
27th 12TH STREET SE SALEM, OREGON 97302
P.O. BOX 14111 SALEM OR 97309
PHONE (503) 370-7070
COLSON COLSON CONSTRUCTION

GRAND JUNCTION RETIREMENT RESIDENCE

1"=20'-0" 11-21-88

GRAND JUNCTION, COLORADO

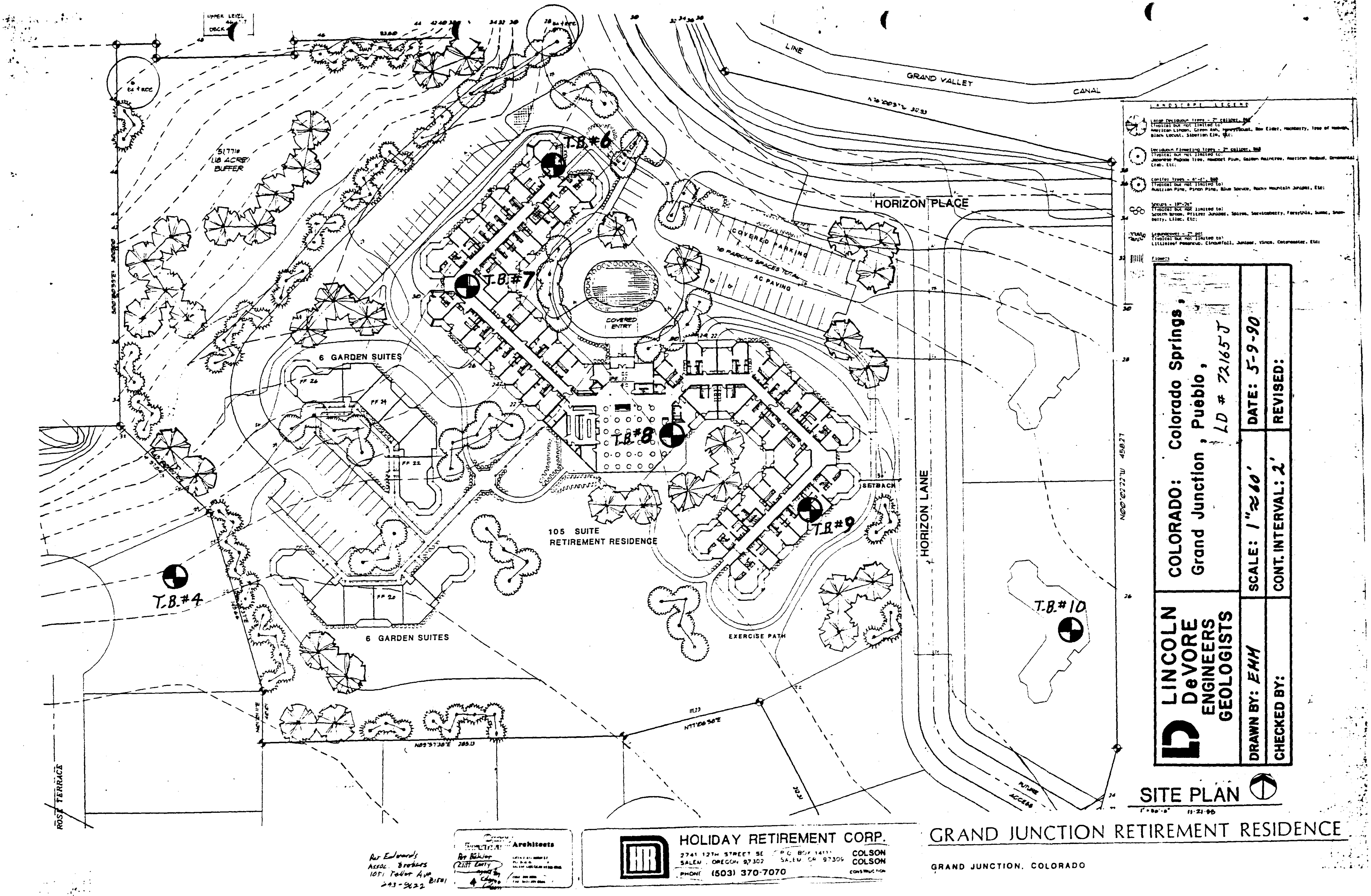


SITE PLAN

HOLIDAY RETIREMENT CORP.
2741 13TH STREET SE, SALEM, OREGON 97302
P.O. BOX 14111, SALEM, OR 97309
PHONE (503) 370-7070
COLSON CONSTRUCTION

GRAND JUNCTION RETIREMENT RESIDENCE

GRAND JUNCTION, COLORADO


GRAND VALLEY
CANAL
LINE
HORIZON PLACE
HORIZON LANE
COVERED PARKING
70 PARKING SPACES TOTAL
AC PAVING
COVERED ENTRY
T.B.#6
T.B.#7
T.B.#8
T.B.#9
T.B.#10
T.B.#4
6 GARDEN SUITES
6 GARDEN SUITES
105 SUITE
RETIREMENT RESIDENCE
EXERCISE PATH
SETBACK
(1.18 ACRE) BUFFER
ROSE TERRACE
FUTURE ACCESS
LANDSCAPE LEGEND
COLORADO: Colorado Springs, Grand Junction, Pueblo,
LD # 72165 J
LINCOLN DeVORE ENGINEERS GEOLOGISTS
DRAWN BY: EHM
CHECKED BY:
SCALE: 1" ≈ 60'
CONT. INTERVAL: 2'
DATE: 5-9-90
REVISED:
SITE PLAN
GRAND JUNCTION RETIREMENT RESIDENCE
GRAND JUNCTION, COLORADO
HOLIDAY RETIREMENT CORP.
2741 12TH STREET SE
SALEM, OREGON 97302
PHONE (503) 370-7070
COLSON
COLSON
CONSTRUCTION
Architects

LINCOLN DeVORE ENGINEERS GEOLOGISTS	COLORADO: Colorado Springs, Grand Junction, Pueblo, LD # 72165J	
DRAWN BY: EMM	SCALE: 1"≈200'	DATE: 5-9-90
CHECKED BY:	CONT. INTERVAL: 2'	REVISED: