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File 19910041 Name: Colony Park - Filing No. 2 - Preliminary Plan -SE Patterson & 25 ½

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

DOCUMENT DESCRIPTION:

X		Declaration of Covenants, Conditions and Restrictions	X	X	Action Sheet
X		Policy of Title Ins. - 3/5/91	X	X	Development Improvement Agreement
X	X	Planning Commission Meeting - 7/2/91 - **	X	X	Planting Plan
X		Subdivision Summary Form	X	X	Floor Plan - Unit A & B
X	X	Drainage Report - 5/3/91	X	X	Grading and Drainage Plan
X	X	Geologic Investigation	X	X	Utility Composite
X		Traffic Analysis	X	X	Cider Mill Road Plan and Profile
X		Soils Report - 3/24/81	X	X	Standard Sanitary Sewer Details
X		Memo to Dept. Heads from Bennett Boeschenstein re: Development Project Meeting - 6/4/91	X	X	Waterline Standard Details
X		Public Notice Posting	X	X	Roadway Standard Details
X	X	Neighborhood Meeting for Colony Park			
X		Legal			
X	X	Planning Commission Meeting Agenda - 7/9/91 - **			

A

#41-91

GRAND JUNCTION planning

Receipt #

Date Rec.

Received By

DEVELOPMENT APPLICATION

We, the undersigned, Being the owners of property situated in Mesa County, State of Colorado, as described on the attached legal description form do hereby petition this:

Type of Petition	Acres / Sq.Ft	Phase	Common Location	Zone	Type of Usage
● Subdivision Plat/Plan	4	○ Minor ● Major	SE of Patterson & 25½ Rd	PR-10	
○ Rezone				From ▷ To	
● Planned Development	4	○ ODP ● Prelim ○ Final			
○ Conditional Use					
○ Hwy-Oriented Development				H.O.	
○ Text Amendment					
○ Special Use					
○ Vacation					○ Right-of-way ○ Easement

PROPERTY OWNER ●	DEVELOPER ●	REPRESENTATIVE ●
Mr. George D. Young	Alco Building Company	Bruce Milyard
Name	Name	Name
601 Horizon Place #141	599 25 Road	576 Rio Linda
Address	Address	Address
Grand Junction, CO 81506	Grand Junction, CO 81502	Grand Junction, CO 81503
City/State	City/State	City/State
	(303) 242-1423	(303) 242-1423
Business Phone #	Business Phone #	Business Phone #

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

WE HEREBY ACKNOWLEDGE THAT WE HAVE FAMILIARIZED OURSELVES WITH THE RULES AND REGULATIONS WITH RESPECT TO THE PREPARATION OF THIS SUBMITTAL, THAT THE FOREGOING INFORMATION IS TRUE & COMPLETE TO THE BEST OF OUR KNOWLEDGE, AND THAT WE ASSUME THE RESPONSIBILITY TO MONITOR THE STATUS OF THE APPLICATION AND THE REVIEW SHEET COMMENTS. WE RECOGNIZE THAT WE OURSELVES, OR OUR REPRESENTATIVE(s) MUST BE PRESENT AT ALL HEARINGS. IN THE EVENT THAT THE PETITIONER IS NOT REPRESENTED, THE ITEM WILL BE DROPPED FROM THE AGENDA, AND AN ADDITIONAL FEE CHARGED TO COVER RE-SCHEDULING EXPENSES BEFORE IT CAN AGAIN BE PLACED ON THE AGENDA

X Bruce Milyard

Signature of person completing application — Date

X George D. Young

PROPERTY OWNER ACKNOWLEDGES THE DEVELOPMENT APPLICATION AS IT RELATES TO THE TERMS OF THE FEBRUARY 21, 1991 "OPTION TO PURCHASE REAL PROPERTY" BETWEEN GEORGE D. YOUNG AND ALCO BUILDING COMPANY

Signature of property owner(s) - attach additional sheets if necessary

School District 51
Pomona Elementary School
2115 Grand Ave.
Grand Junction, CO 81501

Joe Frank & Kathleen Tomkins
605 Meander Drive
Grand Junction, CO 81505

Robert I Baughman
D N Barbour & P K Baughman
639 1/2 Main Street
Grand Junction, CO 81501
Location: 2581 F Road

Clifford & Elizabeth Harwin
2582 F Road
Grand Junction, CO 81505

Eugene M Sanders
2580 F Road
Grand Junction, CO 81505

William F. Novinger
2479 G Road
Grand Junction, CO 81505

James A & Debra A Sanders
c/o Daphne Branson
2580 1/2 F Road
Grand Junction, CO 81505

Wilma Alyne & Clifford LeRoy Miller
2552 F Road
Grand Junction, CO 81505

Jerry C & Kathryn D Morgan, Jr.
615 Lodgepole
Grand Junction, CO 81504

Seventh Day Adventist Assoc.
2520 So Downing St.
Denver, CO 80210
(Location: 2554 F Road)

Daphne N Branson
2580 1/2 F Road
Grand Junction, CO 81505

Glenn McClelland
838 26 1/2 Road
Grand Junction, CO 81506

Joe G Redding
Tony M Redding
2566 F Road
Grand Junction, CO 81505

Kenneth C & Melanie K Haining
2554 1/2 F Road
Grand Junction, CO 81505

Wesley H Dixon
2562 F Road
Grand Junction, CO 81505

Richard F & Jacquelyn G Dewey
2236 Tiffany Ct.
Grand Junction, CO 81503

Robert L Keech
Hazen & Norma B Hazen
5672 S. Willowbrook Dr.
Morrison, CO 80465

#41 91

U S Postal Service
602 E. Forsight Circle
Grand Junction, CO 81505

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COLONY PARK

PROJECT NARRATIVE

WHAT IS THE PROPOSAL

This proposal for Colony Park is a replat of Colony Park, Filing 1. A final plat and plan for Colony Park, Filing 1 was approved by the City of Grand Junction in 1981. Since the approval, there have not been any site improvements made to the property by the original developer or subsequent owners. This proposal is in a Planned Residential 10 zone and is a 3.43 acre development. Once fully developed, 22 living units will be constructed for an overall density of 6.4 units per acre. This results in a 36% reduction between zoned density and developed density. Phase 1 is for the development of 1.76 acres with 8 living units, or a density of 4.5 units per acre. Even though Phase I is the platting of 8 living units, the infrastructure will be constructed for the entire development, or 22 living units.

The proposed Colony Park subdivision is a planned residential development offering single level style attached homes. The homes are arranged in clusters with each unit ranging in size from 1225 to 1575 sq. ft. of living space with an attached two car garage. Many of the garages are designed as side entry in an attempt to eliminate the garage door from the streetscape. The exterior asthetics of the units will be enhanced by relatively spacious open areas to be maintained and preserved by a Home Owner's Association with strong Covenants.

The target markets for this development are the retired person, the empty nester, or the small family desiring a quality home with landscaping and exteriors being maintained by a homeowner's association.

LOCATION

Colony Park subdivision is located on the south side of F Road east of 25-1/2 adjacent to Pomona School.

AREA IMPACTED BY THE PROPOSAL

West of the proposed development lies the Pomona School property which carries a PZ zoning. The area south and east of the development is presently being utilized as agricultural ground, however it is zoned PR-10. North of the proposed development lies "F" Road with the strip along the north side being primarily residential with SF-4 and SF-8 zoning. Development does conform with existing F. Road Corridor guidelines.

The most direct effect of the proposed development will be the additional traffic generated and its impact on "F" Road. In accordance with the

Institute of Transportation Engineers Trip Generation Manual, Residential Condominums Classifications, 5.2 average daily trips per unit will generate approximately 229 movements per day from Colony Park subdivision.

The schools that could potentially be impacted from the development would be Pomona Elementary, West Middle School, and Grand Junction High School.

The development will be serviced by Ute Water, City sewer and Grand Valley Irrigation for landscape watering needs.

EXTERNAL RELATIONSHIPS

Visual Screening

The visual relationship of Colony Park to the external properties consist of the view from "F" Road, the view from Pomona School on the west, and the view from the agricultural ground on the south and east. A combination of fencing and landscaping will mitigate these impacts.

The view of Colony Park from F Road is to be minimized by the use of screen fencing and landscaping. Approximately 25 feet of right of way exists between the rear edge of the sidewalk and the property line paralleling F Road. The developer, in conjunction with this application, will be applying for a revokable fence permit to allow a screen fence in the right of way along F Road. The fence will be placed approximately 10' behind the rear edge of the sidewalk in the right of way. All of the right of way area will be landscaped by the developer and maintained by the Home Owner's Association. The proposed fence along F Road will be a combination of cedar and masonry. (see detail) The fence along the east and south property line will be a rail fence designed adeqately to barricade livestock from entering the development from the adjacent agricultural property. An existing fence and proposed trees on the west property line will separate the development from Pomona School.

Vehicular Circulation and Parking

The proposed Cider Mill Road will provide internal vehicular circulation to the development. The proposed street section is the city local roadway section. This provides width for on-street parking, however, resident parking is provided for each unit in two-car garages and driveways which allow 2 additional spaces. Recreational vehicle parking is restricted by the covenants.

Pedestrian Circulation

Pedestrian circulation within the proposed development is accomodated by the 4' attached walk on both sides of Cider Mill Road and culdesac. The proposed walk connects directly into the existing walk on the south side of F Road. A required U.S. Postal Service Centralized Mail Delivery Box will be installed as depicted on site plan to encourage pedestrian use.

LANDSCAPING

The proposed landscaping consists of screening and lawn areas along "F" Road, internal tree plantings, between Unit buffer plantings, lawn areas, and entry courtyard plantings. All landscape will be irrigated with a pumped automatic sprinkler system. The system is to be owned, operated and maintained by the Homeowner's Association. The irrigation source will be from the wastewater system paralleling the west property line augmented with irrigation water from Independent Ranchman's ditch on the north if needed.

GRADING AND DRAINAGE (drainage report)

The grading and drainage proposed for this site is described in detail in the attached appendix titled "Drainage Report for Colony Park" prepared by Banner and Associates.

UTILITIES

The sewer service is to connect to the existing 18" horizon intercept line on the west property line. The projected flows are based on 150 gallons/day for each bedroom. In determining the flow, the bedroom count assumes half the units are 2 bedroom and half would be 3 bedroom. This count produces a flow of 8250 gallons/day once the project is fully developed.

Proposed water service will tie into the existing 8" Ute water line located in the northeast corner of subject property.

Public Service Company will supply the project with electric and gas service while U.S. West will supply telephone service. The above mentioned services will be placed in the utility easement provided on the street side of the respective lots.

The Home Owner's Association will provide the services needed to maintain the open space and the exterior maintenance of all the living units. The Home Owner's Association is founded on a solid set of covenants designed to maintain aesthetic harmony and consistency throughout the development. A draft of the covenants is attached as Appendix D.

SPECIAL CONSIDERATIONS

Vacation Request

As noted on the application, the developer is requesting a vacation of all rights of way and easements of record associated with Colony Park, Filing 1. The vacation request is the result of this property no longer being developed in conjunction with property to the south and east. Colony Park, Filing 1, as

presently recorded, has road alignments and easements that are no longer functional now that property ownership has been bifercated. Therefore, the request before you is to vacate the existing right of way and easements which will be replaced by right of way and easements as depicted on this submittal. Recording the vacation of the present right of way and easements would occur simultaneously with recording of the final replatt. Even though future expansion of this development is not anticipated at this time, accomodations to continue the roadway to the south have been made by sizing the Cider Mill Road to a "local roadway section" and granting a right of way from the end of the culdesac to the south property line.

Revocable Fence Permit

As was mentioned earlier in the narrative, the developer in conjunction with this application, is requesting a revocable fence permit allowing the developer to construct screen fencing in the right of way along the south side of F Road. Approximately 25 feet of right of way exists between property line and the back edge of the sidewalk along F Road. The developer proposes to construct a screen fence on the right of way leaving approximately 10 feet between the fence and sidewalk to be landscaped by the developer and maintained by the Home Owner's Association. The right of way south of the fence would be landscaped to be harmonious with the other open spaces and would also be maintained by the Home Owner's Association.

Drainage Easement

The developer and property owner have been approached by the Grand Junction Drainage District and the City of Grand Junction to assist in resolving a problem that exists relative to a tile drain line that exists on the west property line. The problem is a surcharge that occurs during certain periods when the Pomona School irrigation system is discharging its waste water. Even though the final solution to the problem has not been decided, the developer has agreed to accomodate the resolution by granting an easement along the west property line providing a satisfactory and mutually beneficial resolution is adopted. The exact location and width of the easement has yet to be discussed.

Property Line Adjustments

The property owner to the South and East of subject property is Mr. Robert Baughman and family. In discussing the replat with Mr. Baughman, all parties concerned recognized the benefit in eliminating the irregular nature of the property boundary lines contained in Colony Park, Filing 1. Therefore, it has been agreed that property transfers will occur between the Mr. Baughman, et. al., and the Young/Alco group to square the property boundaries as depicted on the proposed Replat. The recording of these transfers will be concurrent with the recording of the final platt.

DEVELOPMENT SCHEDULE

Construction of the project will commence upon approval by the City of Grand Junction. The infrastructure improvements will be constructed first, and followed by construction of four (4) units upon issuance of a building permit. Once the first four living units are completed and sold, commencement of additional living units will be dictated by market demand.

Drainage Report

COLONY PARK SUBDIVISION

Prepared for:

Bruce Milyard
ALCO BUILDING COMPANY
599 25 Road
Grand Junction, CO 81505
Ph. (303)242-1423

BANNER

BANNER ASSOCIATES, INC. — CONSULTING ENGINEERS
2777 CROSSROADS BOULEVARD — GRAND JUNCTION, COLORADO 81506
(303) 243-2242

#41 91 May 1991

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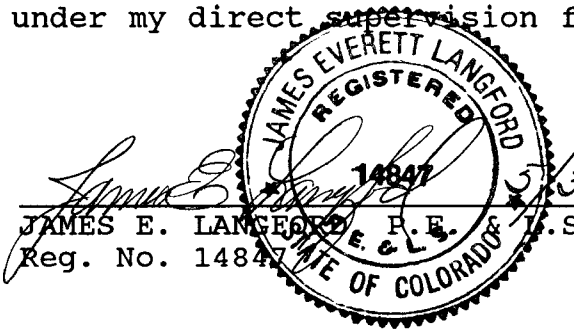
ENGINEER'S CERTIFICATION

I, JAMES E. LANGFORD, P.E. & L.S., certify that this Plan and Report was prepared by me or under my direct supervision for the Owner's hereof.



5/30/91

JAMES E. LANGFORD, P.E. & L.S.
Reg. No. 14847

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INTRODUCTION

INTRODUCTION

COLONY PARK SUBDIVISION is located approximately 1000 feet east of the intersection of Patterson/"F" and 25 Roads, south of Patterson Road and immediately adjacent to the Pamona Elementary School. The property is bounded on the north by Patterson Road, on the west by Pamona Elementary School and on the south and east by vacant land. Runoff from farm land located easterly of the proposed development is conveyed north to the Ranchman's Ditch (subsurface), located in the Patterson/"F" Road right-of-way or southerly to an existing drainage ditch location approximately 435 feet south of the south right-of-way line of Patterson/"F" road. Storm water originating from properties located to the north and west will have no impact on this project, as the runoff will be intercepted by Patterson/"F" Road and 25 Road, respectively.

This project has been removed from the 100 Year Floodplain by placing a portion of the Ranchman's Ditch underground. This information was received through conversations with the Grand Junction City Engineer, and Flood Plain Administrator.

Since the City of Grand Junction does not have specific report preparation criteria, this Report has been prepared using Mesa County's "Design Guidelines for Storm Water Management", and Mesa County Land Development Code, Section 4.1.7, which states that drainage facilities shall be designed to "adequately carry and discharge accumulated run-off into drainage channels, storm sewers, or natural watercourses so that storm water does not cause increased damage or increased flooding downstream...". An analysis of the runoff characteristics of the site and estimates of the impact of surface flows generated, has been carried out to determine the size and location of facilities required to handle this runoff.

Presented herein are the results of our analysis, and a description of the improvements we propose for mitigation of the drainage impacts presented by this development.

SITE CONDITIONS

SITE CONDITIONS

The present site conditions consist of relatively flat topography. The land has been used as pasture in past years but has been removed from a formal irrigation system due a change in ownership. Therefore, historic conditions will assume the land to be irrigated.

The site presently drains in a southwesterly direction at an average slope of 0.5%. The present ground cover consists of sparse grass cover and numerous Cottonwood and Russian Olive trees. Soil conditions, as outlined by a 1981 Soils Report be Lincoln-DeVore Engineering, Geologists, indicate clays and silts dominate the immediate surface strata. The major runoff vehicle is, at present, typically sheet flow to the west, but tends to accumulate south of the property and discharge into the drainage ditch facility.

Site development will cover approximately 70% of the property with either concrete, asphalt, or buildings. This will leave 30% for open space covered with grass allocated to utility easements and drainage ways. The open space is located primarily on the perimeter with additional areas located between building pads.

DESIGN CRITERIA AND METHODOLOGY

DESIGN CRITERIA AND METHODOLOGY

Since the site is much less than 100 acres, the Rational Method, as outlined in Chapter 2 of the "Design Guidelines for Storm Water Management in Mesa County, Colorado", was employed to determine the magnitude of "pre" and "post" development runoff discharges. Rainfall intensities were derived from the "Intensity Duration Curves", furnished by the Grand Junction Engineering Department, developed specifically for the Grand Junction Area. The Soils Report from Lincoln-DeVore dated March, 1981, was consulted to identify surface soil attributes, ground water conditions and to aid in the initial selection of runoff coefficients to best represent the existing site conditions. Flows were thus calculated and tabulated in Table 3, Runoff Volume.

The detention pond volume requirement was calculated using the Modified Rational Method as described in the publication entitled "Urban Stormwater Management, Special Report No. 49", published by the American Public Works Association. The release rate from this structure was established by subtracting the site historic discharge rate, from the developed condition flows.

DRAINAGE ANALYSIS

DRAINAGE ANALYSIS

The time of concentration (Tc) would normally be set equal to the summation of the overland flow time, flow time in curbs and gutters, and the flow time through underground conduits. In our case, the curb and gutter and pipe flow times were arrived at by dividing the length of the flow path by the velocity as calculated by the "Mannings Equation". Overland flow velocities were determined by use of the graph "Average Velocities for Estimating Travel Time for Overland Flow", USDA, Soil Conservation Service, 1980. This summation of travel times, when greater than 5 minutes, would then be set equal to the time of concentration and used in the "Intensity Duration Curves" graph for the Grand Junction area to arrive at the intensity (I) for use in the Rational Formula. In our case, since all the travel times were less than 5 minutes, none were used, and all times of concentration for developed flow were set to the minimum 5 minutes as required.

All drainage basins were digitized to determine the area of each (in acres) which contributes runoff to various design points as depicted on "Grading and Drainage Plan".

The runoff volumes have been tabulated for ease of review on Table 1, Time of Concentration, Table 2, Composite Runoff Coefficients, and Tables 3A & 3B.

The flows generated from the parcel immediately adjacent on the east will be diverted by means of an earthen ditch built during construction of the subdivision. The flows will outlet through an 18" cmp into the drain ditch located approximately 400 feet south of the COLONY PARK SUBDIVISION.

PROPOSED DETENTION FACILITY

PROPOSED DETENTION FACILITY

The Modified Rational Method was used to determine the volume of the detention facility requirements. Using the curve for the 10-year recurrence interval, rainfall intensities for 5, 10, 20, 30, 40, 50 and 60 min. rainfall averaging times were selected. Discharge rates were calculated for each using the Rational Method. These values were plotted on the graph found attached and the areas between the Max. Allowable Discharge Rate and the individual hydrographs were calculated. According to the instructions for use of this method, the largest such volume calculated or the 10 year event was then used as the minimum storage volume for the detention structure. The contours within each area being proposed for the detention facility were digitized and found to roughly total 8800 cubic feet in volume where only 660 cubic feet are required. The detention volumes are given on the Grading and Drainage Plan.

A detention outlet structure was designed using the orifice equation for high head release flow (see Calculation Sheet attached), by sizing a concrete box inlet at the end of the 18 inch RCP with a slide-in baffle to allow an historic flow of 2.32 cfs. The baffle has a 5.83" diameter hole that will reduce flows to historic runoff values.

The 100 year event has been evaluated using the same criteria as the 10 year event. While the flows are significantly larger, the detention facilities at the lower end of the storm drain network have sufficient capacity.

REFERENCES

REFERENCES

"Intensity Duration Curves", City of Grand Junction.

"Design Guidelines for Storm Water Management", Mesa County, Colorado, undated.

"Urban Stormwater Management, Special Report No. 49", American Public Works Association, 1313 East Sixteenth Street, Chicago, IL.

"Handbook of Steel Drainage and Highway Construction Products", American Iron and Steel Institute, Second Edition, 1971.

TABLES

TABLE 1

COLONY PARK SUBDIVISION

DRAINAGE STUDY - Q10 AND Q100

TIME OF CONCENTRATION

BASIN	Tc TIME OF CONCEN. MIN.	DESCRIPT. OF FLOW	Ed DIFF. IN ELEVATION	L LENGTH FT.	S SLOPE %	V VELOCITY FT/SEC FIG 2-2	Tt TRAVEL TIME SEC.
HISTORIC	21.90	OVERLAND	2.5	460	0.54	0.35	1314.29
A	3.98	OVERLAND	1.04	33	3.15	1.75	18.86
		PAVE/CONCR	1.54	330	0.47	1.5	220.00
B	4.82	OVERLAND	4.92	252	1.95	0.95	265.26
		PAVE/CONCR	0.08	36	0.22	1.5	24.00
C	2.64	PAVE/CONCR	3.25	317	1.03	2	158.50
D	2.45	PAVE/CONCR	4.15	323	1.28	2.2	146.82
E	2.59	OVERLAND	2.2	119	1.85	0.9	132.22
		PAVE/CONCR	0.5	49	1.02	2.1	23.33
F	1.63	OVERLAND	2.4	90	2.67	1.2	75.00
		PAVE/CONCR	0.5	45	1.11	2	22.50
G	1.23	OVERLAND	1	46	2.17	1.1	41.82
		PAVE/CONCR	0.5	59	0.85	1.85	31.89

TABLE 2

AREA BREAKDOWN, ACRES

BASIN NO.	TOTAL AREA	ROOF	WT'D AREA	ASPHALT	WT'D AREA	CONCRETE	WT'D AREA	GRASS	WT'D AREA	COMPOSITE "C" VALUE
A	0.761	0.082	0.0779	0.26	0.182	0.165	0.1155	0.254	0.0381	0.54
B	0.82	0.248	0.2356	0	0	0	0	0.572	0.0858	0.39
C	0.778	0.185	0.17575	0.156	0.1092	0.353	0.2471	0.084	0.0126	0.70
D	0.863	0.242	0.2299	0.156	0.1092	0.201	0.1407	0.264	0.0396	0.60
E	0.329	0.113	0.10735	0	0	0	0	0.216	0.0324	0.42
F	0.257	0.083	0.07885	0	0	0	0	0.174	0.0261	0.41
G	0.142	0.057	0.05415	0	0	0	0	0.085	0.01275	0.47

PRE-DEVEL. 3.69

RUNOFF COEFFICIENTS RECOMMENDED BY MESA COUNTY

ROOF =		0.75 TO 0.95 VALUE USED	0.95
ASPHALT =		0.70 TO 0.95 VALUE USED	0.7
CONCRETE =		0.70 TO 0.95 VALUE USED	0.7
GRASS =	FLAT TO 2%	0.13 TO 0.17 VALUE USED	0.15
	2% TO 7%	0.18 TO 0.22	
	> 7%	0.25 TO 0.35	
UNIMPROVED =		0.10 TO 0.30 VALUE USED	0.3

TABLE 3A
RUNOFF VOLUME
Q10

BASIN	C COMPOSITE VALUES	Cf	I* RAINFALL INTENSITY IN/HR	A BASIN AREA, ACRES	Q VOL., CFS Q= C Cf I A
HISTORIC					
1	0.3	1	2.1	3.69	2.32
2	0.3	1	2.06	4.29	2.65
DEVELOPED					
A	0.54	1	3.25	0.76	1.34
B	0.39	1	3.25	0.82	1.04
C	0.70	1	3.25	0.78	1.77
D	0.60	1	3.25	0.86	1.69
E	0.42	1	3.25	0.33	0.45
F	0.41	1	3.25	0.26	0.34
G	0.47	1	3.25	0.14	0.22
			TOTAL DEVELOPED		6.86

NOTE: HISTORIC FLOWS FROM AREA 2 WILL BE DIVERTED PRIOR TO ENTRANCE TO AREA 1.
THEREFORE, NO ACCOUNTING FOR THE FLOW WILL BE MADE.

TABLE 3B
RUNOFF VOLUME
Q100

BASIN	C COMPOSITE VALUES	Cf	I* RAINFALL INTENSITY IN/HR	A BASIN AREA, ACRES	Q VOL., CFS Q= C Cf I A
HISTORIC					
1	0.3	1.25	3.25	3.69	4.50
2	0.3	1.25	3.21	4.29	5.16
DEVELOPED					
A	0.54	1.25	4.91	0.76	2.54
B	0.39	1.25	4.91	0.82	1.97
C	0.70	1.25	4.91	0.78	3.34
D	0.60	1.25	4.91	0.86	3.19
E	0.42	1.25	4.91	0.33	0.86
F	0.41	1.25	4.91	0.26	0.64
G	0.47	1.25	4.91	0.14	0.41
			TOTAL DEVELOPED		12.95

NOTE: HISTORIC FLOWS FROM AREA 2 WILL BE DIVERTED PRIOR TO ENTRANCE TO AREA 1.
THEREFORE, NO ACCOUNTING FOR THE FLOW WILL BE MADE.

TABLE 4
VOLUMES FOR STORAGE HYDROGRAPHS
MODIFIED RATIONAL METHOD

Q10

Tc TIME OF CONCENTRAION	C COMPOSITE RUNOFF COEFICIENT	I RAINFALL INTENSITY IN/HR	A BASIN AREA ACRES	Q=CIA VOLUMES CFS
5	0.5	3.25	3.19	5.18
10	0.5	2.47	3.19	3.94
20	0.5	1.81	3.19	2.89
30	0.5	1.46	3.19	2.33
40	0.5	1.24	3.19	1.98
50	0.5	1.06	3.19	1.69
60	0.5	0.92	3.19	1.47

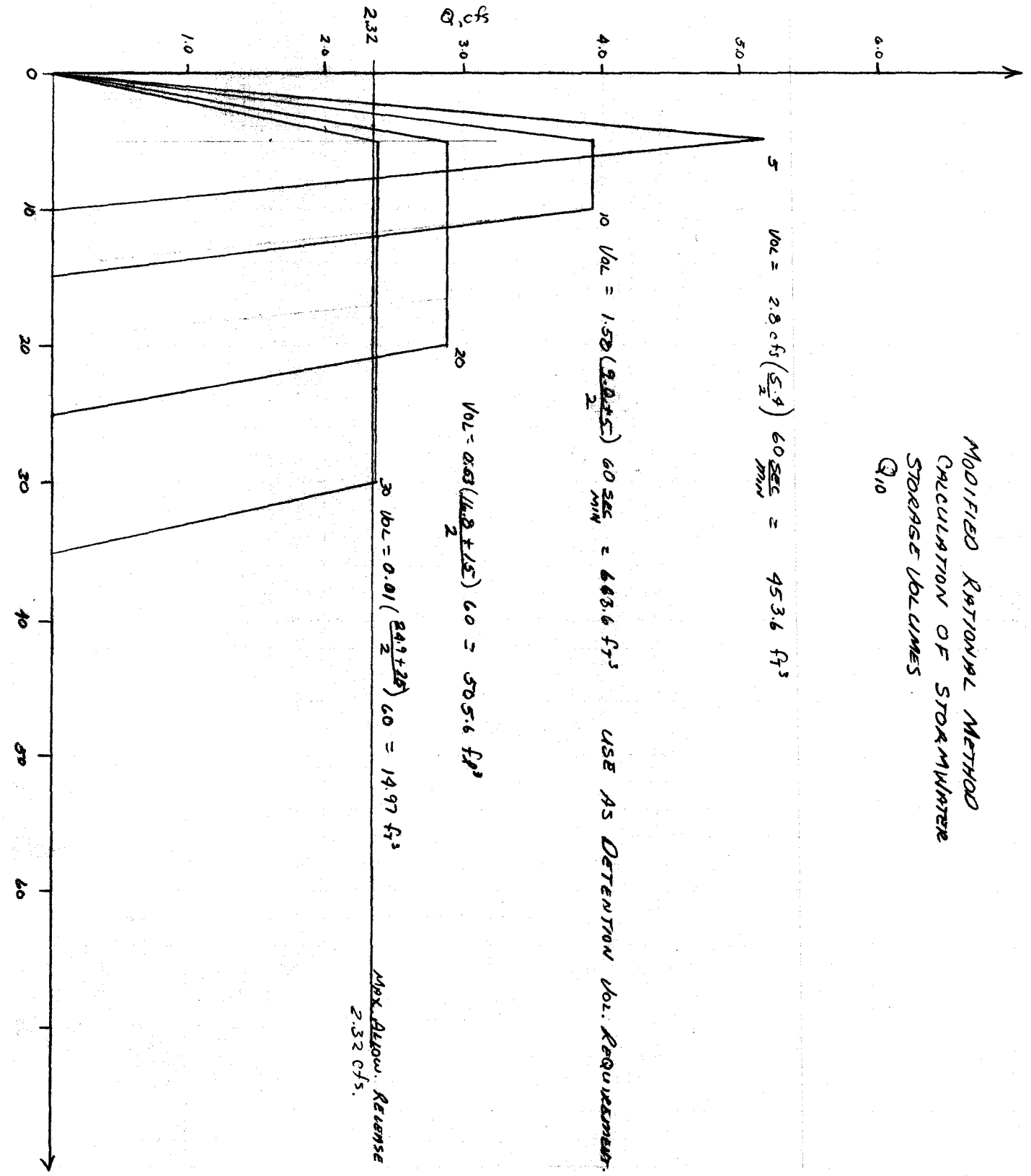
VOLUMES FOR STORAGE HYDROGRAPHS
MODIFIED RATIONAL METHOD
Q100

Tc TIME OF CONCENTRAION	C COMPOSITE RUNOFF COEFICIENT	I RAINFALL INTENSITY IN/HR	A BASIN AREA ACRES	Q=CIA VOLUMES CFS
5	0.5	4.95	3.19	7.90
10	0.5	3.85	3.19	6.14
20	0.5	2.85	3.19	4.55
30	0.5	2.26	3.19	3.60
40	0.5	1.84	3.19	2.93
50	0.5	1.7	3.19	2.71
60	0.5	1.44	3.19	2.30

CALCULATIONS

BANNER
BANNER ASSOCIATES, INC.
CONSULTING ENGINEERS & ARCHITECTS
2777 CROSSROADS BOULEVARD
GRAND JUNCTION, CO 81506 • (303) 243-2242

JOB NO. 8239.01
JOB Colony Park
CALCULATED BY MWL DATE 5-28-91
CHECKED BY _____ DATE _____
SHEET NO. 1 OF _____



MODIFIED RATIONAL METHOD
CALCULATION OF STORMWATER
STORAGE VOLUMES.
Q10

5 VOL = $2.8\ cfs\left(\frac{5.4}{2}\right) 60\ \frac{sec}{min}$ = 453.6 ft^3

10 VOL = $1.57\left(\frac{9.0+15}{2}\right) 60\ \frac{sec}{min}$ = 663.6 ft^3 USE AS DETENTION VOL. REQUIREMENT.

20 VOL = $0.63\left(\frac{11.2+17}{2}\right) 60$ = 570.6 ft^3

30 VOL = $0.01\left(\frac{24.1+28}{2}\right) 60$ = 14.97 ft^3

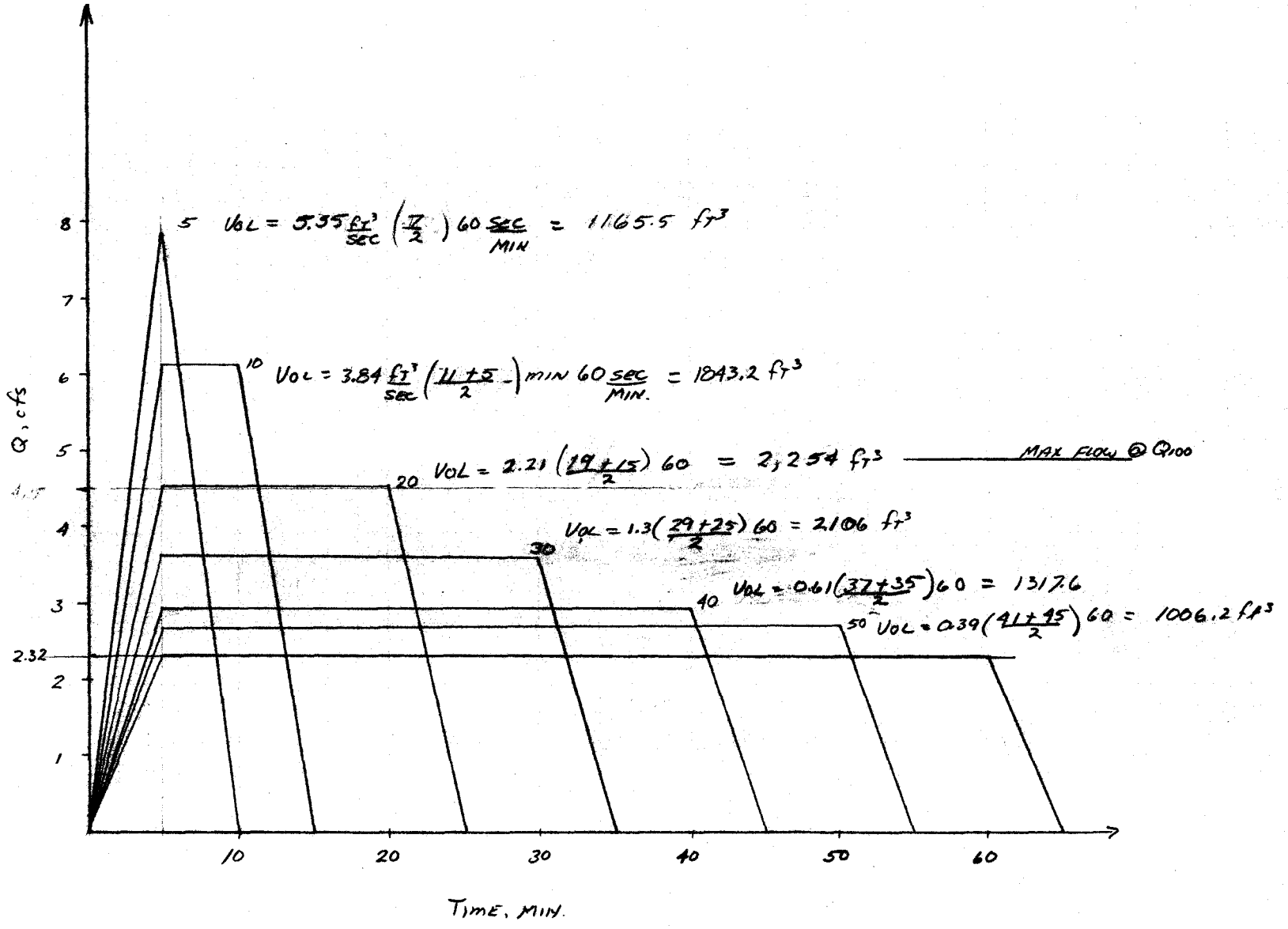
MAX. ALLOW. RELEASE
2.32 cfs.

