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File 1994-0135

Name: Micaela's Village – 2694 Unaweep Ave - Final Plan

P r e s e n t	S c a n n e d	<p>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.</p> <p>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.</p>		
X	X	<b>Table of Contents</b>		
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		Review Sheets		
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		Reduced copy of final plans or drawings		
X		Reduction of assessor's map.		
		Evidence of title, deeds, easements		
X	X	<b>*Mailing list to adjacent property owners</b>		
		Public notice cards		
		Record of certified mail		
X		Legal description		
		Appraisal of raw land		
		Reduction of any maps – final copy		
X	X	<b>*Final reports for drainage and soils (geotechnical reports)</b>		
		Other bound or non-bound reports		
		Traffic studies		
X	X	<b>*Review Comments</b>		
X	X	<b>*Petitioner's response to comments</b>		
X	X	<b>*Staff Reports</b>		
		*Planning Commission staff report and exhibits		
		*City Council staff report and exhibits		
		*Summary sheet of final conditions		
<b><u>DOCUMENT DESCRIPTION:</u></b>				
X	X	Correspondence	X X	Final Drainage Report-3/1/95
X	X	Storm Water Management Plan – 3/21/95	X X	City Council Minutes – 4/19/95, 5/3/95-**
X		Individual Quit Claim Deed – Bk 2057/ Pg 593- not conveyed to City	X	Certification of Plat – 8/14/95
X		Planning Commission Notice of Public Hearing mail-out-sent 3/27/95	X X	Ordinance No. 2833 - **
X	X	Final Drainage Report – 11/30/94	X X	Declaration of Covenants, Conditions and Restrictions- Do not have recorded – will scan unrecorded
X		Treasurer's Certificate of Taxes Due – 11/30/94	X X	Final Plat – GIS Historical Maps - **
X	X	Drainage Easement and Agreement – Bk 2164/Pg 742-**	X X	Utility Composite Plan
X	X	Planning Commission Minutes – 4/4/95, 9/6/94 - **	X X	Sewer Line Profiles – A-D – Plan & Profile – GIS Historical Maps
X	X	DIA – Bk 2164/Pg 749	X X	Composite Plan, Water and Sewer Plan and Profiles, Roadway Centerline Plan and Profile, Roadway Flowlines Plan and Profile, Drainage Plan-GIS Historical Maps - **





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

Receipt \_\_\_\_\_  
 Date 2 March 1995  
 Rec'd By \_\_\_\_\_  
 File No. \_\_\_\_\_

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

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
<input checked="" type="checkbox"/> Subdivision Plat/Plan	<input type="checkbox"/> Minor <input checked="" type="checkbox"/> Major <input type="checkbox"/> Resub	8.24 ac	Unawcep & 27 Road	PR 4.1 (PR 47-90)	Residential
<input checked="" type="checkbox"/> Rezone				From: PR 4.1 To: PR 4.7	
<input checked="" type="checkbox"/> Planned Development	<input type="checkbox"/> ODP <input type="checkbox"/> Prelim <input checked="" type="checkbox"/> Final				
<input type="checkbox"/> Conditional Use					
<input type="checkbox"/> Zone of Annex					
<input type="checkbox"/> Text Amendment					
<input type="checkbox"/> Special Use					
<input type="checkbox"/> Vacation					<input type="checkbox"/> Right-of-Way <input type="checkbox"/> Easement
<input type="checkbox"/> PROPERTY OWNER		<input type="checkbox"/> DEVELOPER		<input type="checkbox"/> REPRESENTATIVE	

<u>MARY LOU KENNEDY</u> Name	←	<u>CIMARRON PROPERTIES</u> Name	<u>DAN BROWN</u> Name
<u>2146 1/2 B HWY 6 + 50</u> Address	←		<u>1018 COLO. AVE.</u> Address
<u>GRAND JCT. CO. 81505</u> City/State/Zip	←		<u>GRAND JCT. CO.</u> City/State/Zip
<u>303 245-6693</u> Business Phone No.	←		<u>303 241-2370</u> Business Phone No.

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

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

Daniel K. Brown  
 Signature of Person Completing Application 3/2/95  
Date

Mary Lou Kennedy  
 Signature of Person Completing Application 3/2/95  
Date

Attach Additional Sheets if Necessary

# SUBMITTAL CHECKLIST

## MAJOR SUBDIVISION: FINAL

orig 135 94(2)

Location: Micaela's Village

Project Name: \_\_\_\_\_

ITEMS	SSID REFERENCE	DISTRIBUTION																	TOTAL REQ'D.											
		City Community Development	City Dev. Eng.	City Utility Eng.	City Property Agent	City Parks/Recreation	City Fire Department	City Attorney	City G.J.P.C. (8 sets)	City Downtown Dev. Auth.	City Police	County Planning	County Bldg. Dept.	County Surveyor	Walker Field	School Dist. #51	Irrigation District	Drainage District		Water District	Sewer District	U.S. West	Public Service	GVRP	CDOT	Corps of Engineers	Colorado Geologic Survey	U.S. Postal Service	Persigo WWTF	
● Application Fee <i>4740 r7520</i>	VII-1	1																												
● Submittal Checklist*	VII-3	1																												
● Review Agency Cover Sheet*	VII-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Application Form*	VII-1	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● 11"x17" Reduction of Assessor's Map	VII-1	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Evidence of Title	VII-2	1		1			1																							
○ Appraisal of Raw Land	VII-1	1			1	1																1	1	1						
● Names and Addresses	VII-2	1																												
● Legal Description	VII-2	1		1																										
○ Deeds	VII-1	1		1		1																								
○ Easements	VII-2	1	1	1	1		1															1	1	1						
○ Avigation Easement	VII-1	1		1		1							1																	
○ ROW	VII-3	1	1	1	1		1															1	1	1						
○ Covenants, Conditions, & Restrictions	VII-1	1	1				1																							
○ Common Space Agreements	VII-1	1	1				1																							
● County Treasurer's Tax Cert.	VII-1	1																												
● Improvements Agreement/Guarantee*	VII-2	1	1	1			1																							
○ CDOT Access Permit	VII-3	1	1																											
○ 404 Permit	VII-3	1	1																											
○ Floodplain Permit*	VII-4	1	1																											
● General Project Report <i>Marabu</i>	X-7	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	
● Composite Plan	IX-10	1	2	1	1																									
● 11"x17" Reduction Composite Plan	IX-10	1			1	1	1	8	1	1	1	1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	
● Final Plat	IX-15	1	2	1	1		1					1																		
● 11"x17" Reduction of Final Plat	IX-15	1						8	1	1	1		1	1	1	1	1	1	1	1	1	1	1				1			
● Cover Sheet	IX-11	1	2																											
● Grading & Stormwater Mgmt Plan	IX-17	1	2														1							1	1					
○ Storm Drainage Plan and Profile	IX-30	1	2														1				1	1	1							
● Water and Sewer Plan and Profile	IX-34	1	2	1			1										1	1	1	1	1	1					1			
● Roadway Plan and Profile	IX-28	1	2														1													
○ Road Cross-sections	IX-27	1	2																											
○ Detail Sheet	IX-12	1	2																											
○ Landscape Plan	IX-20	2	1	1				8																						
● Geotechnical Report	X-8	1	1									1													1				3	
○ Phase I & II Environmental Report	X-10,11	1	1																											
● Final Drainage Report	X-5,6	1	2															1												
○ Stormwater Management Plan	X-14	1	2															1						1						
○ Sewer System Design Report	X-13	1	2	1															1											
○ Water System Design Report	X-16	1	2	1														1												
○ Traffic Impact Study	X-15	1	2																								1			
○ Site Plan	IX-29	1	2	1	1		1	8																						

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

PRE-APPLICATION CONFERENCE

Date: 10 Oct 1994
Conference Attendance: Dan Brown Tom Dixon
Proposal: Micaela's Village (37 lots)
Location: Unawep

Tax Parcel Number:
Review Fee: \$740 + \$15 acres
(Fee is due at the time of submittal. Make check payable to the City of Grand Junction.)
Related Files: 87-94 135-94

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

Applicable Plans, Policies and Guidelines
Located in identified floodplain? FIRM panel #
Located in other geohazard area?
Located in established Airport Zone? Clear Zone, Critical Zone, Area of Influence?

Avigation Easement required?

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

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

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

PRE-APPLICATION CONFERENCE

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

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

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

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

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

2945-234-08-050  
JOHN A GREEN  
IRENE M  
PO BOX 835  
CLIFTON COLORADO 81520-0835

135 94  
(2)

2945-234-08-046  
LOUIS E SIMMONS  
MADGE SIMMONS  
1175 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503

2945-234-07-024  
WANDA M DARROW  
CINDY L BURFIELD  
1153 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1857

2945-234-08-047  
JOHN R SNOWDON  
NANCY D  
1173 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1869

2945-234-07-026  
PAUL R CLEMENT  
LYNETTE M  
1149 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1857

2945-234-08-048  
DAVID L DIONNE  
DENISE P GORE  
1171 SANTA CLARA AVE  
GRAND JUNCTION COLORADO 81503-1869

2945-234-07-030  
DORA MARIA ROMERO  
1154 OLSON AVE  
GRAND JUNCTION, CO 81503-1841

2945-234-08-031  
SIDNEY A NICHOLS  
LAURA M  
PO BOX 131  
MESA, CO 81643-0131

2945-234-08-049  
CHARLES J EULER  
1169 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1869

2945-234-08-035  
MICHAEL EDWARD GOODWILL  
1175 OLSON AVE  
GRAND JUNCTION, CO 81503-1836

2945-234-08-051  
ROBERTA K SIVILS  
1165 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1869

2945-261-00-015  
RICCI INVESTMENT COMPANY  
2021 N REDWOOD RD  
SALT LAKE CITY, UT 84116-1239

2945-261-00-038  
JOHN M TRUMBO  
LURA J  
2677 UNAWEEP AVE  
GRAND JUNCTION, CO 81503-1800

2945-261-02-002  
W B SWISHER  
CAROL L-TRUST  
1640 O RD  
LOMA, CO 81524-9414

2945-261-04-004  
HILLTOP FOUNDATION INC  
1100 PATTERSON RD  
GRAND JUNCTION, CO 81506-8219

2945-261-02-003  
DOUGLAS G MEAGLEY  
1815 DAVID ST  
GRAND JUNCTION, CO 81503-1927

2945-234-00-014  
ELZIE O GOSS  
LORENE A  
1722 ROUBIDEAU ST  
GRAND JUNCTION, CO 81503-1842

2945-234-07-031  
RICHARD J MONTGOMERY  
PATRICIA D  
1156 OLSON AVE  
GRAND JUNCTION, CO 81503-1841

2945-234-07-032  
CHARLES D SMITH  
VIOLA M  
1158 OLSON  
GRAND JUNCTION, CO 81504

2945-234-07-034  
CRETA K PAYNE  
1166 OLSON AVE  
GRAND JUNCTION, CO 81503-1841

2945-234-08-028  
MARTY RAY POLLARD  
206 32 RD  
GRAND JUNCTION, CO 81503-9404

2945-234-08-029  
KENNETH RAY PAYNE  
1166 OLSON AVE  
GRAND JUNCTION, CO 81503-1838

2945-234-08-030  
FLORENCE DOBBS ESSER  
501 N 5TH ST  
OLATHE, CO 81425

2945-234-07-025  
FRANK J GREEN  
LOUISE M  
1151 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1857

2945-234-07-029  
MURIEL F CRAWFORD  
TRUSTEE  
3943 S PIAZZA PL  
GRAND JUNCTION, CO 81506-8501

2945-234-07-028  
JEANETTE HELM  
1150 OLSON AVE  
GRAND JUNCTION, CO 81503-1841

2945-234-07-027  
JAMES C LANCASTER  
ELIZABETH F  
PO BOX 1103  
OMAHA, NE 68101-1103

2945-234-08-033  
RANDY VANDERLANN  
1174 OLSON AVE  
GRAND JUNCTION, CO 81503-1838

2945-234-08-036  
SHANNON H WHEELER  
1177 OLSON AVE  
GRAND JUNCTION, CO 81503-1836

2945-234-08-037  
LISA RGYWALSKI  
FRANK V  
1179 OLSON AVE  
GRAND JUNCTION, CO 81503-1836

2945-234-08-038  
GARY R BALLANTYNE  
JOAN L  
1181 OLSON AVE  
GRAND JUNCTION, CO 81503-1836

2945-234-02-019  
GREGORY P SVALDI  
PATRICIA J  
1742 ROUBIDEAU ST  
GRAND JUNCTION, CO 81503-1842

2945-234-07-019  
DONALD SURGES  
ETAL  
1163 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1857

2945-234-07-021  
PENNY S HYDE  
1159 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1857

2945-234-07-022  
LINDA D CRUTHERS  
1157 SANTA CLARA  
GRAND JUNCTION, CO 81503

2945-234-07-023  
WILLIAM D HAYES  
PAULA J  
2558 GYPSUM CREEK RD  
GYPSUM, CO 81637-9748

2945-234-00-015  
KENNETH A HEITT  
2239 RIMROCK RD  
GRAND JUNCTION, CO 81503-1179

2945-234-00-016  
KENTON NEAL FOSTER  
CATHERINE ANN  
2676 UNAWEEP AVE  
GRAND JUNCTION, CO 81503-1870

2945-234-00-017  
MARY LOU KENNEDY  
2034 BROADWAY  
GRAND JUNCTION, CO 81503

2945-234-00-019  
C L TILTON  
ETAL  
2959 D 1/2 RD  
GRAND JUNCTION, CO 81504-8609

2945-234-00-951  
GRAND JUNCTION CONGREGATION OF  
WITNESSES  
1736 LINDEN ST  
GRAND JUNCTION, CO 81503

2945-234-07-020  
SANDRA K WARNER  
1161 SANTA CLARA AVE  
GRAND JUNCTION, CO 81503-1857

2945-261-04-003  
SANG GEORGE T CHAC  
2851 PICARDY DR  
GRAND JUNCTION, CO 81501

2945-261-05-005  
ROBERT O BRATTIS  
C/O STEVE BRATTIS  
5237 RANCHERO LN  
DALLAS, TX 75236-0000

2945-234-02-004  
PAT L CUNNINGHAM  
M KIM  
1716 ROUBIDEAU ST  
GRAND JUNCTION, CO 81503-1842



2945-243-00-084  
R W INGLE  
1144 HILL AVE  
GRAND JUNCTION, CO 81501-3237

2945-243-28-001  
R W INGLE  
1144 HILL AVE  
GRAND JUNCTION, CO 81501-3237

2945-243-28-002  
FLOYD E ALLEN  
FRANCES J-TRUST  
311 PINON ST  
GRAND JUNCTION, CO 81503-2048

2945-261-05-002  
PAUL P SCHLEISMAN  
ETAL C/O LOUIS L HOTCHKISS  
3262 E RD  
CLIFTON, CO 81520-7970

2945-261-05-003  
ESTHER L DANIELS  
680 1/2 MOORELAND CT  
GRAND JUNCTION, CO 81504-4230

2945-243-28-001  
R W INGLE  
1144 HILL AVE  
GRAND JUNCTION, CO 81501-3237

2945-243-00-084  
R W INGLE  
1144 HILL AVE  
GRAND JUNCTION, CO 81501-3237

2945-234-08-045  
DAVID R SMUIN  
MAUREEN T MUCK  
1179 SANTA CLARA AVE

2945-243-28-002  
FLOYD E ALLEN  
FRANC J-TRUST  
311 PINON ST  
GRAND JUNCTION, CO 81503-2048

2945-261-05-002  
PAUL P SCHLEISMAN  
ETAL C/O LOUIS L HOTCHKISS  
3262 E RD  
CLIFTON, CO 81520-7970

2945-261-05-003  
ESTHER L DANIELS  
680 1/2 MOORELAND CT  
GRAND JUNCTION, CO 81504-4230

2945-261-05-006  
ROBERT O BRATTIS  
C/O STEVE BRATTIS  
5237 RANCHERO LN  
DALLAS, TX 75236-0000

2945-261-05-007  
P W P ORCHARD MESA INVESTMENT I  
C/O JO SMITH  
33 CHARLESTON AV  
SUGARLAND, TX 77478

2945-234-08-044  
SUSAN I STANTON  
1188 OLSON AVE  
GRAND JUNCTION, CO 81503-1838

2945-234-08-043  
JOHN G MILLER  
1186 OLSON AVE  
GRAND JUNCTION, CO 81503-1838

2945-234-08-042  
LOIS R STARBUCK  
1189 OLSON AVE  
GRAND JUNCTION, CO 81503-1836

2945-234-08-041  
CAROL J JONES  
1187 OLSON AVE  
GRAND JUNCTION, CO 81503-1836

2945-234-08-040  
SMITH M MCCUSTION  
LOIS J - M P & L A MCCUSTION  
398 N DALE CT  
GRAND JUNCTION, CO 81503-1664

2945-234-08-039  
EDWARD M JUNAK  
1183 OLSON  
GRAND JUNCTION, CO 81504

# Micaela's Village Storm Water Management Plan

prepared 21 March 1995



A. Site and Project Description

Micaela's Village is a proposed residential development to be built using typical construction methods. Construction of the proposed development will be completed in two phases, the first phase will be completed before the second phase begins. The sequence of events for each phase will follow the routine development sequence of events listed in Figure 1. The proposed development has an area of approximately 8.0 acres containing 38 lots varying in size from 0.13

Figure 1

- |  |
|--|
| <p><b>Construction Sequence</b></p> <ul style="list-style-type: none"><li>• Construction Staking</li><li>• Clearing</li><li>• Grading</li><li>• Utilities Installation</li><li>• Road Construction</li><li>• Lot Development</li></ul> |
|--|

acres to 0.20 acres as shown in Figure 2. The estimated area to undergo clearing, excavation and grading is approximately 5.8 acres for lots and two acres for streets. The rational method runoff coefficient prior to development is estimated to be 0.32. The runoff coefficient of the property after construction is estimated to be 0.51.

The construction area has low potential for soil erosion due to the mild slopes of the property. The property generally slopes to the west at an average 0.5% slope. The present ground cover consists of abandoned alfalfa and native grasses. Soils on the property are mostly sandy loam with gravel. The property was at one time irrigated but the water supply is no longer used on the property.

Potential sources for contaminant loading of storm water include fueling activities, storage of construction materials, and sediment loading. Potential non-storm water discharges include overspraying for dust suppression and unplanned releases during construction of the water system.

B. Management During Construction

Construction activities are prone to pollution problems. Anticipated pollution sources affect storm water only when they are allowed to come into contact with runoff. Controls related to pollutant loading are the separation of potential pollutant sources and intercepting potential transport vehicles.

Best Management Practices (BMPs) during construction are aimed to separate potential pollutant sources from storm water and minimize the transport of pollutants. BMPs to be employed during construction activities at Micaela's Village include the following:

- Material produced during the clearing phase will not be stored for periods of extended duration. Disposition of materials will be carried out in a timely fashion. If prolonged storage is necessary, storm water will be diverted to prevent contact with stored materials.

# MICAELA'S VILLAGE

Storm Water Management Plan  
Located in Section 23, 11S, R1W, Ute PM  
Grand Junction, Mesa County, Colorado



### LEGEND:

- Limit of Clearing and Grading
- - - Property Line
- - - Existing Storm Water Outfall
- Straw Gais

### NOTES:

Site Area = 8.0 Acres  
Soil Type = Sandy Loam  
Approximately 80% of cover.

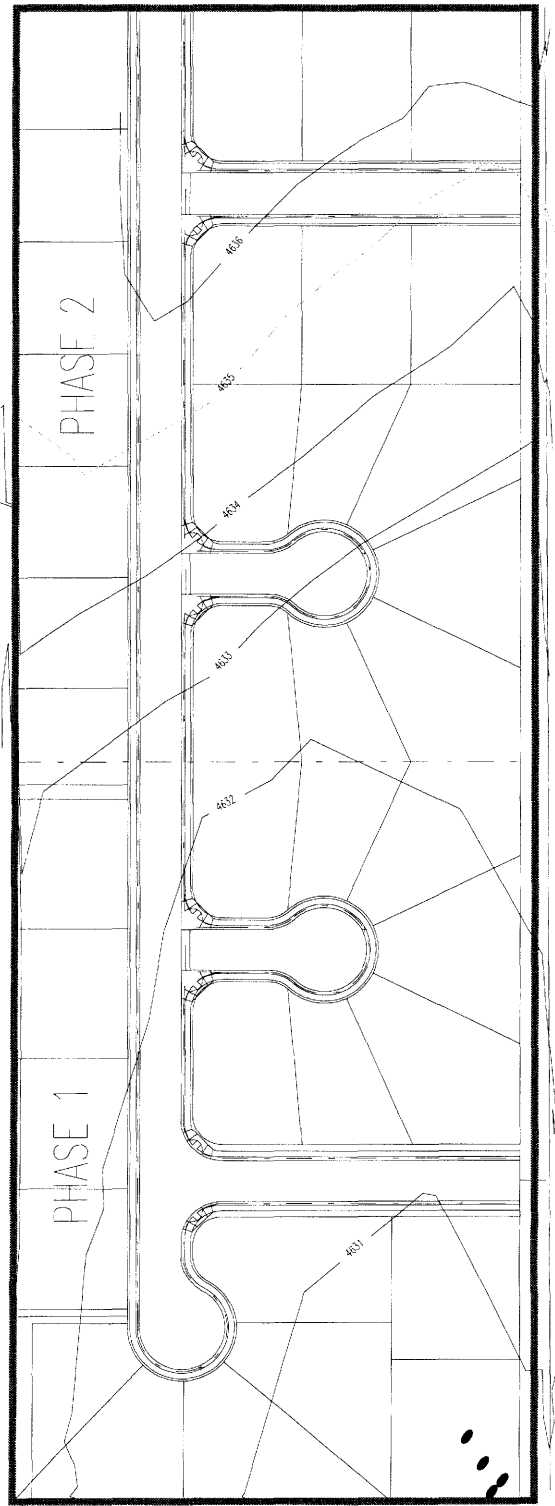


Figure 2

- Good housekeeping procedures will be maintained and a trash container will be provided.

BMPs to mitigate soil, dust, and sediment issues will include the following structural and management tools:

- If feasible, runoff will be diverted around construction activities and discharged onto undisturbed areas.
- Straw bails will be placed in runoff channels that cannot be diverted.
- If necessary, dust suppression will be performed by spraying problem areas with water.

BMPs to prevent contamination due to materials handling, fueling, and spills will include the following:

- Construction materials will be stored in a common storage area that will be kept free of accumulating debris and trash.
- The storage area will be inspected daily to check for leaking containers and accumulating debris.
- The storage area will be located in an area with a size that minimizes runoff contact. If necessary, a berm or ditch will be constructed at the perimeter of the area.
- Equipment fueling will be performed by designated personnel and equipment will not be allowed to be “topped off.” Spills will immediately be contained and contaminated soils will be removed.

#### C. Final Stabilization and Long Term Management

Final soil stabilization of the subdivision will include landscaped lawns, paved roads and sidewalks. The subdivision will have a designed storm drainage system that includes inlet boxes with grates. The proposed subdivision is within the cities jurisdiction, therefore city codes will determine storm water pollution prevention practices such as road sanding and trash collection.

D. Inspection and Maintenance

Contractors and subcontractors will be required to read the Storm Water Management Plan. All inspections will be performed by designated representatives of the person(s) performing construction activities.

# Micaela's Village Final Drainage Report

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prepared 30 November 1994

by



751 Horizon Court Suite 102  
Grand Junction, CO 81506



I. GENERAL LOCATION AND DESCRIPTION

A. Site and Major Basin Location

The property for the proposed Micaela's Village development is located in the area locally known as Orchard Mesa, south of the city of Grand Junction in the County of Mesa, State of Colorado. The proposed development is in the southeast quarter of section 23, Township 1 South, Range 1 West of the Ute Meridian, and given the parcel identification numbers of 2945-234-00-017. The property is currently undeveloped and no streets are located inside the property. Lamplite Park filing number one is neighboring to the north and several residences and businesses bound the property on the east and west sides and Unawep Avenue borders the south margin. No other developments bound the property.

B. Site and Major Basin Description

The total area of the property is 8.24 acres. The present ground cover consists of abandoned alfalfa and native grasses. Soils on the property are mostly sandy loam with gravel. The property was at one time irrigated but the water supply is no longer used on the property.

II. EXISTING DRAINAGE CONDITIONS

A. Major Basin/Site

For the purpose of this report, the major basin is considered to be the boundary of the property. Inflow onto the property is diverted through a system of abandoned irrigation ditches (Figure 1), therefore the major basin does not receive appreciable inflow from



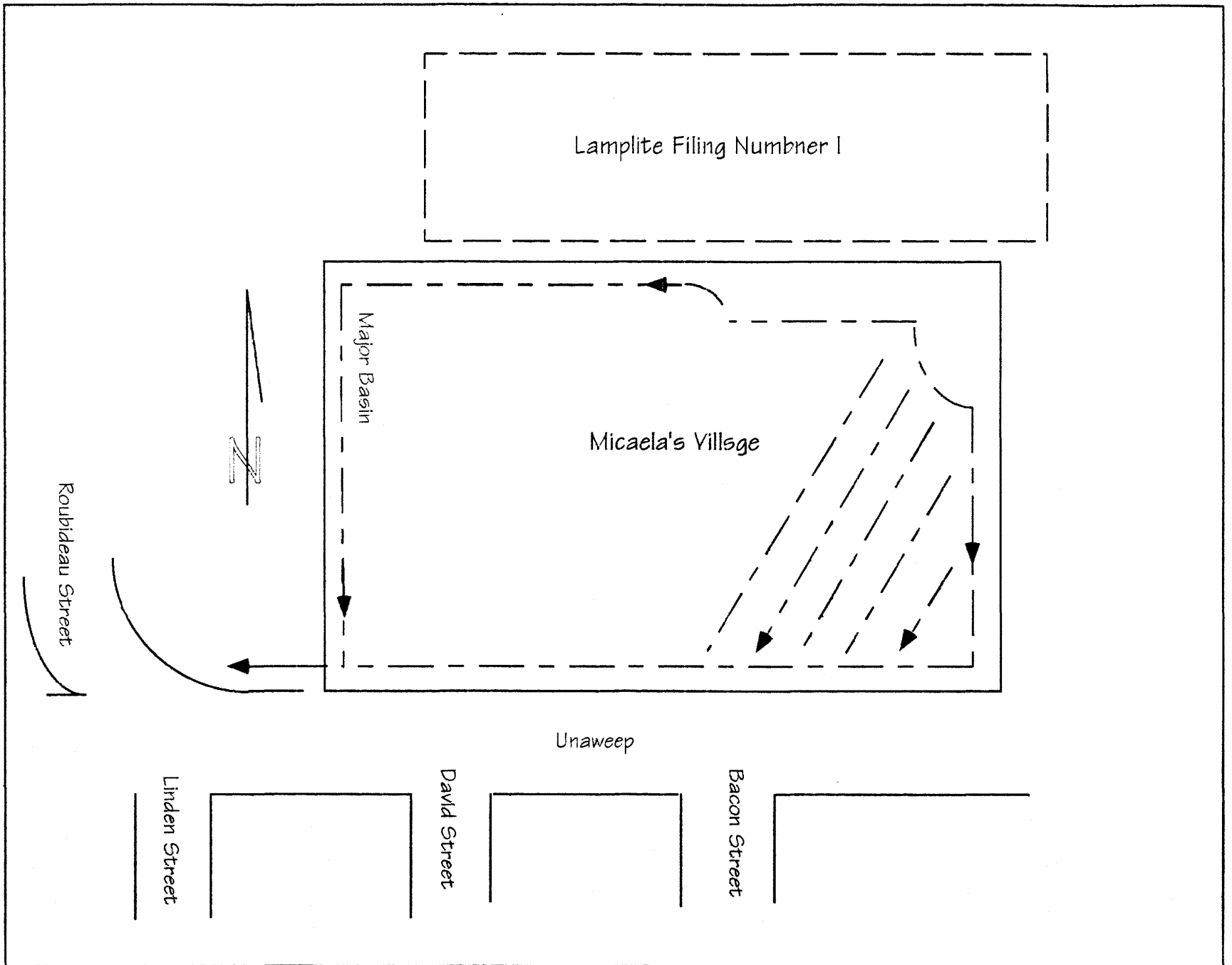


Figure 1: Major Basin and Existing Flow Conditions

2105

adjacent properties. Currently, runoff is discharged at the southwest corner of the property into a ditch that conveys the water to a storm sewer on the northeast corner of the intersection of Unawweep Avenue and Roubideau Street.

The property is zoned X (i.e. outside of the 500 year floodplain) by the National Flood Insurance Program. Though the Flood Insurance Rate Maps (FIRMs) do not necessarily identify all areas subject to flooding, no local features have been identified to suggest the FIRM is incorrect.

### III. PROPOSED DRAINAGE CONDITIONS

#### A. Changes in Drainage Patterns

Development of the property will result in an increased peak discharge and decreased time of concentration to the current storm drainage conveyance system. The present conveyance system is inadequate to transport the pre-development two year event. The current downstream historical flow will be diverted and rerouted directly to the Colorado River using a system designed to transport the 100 year storm.

#### B. Maintenance Issues

The drainage system will be located within dedicated easements to insure access to all parts of the system. A homeowners association will be formed to accept responsibility of maintenance of the drainage system. Maintenance of the system will include:

- aesthetic maintenance,
- nuisance maintenance, and

- operations and structural maintenance.

The association will perform periodic inspections of the system and make necessary adjustments and repairs as well as maintain appropriate records of repairs.

#### IV. DESIGN CRITERIA & APPROACH

##### A. General Considerations

Because there is no inflow from adjacent properties and runoff produced on the property is discharged to the existing underground conveyance system, there is no impact to previous drainage studies. The primary constraint for the design of the drainage system for the proposed development is obtaining adequate grade while maintaining necessary utility cover depths.

##### C. Hydrological Criteria

The two year and one hundred year events, as illustrated in the City of Grand Junction's Stormwater Management Manual (SWMM), were used as design rainfall parameters. The 24 hour event was used as the design rainfall. The Modified Rational Method was used to calculate runoff rates and quantities. Detention basin calculations were performed using the outline in Section N of the SWMM.

##### D. Hydraulic Criteria

Hydraulic design calculations were performed using methods accepted by practicing engineers and adopted by the City of Grand Junction. The SWMM was used to select design methods to achieve historical discharge requirements.

V. RESULTS AND CONCLUSIONS

A. Runoff Rates for 2 and 100 year storm

- Runoff rates will change as follows:

	2 year event	100 year event
existing total site runoff rates	1.96 cfs	3.54 cfs
proposed total site runoff rates	6.95 cfs	19.76 cfs

The existing storm drainage conveyance system can not adequately convey runoff produced from the historic 2 year event.

Runoff will be conveyed with curb and gutter while in the boundary of the proposed development.

A 24 inch storm sewer will transport stormwater from the development to the Colorado River. Detention is not necessary since the receiving basin will not be affected by increased discharge.

VI. APPENDICES

Post-development															
Basin	Area		Runoff Coef. C10	Runoff Coef. C100	Reach	Length Feet	Slope (S) %	V ft/sec	2-Yr Time Min	100-Yr Time Min	Intensity		Discharge		
	Surface Type	acres									Inches/hour 10-Yr	100-Yr	CFS(Q=CiA) 10-Yr	100-Yr	
A	Landscaped	0.79	0.25	0.35	A-1	110	1.00	0.11	16.05	14.16					
	Pvmnt & Roofs	0.68	0.90	0.95	A-2	108	1.50	3.00	6.01	6.01					
	Total/Average	1.47	0.61	0.67					22.05	20.16	1.05	2.84	0.95	2.79	
B	Landscaped	0.67	0.25	0.35	B-1	140	1.00	0.13	18.10	15.97					
	Pvmnt & Roofs	0.82	0.90	0.95	B-2	763	1.50	3.00	4.24	4.24					
	Total/Average	1.49	0.66	0.66					22.34	20.21	1.04	2.80	1.03	2.76	
C	Landscaped	0.61	0.25	0.35	C-1	140	1.00	0.13	18.10	15.97					
	Pvmnt & Roofs	1.01	0.90	0.95	C-2	503	1.50	3.00	2.79	2.79					
	Total/Average	1.62	0.71	0.62					20.90	18.77	1.08	2.91	1.25	2.90	
D	Landscaped	0.35	0.25	0.35	D-1	65	1.00	0.09	12.34	10.88					
	Pvmnt & Roofs	0.56	0.90	0.95	D-2	885	1.50	3.00	4.92	4.92					
	Total/Average	0.91	0.64	1.03					17.25	15.80	1.19	3.14	0.69	2.93	
E	Landscaped	0.41	0.25	0.35	E-1	65	1.00	0.09	12.34	10.88					
	Pvmnt & Roofs	0.56	0.90	0.95	E-2	500	1.50	3.00	2.78	2.78					
	Total/Average	0.97	0.62	0.97					15.11	13.66	1.28	3.48	0.77	3.27	
F	Landscaped	0.56	0.25	0.35	F-1	140	1.00	0.13	18.10	15.97					
	Pvmnt & Roofs	1.23	0.90	0.95	F-2	573	1.50	3.00	3.18	3.18					
	Total/Average	1.79	0.76	0.57					21.29	19.16	1.07	2.90	1.45	2.93	
Total Area & Weighted C		8.25	0.68	0.71				Tc(max)	22.34	22.05	Total Q:		6.14	17.59	
Offsite	Pvmnt	0.46	0.90	0.95	U-1	573	2.00	2.90	3.29	3.29	1.95	4.95	0.81	2.16	
												Total Q + Offsite:		6.95	19.76

Historic Conditions															
Basin	Area		Runoff Coef. C10	Runoff Coef. C100	Reach	Length Feet	Slope (S) %	V ft/sec	10-Yr Time Min	100-Yr Time Min	Intensity		Discharge		
	Surface Type	acres									Inches/hour 10-Yr	100-Yr	CFS(Q=CiA) 10-Yr	100-Yr	
A	Abandoned Alfalfa and Native Grasses	8.25	0.25	0.30	A-1	1100	0.50	0.29	63.93	60.17	0.95	1.43	1.96	3.54	
									Max Tc	63.93	60.17	Total Qh Increase		1.96	3.54
												4.18	14.05		

Required Detention Volume	
2 year storm detention volume	100 year storm detention volume

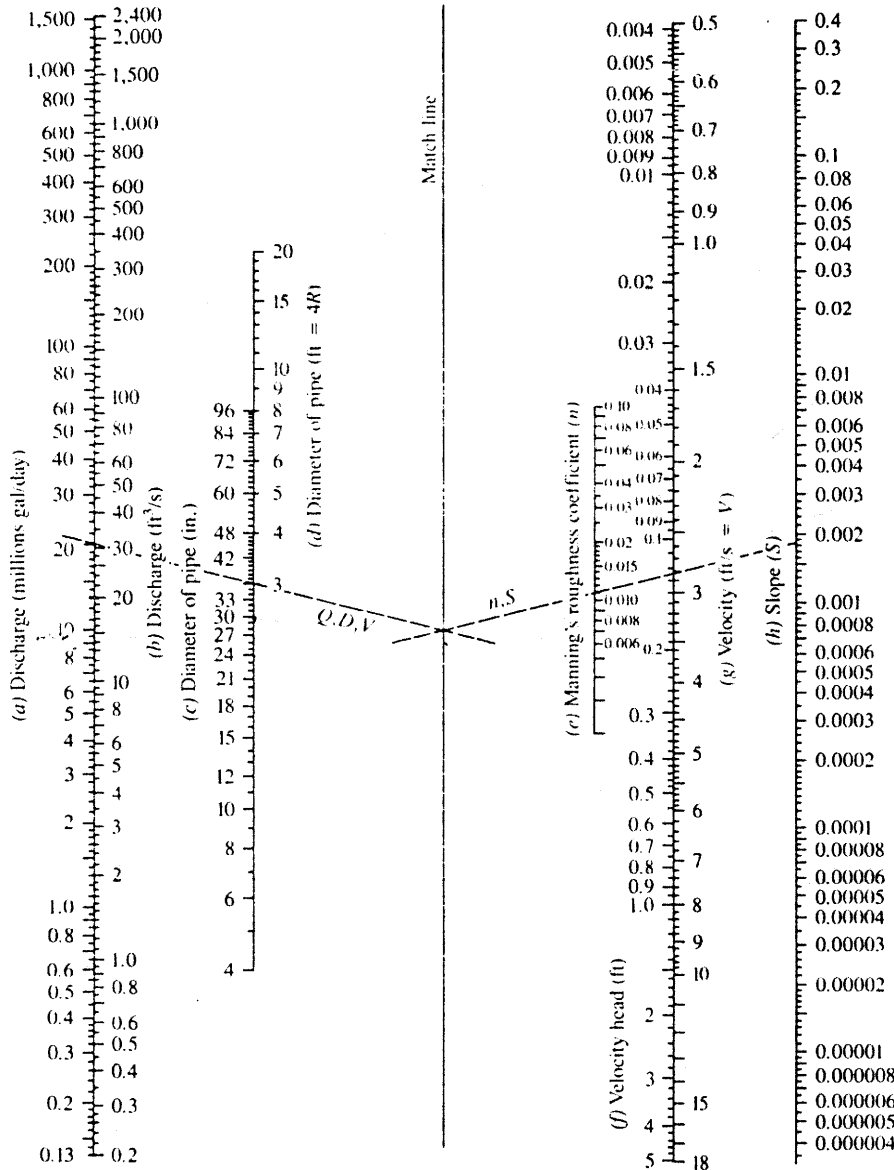


Figure 4-6 Alignment chart for flow of water in pipes flowing full (1)

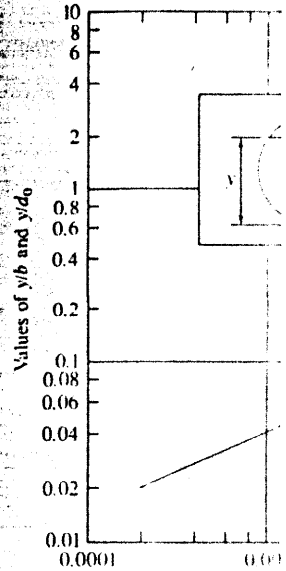


Figure 4-7 Curves for determining values of  $y/b$  and  $y/d_0$  [adapted from *Open Channel Flow*, Copyright © 1959, McGraw-Hill Book Company.]

**SOLUTION** With Eq. (4-7a) can be written

$$AR^{2/3} = \frac{Q^n}{(1.49 S)^{n/3}}$$

or 
$$\frac{AR^{2/3}}{b^{8/3}} = \frac{Q^n}{1.49 S^{n/3}}$$

Since  $Q = 200$  cfs,  $n = 0.01$  hand side of Eq. (4-8):

$$\frac{AR^{2/3}}{b^{8/3}} = \frac{200^{0.01}}{1.49 \times 0.01^{0.01}}$$

Then for  $AR^{2/3}/b^{8/3}$  Thus,

$$y_n = 0.33b \text{ or}$$

# GEOTECHNICAL REPORT

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

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

November 30, 1994

Mr. Lloyd Rodriquez  
P.O. Box 4146  
Grand Junction, Colorado 81502

Re: Micaela's Village, Pavement Sections  
Grand Junction, CO.

At the request of Mr. Rodriquez, the proposed subgrade of the roadways within Micaela's Village Subdivision was sampled by personnel of LINCOLN-DEVORE, INC.. The samples were subjected to Laboratory Testing and appropriate road sections were computed. Following are our findings and recommendations.

Samples of the surficial native soils at this property that may be required to support pavements have been evaluated using the Hveem-Carmay method (ASTM D-2844) to determine their support characteristics. The results of the laboratory testing are as follows:

AASHTO Classification - A-5(9)      Unified Classification - CL

R = < 5  
Sample exuded during compaction  
Expansion @ 300 psi = 0.7  
Displacement @ 300 psi = 3.85

No estimates of traffic volumes have been provided to Lincoln DeVore. However, we assume that the roads will be classified as residential. The design procedures utilized are those recognized by the Colorado Department of Highways and the 1986 AASHTO design procedure.

Based upon the existing topography, the anticipated final road grades and the anticipated future irrigation practices in the local area, a Drainage Factor of 0.7 (1986 AASHTO procedure) has been utilized for the section analysis.



PROPOSED PAVEMENT SECTIONS

Based on the soil support characteristics outlined above, the following pavement sections are recommended:

Residential Roadway, 18k EAL = 5 :

The terminal Serviceability Index of 2.0, a Reliability of 70 and a design life of 20 years have been utilized, based on recommendations by the Highway Department. An 18 kip EAL of 5, also recommended by the Highway Department, was used for the analysis.

Asphalt-Base Coarse

3 inches of asphaltic concrete pavement  
on 13 inches of aggregate base coarse  
on 8 inches of recompacted native material

OR

3 inches of asphaltic concrete pavement  
on 6 inches of aggregate base coarse  
on 8 inches of aggregate subbase ('Pit-Run')  
on 8 inches of recompacted native material

Full Depth Asphalt:

7 inches of asphaltic concrete pavement  
on 12 inches of recompacted native material

Rigid Concrete:

Doweled, not tied to shoulder slabs or curbing

6 inches of portland cement pavement  
on 4 inches of aggregate base coarse  
on 8 inches of recompacted native material

Due to the possibility of very high soil moisture in some portions of the subgrade soils, the use of a Geotextile Fabric for separation and minor reinforcement ( such as Mirafi 500-X or 140-N), placed beneath the Aggregate Base Course, may be required in some areas on this site.

### PAVEMENT SECTION CONSTRUCTION

We recommend that the asphaltic concrete pavement meet the State of Colorado requirements for a Grade C mix. In addition, the asphaltic concrete pavement should be compacted to a minimum of 95% of its maximum Hveem density. The aggregate base coarse should meet the requirements of State of Colorado Class 5 or Class 6 material, and have a minimum R value of 78. We recommend that the base coarse be compacted to a minimum of 95% of its maximum Modified Proctor dry density (ASTM D-1557), at a moisture content within + or -2% of optimum moisture. The native subgrade shall be scarified and recompacted to a minimum of 90% of their maximum Modified Proctor dry density (ASTM D-1557) at a moisture content within + or -2% of optimum moisture.

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.

#### Concrete Pavement

We recommend that the rigid concrete pavement have a minimum flexural strength ( $F_t$ ) of 650 psi at 28 days. This strength requirement can be met using Class P or AX or A or B Concrete as defined in Section 600 of the Standard Specifications for Road and Bridge Construction, Colorado DOT. It is recommended that field control of the concrete mix be made utilizing compressive strength criteria.

Flexural Strength should only be used for the design process. Concrete with a lower flexural strength may be allowed by the agency having jurisdiction however, the design section thicknesses should be confirmed. In addition, the final durability of the pavement should be carefully considered.

Control joints should be placed at a minimum distance of 12 feet in all directions. If it is desired to increase the spacing of control joints, then 66-66 welded wire fabric should be placed in the mid-point of the slab. If the welded wire fabric is used, the control joint spacing can be increased to 40 feet. Construction joints designed so that positive joint transfer is maintained by the use of dowels is recommended.

The concrete should be placed at the lowest slump practical for the method of placement. In all circumstances, the maximum slump

Mr. Lloyd Rodriguez  
Micaela's Village, Pavement Sections  
Grand Junction, November 30, 1994, Page 4

should be limited to 4 inches. Proper consolidation of the plastic concrete is important. The placed concrete must be properly protected and cured.

It is believed that all pertinent points have been addressed. If any further questions arise regarding this project or if we can be of any further assistance, please do not hesitate to contact this office at any time.

Respectfully Submitted,

LINCOLN DeVORE, Inc.



by: Edward M. Morris EIT      Reviewed By: George D. Morris, PE  
Engineer/Western Slope Manager

LD Job No.: 81837-J



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

December 16, 1994

Lloyd Rodriguez  
653 Wintergreen  
Grand Junction, CO 81501

Dear Lloyd,

The most recent submittal of Micaela's Village is presently being reviewed for agency responses and comments. The City Development Engineer, who is responsible for reviewing street plans and the final drainage report, has commented that these plans and this report are not complete. The Utility Engineer has also indicated deficiencies in the submittal for the sewer plans. Therefore, this review will not be scheduled on the January 10th Planning Commission agenda. Complete submittals require all necessary information so that staff has adequate time to review and evaluate proposals, especially when a proposal is going for final plan/plat approval. A month's delay should give your engineers sufficient time to prepare acceptable construction plans and address inadequacies in the drainage report.

To assist you in getting this information together, I have included comments from Jody Kliska and Bill Cheney. You should contact them if you need clarification for the submittals. You might also reconsider the street naming for this project. Since the name of the subdivision is Micaela's Village, it would seem that the principle street should be Micaela Drive and Micaela Court rather than Kathy Lynn Drive and Kathy Lynn Court. You might want to think about this when you submit the completed plans.

If you have any questions, please feel free to contact me at 244-1447.

Sincerely,

A handwritten signature in cursive script that reads "Tom Dixon".

Tom Dixon, AICP, Senior Planner

cc: File #135-94(2)  
Dan Brown  
Terry Nichols

GENERAL PROJECT REPORT

MICAELA'S VILLAGE

GRAND JUNCTION, COLORADO

DECEMBER 1994

MARY LOU KENNEDY: OWNER

135 94(2)

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135 94(2)

A: PROJECT DESCRIPTION

1. LOCATION:

MICAELA'S VILLAGE IS LOCATED ADJACENT TO AND NORTH OF UNAWEEP AVE (C. ROAD) AND 175 WEST OF 27 ROAD ON ORCHARD MESA IN GRAND JUNCTION. THE PROPERTY IS LOCATED IN PART OF THE SOUTHEAST 1/4 OF SECTION 23, TOWNSHIP 1 NORTH, RANGE 1 WEST OF THE UTE MERIDIAN.

2. ACREAGE:

MICAELA'S VILLAGE CONSISTS OF 8.23 ACRES.

3. PROPOSED USE:

THE PROPOSAL CALLS FOR THE PHASED DEVELOPMENT OF 38 LOTS ON 8.24 ACRES. THE RESULTING DENSITY WILL BE 4.6 UNITS PER ACRE.

B. PUBLIC BENEFIT:

THIS SUBDIVISION WILL MEET THE NEED FOR AFFORDABLE HOUSING IN THE GRAND JUNCTION AREA. ATTRACTIVE HOUSES ON GOOD STREETS WITH GOOD SIDEWALKS WILL ENHANCE THE AREA AND REMOVE A LONG STANDING WEED-PATCH. ALSO THE COMPLETING OF THE PROJECT WILL RESULT IN THE REMOVAL OF NON-CONFORMING TRAILER HOUSES EXISTING ON THE EAST SIDE OF THE PROPERTY.

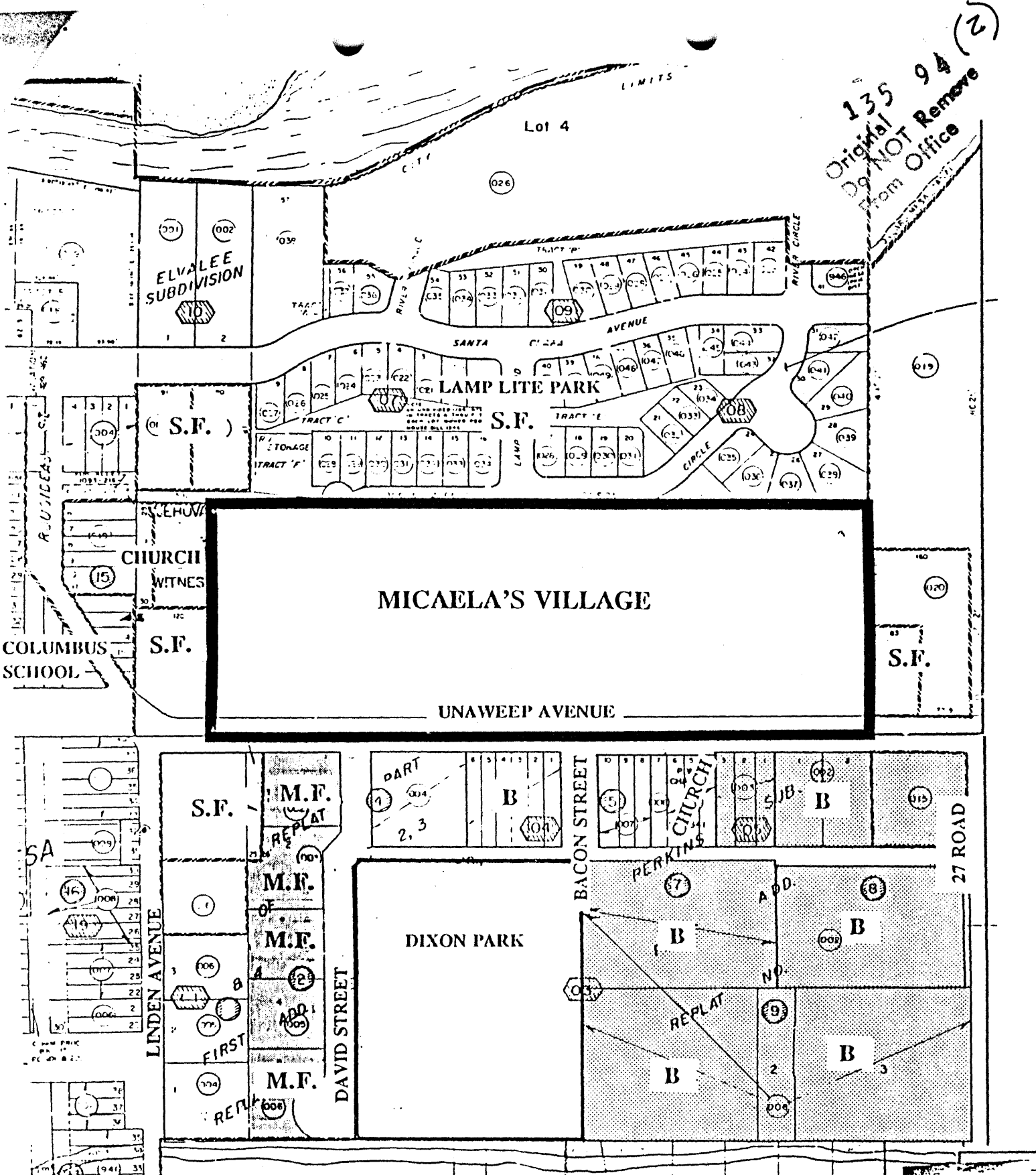
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135 94 (2)

### C. PROJECT COMPLIANCE, COMPATIBILITY, AND IMPACT

1. A 4.1 ZONING HAS BEEN PREVIOUSLY APPROVED BY THE CITY. THIS DENSITY WAS ERRONEOUSLY CALCULATED USING ALL OF THE RIGHT-OF-WAY OF UNAWEEP AVENUE. A PLAN WAS APPROVED CALLING FOR 37 LOTS. EVEN THOUGH THE NUMBER OF LOTS WILL ONLY BE ONE MORE, THE REQUEST FOR THE 4.6 UNITS PER ACRE ZONING IS WILL SET THE NUMBERS STRAIGHT. ADDITIONALLY 10 FEET OF RIGHT-OF-WAY WILL BE DEEDED TO THE CITY FOR THE WIDENING OF UNAWEEP AVENUE.
2. THE SURROUNDING AREA (SEE FIGURE 1) CONSISTS OF SINGLE FAMILY TO THE EAST, SOUTHWEST, AND NORTH. TO THE SOUTH IS LARGELY BUSINESS WITH SOME MULTI-FAMILY TO THE SOUTHWEST. A CONVENIENCE STORE AND PARK ARE DIRECTLY SOUTH OF THE PROPERTY. TWO CHURCHES AND COLUMBUS ELEMENTARY SCHOOL ARE SHORT DISTANCES FROM THE PROPERTY.
3. THE PROPOSED ACCESS TO MICAELA'S VILLAGE CONSISTS OF TWO ENTRIES ON UNAWEEP AVENUE. THE ENTRY TO THE WEST (DAVID STREET) WILL LINE UP WITH THE EXISTING DAVID STREET TO THE SOUTH. THE ENTRY TO THE EAST (MICAELA'S STREET) WILL BE BETWEEN EXISTING BACON STREET TO THE SOUTHWEST AND 27 ROAD TO THE SOUTHEAST. ALL ROADWAYS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY GRAND JUNCTION STANDARDS FOR RESIDENTIAL DEVELOPMENTS. UNAWEEP AND 27 ROAD ARE CLASSIFIED AS COLLECTOR. OTHER ROADS MENTIONED AS WELL AS ROADS IN NEARBY LAMP LITE PARK SUBDIVISION ARE CLASSIFIED AS LOCAL STREETS.
4. ALL UTILITIES ARE READILY AVAILABLE AND ADJOINING THE PROPERTY ON THE SOUTH SIDE. WATER WILL BE EXTENDED DOWN FROM THE UTE WATER LINE WHICH CURRENTLY EXISTS IN LAMP LITE PARK SUBDIVISION (SEE UTILITY COMPOSITE PLAN). AN EXISTING 8" SEWER MAIN CROSSED THE PROPERTY PARALLEL TO THE WEST PROPERTY LINE.
5. NO SPECIAL OR UNUSUAL DEMANDS ON UTILITIES ARE ANTICIPATED AT THIS TIME.
6. ACCORDING TO REVIEW COMMENTS ON THE PRELIMINARY PHASE OF THIS DEVELOPMENT, NO ADVERSE OR INSURMOUNTABLE EFFECTS WILL BE EXPERIENCED BY ANY PUBLIC FACILITIES.

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- M.F. Indicates Multi-Family
- S.F. Indicates Single-Family
- B Indicates Business

FIGURE I  
SURROUNDING LAND USE MAP



A Geologic Hazards Report has been prepared and submitted to the Grand Junction Community Development Department. The purpose of the report is to identify geologic hazards that may have an adverse effect on construction within the subject property. The conclusions and recommendations from the aforementioned report follow:

1. The potential for expansive clays that could adversely effect foundations exists in Mancos Shale and soils derived from the shale.
2. The wind-blown and alluvial soils could experience settlement under heavy loading and/or saturation.
3. Due to the topography, no flood hazard exists on this property.
4. The depth to water table should be considered in the design of any large structures or basements.
5. Mancos Shale and soils derived from the shale contain sulfate salts due to the marine origin of the Mancos. Sulfate resistant cement should be used where concrete would contact the shale or soil.
6. No landslide or erosion hazard exists on the property due to the gentle slopes (1 to 2 percent). A previous landslide 300 feet offsite to the north would undoubtedly stabilize and cease its headward advance before becoming a hazard to this parcel.
7. Commercial mineral resources of metallic or non-metallic nature are not found in the immediate area. The underlying gravel layer contains too high a percentage of silt and clay to be of value for concrete aggregate. A small possibility of the occurrence of natural gas from underlying sedimentary formations exists; the likelihood of gas is diminished by the relatively thin sequence of sedimentaries in the subsurface.
8. The area has a low probability of destructive seismic events.