BANNER
BANNER ASSOCIATES, INC.
CONSULTING ENGINEERS & ARCHITECTS
2777 CROSSROADS BOULEVARD
GRAND JUNCTION, CO 81506 • (303) 243-2242

JOB NO. 2239-01 SHEET NO. ____ OF ____
JOB Colony Park
CALCULATED BY MDG DATE 5-29-91
CHECKED BY ____ DATE ____

MODIFIED RATIONAL METHOD CALCULATION OF STORMWATER STORAGE VOLUMES Q100

$$VOL = Q\frac{ft^3}{sec}\left(\frac{min}{2}\right)60\frac{sec}{min} = ft^3$$



OUTLET STRUCTURE

DESIGN CALCULATIONS

High Head as compared with office diameter.

$$Q = CA\sqrt{2gH}$$

Q = 2.32 cfs
H = 82.0-75.24 = 6.76
A = Area
G = 32.2
C = 0.60[1]

$$2.32 = 0.60 \frac{\pi d^2}{4} \sqrt{2(32.2)\ 6.76}$$

$$2.32 = 0.4712\ d^2\ 20.8649$$

$$d = 0.486' = 5.83"$$

[1] Page 2 - 27 "Handbook of Applied Hydraulics".

DETENTION FACILITY VOLUMETRICS

Based on FAA Drainage Facilities Design

$V = 1/3\ b\ (A + B + \sqrt{AB})$

A & B = Contour Areas, sf.
b = Depth Between Contours
V = Volume ft^3

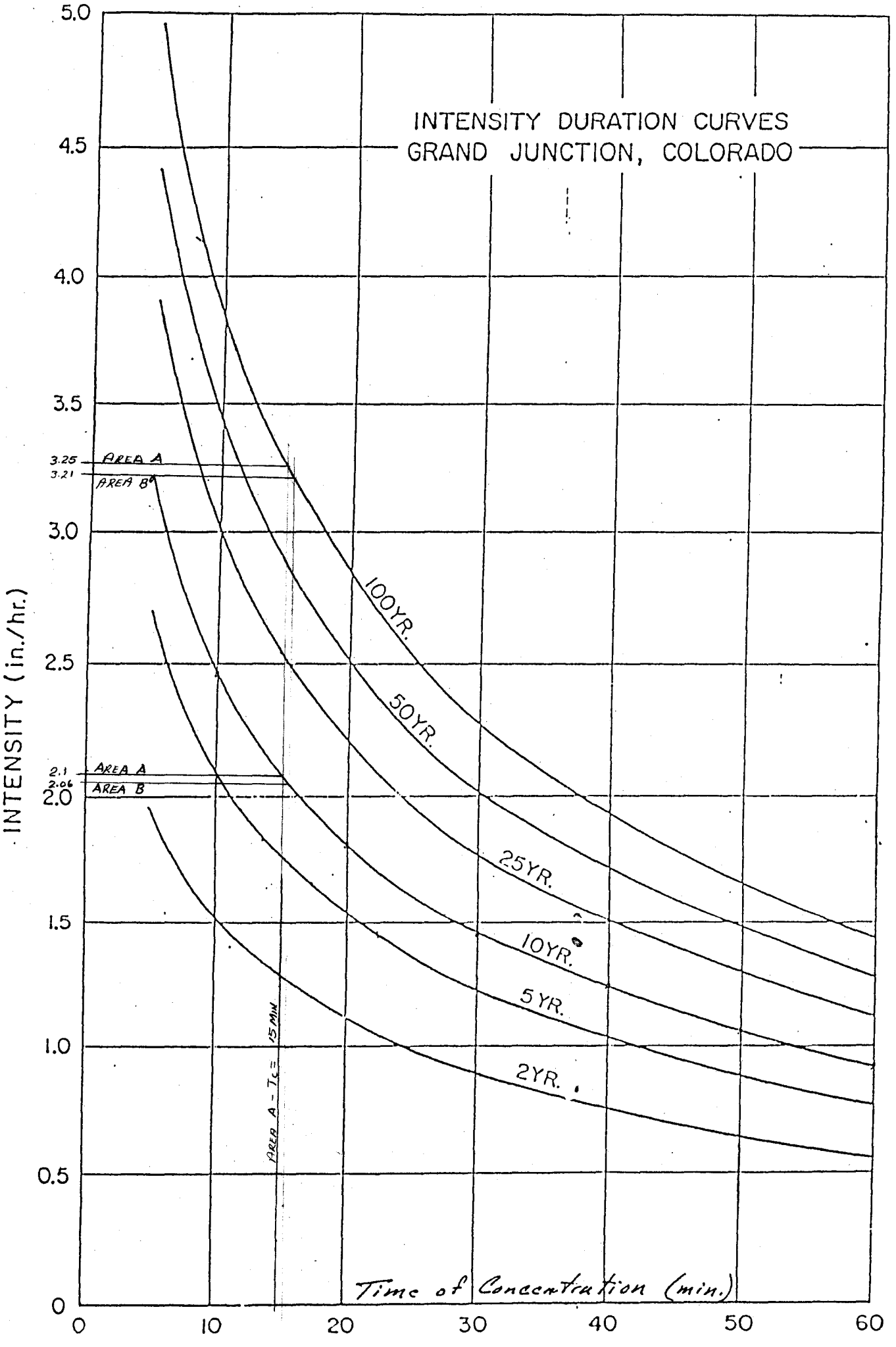
Basin Storage

Basin	A	B	b	$\sqrt{AB}$	V
E	1204.0	138	1.00	407.6	583.2
F	2776.0	55	1.40	390.7	1503.0
B	8030.0	777	1.00	2497.9	3768.3
C & D	7562.5	0	0.65	0.0	1638.5
G	1116.0	10	1.00	105.6	410.5
				Total Basin	7901 ft^3

Pipe Storage

Pipe	Area/L.F.	Length	Volume
18" RCP	$\frac{\pi(1.5)^2}{4} = 1.7671$	176'	311 ft^3
8" PVC	$\frac{\pi(.67)^2}{4} =$	407'	143 ft^3
		Total Pipe Volume	454 ft^3

Grand Total of Storage Facilities = 8355 ft^3


INTENSITY DURATION CURVES
GRAND JUNCTION, COLORADO
INTENSITY (in./hr.)
Time of Concentration (min.)
100YR.
50YR.
25YR.
10YR.
5YR.
2YR.
3.25 AREA A
3.21 AREA B
2.1 AREA A
2.06 AREA B
AREA A - Tc = 15 MIN
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
0
10
20
30
40
50
60

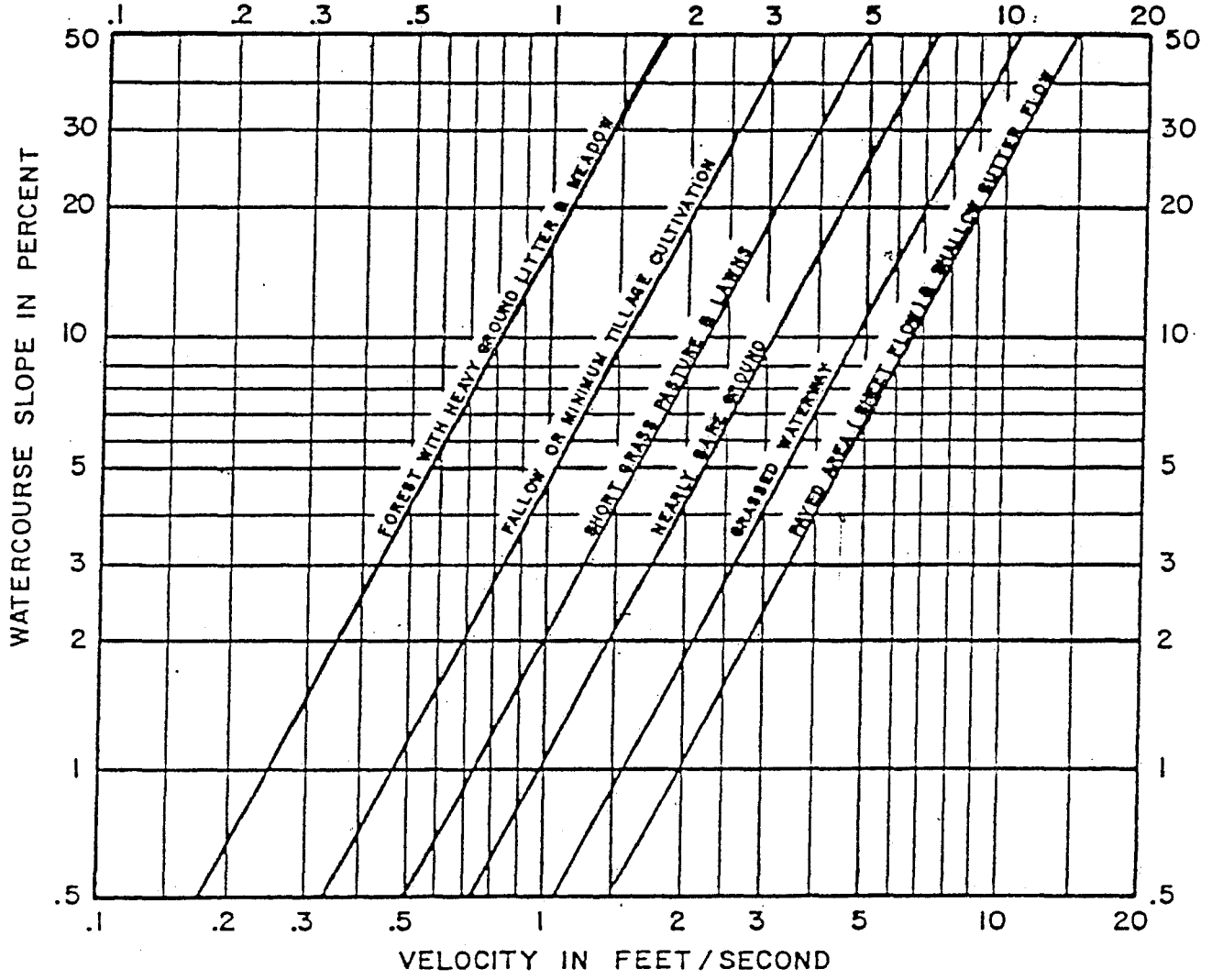
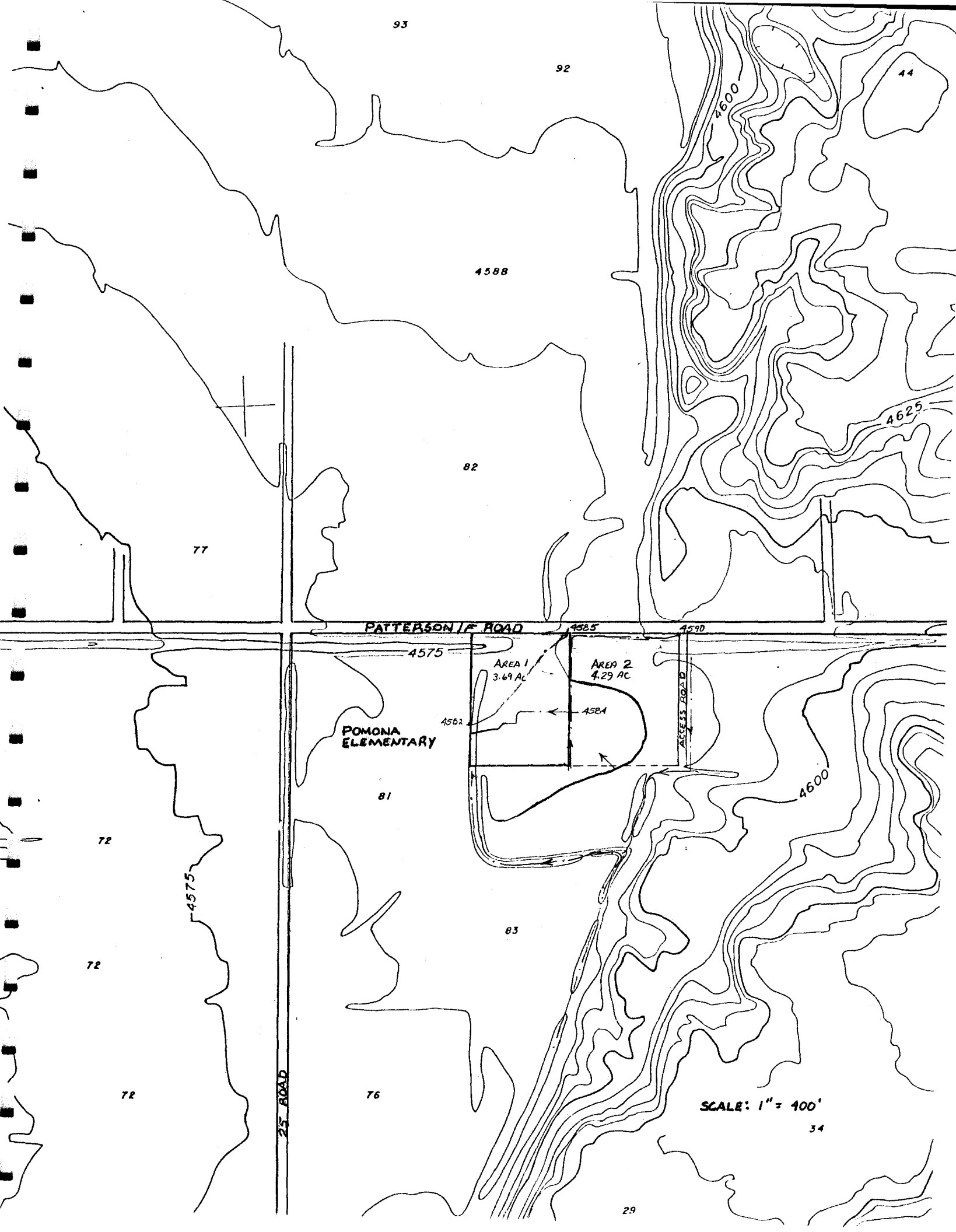


Figure 2-2 AVERAGE VELOCITIES FOR ESTIMATING TRAVEL TIME FOR OVERLAND FLOW..
(From: USDA, Soil Conservation Service, 1980)

Time of concentration is obtained by determining the average velocity for overland flow then dividing the length of the overland flow by the average velocity.


93
92
44
4600
4588
4625
82
77
PATTERSON RD
4585
4590
4575
AREA 1
3.69 AC
AREA 2
4.29 AC
4584
4582
ACCESS ROAD
POMONA
ELEMENTARY
81
4600
72
4575
83
72
25 ROAD
72
76
SCALE: 1" = 400'
34
29

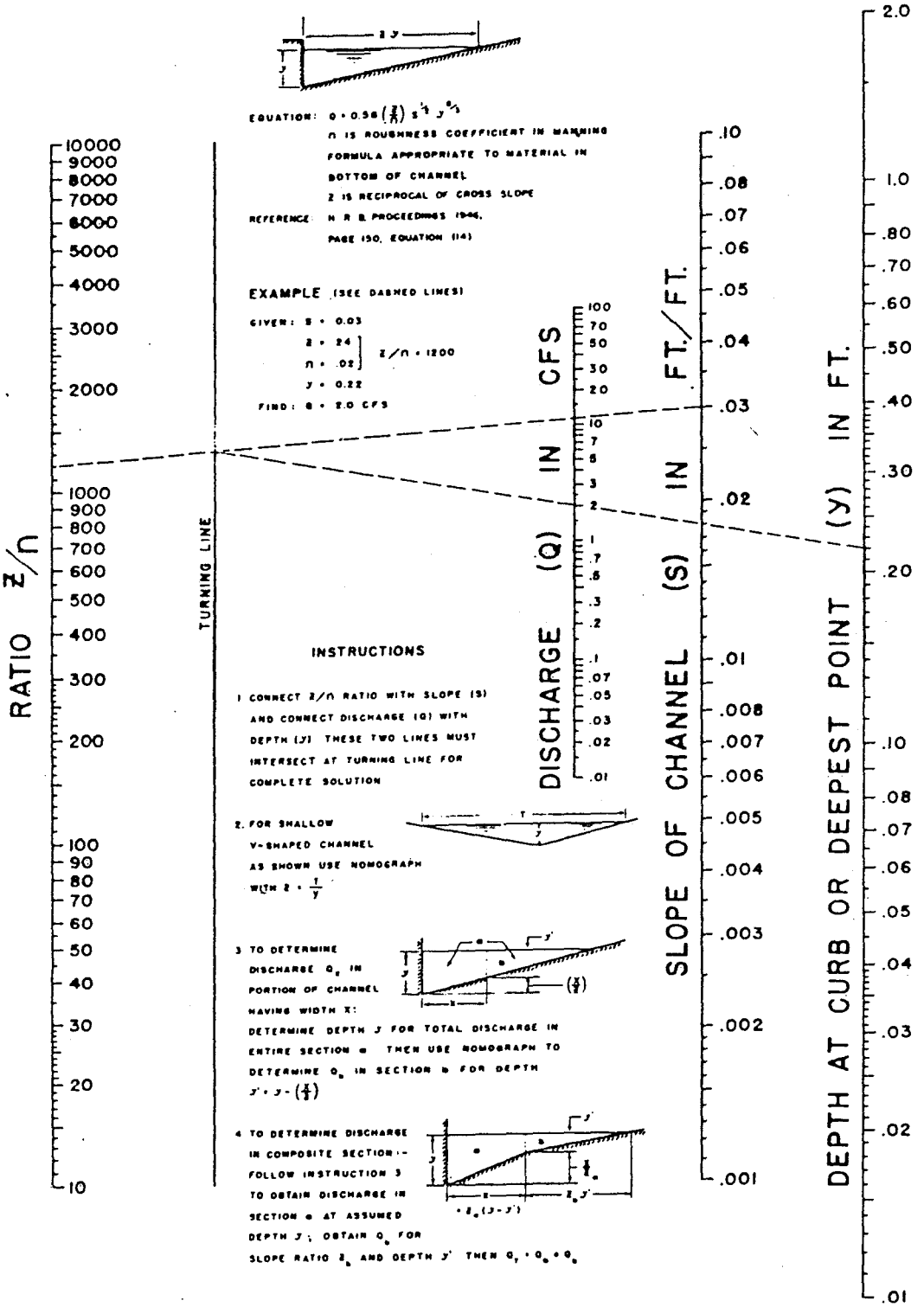


FIGURE 6-1. NOMOGRAPH FOR FLOW IN TRIANGULAR GUTTERS.

GEOLOGIC INVESTIGATION
COLONY PARK
MINOR SUBDIVISION

Mesa County, Colorado
May 22, 1991

John H. Wright, C.P.G.
& Associates

(303) 241-6619
336 Main St., Suite 201

P.O. Box 2355
Grand Junction, CO 81502

GEOLOGIC INVESTIGATION
COLONY PARK
MINOR SUBDIVISION

Mesa County, Colorado
May 22, 1991

CONTENTS

GEOLOGIC INVESTIGATION
COLONY PARK
MINOR SUBDIVISION

Mesa County, Colorado
May 22, 1991

INTRODUCTION

The proposed Colony Park Minor Subdivision is being developed by ALCO Building Co., 599 29 Rd., Grand Junction, CO 81505. The property consists of approximately 3.4 acres to be subdivided into 22 lots for town homes with common grounds. It is located in a portion of Section 10, T 1 S, R 1 W, Ute P.M. in Mesa County, Colorado west of the intersection of F Road and 26 Road. (See location map).

CONCLUSIONS AND RECOMMENDATIONS

1. The site was formerly shown by the Department of the Army (1976) to lie within a 100 year sheet flow floodplain. Subsequent improvements in the channel upstream and that adjacent to the north line of the property have contained the floodway in the channel (HUD, National Flood Insurance Program, 1978). Thus, the former hazard has been mitigated.

2. Evidence shows that a shallow water table may be expected to underlie the entire property. Below grade structures should be avoided.

SCOPE

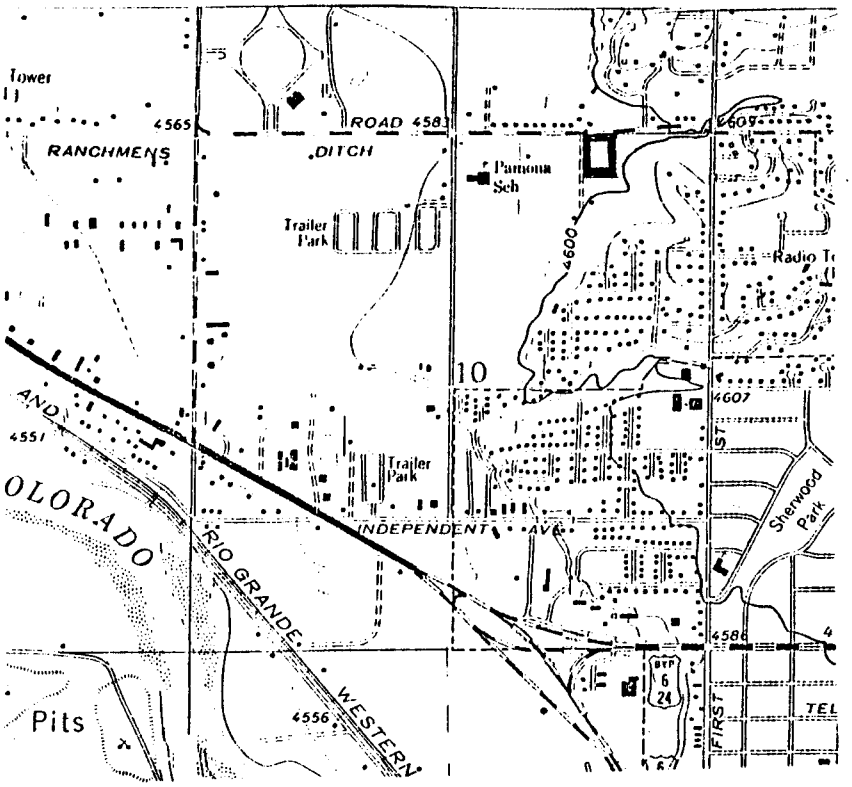
This report represents the results of a geologic investigation of the proposed Colony Park Minor Subdivision as required by Colorado S.B. 35 and local regulations. The investigation included a field examination as well as a review of available geologic literature.

A property map (1"=100') with 1' topographic contours was provided by the developers. Monumentation from the base survey was adequately located in the field.

The conclusions of this investigation are based solely on the site conditions at the time of investigation. They do not reflect hazards which might develop from improper design or construction methods.

GEOLOGY

The property lies entirely upon an alluvial floodplain deposit of sandy clay and sparse gravel which overlies the Cretaceous Mancos shale (Km). No outcrops of formational material exist on the property. Subsurface bedding is assumed to be nearly flat.



Colony Park Minor Subdivision

PROPERTY LOCATION MAP
From USGS 7.5 Minute Quadrangle: Grand Junction
Scale: 1" = 2,000'

Geologic Hazards

A 100 year sheet flow floodplain hazard was formerly shown by the Army Corps of Engineers (1976) to cover the entire site. This hazard referred to potential flooding of the open Horizon Drive Channel and the open Independent Ranchman's Ditch when both were already seasonally charged with irrigation waters. Subsequent to the Army Corps' investigations remedial work was done on both channels -- to wit, containing portions of both channels in culverts -- such that the Department of Housing and Urban Development (July 3, 1978) has indicated the floodway sufficiently contained and no 100 year flood hazard to presently exist. Thus, the former hazard has been mitigated.

A shallow water table is suspected to underlie the entire property. The source of this water is principally from two nearby irrigation ditches -- the Independent Ranchman's Ditch and the Horizon Drive Channel. While these two ditches have been contained in culverts in the immediate vicinity of the property, leakage from the open portions close to the property apparently continues to infiltrate the subsurface. Evidence of a shallow water table at 15' to 20' depth below surface was found in soils test holes drilled by Lincoln Devore in 1981. Furthermore, phreatophyte vegetation such as cottonwoods and russian olives flourished on the property at the time of this investigation. The hazard to property due to shallow water table can be easily mitigated by proper foundation design and avoidance of below grade structures such as basements. The subsurface soils report by Lincoln Devore (1981, cited below) adequately addresses this question, and makes appropriate design recommendations.

Mineral Resources

No developable valuable mineral resources are known to occur on the property.

SITE CONDITIONS

Surface Features

Natural topography is nearly flat, grading 0.5% - 1.0% to the southwest.

The surface consists mainly of an open field sparsely covered with poor grasses and cottonwood and russian olive trees. No buildings are located on the site.

Two shallow irrigation ditches cross the property, apparently once intended for local use but both presently dry.

Drainage

No stream channels exist on the property. Poor to moderate surface runoff drains southwesterly where it is captured by a branch of the

Independent Ranchman's ditch and eventually empties into the Colorado River.

Construction Factors

No hard or resistant outcrops of rock occur on the property, and surficial materials are easily rippable with conventional means.

WATER

Domestic water will be obtained from Ute Water.

Irrigation water will be derived from Grand Valley Irrigation.

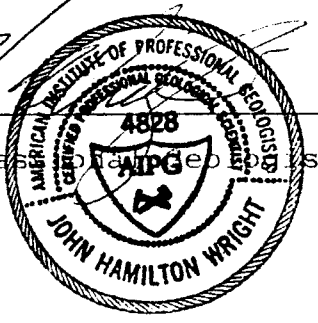
Sewage will be conveyed off site by the City of Grand Junction systems.

SOILS

Surface soils are comprised of two soil types: "Ravola loam" and "Fruita and Ravola loam". Both are pale to light brown loam which may be slightly calcareous. They are alluvial soils with occasional gravels which overlie the Cretaceous Mancos Shale. In general, they display medium runoff, medium internal drainage, moderate erosion hazard, and sparsely saline soils characteristics. Occasionally these soils and the shale substratum contain lenses of bentonitic or swelling clays. Field observations do not indicate a significant hazard associated with these characteristics on site.

Subsurface soils tests are not required for minor subdivisions by Mesa County. However, a subsurface soils test has been conducted in the past (March 24, 1981) by Lincoln Devore, professional soils engineers, over a larger tract which included the site of this investigation. At least two of the test borings were collared on the site. The Lincoln Devore investigation made findings of a shallow water table, somewhat saline soils, and certain runoff characteristics. That investigation resulted in appropriate recommendations for construction. No significant change has been wrought on the property since that investigation. The findings and recommendations of that investigation should be followed.

John H. Wright
Certified Professional Geologist
May 22, 1991



REFERENCES

1. Soil Conservation Service; Soil Survey of the Grand Junction Area, CO; Series 1940, No. 19; 1955.

2. Army Corps of Engineers; Flood Hazard Information, Colorado River and Tributaries, Grand Junction, Colorado; 1976.

3. HUD National Flood Insurance Program Map; Flood Hazards of Grand Junction; July 3, 1978.

4. Lincoln Devore; Soil Test, Colony Park Subdivision; March 24, 1981.

RADIATION EXAMINATION

COLONY PARK MINOR SUBDIVISION

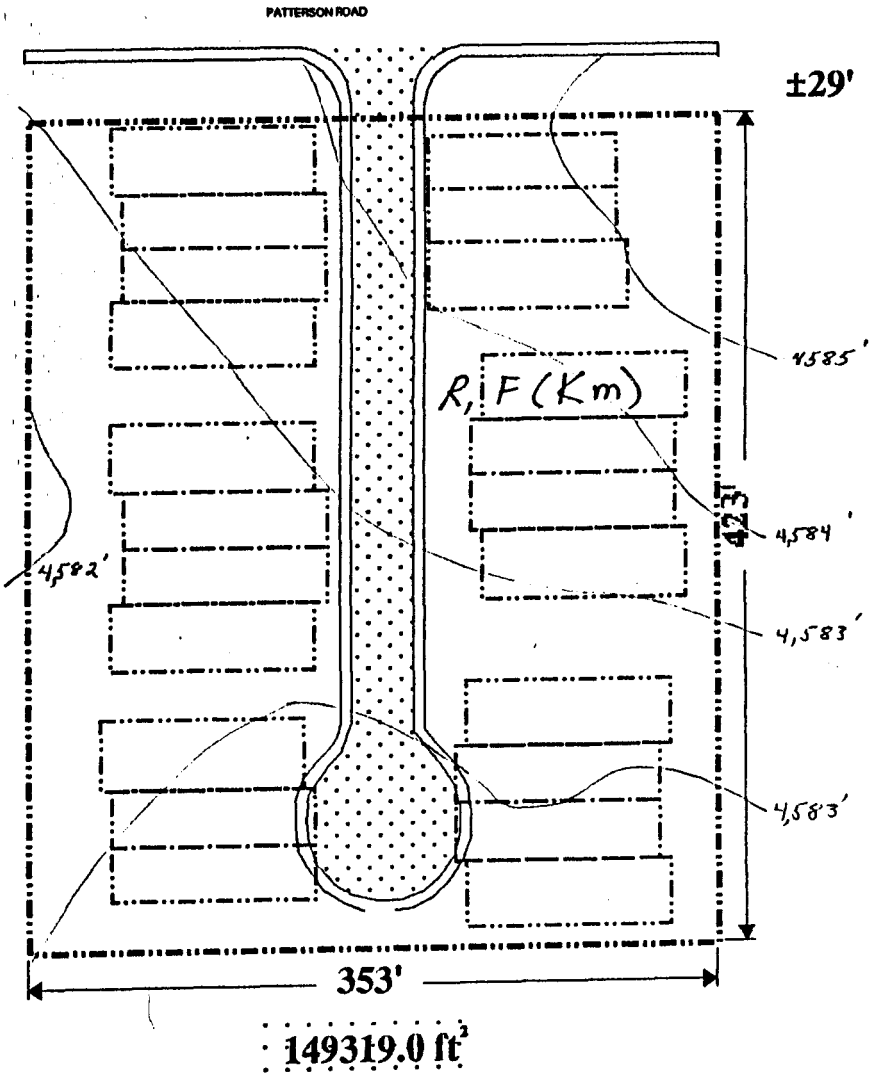
Mesa County, Colorado
May 22, 1991

The proposed Colony Park Minor Subdivision, being developed by ALCO Building Co., 599 29 Rd., Grand Junction, CO 81505, was examined for potential radiation hazard. The property is located in a portion of Section 10, T 1 S, R 1 W, Ute P.M. in Mesa County, Colorado. Conditions at the site at the time of this investigation indicate the site is free of radiation hazard.

The examination of the site was carried out according to the requirements of Colorado SB 35, and of local regulations which require radiation examinations for proposed subdivisions. The field examination was furthermore carried out in conjunction with the foregoing geologic field investigation, using a Urinco Scintillation Counter Model #720N. The surface was thoroughly traversed on foot. Background radiation was 50 counts per second, +/- 10cps. No where on the property was found a reading higher than background.

As all readings were well below Colorado Health Department standards of 250 counts per second, there is no apparent reason for more detailed radiation survey work.

John H. Wright
Certified Professional Geologist



COLONY PARK MINOR SUBDIVISION

Scale: 1"= 100'
Contour Interval: 1'

North

Explanation:

R, F (Km) Ravola and Fruita loam (overlying Cretaceous Mancos Shale)

——— No other geologic features are shown since no outcrops or structure can be observed on the surface.

REVIEW SHEET SUMMARY

FILE NO. #41-91 **TITLE HEADING:** COLONY PARK FILING NO. 2

ACTIVITY: Request for a Preliminary Plan and Plat for 22 residential lots on 3.43 acres in an existing Planned Residential ten units per acre (PR-10) Zone.

PETITIONER: Alco Building Company

LOCATION: Southeast of Patterson and 25 1/2 Roads

PHASE: Preliminary **ACRES:** 3.43

PETITIONER'S ADDRESS: 599 25 Road
Grand Jct, CO 81505

ENGINEER: Banner & Assoc. Jim Langford, 243-2242

STAFF REPRESENTATIVE: David Thornton (303) 244-1447

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

City Police Department 06/05/91
Captain Gorby 244-3562

Police Department is concerned with noise complaints from residents due to activities at Pamona Softball fields. Recommended acceleration, and deceleration lanes be provided for entrance and exit to subdivision.

City Fire Department 06/06/91
George Bennett 244-1400

1. Access appears to be adequate at this time.

2. In meeting City Ordinance #2513 Para. 31-94(2)b. fire hydrants are to be placed at each intersection and not more than 300 feet apart. Please move the south hydrant north to meet this requirement. An (8) eight inch supply line is to be provided. A minimum fire flow of 1,000 gpm must be provided.

Ute Water 06/05/91
Gary R. Matthews 242-7491

Individual meters would connect to the 8" main on Cider Mill Road. Illustration of the water service connection on sheet 9 of 10 is incorrect. Curb stop valves need removed and a corp stop valve added at the end of the service line.

Policies and fees in effect at the time application will apply.

Public Service 06/06/91
Carl Barnkow 244-2658

Gas: No objection to replat, however, Lots 16 though 19 appear to be platted over existing easement. Buildings may not be constructed over easement. This includes sheds, patios, etc.

Electric: No objections. Facilities will be front lot line construction. Meters are not to be located inside fence areas.

Post Office 06/07/91
Synthia L. Polzine 244-3400

This subdivision is on city route 22 for mail delivery. Mail delivery will be centralized unless development is 50% complete. Please notify Postal Service when addressing has been established.

City Engineer 06/12/91
J. Don Newton 244-1559

Drainage: In drainage calculation, why is historic discharge from basin 2 not included in allowed maximum release rate? If included, the allowed release rate would increase from 2.32 to 4.97 cfs. I have no objections to the proposed drainage plan and report, however, the storm sewer pipe should be connected to the proposed new drainage pipe to be constructed along the west side of the development. Please call the Grand Junction Drainage District for details.

Street: What is the "EGTC" line shown along outside of the right-of-way line on sheet 7?

Please complete the left and right side profile lines and label the existing ground line, flow line, or top of curb, etc. on the profiles.

A right turn deceleration lane at the entrance to this development is not warranted at this time but will be required upon any future extension of Cider Mill Road. No future street access on F Road will be allowed within 300' of Cider Mill Road. The petitioner should meet with the owners of the other undeveloped land in the area and develop a traffic circulation plan and street network for future development of their properties. This should be done prior to final approval of Colony Park Filing #2. Standard City details shown on streets 8, 9, and 10 need to be updated to agree with current standards.

City Parks & Recreation 06/12/91
Don Hobbs 244-1545

Open space fee due - 22 units x $225 = $4,950

City Property Agent 06/18/91
Tim Woodmansee 244-1565

1. Lot corners need to be tied to the subdivision boundaries.

2. The sum of the distances along the northern boundary is .08 greater than the measured overall dimension.

3. Lot os-2 encroaches upon Lot 11 and renders it undevelopable. Should Lot 11 be removed or this particular block of lots moved to the north?

4. There are errors or discrepancies in the following courses:

   #4 should have a southwest bearing;
   #5 this bearing should be labeled on plat;
   #7 this bearing should be labeled on plat;
   #12 bearing does not match plat;
   #13 distance not shown on plat;

   Please re-check all bearings and distances.

4. The revocable permit will be scheduled to go before Council at the final hearing.

41-91

Alco Building Company, Inc.

RECEIVED GRAND JUNCTION PLANNING DEPARTMENT

JUN 28 1991

June 28, 1991

Grand Junction Planning Dept.
250 North 5th
Grand Junction, CO 81501

Dear Sirs:

These comments are in response to the review comments recieved from the various agencies relative to the preliminary submittal for Replat of Colony Park, Filing #1 as follows:

GRAND JUNCTION DRAINAGE DISTRICT:

I have contacted Mr. John Ballagh and discussed the following:

1.) The easement on the west property boundary has been changed to read drainage easement removing the word proposed.

2.) The wording in the plat narrative hasbeen referred to legal council and the engineer for their interpretation as to whether a change in lanuage is needed.

3.) Due diligence will be taken in landscape planting to anticipate the need for equipment access and repair.

4.) The developer has agreed to pay the cost of material for one manhole for the proposed storm sewer to be installed on the west boundary of the development. The developer has agreed to dedicate the easement needed for said line.

CITY POLICE DEPARTMENT:

1.) Per City Engineer, acceleration and deacceleration lanes are not warranted for this subdivision.