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DEVELOPMENT SCHEDULE AND PHASING:

THE PHASING PLAN (SEE FIGURE II) IS AS FOLLOWS:

PHASE 1:

BUILD DAVID STREET, KATHY LYNN COURT, DAVID COURT, AND THAT PORTION OF KATHY LYNN DRIVE THAT WOULD SERVICE LOTS 1-10 OF BLOCK 1 AND ALL OF BLOCK 2 (17 LOTS).

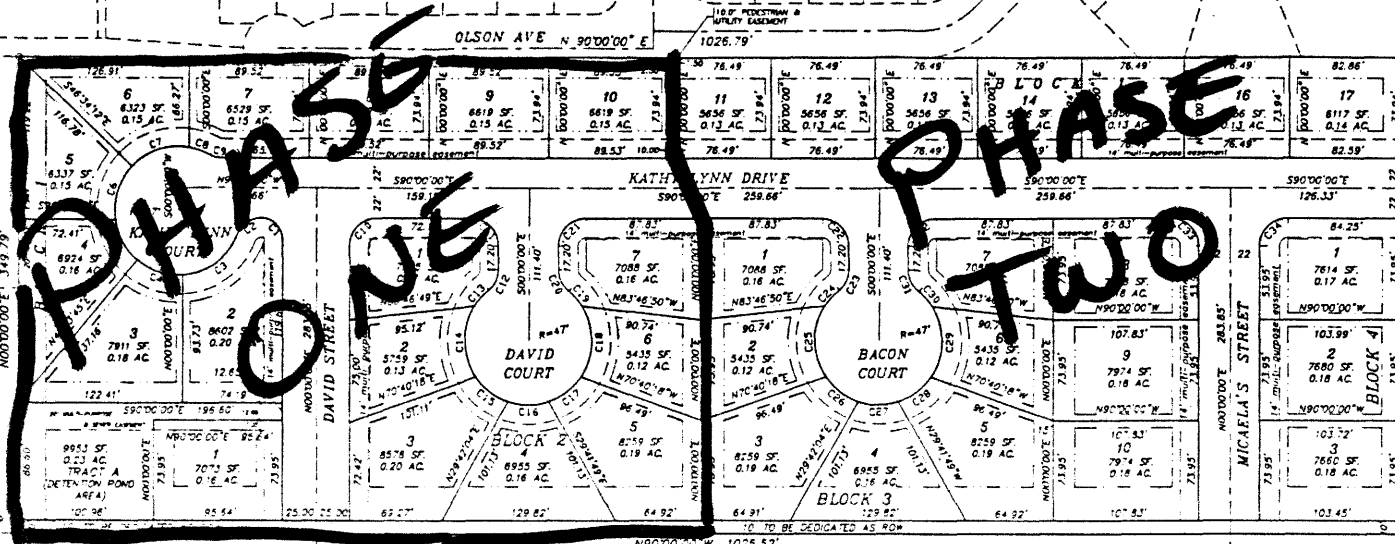
PHASE 2:

FINISH THE REMAINDER.

DEVELOPMENT WILL COMMENCE AS SOON AS POSSIBLE. IT IS EXPECTED THAT THE SECOND PHASE WILL BE INITIATED IN THE SPRING OF 1996.

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MICHAELA'S VILLAGE



- LEGEND & NOTES
- FOUND SURVEY MONUMENTS SET BY OTHERS NO. 5 RE-BAR
  - SET NO. 5 RE-BAR W/CAP L.S. 16413 IN CONCRETE
  - ⊥ NO. 5 RE-BAR W/CAP L.S. 16413 TO BE SET FOR ALL LOT CORNERS
  - ◆ MESA COUNTY SURVEY MARKER

NOTICE: Attention is directed that this plat contains all lots, areas shown thereon and all boundaries shown thereon are subject to the provisions of the Uniform Platting Act, Chapter 12, Article 10, Section 10-101, R.S.M. 1901, and the provisions of the Uniform Platting Act, Chapter 12, Article 10, Section 10-102, R.S.M. 1901.

LAND USE SUMMARY (37 LOTS)

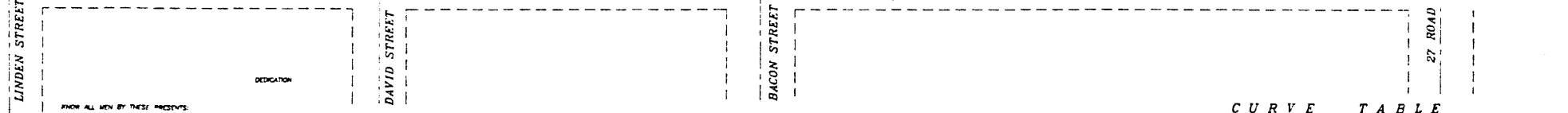
LOTS = 5.84 ACRES = 71%
ROADS = 2.17 ACRES = 26%
TRACT A = 0.23 ACRES = 0.3%
TOTAL = 8.24 ACRES = 100%

SETBACKS

FRONT = 20' FROM PROPERTY LINE  
 REAR = 15' FROM PROPERTY LINE  
 (EXCEPT WHERE CASEMENTS ARE LARGER)  
 SIDE = 5' FROM PROPERTY LINE  
 ALONG UNWEEP = 25' FROM PROPERTY LINE

SN CORNER  
 SET NO. 4 2014  
 SECTION 23  
 T15S R15W L14W  
 TBM  
 4632.6

N 89°00'00" E 120.00' S  
 N 90°00'00" E 221.60' S  
 N 90°00'00" E 1323.44' (BASIS OF BEARINGS ASSUMED)  
 UNWEEP (C ROAD)  
 N 90°00'00" E 678.51' S  
 N 90°00'00" E 302.24' S  
 SE CORNER  
 SECTION 23  
 T15S R15W L14W



FROM ALL MEN BY THESE PRESENTS:

That the undersigned, Mary Lee McCreedy, in her name as that real property situated in the City of Grand Junction, County of Mesa, State of Colorado, and as described in Book 205, of Page 187 the 280 of the Mesa County Clerk and Recorder Office, and being situated in the SE 1/4 SE 1/4 Section 23, Township 15 South, Range 15 East of the 11th Meridian, Mesa County, Colorado, do hereby certify that the accompanying plat, hereinafter herein called "this plat", is a true and correct representation of the same, and that the same has been approved by me, the undersigned, as the same appears on the accompanying plat.

STATE OF COLORADO }  
 COUNTY OF MESA } S.S.

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 19\_\_\_\_, by Mary Lee McCreedy.

My commission expires \_\_\_\_\_

Notary Public  
 Address \_\_\_\_\_

That said owner has placed the said real property to be laid out and surveyed as MICHAELA'S VILLAGE, a subdivision of a part of City of Grand Junction, County of Mesa, State of Colorado.

That said owner does hereby declare and set apart real property as shown and labeled on the accompanying plat as follows:

STATE OF COLORADO }  
 COUNTY OF MESA } S.S.

I hereby certify that this instrument was filed in my office of \_\_\_\_\_ at \_\_\_\_\_ o'clock \_\_\_\_\_ M. this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 19\_\_\_\_, and is duly recorded in Plat Book No. \_\_\_\_\_ Page \_\_\_\_\_.

All easements appurtenant to the City of Grand Junction for the use of the public, whether as particular easements for the installation, operation, maintenance and repair of public works and structures including, but not limited to electric lines, gas lines, water lines, sewer lines, telephone lines, and lines for the installation and maintenance of traffic control facilities, street lighting, and other structures.

All Irrigation Easements in the Property shown of lots and tracts hereby platified as parcelled easements for the installation, operation, maintenance and repair of public irrigation systems.

All Drainage Easements in the Property shown of lots and tracts hereby platified as parcelled easements for the convenience of runoff water which originates within the area hereby platified or from upstream areas, through natural or man-made facilities above or below ground.

All Detention/Retention Easements in the Property shown of lots and tracts hereby platified for the purpose of conveying and detaining/retaining runoff water which originates within the area hereby platified, and also for the convenience of runoff from upstream areas.

All Powerlines/Utility Easements in the Property shown of lots and tracts hereby platified as parcelled easements for the installation, operation, maintenance and repair of electric, gas, water, sewer, telephone, and other lines for the installation and maintenance of public services, including but not limited to, street lighting, fire, police, emergency services, and the City of Grand Junction.

All easements include the right of ingress and egress on, along, over, under, and through and across by the beneficiaries, their successors, or assigns, together with the right to trim or remove interfering trees and shrubs, and to Drainage and Detention/Retention easements, the right to drainage, provided, however, that the beneficiaries of said easements shall within the Parameters of the easements, not obstruct, impede, or interfere with the drainage of water from the area hereby platified nor obstruct or impede the easements for entering or placing any improvements thereon which may prevent reasonable ingress and egress to and from the easements.

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

IN WITNESS WHEREOF said owner has caused her name to be hereunto subscribed this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 19\_\_\_\_.

Mary Lee McCreedy

CITY APPROVAL

This plat of MICHAELA'S VILLAGE, a subdivision of the City of Grand Junction, County of Mesa, and State of Colorado was approved and accepted this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 19\_\_\_\_.

City Manager \_\_\_\_\_ President of Council \_\_\_\_\_

SURVEYOR'S CERTIFICATE

I, Mary E. Morris, certify that the accompanying plat of MICHAELA'S VILLAGE, a subdivision of a part of the City of Grand Junction, County of Mesa, State of Colorado has been prepared under the direct supervision and personal supervision of me, the undersigned, and that I am a duly Licensed Professional Land Surveyor in the State of Colorado, and that I am duly qualified to perform the duties and obligations of the Surveyor as defined in the State Constitution and the Statutes of the State of Colorado, and that I am duly qualified to perform the duties and obligations of the Surveyor as defined in the State Constitution and the Statutes of the State of Colorado.