CITY FIRE DEPARTMENT:

1.) Spacing of fire hydrant has been moved to meet requirements.

UTE WATER:

1.) Concerns we relayed to engineer, Banner & Associates, for changes if needed.

CITY PARKS/RECREATION:

1.) We were told the previous developer paid open space fees, if so, additional fees would not be due. If the developer did pay it would have been in 1981, however, if fee was not paid it will be by this developer.

P. O. Box 996 599 25 Road Grand Junction, Colorado 81502 (303) 242-1423

PUBLIC SERVICE:

1.) An error existed showing a gas easement and has been changed.

POST OFFICE:

1.) Comments were informative in nature, no response needed.

UTILITY ENGINEER:

Plat

1.) The drainage easement is all part of the open space which is clearly marked "access, drainage, & utility".
2.) Plat narrative has been referred to legal council for interpretation as to whether a change is needed.

Utility composite

1.) Sewer Line will be installed with material acceptable to the City of Grand Junction.
2.) Has been changed.
3.) Changed
4.) Storm sewer ties into proposed line to be installed by the City of Grand Junction & Grand Junction Drainage District.

Specifications

1-4 Outdated sheets have been replaced with sheets reflecting new city standards.

Drainage

1.) A full drainage report was submitted with preliminary package.

CITY PROPERTY AGENT:

1-5 all items of concern were referred to the surveyor and engineer at Banner & Associates for verification and change if needed.

CITY ENGINEER:

1.) Drainage concern was referred to Banner & Associates and was verified calculations are correct.
2.) "EGTC" is clearly marked on legend.
3.) A meeting with adjacent property owners was called to discuss traffic circulation of future developement on their properties. The concensus was this developement would not be the major access to future developement of the adjacent property.

COMMUNITY DEVELOPMENT DEPARTMENT:

1.) Submitted to Dave Thorton.
2.) Individual unit trash pick-up is the developers intent.
3.) Labeling of the replat has been referred to legal council for interpretation.
4.) Development Schedule - Phase 1 - August 1991, Phase II - within one year.
5.) Landscaping bids are being solicited at this time to determine dollar amounts.
6.) Submitted with final
7.) Will be corrected
8.) Referred to legal and engineering

COMMUNITY DEVELOPMENT DEPARTMENT: Continued

9.) The gas easement was an error and has been corrected.
10.) Refer to Plat as old boundary is shown.
11.) Informative - no response
12.) Informative - no response
13.) Refer to #8 - A & B will be completed prior to requesting Plat sign-off, however, legal council and engineering feel plat title should remain as is.

Respectfully Submitted,

Bruce Milyard

Bruce Milyard
Alco Building Company

FF

ACTION SHEET

~~REZONE AND~~ PRELIMINARY

ACRES _____
UNITS _____
DENSITY _____
ACTIVITY Preliminary plan/plat (Replat
PHASE Prelim.
COMMON LOCATION S. of Patterson Rd. - 1,000 ft. East of 25½ Rd
DATE SUBMITTED 6-1-91 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 _____

FILE NUMBER _____
ZONE PR-10
TAX SCHEDULE # 2945-101-29-001
010

REVIEW AGENCIES

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	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 G.J. ✓	●	●	●										●	●	●	●	●	●	●	●		●				●			●				
● 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)	●	●	●												●			●				●	●			●			●	●	●		
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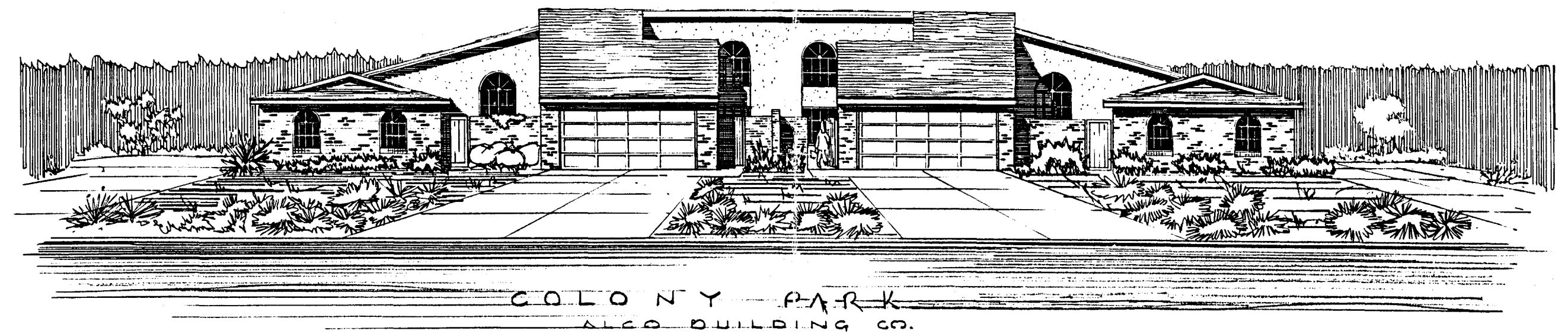
BOARDS	DATE	
P.C.	7-9-91	Approve 5-0 subject to Review Agency Comments & recommend denial of the Revokable Permit for fence #41 91

STAFF

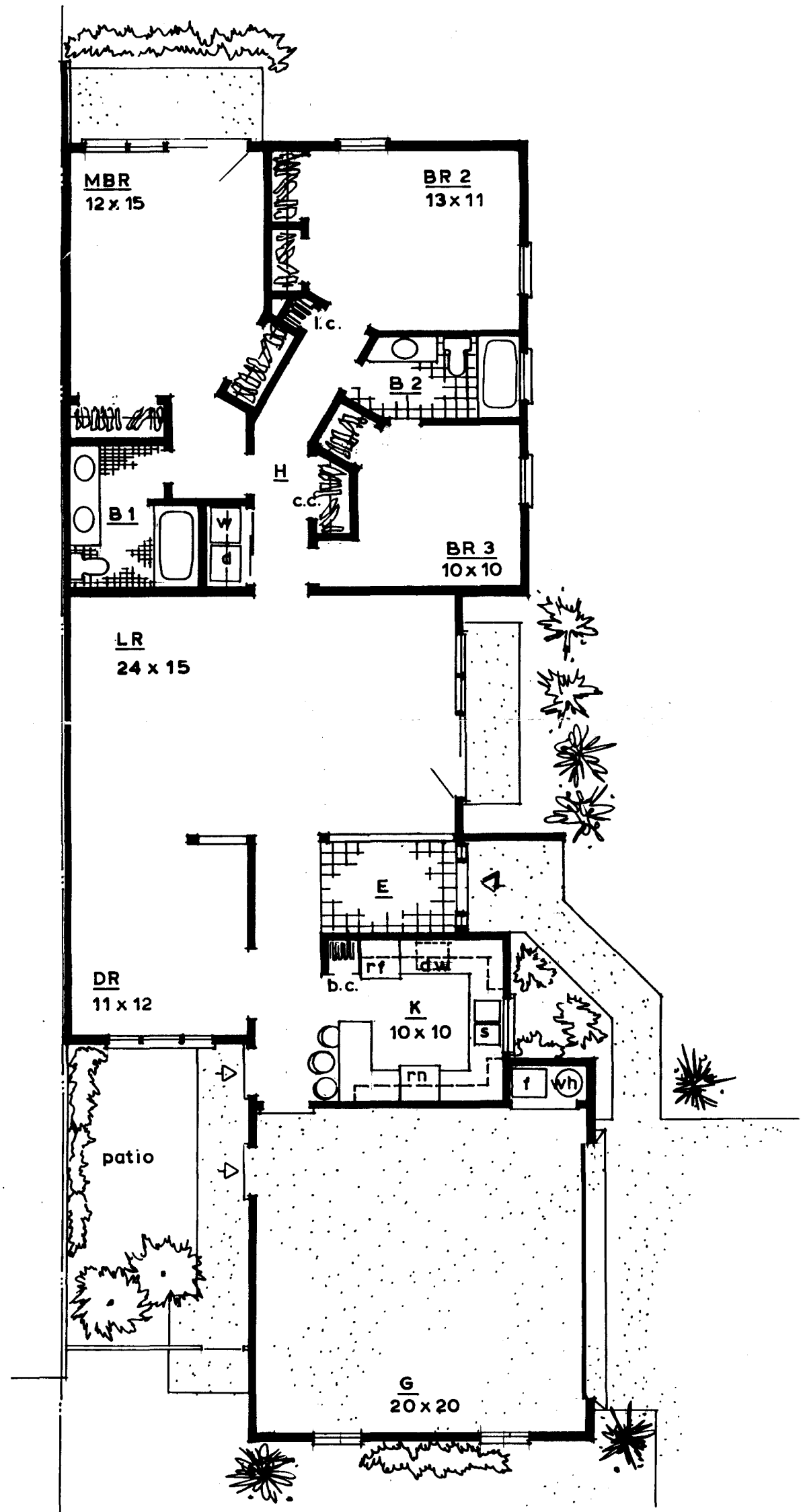
Original
Do NOT Remove
From Office

APPLICATION FEE REQUIREMENTS

$315 payable to City of G.J. at time of Submittal



COLONY PARK
ALCO BUILDING CO.


MBR
12 x 15
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G
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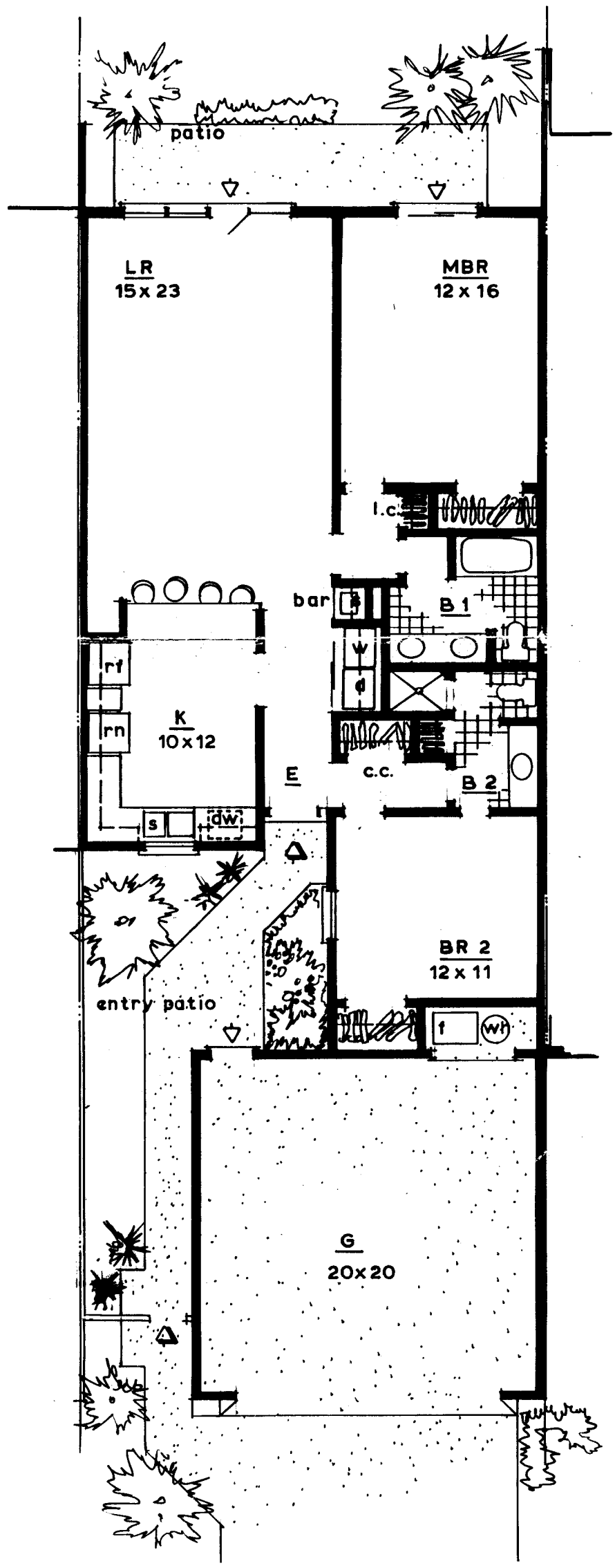
UNIT A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c.c.
B 2
s
dw
BR 2
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entry patio
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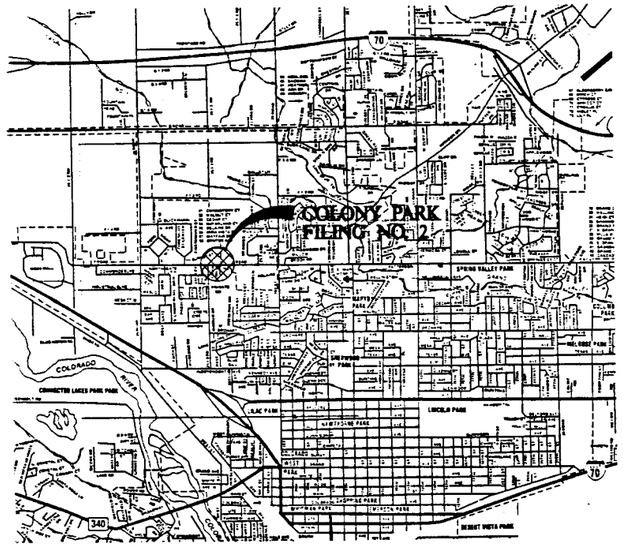
20x20

UNIT B

ALCO BUILDING COMPANY

PLANS FOR
CONSTRUCTION
OF

COLONY PARK FILING NO. 2



VICINITY MAP

MAY 1991

NO.	TITLE
1.	TITLE SHEET
2. & 3.	PLAT
4.	LEGEND AND CONSTRUCTION NOTES
5.	GRADING AND DRAINAGE PLAN
6.	UTILITY COMPOSITE
7.	ROADWAY AND SEWER PLAN AND PROFILE
8.	SEWERLINE STANDARD DETAILS
9.	WATERLINE STANDARD DETAILS
10.	ROADWAY STANDARD DETAILS

BANNER

BANNER ASSOCIATES, INC. • CONSULTING ENGINEERS & ARCHITECTS
2777 CROSSROADS BOULEVARD • GRAND JUNCTION, CO 81506 • (303) 243-2242

JOB NO. 8239-01

COLONY PARK FILING NO. 2: A REPLAT OF A PORTION OF COLONY PARK, FILING NO. I, AND A PORTION OF THAT PARCEL DESCRIBED IN DOCUMENT RECORDED IN BOOK 1814, PAGE 405, COLONY PARK, PHASE I, FILING 2, SECTION 10, T.1 S., R.1 W., UTE MERIDIAN

CITY APPROVAL

Colony Park, Phase I, Filing No. 2: A Replat of a Portion of Colony Park, Filing No. I, located in E 1/2 of the NW 1/4 of the NE 1/4 of Section 10, T1 S., R1 W., U.M., City of Grand Junction, County of Mesa, State of Colorado is approved and accepted on this _____ day of _____ A.D., 199__

_____
City Manager

_____
President of the Grand Junction City Council

_____
Chairman of the Grand Junction City Planning Commission

_____
City Planning Director

_____
City Engineer

MESA COUNTY SURVEYOR

Received _____
Reception _____

COUNTY CLERK AND RECORDER'S CERTIFICATE

State of Colorado)
)
County of Mesa)

I hereby certify that Colony Park, Filing No. 2, Phase I: A Replat of a Portion of Colony Park, Filing No. I, Section 10, T.1 S., R.1 W., Ute Meridian was filed for record in the office of the County Clerk and Recorder of Mesa County at _____M., on the ____ day of _____ A.D. 1991 in Book No.____, Page No.____, Reception No.____

_____
Mesa County Clerk and Recorder

_____
Deputy

COUNTY PLANNING COMMISSION CERTIFICATE

Approved this ____ day of _____, A.D., 1991, County Planning Commission of the County of Mesa, Colorado.

_____
Chairman

BOARD OF COUNTY COMMISSIONER'S CERTIFICATE

Approved this ____ day of _____, A.D., 1991, Board of County Commissioners of the County of Mesa, Colorado.

_____
Chairman

UTILITIES COORDINATING CERTIFICATE

Approved this ____ day of _____, A.D., 1991.

_____

CERTIFICATE OF OWNERSHIP AND DEDICATION

KNOW ALL MEN BY THESE PRESENTS that George D. Young being the owner in fee simple of Colony Park, Filing No. 2; A Replat of a Portion of Colony Park, Filing No. I, and a Portion of that Parcel described in document recorded in Book 1814, Page 405, Section 10, Township 1 South, Range 1 West, Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado does hereby Replat, said real property in accordance with the Replat shown hereon:

LEGAL DESCRIPTION OF COLONY PARK, FILING NO. 2: A REPLAT OF A PORTION OF COLONY PARK, FILING NO. I

Colony Park Filing No. 2 is located in the E 1/2 of the NW 1/4 of the NE 1/4 of Section 10, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado more fully described as follows:

Beginning at the northeasterly corner of Colony Park, Filing No. 2 whence the 1/4 corner, a Mesa County Survey Marker, common to Sections 3 and 10, T.1 S., R.1 W., U.M. bears N 85° 44' 22" W, 1015.68 feet with the Section line between Sections 3 and 10 between the 1/4 corner and Section corner of 2-3-10-4 considered to bear N 89° 58' 25" W, and with all bearings used herein relative thereto:

1. Thence S 00° 02' 34" E, 423.06 feet;
2. Thence N 89° 58' 31" W, 354.08 feet;
3. Thence N 00° 01' 17" E, 423.07 feet;
4. Thence S 89° 58' 25" E, 353.56 feet to the Point of Beginning.

Colony Park, Filing No. 2 as described above contains 3.436 acres more or less.

LEGAL DESCRIPTION OF PHASE I OF COLONY PARK, FILING NO. 2: A REPLAT OF A PORTION OF COLONY PARK, FILING NO. I: PLAT BOOK 13, PAGE 382, AND A PORTION OF THAT PARCEL DESCRIBED IN DOCUMENT RECORDED IN BOOK 1814, PAGE 405

Phase I is located in Colony Park, Filing No. 2 in the E 1/2 of the NW 1/4 of the NE 1/4 of Section 10, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado more fully described as follows:

Beginning at the northeasterly corner of Phase I of Colony Park, Filing No. 2 whence the 1/4 corner, a Mesa County Survey Marker, common to Sections 3 and 10, T.1 S., R.1 W., U.M. bears N 85° 02' 08" W, 871.3 feet with the Section line between Sections 3 and 10 between the 1/4 corner and Section corner of 2-3-10-4 considered to bear N 89° 58' 25" W, and with all bearings used herein relative thereto:

1. Thence S 00° 01' 35" W, 296.40 feet;
2. Thence southeasterly 29.37 feet along the arc of a circular curve concave to the northeast with a radius of 38.00 feet, a delta of 44° 16' 56" and a chord bearing S 22° 06' 53" E, 28.64 feet;
3. Thence southerly 77.29 feet along the arc of a circular curve concave to the west with a radius of 50.00 feet, a delta of 88° 33' 52" and a chord bearing S 00° 01' 35" W, 69.82 feet;
4. Thence southwesterly 29.37 feet along the arc of a circular curve concave to the southeast with a radius of 38.00 feet, a delta of 44° 16' 56" and a chord bearing S 22° 06' 53" E, 28.64 feet;
5. Thence S 00° 01' 35" W, 3.78 feet;
6. Thence N 89° 58' 31" W, 50.00 feet;
7. Thence N 00° 01' 35" E, 3.78 feet;
8. Thence northwesterly 29.37 feet along the arc of a circular curve concave to the southwest with a radius of 38.00 feet, a delta of 44° 16' 56" and a chord bearing N 22° 06' 53" W, 28.64 feet;
9. Thence northerly 77.29 feet along the arc of a circular curve concave to the east with a radius of 50.00 feet, a delta of 88° 33' 52" and a chord bearing N 00° 01' 35" E, 69.82 feet;
10. Thence northeasterly 16.90 feet along the arc of a circular curve concave to the northwest with a radius of 38.00 feet, a delta of 28° 29' 28" and a chord bearing N 30° 03' 48" E, 16.70 feet;
11. Thence N 89° 58' 25" W, 157.16 feet;
12. Thence N 00° 01' 17" E, 308.74 feet;
13. Thence S 89° 58' 25" E, 208.62 feet to the Point of Beginning.

Phase I of Colony Park, Filing No. 2 as described above contains 1.877 acres more or less.

That said owner does hereby dedicate the streets shown in the plat shown hereon to the City of Grand Junction on behalf of the public forever and does hereby dedicate those portions of Phase I of Colony Park, Filing No. 2 which are labeled as Access, Drainage and Utility Easements in the Plat shown hereon are dedicated to the City of Grand Junction in behalf of the Public Utility Companies and the Public as perpetual easements for the installation and maintenance of utility, access and drainage facilities, including but not limited to transmission lines, electric lines, gas lines, water lines, sewer lines and telephone lines, together with the right to trim interfering trees and brush and with the perpetual right of ingress and egress for installation of such facilities, and does hereby dedicate those areas labeled as Irrigation and gas line easements in the plat shown hereon to the public for such use, and those areas labeled Open Space in the Plat shown hereon are hereby dedicated to the owners of the property within Colony Park, Phase I, Filing No. 2 for recreational and aesthetic purposes as determined appropriate by said owners. Said easements and rights shall be utilized in a reasonable prudent manner.

IN WITNESS WHEREOF, I hereunto set my hand this _____ day of _____, A.D., 1991.

_____
George D. Young

ACKNOWLEDGEMENT OF OWNERSHIP

State of Colorado)
)
County of Mesa)

On this _____ day of _____, A.D., 1991, before me the undersigned officer, personally appeared George D. Young and acknowledged that he executed the foregoing Certificate of Ownership, for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto affix my hand and official seal.
My commission expires _____

_____
Notary Public

_____
Address

SURVEYOR'S CERTIFICATE

I, Wallace E. Beedle, a Professional Land Surveyor, licensed under the laws of the State of Colorado, do hereby certify that Colony Park, Filing No. 2; A Replat of a Portion of Colony Park, Filing No. I, and a Portion of that Parcel described in document recorded in Book 1814, Page 405, and Colony Park, Phase I, Filing No. 2, Section 10, T.1 S., R.1 W., Ute Meridian, shown hereon has been prepared under my direct supervision and accurately represents a survey conducted under my direct supervision. This survey complies with applicable Mesa County and State of Colorado regulations to the best of my knowledge and belief.

IN WITNESS WHEREOF, I hereunto affix my hand and official seal this 30 day of May, A.D.

Wallace E. Beedle
P.L.S. No. 20632

COLORADO REGISTERED WALLACE E. BEEDLE 20632 P.E. AND P.L.S.

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

COLONY PARK, FILING NO. 2: A REPLAT OF A PORTION OF COLONY PARK, FILING NO. I, AND A PORTION OF THAT PARCEL DESCRIBED IN DOCUMENT RECORDED IN BOOK 1814, PAGE 405, COLONY PARK, PHASE I, FILING 2, LOCATED IN E 1/2, NW 1/4, NE 1/4 OF SECTION 10, T.1 S., R.1 W., UTE MERIDIAN, MESA COUNTY, COLORADO

BANNER ASSOCIATES, INC.
GRAND JUNCTION, COLORADO

SCALE:	JOB NO:	DATE:	SHEET NO:
N.T.S.	8239-01	5-29-91	1 of 2

LEGEND

R.O.W.	STREET R.O.W. LINE
℄	LOT LINE
	EASEMENT LINE
1+00 ℄ 1+50	CENTERLINE & STATION MARKERS
E.T.C.	CENTERLINE COMMON TRENCH–ELECTRICAL, TELEPHONE, & CABLE T.V.
T.V.	CABLE TELEVISION LINE
T	UNDERGROUND TELEPHONE LINE
OHP	EXISTING OVERHEAD UTILITY LINES & POLES
E	CONDUIT LINE, TRANSFORMER W/SERVICE TO LOT, PULL OR SPLICE BOX, 2'0" RISER POLE
	STREET LIGHT
G	GAS LINE, 1¼" DIAMETER (UNLESS OTHERWISE NOTED)
8"W	WATERLINE, TEE & THRUST BLOCK, INLINE VALVE, FIRE HYDRANT, REDUCER, WATER METER, BLOW–OFF
	STORM SEWER, INLET, MANHOLE, OUTFALL (SMALLER THAN 30")
	STORM SEWER (30" & LARGER)
8"S	SANITARY SEWER, CLEAN–OUT, MANHOLE, SERVICE CONNECTION, WYE, SPECIAL PIPE & PLUG
TOP BACK OF CURB / EDGE OF GUTTER	CURB INLET W/DIRECTION OF FLOW
	DITCH & DIRECTION OF FLOW
TP	BENCHMARK LOCATION
2 (LOT) ② (BLOCK)	LOT & BLOCK No.
	PRESSURE REDUCING VALVE
4	SHEET REF.

GENERAL CONSTRUCTION NOTES

1. Alignment, centerline curve data, and stationing to be verified from approved subdivision plat before construction.
2. Locations of utilities shown on these plans are approximate only. Contractor is to contact affected utility for specific locations before digging.
3. These plans and the surveys upon which they are based are tied into the system of Monument Line provided by the City of Grand Junction. The stationing shown on "F" Road is relative to the brass cap at 25 1/2 Road being Station 100+00.
4. Contractor to provide plugs and marker posts at all pipe stubouts noted on Plans, include cost in unit price bid per linear foot of pipe.
5. On existing pipe and on proposed pipe–by–others, Contractor to remove existing plug and make connection. No separate pay
6. All satisfactory excess excavation from utility construction shall be stockpiled as directed by Engineer. All unsatisfactory and waste material including vegetation, roots, concrete, rocks, and other debris, shall be hauled from the project by the Contractor. No separate pay.
7. Contractor to verify location and elevation of existing utilities prior to the construction of proposed utilities.
8. Contractor shall give 48 hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior to commencement of work. Contractor shall assure himself that all construction permits have been obtained prior to commencement of work. All permits obtainable by the Contractor shall be obtained at the Contractor's expense.
9. Contractor shall confine his construction operations to the rights–of–way, easements, and lots, as shown on Plans and Plat. Any damage to private facilities outside these limits shall be repaired by the Contractor at no expense to the Owner.
10. Contractor shall be responsible for the field location and protection of all existing utilities and structures not scheduled for disturbance under this Contract.
11. 2" x 4" marker posts, extending a minimum of 2'–0" above grade, are to be placed at the ends of all service line terminations.
12. The Contractor will coordinate his construction with the relocations or extensions of gas, telephone or power as needed for service to this site.
13. When these plans or technical specifications are found to be in conflict with City of Grand Junction details or specifications, or those of the Ute Water Conservancy District, the more restrictive will apply.

SANITARY SEWER CONSTRUCTION NOTES

1. Service connections to manholes will not be permitted. Services shall be located as shown on the Utility Composite.
2. Manholes are to be constructed in accordance with current City of Grand Junction typical details. Care shall be taken in forming the inverts, cones or slabs are to be rotated such that openings are aligned as nearly over the inlets as possible and there are to be no steps.
3. The Contractor shall set rim elevations outside paved surfaces to 4" above natural ground or finish grade.
4. Water stop gaskets and clamp assemblies are to be furnished and installed at all connections to manholes. No separate pay.
5. Where sanitary sewers cross under waterline with less than 2–feet of vertical separation, and in all cases where the sanitary sewer crosses over the waterline at any depth, provide an 18–foot joint of Special Pipe. SEE DETAIL. Include cost of waterline crossing (Special Pipe with concrete collars, adapters, and approved backfill), in unit price bid per lineal foot of sanitary sewer in appropriate sizes.
6. Sanitary sewer lines are to be tested in accordance with current City of Grand Junction technical specifications. Contractor to furnish all materials and equipment. Include cost in unit price bid for sanitary sewer lines.

STORM SEWER CONSTRUCTION NOTES

1. All storm sewers and leads to be ASTM, C–76, Class III, reinforced concrete pipe unless otherwise indicated. Joints of pipe to be tongue and groove. Bell and spigot pipe will be acceptable if Contractor bears cost of any additional expense for materials or the relocation of other utilities resulting form such substitutions.
2. All storm sewers and leads to be Class 100, DR 25, PVC pipe unless otherwise specified.
3. All storm sewer manholes shall be precast concrete as shown in DETAILS.

PAVING CONSTRUCTION NOTES

1. All road widths, and radii are to face of curb or flowline unless noted otherwise. Any "spot" design elevations are to flowline of curb and gutter unless otherwise noted.
2. T.C. = top of curb elevation
   T.P. = top of pavement elevation
   T.R. = top of manhole rim
   F.L. = flowline
   El. = elevation
3. Contractor to protect existing utilities and appurtenances. Manholes, drainage inlets, utility lines, etc., damaged, covered or filled with dirt or debris by the Contractor shall be cleaned and repaired at no expense to the Owner.
4. Hot–mix asphaltic concrete to be Grading E. A mix design for the proposed pit must be approved by Engineer prior to placement of pavement.
5. Where proposed pavement is to match existing pavement, existing pavement is to be square cut, full base thickness is to be brought to match line and existing surface is to be tack–coated before proposed surface is placed.
6. Handicap ramps are to be constructed where indicated on the plans and in accordance with current City of Grand Junction Standard Details.
7. Curb, gutter and drainage pans to have " expansion joints at each change in horizontal alignment of curb and gutter, but in no case at a greater distance apart than 100 feet. Locate dummy grooved joints between expansion joints at intervals not exceeding 10 feet.
8. 4" mat is to be obtained by 2 applications, a tack coat will be applied between the bottom and finish mat. Tack coat to be emulsified asphalt (CSSIh) applied at a rate of 0.10 gallons per square yard. Include cost of tack coat in unit price for Hot Bituminous Pavement.

WATERLINE CONSTRUCTION

1. Waterline materials to be as follows:
   (a) less than 2–inch service lines to be copper (Type K).
   (b) 2–inch service lines to be Class 200 (DR–21) PVC.
   (c) 4–inch and larger to be AWWA Class 150 (DR–18) PVC.
2. Waterline fittings for 4–inch and larger waterlines to be Cast Iron (C–150). Thickness Class 22, with polyethylene wrap.
3. All 2–inch and smaller valves to be rated for 200 psi static pressure.
4. All waterlines to have normal cover of 5–feet, except at drainage swales where a minimum of 4–feet will be allowed.
5. All materials, labor and equipment required for testing and disinfection of waterlines shall be furnished by Contractor. No separate pay.
6. All pipe bends/angle points, both horizontal and vertical, as called for on the plans are to be thrust blocked per City of Grand Junction Technical Specifications.
7. Waterline lowerings, if needed, will be constructed with 45° bends, joint restraints, tie rods and anchors in accordance with City of Grand Junction Standards.

American Consulting Engineers Council Member

BANNER
BANNER ASSOCIATES, INC. ● CONSULTING ENGINEERS & ARCHITECTS
2777 CROSSROADS BOULEVARD ● GRAND JUNCTION, CO 81506 ● (303) 243-2242
605 E. MAIN ● SUITE 6 ● ASPEN, CO 81611 ● (303) 925-5857

DRAWN BY: J.E.L.
DESIGNED BY:
CHECKED BY:
REVIEWED _____ DATE: _____ FOR _____
REVIEWED _____ DATE: _____ FOR BANNER ASSOCIATES, INC.

REVISION	DATE	DESCRIPTION	BY	CH'D

ALCO BUILDING COMPANY — GRAND JUNCTION, COLORADO

LEGEND AND CONSTRUCTION NOTES

SCALE: N.T.S. | JOB NO: 8239-01 | DATE: 5-23-91
SHEET NO: 4 of 10

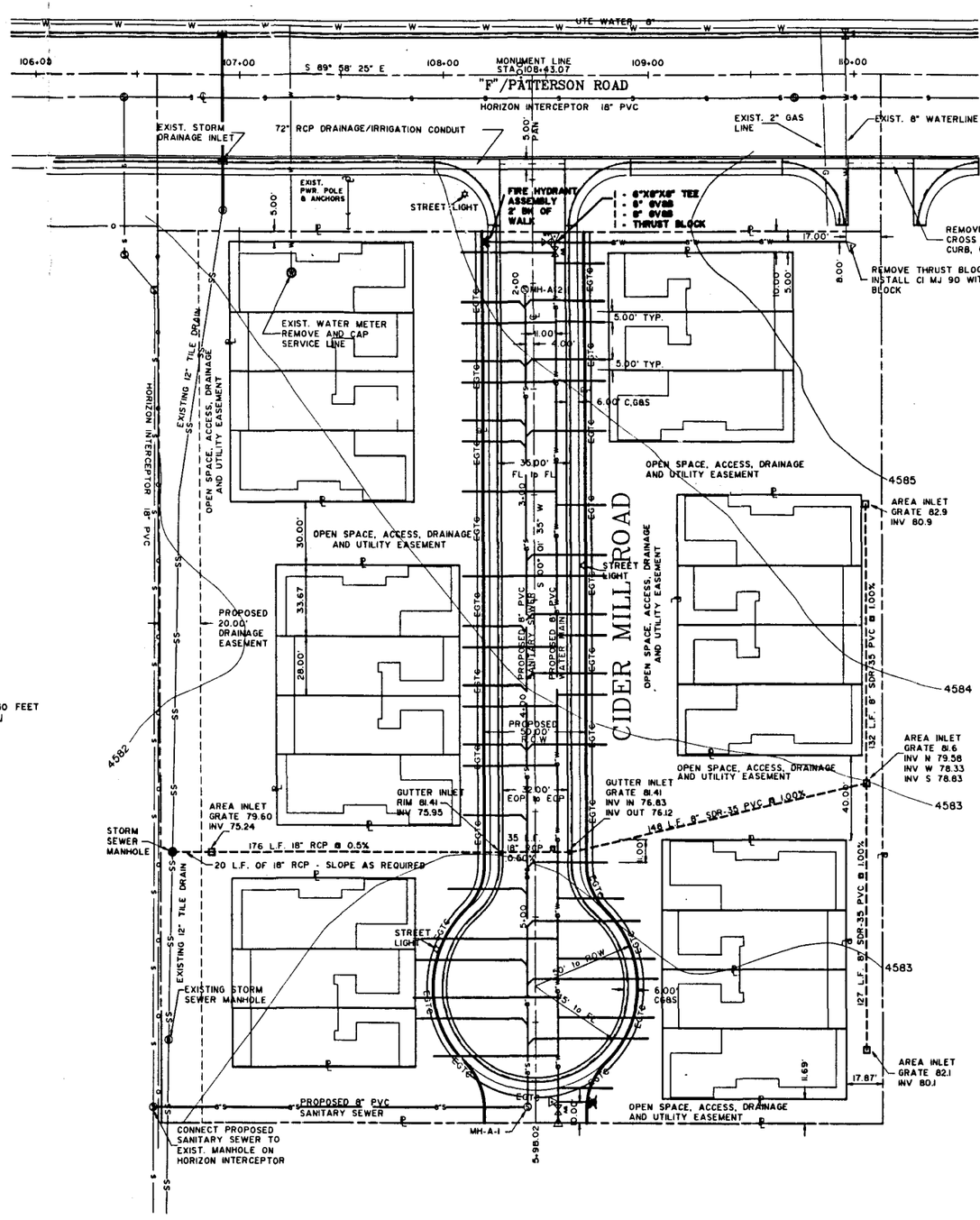
LEGEND

R.O.W.	STREET R.O.W. LINE
℄	LOT LINE
	EASEMENT LINE
1+00 ℄ 1+50	CENTERLINE & STATION MARKERS
E.T.C.	CENTERLINE COMMON TRENCH-ELECTRICAL, TELEPHONE, & CABLE T.V.
T.V.	CABLE TELEVISION LINE
T	UNDERGROUND TELEPHONE LINE
OHP	EXISTING OVERHEAD UTILITY LINES & POLES
E	CONDUIT LINE, TRANSFORMER W/SERVICE TO LOT, PULL OR SPLICE BOX, 2'0" RISER POLE
	STREET LIGHT
G	GAS LINE, 1¼" DIAMETER (UNLESS OTHERWISE NOTED)
8"W	WATERLINE, TEE & THRUST BLOCK, INLINE VALVE, FIRE HYDRANT, REDUCER, WATER METER, BLOW-OFF
	STORM SEWER, INLET, MANHOLE, OUTFALL (SMALLER THAN 30")
	STORM SEWER (30" & LARGER)
8"S	SANITARY SEWER, CLEAN-OUT, MANHOLE, SERVICE CONNECTION, WYE, SPECIAL PIPE & PLUG
TOP BACK OF CURB / EDGE OF GUTTER	CURB INLET W/DIRECTION OF FLOW
	DITCH & DIRECTION OF FLOW
TP	BENCHMARK LOCATION
2 (LOT) (BLOCK)	LOT & BLOCK No.
	PRESSURE REDUCING VALVE
4	SHEET REF.