Mary E. Morris, O.E.D. Surveying Systems Inc.  
 Colorado Registered Professional Land Surveyor L.S. 16413

CURVE TABLE

CURVE NO.	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT LENGTH
C1	15.64'	24.57'	22.12'	S 45°00'01" E	90°00'00"	15.64'
C2	20.00'	23.66'	22.30'	N 36°06'51" E	67°46'14"	15.43'
C3	47.00'	35.11'	45.48'	N 33°19'30" E	62°31'36"	29.10'
C4	47.00'	36.48'	35.57'	N 72°00'00" E	44°28'03"	19.10'
C5	47.00'	34.17'	33.43'	N 28°56'00" E	41°39'40"	17.10'
C6	47.00'	42.28'	42.87'	N 74°39'24" E	41°00'00"	29.10'
C7	47.00'	46.28'	44.37'	N 71°36'02" E	56°20'04"	17.10'
C8	47.00'	15.70'	15.63'	N 70°39'49" E	19°08'14"	7.92'
C9	47.00'	10.09'	9.98'	N 62°16'25" E	26°28'17"	9.98'
C10	47.00'	31.42'	26.28'	N 45°00'00" E	90°00'00"	20.00'
C11	20.00'	10.09'	9.98'	N 45°00'00" E	90°00'00"	20.00'
C12	47.00'	15.29'	15.22'	N 41°51'38" E	18°38'25"	7.71'
C13	47.00'	30.59'	30.00'	N 30°00'00" E	66°57'11"	31.08'
C14	47.00'	30.59'	30.00'	N 30°00'00" E	37°13'23"	15.83'
C15	47.00'	30.13'	29.62'	N 30°00'00" E	36°43'44"	15.60'
C16	47.00'	30.59'	30.00'	N 30°00'00" E	27°13'23"	15.83'
C17	47.00'	30.59'	30.00'	N 30°00'00" E	66°57'10"	31.08'
C18	47.00'	30.13'	29.62'	N 30°00'00" E	18°38'26"	7.71'
C19	47.00'	15.29'	15.22'	N 41°51'37" E	18°38'26"	7.71'
C20	20.00'	17.87'	17.88'	N 33°19'22" E	43°02'31"	9.98'
C21	20.00'	31.42'	26.28'	N 45°00'00" E	90°00'00"	20.00'
C22	20.00'	31.42'	26.28'	N 45°00'00" E	90°00'00"	20.00'
C23	20.00'	17.87'	17.88'	N 33°19'22" E	43°02'31"	9.98'
C24	47.00'	15.29'	15.22'	N 41°51'37" E	18°38'26"	7.71'
C25	47.00'	34.92'	31.83'	N 00°56'11" E	66°57'10"	31.08'
C26	47.00'	30.59'	30.00'	N 30°00'00" E	37°13'23"	15.83'
C27	47.00'	30.13'	29.62'	N 30°00'00" E	36°43'44"	15.60'
C28	47.00'	30.59'	30.00'	N 30°00'00" E	66°57'11"	31.08'
C29	47.00'	30.13'	29.62'	N 30°00'00" E	18°38'26"	7.71'
C30	47.00'	15.29'	15.22'	N 41°51'37" E	18°38'26"	7.71'
C31	20.00'	17.87'	17.88'	N 33°19'22" E	43°02'31"	9.98'
C32	20.00'	31.42'	26.28'	N 45°00'00" E	90°00'00"	20.00'
C33	20.00'	31.42'	26.28'	N 45°00'00" E	90°00'00"	20.00'
C34	20.00'	17.87'	17.88'	N 33°19'22" E	43°02'31"	9.98'

MICHAELA'S VILLAGE

FINAL PLAT

SITUATED IN THE SE 1/4 SE 1/4 SECTION 23, T15S, R15W, L14W

FOR: RODRIGUEZ	O.E.D. SURVEYING SYSTEMS INC. 1018 COLD AVE GRAND JUNCTION, COLORADO 81501-2107 454-5248	SURVEYED BY: SE MW
SCALE: 1" = 50 FT	DRAWN BY: JAE WCM	SHEET NO. 23
DATE: 11/29/24		

Figure II

Original Notary Public

**STAFF REVIEW (Preliminary comments)**

FILE: #135-94(2)

DATE: March 16, 1995

STAFF: Tom Dixon, AICP

REQUEST: Final Plan/Plat Review for a 38-lot Subdivision and a Rezone from PR 4.1 to PR 4.7

LOCATION: 2694 UnawEEP Avenue

APPLICANT: Mary Lou Kennedy

EXISTING LAND USE: Undeveloped

PROPOSED LAND USE: Single-family Residential

SURROUNDING LAND USE: Single-family Residential

EXISTING ZONING: PR 4.1

PROPOSED ZONING: PR 4.7

SURROUNDING ZONING:

NORTH: PR-8 (Planned Residential, 8 units per acre)

SOUTH: RMF-16 (Multi-Family Residential, 16 units per acre) and  
PB (Planned Residential)

EAST: RSF-8 (Single-Family Residential, 8 units per acre)

WEST: RMF-16

**RELATIONSHIP TO COMPREHENSIVE PLAN/POLICIES/GUIDELINES:** The UnawEEP Avenue (C Road) Corridor Guidelines apply to this proposal. These guidelines recognize UnawEEP Avenue as a collector street and they are intended to provide for safe pedestrian safety to schools and parks and to protect residential uses from non-residential uses.

**STAFF ANALYSIS:** This proposal is for final plan/plat of a 38-lot subdivision on a parcel containing 8.24-acres. The lot sizes range from 5,416 square feet to 9,186 square feet in size. Access to the individual lots will occur from a looped public street (proposed as Michaela's Drive) which will connect with three cul-de-sacs. The cul-de-sacs will serve about 20 lots. Two connections onto UnawEEP Avenue are provided from Michaela's Drive via David and Kathy Lynn Streets. The two accesses onto UnawEEP were approved at the preliminary phase by the Planning Commission at its September, 1994 meeting.

A 10-foot pedestrian and utility easement connection to Olson Avenue (to the north) is also proposed. This connection is in lieu of a direct street connection to Olson Avenue and the Lamp Lite Subdivision to the north. The pedestrian easement will have to be improved with an 8-foot wide concrete sidewalk and will link with the sidewalk on the north side of the subdivision. This sidewalk, in turn, will connect with an existing pedestrian network extending through Lamp Lite to Columbus Elementary School to the west of Michaela's Village.

This site is presently zoned PR 4.1. Because the actual density proposed with this subdivision is nearly 4.7 units per acre, a rezone to PR 4.7 is requested.

Issues concerning the final plan/plat are as follows:

1) Two road connections onto UnawEEP Avenue with looped internal circulation and access for this subdivision was approved as a preliminary plan. Access onto UnawEEP Avenue is prohibited for individual lots. A "no access" restriction will apply to all lots fronting on UnawEEP and this restriction must appear on the final plat.

2) The setbacks previously approved for this proposal are as follows:

Front yard = 20 feet

Rear = 15 feet (25 feet along UnawEEP Avenue)

Side = 5 feet (25 feet along UnawEEP Avenue)

Garage = 20 feet

The height limit = 32 feet

3) If fencing around the subdivision is proposed, height and materials need to be shown, identified and approved.

4) Stormwater drainage concerns from the site remain a problem. It may not be practical nor feasible to pipe water directly to the Colorado River as proposed, especially since the City could be liable for potential long-term drainage problems. Comments and alternative solutions generated by the Public Works staff address these problems and need to be considered with the final design of a drainage system.

5) Renaming of some of the proposed streets is necessary in order to avoid confusion and to remain consistent with the City's uniform street naming system. Michaela's Drive will have to be named Michaela's Place with its western cul-de-sac named Michaela's Court. David Court needs to be named differently since it parallels David Street which may cause confusion. The street naming system is necessary to facilitate the provision of necessary public services such as police, fire, emergency response, and mail delivery.

March 15, 1995

REVIEW COMMENTS FOR: Micaela's Village #135-94(2)  
TYPE OF REVIEW: Final Plan & Plat  
REVIEWED BY: Jody Kliska

#### Plat

There is a dedication for irrigation easements but no easements are shown on the plat.

There is a dedication for detention/retention easements, but apparently no facilities are proposed. It does not appear this dedication is necessary.

Dedications are needed for the sewer, ingress/egress easements shown on the plat.

A note on the plat stating no access to UnawEEP will be allowed from any lots abutting UnawEEP.

#### Utility Composite

The composite does not show the existing sanitary sewer or telephone cable in the easement along the western boundary of Lamplite where the storm sewer is proposed.

#### Street Plans

A 30' radius is required at the street connections to UnawEEP as required by the City Standards.

Note 5 has incorrect references to compaction specifications. Please correct these in accordance with the City of Grand Junction specifications.

Approval of the preliminary plan for this subdivision specifically required this development to construct curb, gutter, and sidewalk along Olson. No plans were submitted for this work. Please submit construction drawings. Drainage puddles at the west end of Olson now, and we are requesting this development install an inlet and pipe to connect with the proposed storm drain system for this subdivision.

Please include a note on the street plans that inspection and approval of the street subgrade from the City of Grand Junction is

required prior to placement of base material. The soils report indicated the possibility of high soil moisture and indicated the use of a geotextile fabric may be necessary on this site.

#### Drainage

City staff recommendation is for the storm drainage to go south down David St. rather than the proposed alignment to the river. We will be meeting with the engineer to look at alternatives. However, the problems identified with the proposed storm drainage include the following:

The proposal for the storm sewer would place the pipe in a 6' easement along the western boundary of Lamplite. There is already an existing sanitary sewer in this easement, and was not shown on the profile for the storm sewer. There is an existing residence constructed right at or slightly inside the easement and construction work will be quite difficult. We have concerns about excavating the depth for the storm sewer shown as 8-9' in the vicinity of the house, especially because the room to work in is very limited.

The proposed storm sewer would cross Santa Clara onto property purchased by the developer. Easements must be dedicated for the facility and must be of sufficient width (25') for city maintenance vehicles to access. Ownership of the property below the slope to the river is in question as well.

The proposal includes an exposed steel pipe from the top of the slope to the river and concerns have been expressed about the visibility from Watson Island as well as maintenance.

#### Other

A development Improvements Agreement must be submitted prior to approval.

Since this development exceeds 5 acres, a Stormwater Management Plan and permit from the State Health Department is required.

# Micaela's Village Final Drainage Report

prepared 1 March 1995

by

Nichols Associates, Inc.  
751 Horizon Ct Suite 102  
Grand Junction, CO



Micaela's Village: Final Drainage Report

I. GENERAL LOCATION AND DESCRIPTION

A. Site and Major Basin Location

The property for the proposed Micaela's Village development is located in the area locally known as Orchard Mesa, south of the city of Grand Junction in the County of Mesa, State of Colorado. The proposed development is in the southeast quarter of section 23, Township 1 South, Range 1 West of the Ute Meridian, and given the parcel identification numbers of 2945-234-00-017. The property is currently undeveloped and no streets are located inside the property. Lamp Lite Park Filing One is neighboring to the north, several residences and a church bound the property on the east and west sides, and Unawep Avenue borders the south margin. No other developments bound the property.

B. Site and Major Basin Description

The total area of the property is 8.00 acres. The present ground cover consists of abandoned alfalfa and native grasses. Soils on the property are mostly sandy loam with gravel. The property was at one time irrigated but the water supply is no longer used on the property.