N

FEET 30 0 30 FEET

GRAPHIC SCALE
1 inch = 30 ft.



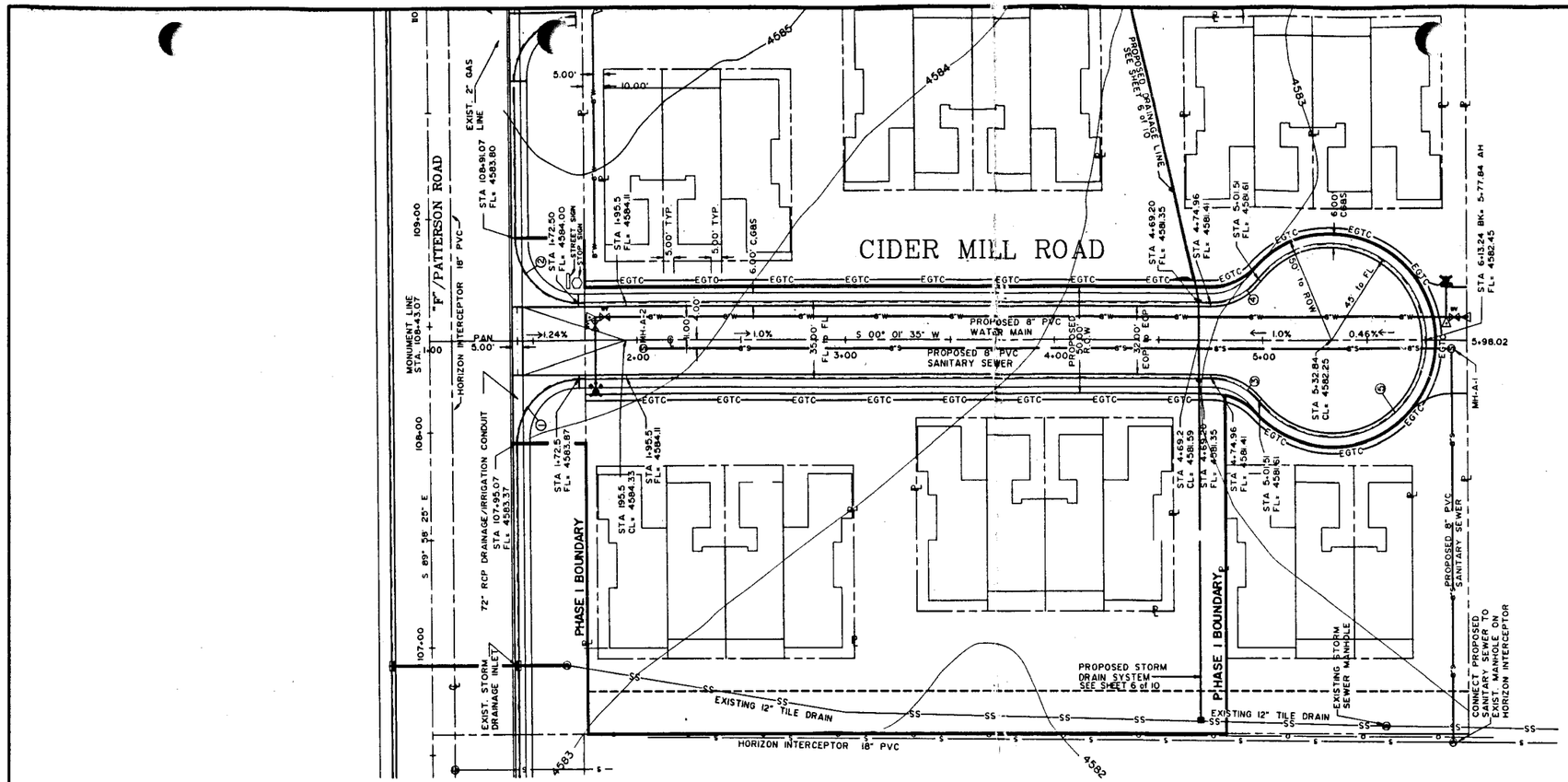
DRAWN BY:	REVIEWED		REVISION	DATE	DESCRIPTION	BY	CHD	ALCO BUILDING CO.	CITY OF GRAND JUNCTION
DESIGNED BY:	DATE: FOR							UTILITY COMPOSITE	
CHECKED BY:	REVIEWED								
	DATE: FOR BANNER ASSOCIATES, INC.								

BANNER

BANNER ASSOCIATES, INC. ● CONSULTING ENGINEERS & ARCHITECTS
2777 CROSSROADS BOULEVARD ● GRAND JUNCTION, CO 81506 ● (303) 243-2242
606 E. MAIN ● SUITE 6 ● ASPEN, CO 8161 ● (303) 925-5857

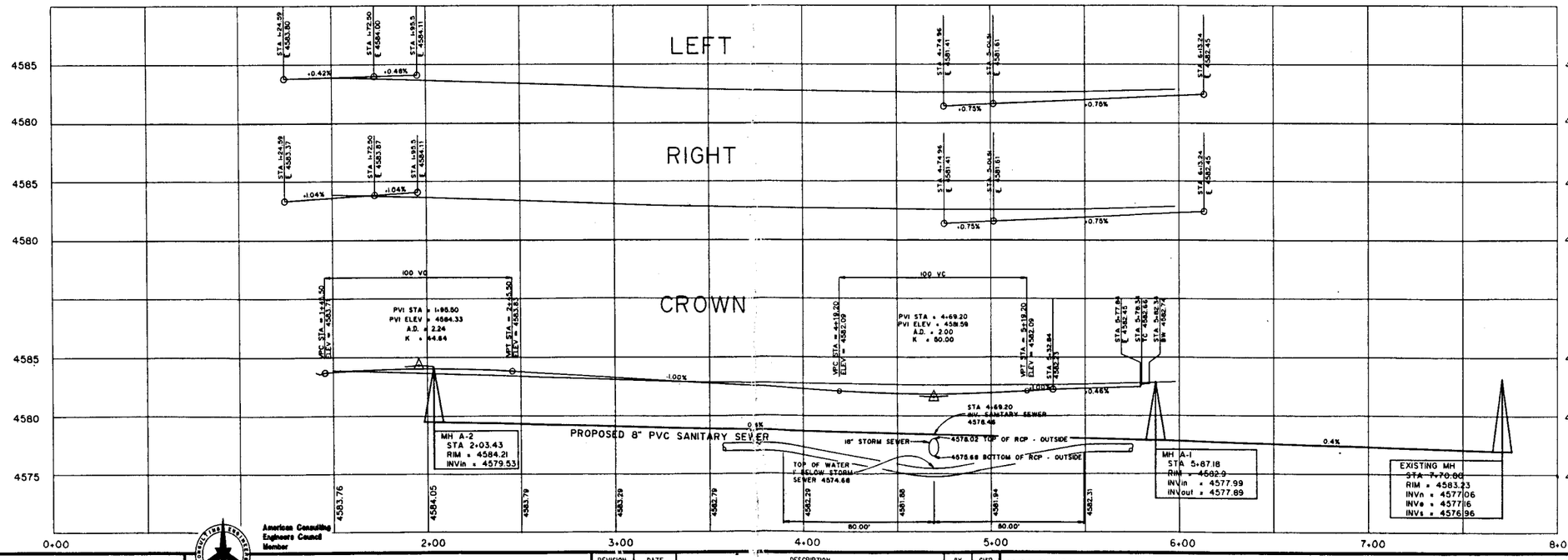
SCALE:	JOB NO:	DATE:
1"=30'	8239-01	5-28-91

SHEET NO: 6 OF 10



CURVE TABLE - CURB AND GUTTER FLOWLINE

CURVE NO.	LENGTH, FT	RADIUS, FT	TANGENT	DELTA,DMS
1	47.91	30.5	30.5	90-00-00
2	47.91	30.5	30.5	90-00-00
3	26.55	30.0	14.21	50-42-13
4	26.55	30.0	14.21	50-42-13
5	223.47	45.5	37.24	281-24-25



American Consulting Engineers Council Member

BANNER
BANNER ASSOCIATES, INC. ● CONSULTING ENGINEERS & ARCHITECTS
2777 CROSSROADS BOULEVARD ● GRAND JUNCTION, CO 81506 ● (303) 243-2242
605 E. MAIN ● SUITE 6 ● ASPEN, CO 81611 ● (303) 925-5857

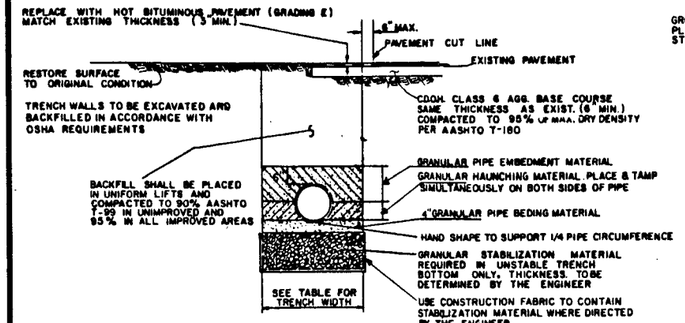
REVISION	DATE	DESCRIPTION	BY	CHD

DRAWN BY: DCJ3
CHECKED BY: MDW
REVIEWED ____ DATE: ____ FOR ____
REVIEWED ____ DATE: ____ FOR BANNER ASSOCIATES, INC.

ALCO BUILDING — GRAND JUNCTION, COLORADO

CIDER MILL ROAD PLAN AND PROFILE

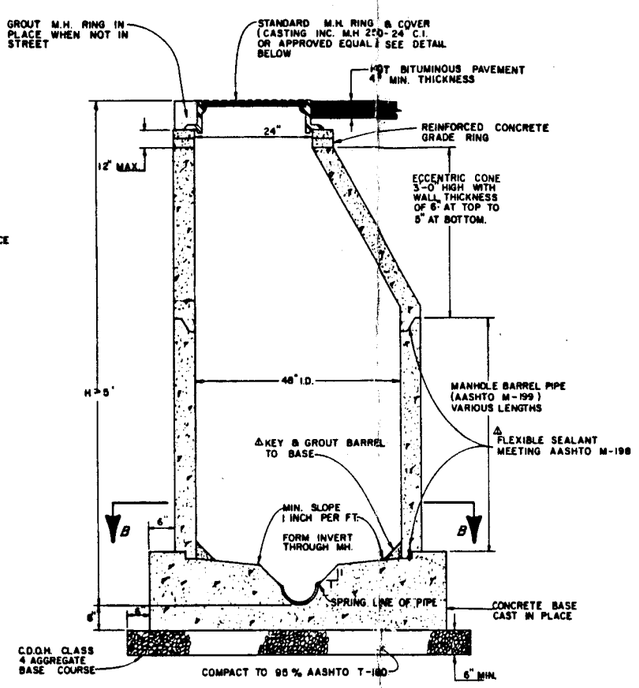
SCALE: Horz: 1"=30' Vert: 1"=5'
DATE: 5-28-91
Project No: 8239-01
SHEET NO: 7 of 10



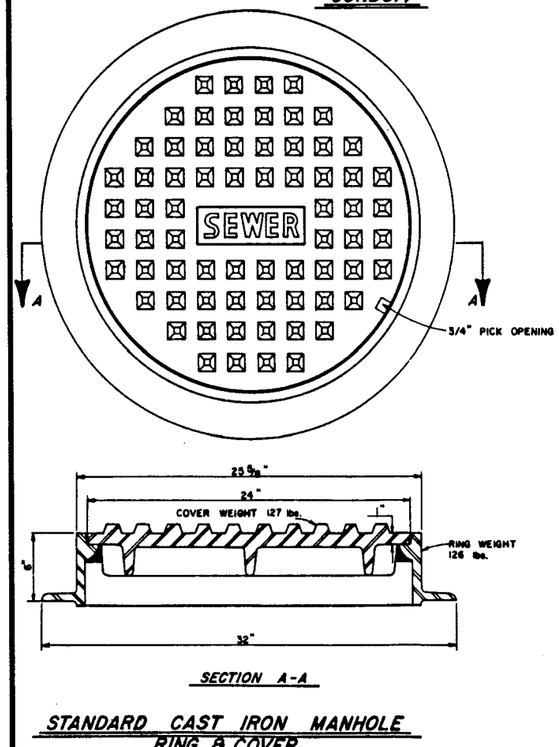
	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES		
SIEVE SIZE	PIPE BEDDING & HAUNCHING & EMBEDMENT MATERIAL (CRUSHED OR SCREENED ROCK)	GRANULAR STABILIZATION MATERIAL (SCREENED OR CRUSHED ROCK)	PIT RUN AGGREGATE (TO BE USED WHERE SPECIFIED OR DIRECTED BY THE ENGINEER)
12 INCH	---	---	100
2 INCH	---	100	---
1 INCH	100	---	---
NO. 200	20 MAX	20 MAX	20 MAX

NOMINAL SIZE OF PIPE	MAXIMUM TRENCH WIDTH AT 6" TOP OF PIPE	MINIMUM TRENCH WIDTH AT PIPE SPRINGLINE
LESS THAN 18"	PIPE O.D. + 18"	PIPE O.D. + 12"
18" THRU 36"	PIPE O.D. + 24"	PIPE O.D. + 18"
37" THRU 60"	PIPE O.D. + 30"	PIPE O.D. + 24"

TYPICAL TRENCH DETAIL FOR ALL UNDERGROUND CONDUIT

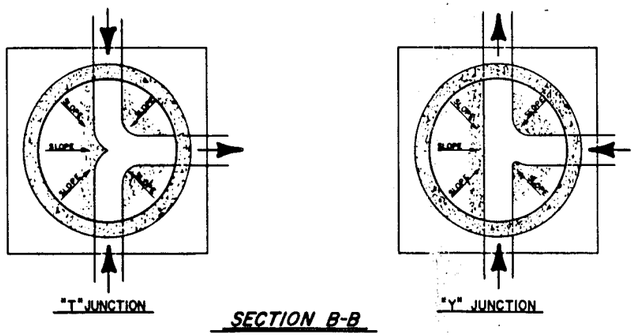


STANDARD MANHOLE



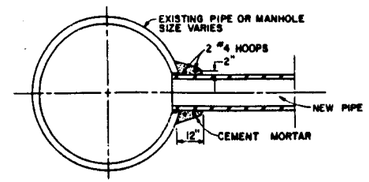
SECTION A-A

STANDARD CAST IRON MANHOLE RING & COVER

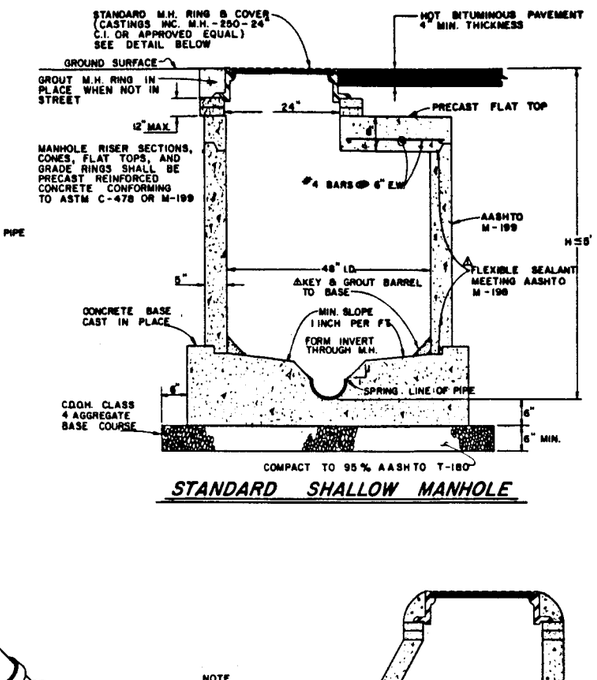


SECTION B-B

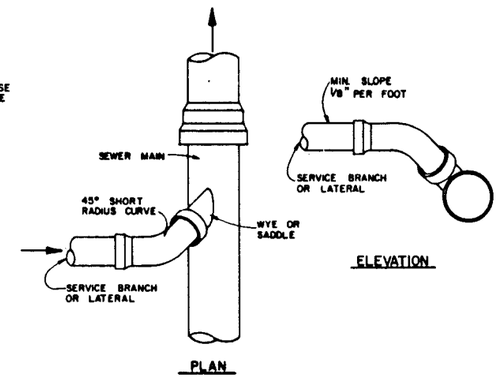
1. CONCRETE SHALL BE COLORADO DIVISION OF HIGHWAYS CLASS "B" (SECTION 601.02)
2. ALL CEMENT USED IN MORTAR, CONCRETE BASES, GRADE RINGS, RISER SECTIONS, CONES, AND FLAT TOPS, FOR SANITARY SEWER MANHOLES, SHALL BE TYPE V OR MODIFIED TYPE II PORTLAND CEMENT WITH LESS THAN 5% TRICALCIUM ALUMINATE.
3. MANHOLE RISER SECTIONS, CONES, FLAT TOPS, AND GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE CONFORMING TO ASTM C-478 OR AASHTO M-199
4. BACKFILL AROUND MANHOLES AND OTHER STRUCTURES SHALL BE PLACED IN 8" MAX. LIFTS AND COMPACTED TO 95% AASHTO T-99.
5. ALL WORK SHALL BE IN ACCORDANCE WITH APPROVED PLANS AND CITY SPECIFICATION.
6. MANHOLE CONE AND FLAT TOP SECTIONS SHALL BE POSITIONED SUCH THAT THE M.H. RING AND COVER IS CENTERED OVER THE MAIN SEWER LINE.



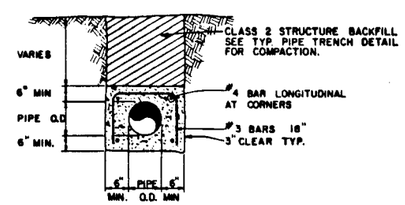
CONNECTION TO EXISTING MANHOLE OR PIPE



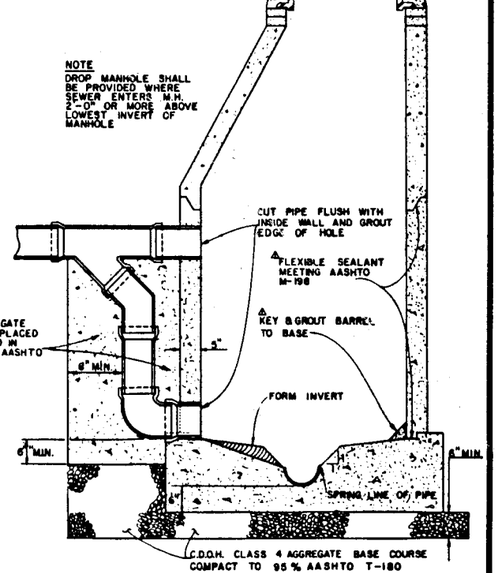
STANDARD SHALLOW MANHOLE



TYPICAL SERVICE "Y" CONNECTION



CONCRETE ENCASEMENT DETAIL



DROP MANHOLE

Jerry Don Newton 6-12-85
JERRY DON NEWTON CITY ENGINEER

DESCRIPTION	DATE
REVISION △ ADDED NOTES FOR GROUT & SEALANT (CLM)	7-7-93
REVISION △ Changed Base on Drop M.H. (Dm)	2-14-85
REVISION △ Changed Gradation Chart (Dm)	6-10-85
REVISION △ Changed Drop Manhole (JAK)	6-6-88

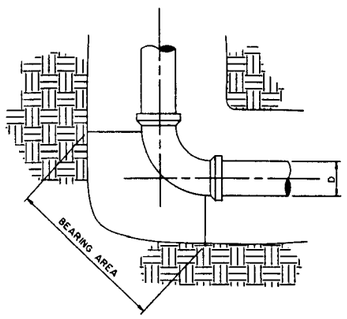
DRAWN BY Luther Martin DATE 4-85
CHECKED BY T.A.B. DATE 4-85
APPROVED BY J.D.N. DATE 6-85
FIELD BOOK NO. ____ PAGE ____

SCALE: PLAN HORIZ. None; PROFILE HORIZ. None, VERT. None

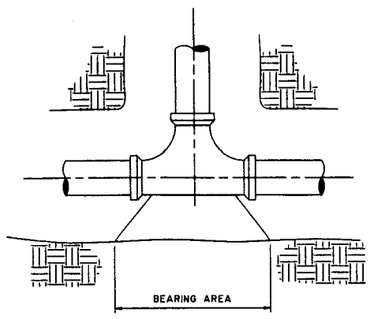
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION
CITY OF GRAND JUNCTION, COLORADO

STANDARD SANITARY SEWER DETAILS (SS-1)

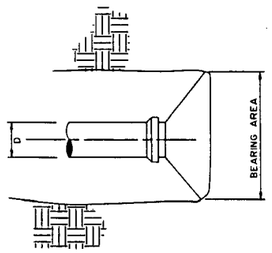
SHEET NO. 8 OF 10
FILE NO. SS-1



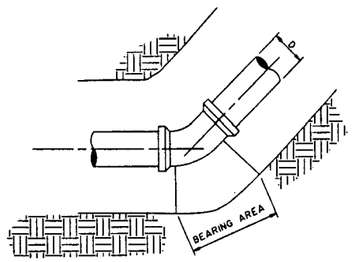
90° BEND



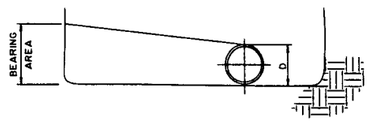
TEE



DEAD END LINE



45° BEND OR LESS



TYPICAL SECTION
THROUGH THRUST BLOCKS

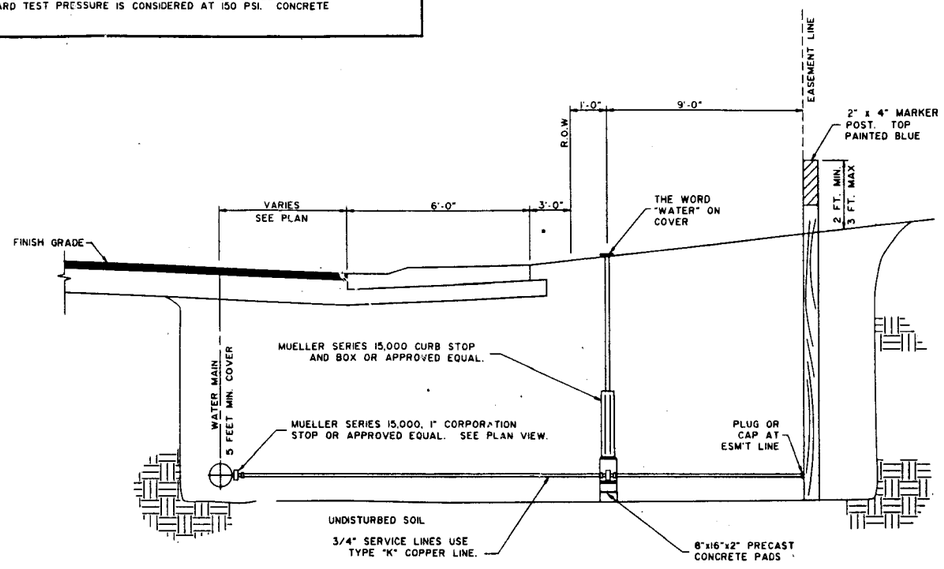
NOTE:

1. ALL THRUST BLOCKS ARE POURED IN PLACE.
2. ALL THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
3. PROVIDE BOND BREAKER BETWEEN THRUST BLOCKS AND AT ALL FITTINGS.
4. SEE TABLE ON DETAILS WS-726 FOR SIZE OF THRUSTBLOCKS.

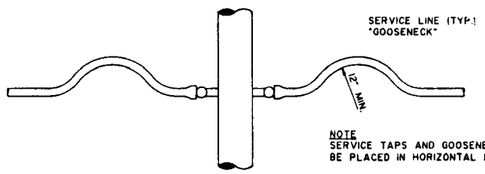
MINIMUM THRUST BLOCK WT. IN LBS.						BEARING AREA IN SQUARE FEET					
PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4 BEND	TEE OR PLUG	90° BEND	45° BEND	22 1/2° BEND	11 1/4 BEND	TEE OR PLUG
4"	2,700	1,500	800	400	1,900	1.3	1.0	1.0	1.0	1.0
6"	6,000	3,000	1,700	900	4,300	3.0	1.6	1.0	1.0	2.1
8"	10,700	5,800	3,000	1,500	7,600	5.3	2.9	1.5	1.0	3.8
10"	16,700	9,100	4,600	2,300	11,800	8.3	4.5	2.3	1.2	5.9
12"	24,000	13,000	6,700	3,400	17,000	12.0	6.5	3.3	1.7	8.5

SOIL BEARING PRESSURE IS ASSUMED TO BE 2,000 PSF WHERE SOIL BEARING VARIES FROM ABOVE REQUIRED BLOCK AREA SHALL BE MODIFIED ACCORDINGLY, IN NO CASE SHALL BEARING AREA BE LESS THAN 1.0 FT. STANDARD TEST PRESSURE IS CONSIDERED AT 150 PSI. CONCRETE TO BE CLASS "C".

TIE DOWN BARS FOR 150 P.S.I. PRESSURE					TIE RODS
PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4 BEND	FOR 150 P.S.I. PRESSURE
4"	2 - # 4	2 - # 4	2 - # 4	2 - # 4	4 - # 4
6"	2 - # 4	2 - # 4	2 - # 4	2 - # 4	4 - # 4
8"	2 - # 4	2 - # 4	2 - # 4	2 - # 4	4 - # 4
10"	2 - # 5	2 - # 4	2 - # 4	2 - # 4	4 - # 4
12"	2 - # 5	2 - # 4	2 - # 4	2 - # 4	4 - # 5



SERVICE TAPS AND "GOOSENECKS" IN SERVICE LINES ARE TO BE IN THE HORIZONTAL PLANE



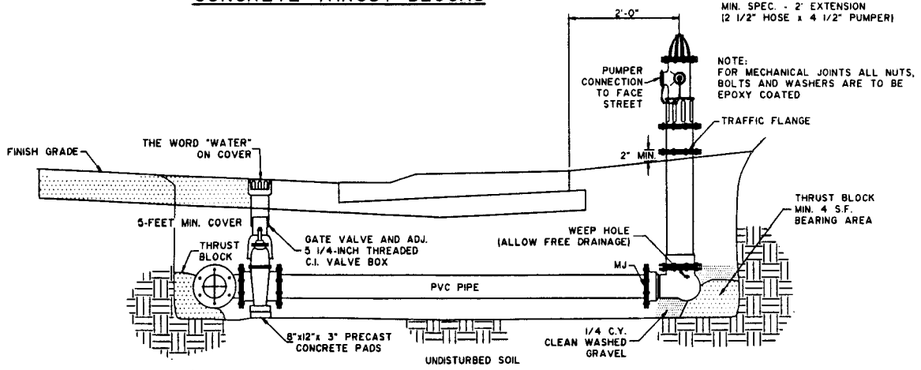
NOTE
SERVICE TAPS AND GOOSENECKS TO BE PLACED IN HORIZONTAL PLANE.

PLAN VIEW

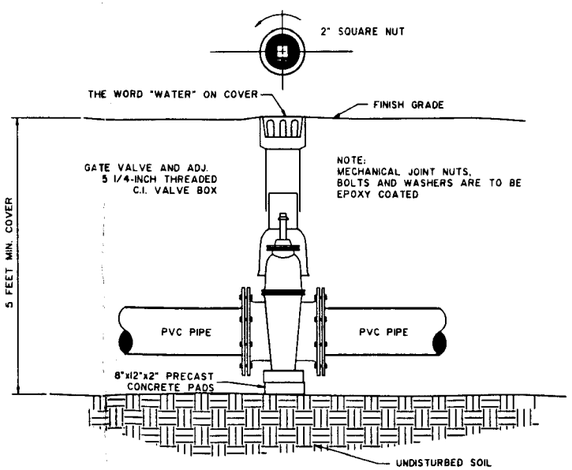
WATER SERVICE CONNECTION

LESS THAN 2 - INCH

CONCRETE THRUST BLOCKS



FIRE HYDRANT ASSEMBLY



GATE VALVE AND BOX

American Consulting Engineers Council Member

BANNER

BANNER ASSOCIATES, INC. ● CONSULTING ENGINEERS & ARCHITECTS
2777 CROSSROADS BOULEVARD ● GRAND JUNCTION, CO 81506 ● (303) 243-2242
605 E. MAIN ● SUITE 6 ● ASPEN, CO 8161 ● (303) 925-5857

DRAWN BY: F.J.K.
DESIGNED BY: J.E.L.
CHECKED BY: J.E.L.
REVIEWED _____ DATE: _____ FOR _____
REVIEWED _____ DATE: _____ FOR BANNER ASSOCIATES, INC.

REVISION	DATE	DESCRIPTION	BY	CHD

ALCO BUILDING CO. GRAND JUNCTION, COLORADO

COLONY PARK SUBDIVISION
WATERLINE STANDARD DETAILS

SCALE: N.T.S. | JOB NO: 8239-01 | DATE: 5-24-91
SHEET NO: 9 of 10

RESIDENTIAL USE
ZONED RSF-4

PATTERSON ROAD

ENTRY SHRUB BEDS

SCREEN FENCE

RAIL FENCE

EXISTING CHAIN LINK FENCE

POMONA SCHOOL (PZ)

SHADE/SCREEN TREES

LAWN

MAILBOX

20'

ENTRY SHRUB BED

1A
2B
3B
4A
5A
6B
7B
8A
9A
10B
11B
12A
13B
14B
15A
16A
17B
18B
19A
20A
21B
22B

AGRICULTRUAL USE
(ZONED PR-10)

SHADE/ SCREEN TREES

AGRICULTRUAL USE
(ZONED PR-10)

SITE PLAN

#41-91
Original
Do NOT Remove
From Office

COLONY PARK TOWNHOMES

NORTH
1" = 30'

CIAVONNE & ASSOCIATES, INC.
LANDSCAPE & PLANNING ARCHITECTS
336 MAIN ST. #206
GRAND JUNCTION, CO

1601505 10:56 AM 05/06/92
MESA CO.CLK & REC Mesa County Co
DOC EXEMPT

AVIGATION EASEMENT

THIS EASEMENT is made and entered into by and between the WALKER FIELD, COLORADO, PUBLIC AIRPORT AUTHORITY, a body corporate and politic and constituting a political subdivision of the State of Colorado, hereinafter called GRANTEE, and PTARMIGAN INVESTMENTS INC. hereinafter, GRANTOR;

WHEREAS, Grantee is the owner and operator of Walker Field Airport situated in the County of Mesa, State of Colorado, and in close proximity to the land of Grantor, and Grantee desires to obtain and preserve for the use and benefit of the public a right of free and unobstructed flight for aircraft landing upon, taking off from, or maneuvering about said airport; and

WHEREAS, Grantor is the owner in fee simple of that certain parcel of land situated in the County of Mesa, State of Colorado, to wit:

SEE ATTACHED DESCRIPTION : Exhibit A

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, the Grantor, for himself, his heirs, administrators, executors, successors and assigns, does hereby grant, bargain, sell and convey unto the Grantee, its successors and assigns, for the use and benefit of the public, an easement and right of way appurtenant to Walker Field Airport, for the passage of all aircraft ("aircraft" being defined for the purposes of this instrument as any device known or hereafter invented, used or designed for navigation or flight in the air) by whomsoever owned and operated, in the navigable airspace above the surface of Grantor's Property to an infinite height above said Grantor's property, together with the right to cause in said airspace such noise and vibrations, smoke, fumes, glare, dust, fuel particles and all other effects that may be caused by the normal operation of aircraft landing at or taking off from or operating at or on said Walker Field Airport, and Grantor hereby waives, remises and releases any right or cause of action which Grantor now has or which Grantor may have in the future against Grantee, its successors and assigns, due to such noise, vibrations, smoke, fumes, glare, dust, fuel particles and all other effects caused by the normal operation of such aircraft.

FURTHER, Grantor hereby covenants, for and during the life of this easement, that Grantor:

(a) shall not hereafter construct, permit or suffer to maintain upon said land any obstruction that extends into navigable airspace required for use of said airport runway surfaces; (Navigable airspace is defined for the purpose of this instrument

as airspace at and above the minimum flight altitudes, including take off and landing, as prescribed in Federal Aviation Administration Federal Air Regulations Part 91, and as such regulations are amended.)

(b) shall not hereafter use or permit or suffer use of said land in such a manner as to create electrical or electronic interference with radio communication or radar operation between the installation upon Walker Field Airport and aircraft, or to make it difficult for flyers to distinguish between airport lights and others or to result in glare in the eyes of flyers using the said airport, or to impair visibility in the vicinity of the airport, or otherwise to endanger the landing, taking off or maneuvering of aircraft.

Grantor agrees the aforesaid covenants and agreements shall run with the land for the benefit of Grantee, its successors and assigns, until said airport shall be abandoned and shall cease to be used for public airport purposes.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal on this 17 day of SEPT, A.D. 1991.

John A. Siegfried

Pres.

(Title)

STATE OF COLORADO)
) ss.
COUNTY OF MESA)

The foregoing instrument was acknowledged before me this 17TH day of SEPT, A.D. 1991, by JOHN A. SIEGFRIED.

My Commission expires: Nov 1, 1995

Notary Public

EXHIBIT A
Avigation Easement for Ptarmigan Ridge Filing 2

A parcel of land situated in the NW1/4 Section 1, Township 1 South, Range 1 West of the Ute Meridian, Grand Junction, Colorado being described as follows:

Considering the East line of the NW1/4 Section 1, T1S, R1W, U.M. to bear S00°02'05"W and all bearings contained herein to be relative thereto: Beginning at the SW corner of the SE1/4 NW1/4 Section 1, Township 1 South, Range 1 West, Ute Meridian; thence N89°49'54"W 213.00 feet; thence N00°02'34"E 596.01 feet; thence N90°00'00"E 146.01 feet; thence 19.17 feet along the arc of a curve to the right with a radius of 1001.78 feet and whose chord bears S12°46'48"E 19.17 feet; thence 51.51' feet along the arc of a curve to the right with a radius of 532.30 feet and whose chord bears S10°33'22"E 51.49 feet; thence N82°12'58"E 44.00 feet; thence 55.77 feet along the arc of a curve the left with a radius of 576.30 feet and whose chord bears N10°33'22"W 55.75 feet; thence ~~25.91~~ 41.21 feet along the arc of a curve to the right with a radius of 957.78 feet and whose chord bears N12°05'44"W 41.21 feet; thence S89°57'26"E 116.82 feet; thence S83°47'22"E 139.61 feet; thence S68°12'49"E 68.57 feet; thence S11°27'18"W 44.13 feet; thence S00°02'34"W 54.13 feet; thence S59°44'13"W 47.42 feet; thence S45°46'57"W 103.41 feet to the NW corner of Lot 2 Spomer Subdivision; thence S00°02'34"W 394.82 feet; thence N89°49'58"W 167.00 feet to the point of beginning, containing 5.701 Acres as described.