II. EXISTING DRAINAGE CONDITIONS

A. Major Basin/Site

For the purpose of this report, the major basin is considered to be the boundary of the property. Inflow onto the property is diverted through a system of abandoned irrigation ditches (Figure 1), therefore the major basin does not receive appreciable inflow from

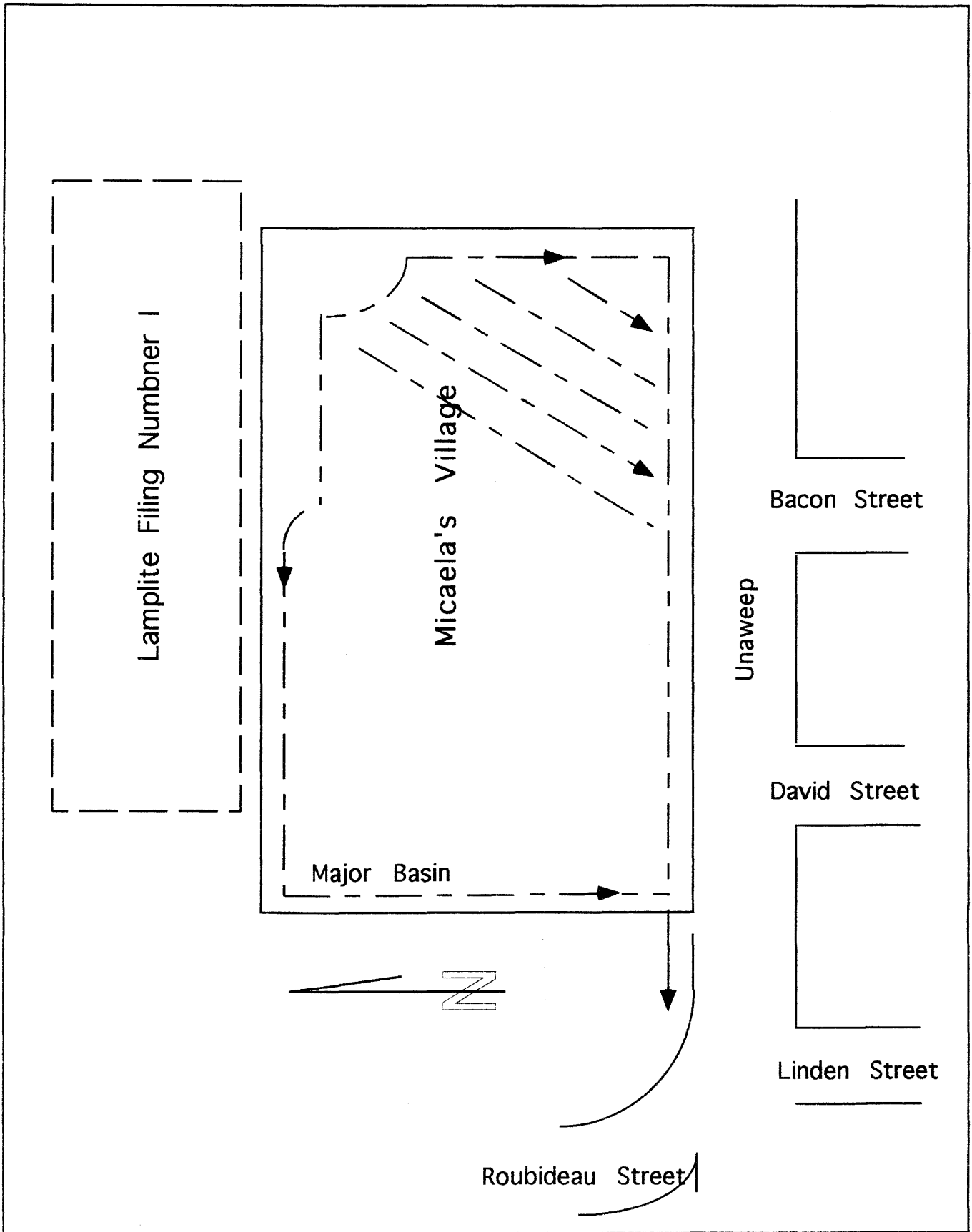


Figure 1: Major Basin and Existing Flow Conditions

*Micaela's Village: Final Drainage Report*

adjacent properties. Currently, runoff is discharged at the southwest corner of the property into a ditch that conveys the water to a 10" culvert under Unawep Avenue at Roubideau Street. The current culvert is undersized for a 100 year event.

The property is zoned X (i.e. outside of the 500 year floodplain) by the National Flood Insurance Program. Though the Flood Insurance Rate Maps (FIRMs) do not necessarily identify all areas subject to flooding, no local features have been identified to suggest the FIRM is incorrect.

### III. PROPOSED DRAINAGE CONDITIONS

#### A. Changes in Drainage Patterns

Development of the property will result in an increased peak discharge and decreased time of concentration. The present conveyance system is inadequate to transport the historical two year event. The proposed drainage plan is to route all stormwater in the property directly to the Colorado River without detention.

#### B. Maintenance Issues

The drainage system will be located within dedicated easements to insure access to all parts of the system. A homeowners association will be formed to accept responsibility of maintenance of the drainage system. Maintenance of the system will include:

- aesthetic maintenance,
- nuisance maintenance, and
- operations and structural maintenance.

Micaela's Village: Final Drainage Report

The association will perform periodic inspections of the system and make necessary adjustments and repairs as well as maintain appropriate records of repairs.

IV. DESIGN CRITERIA & APPROACH

A. General Considerations

Runoff quantities were calculated for Lamp Lite Park prior to its construction. The calculated discharge rates for Lamp Lite Park included a section of the subdivision that was not constructed, therefore those rates were not used for comparison rate at Micaela's Village. Because there is no stormwater discharged into Lamp Lite Park, there is no impact to that developments stormwater system. The primary constraint for the design of the drainage system for the proposed development is obtaining adequate grade while maintaining necessary utility cover depths.

C. Hydrological Criteria

The two year and one hundred year events, as illustrated in the City of Grand Junctions' Stormwater Management Manual (SWMM), were used as design rainfall parameters. The 24 hour event was used as the design rainfall. The Modified Rational Method was used to calculate runoff rates and quantities. Detention basin calculations were not performed.

The site was inspected on October 25th 1994. Soil types, ground cover, slope, and drainage characteristics were recorded. Rational method runoff coefficients were selected from Table "B-1" in the SWMM for historical and proposed conditions. Proposed conditions were calculated using weighted averages (see appendix).

D. Hydraulic Criteria

Hydraulic design calculations were performed using methods accepted by practicing engineers and adopted by the City of Grand Junction. Mannings Equation was used to calculate pipe hydraulics. The nomograph solution of Mannings Equation, and proportional properties of conduits flowing partially full were used to iterate solutions with known constraints (i.e. given  $y/D$ ,  $Q$ , etc.). The SWMM was used to select design methods to achieve historical discharge requirements.

Analysis was performed as follows:

- $Q$  given
- select pipe dia.
- solve for Area
- solve for Hydraulic Radius with  $y/D$
- solve for  $S$  given minimum  $V$
- solve for  $V$  at 100 year  $Q$
- select  $S$
- select pipe dia.
- solve for  $V$  and  $Q$

The above steps were iterative and performed until a suitable pipe size and slope was determined.

V. RESULTS AND CONCLUSIONS

A. Runoff Rates for 2 and 100 year storm

- Runoff rates will change as follows:

	2 year event	100 year event
existing total site runoff rates	1.69 cfs	5.36 cfs
proposed total site runoff rates	4.86 cfs	14.80 cfs

- The existing storm drainage conveyance system can not adequately convey runoff produced from the historic 2 year event.
- Runoff will be conveyed with curb and gutter while in the boundary of the proposed development.
- A 24 inch storm sewer will transport stormwater from the development to the Colorado River. Detention is not necessary since the receiving basin will not be affected by increased discharge rate.

B. Overall Compliance

The proposed drainage design conforms with city policy and standards. The proposed drainage system will provide relief for a currently overburdened drainage pathway.

VI. APPENDICES

- Drainage Area Calculations
- Modified Rational Method Discharge Calculations
  - Proposed
  - Historical
- Street Flow Depth at the Gutter For Critical Sections
- Nomograph Solutions for Velocity in Pipe
- Typical Iteration for Pipe Sizing

MICAELA'S VILLAGE  
DRAINAGE AREAS

SUBBASIN	NO. OF LOTS	TOTAL AREA (SF/ACRES)	LOT AREA (SF/ACRES)	STREET AREA (SF/ACRES)	BUILDING AREA (SF/ACRES)	TOTAL AREA IMPERVIOUS (SF/ACRES)	TOTAL AREA LANDSCAPED (SF/ACRES)	% IMPERVIOUS	(% ERROR)
A	6	62353	47747	14606	13500	28106	34247	45%	0.00%
		1.43	1.10	0.34	0.31	0.65	0.79		
B	7	63318	51459	11859	15750	27609	35709	44%	0.00%
		1.45	1.18	0.27	0.36	0.63	0.82		
C	7	70476	53339	17139	15750	32889	37587	47%	0.00%
		1.62	1.22	0.39	0.36	0.76	0.86		
D	5	37284	29320	7964	11250	19214	18070	52%	0.00%
		0.86	0.67	0.18	0.26	0.44	0.41		
E	5	40443	31801	8642	11250	19892	20551	49%	0.00%
		0.93	0.73	0.20	0.26	0.46	0.47		
F	7	74801	63209	11592	15750	27342	47459	37%	0.00%
		1.72	1.45	0.27	0.36	0.63	1.09		
Totals	37	348675	276875	71802	83250	155052	193623		
		8.00	6.36	1.65	1.91	3.56	4.44		

NOTES:

TOTAL AREAS, LOT AREAS, AND STREET AREAS WERE DERIVED FROM AUTOCAD DRAWING AND SURVCAD AREA CALCULATIONS

AND INPUT AS SQUARE FEET. 1 ACRE = 43560 SF

BUILDING AREA = NUMBER OF LOTS \* 2250 SF

TOTAL AREA IMPERVIOUS = STREET AREA + BUILDING AREA

% IMPERVIOUS = TOTAL AREA IMPERVIOUS / TOTAL AREA

% ERROR = (LOT AREA + STREET AREA)/TOTAL AREA



Nichols Associates, Inc.  
751 Horizon Drive Suite 102

Grand Junction, CO 81506

MICAELA'S VILLAGE - Drainage Study

1-Mar-95

<b>CALCULATION OF INCREASE IN DISCHARGE DUE TO PROPOSED CONSTRUCTION</b>														
<b>After Construction {Area - Intensity - Discharge}</b>														
BASIN	AREA		RUNOFF COEF. C2	RUNOFF COEF. C100	REACH	LENGTH FEET	SLOPE (S) %	V Ft./Sec	2-Yr	100-Yr	INTENSITY Inches/Hour		DISCHARGE CFS (Q=CiA)	
	SURFACE TYPE	Ac.							TIME	TIME	2-Yr	100-Yr	2-Yr	100-Yr
									MIN.	MIN.				
A	Landscaped	0.79	0.25	0.35	A-1	110	1.0	0.15	16.0	14.2				
	Paved & Roofs	0.65	0.90	0.95	A-2	1 081	0.6	3.00	6.0	6.0				
	Total/Average	1.44	0.54	0.62					22.1	20.2	1.05	2.84	0.82	2.54
B	Landscaped	0.82	0.25	0.35	B-1	140	1.0	0.13	18.1	16.0				
	Paved & Roofs	0.63	0.90	0.95	B-2	763	0.6	3.00	4.2	4.2				
	Total/Average	1.45	0.53	0.61					22.3	20.2	1.05	2.84	0.81	2.51
C	Landscaped	0.86	0.25	0.35	A-1	140	1.0	0.13	18.1	16.0				
	Paved & Roofs	0.76	0.90	0.95	A-2	503	0.6	1.50	5.6	5.6				
	Total/Average	1.62	0.55	0.63					23.7	21.6	1.00	2.70	0.90	2.76
D	Landscaped	0.41	0.25	0.35	A-1	65	1.0	0.19	12.3	10.9				
	Paved & Roofs	0.44	0.90	0.95	A-2	885	0.6	1.50	9.8	9.8				
	Total/Average	0.85	0.59	0.66					22.2	20.7	1.05	2.77	0.52	1.56
E	Landscaped	0.47	0.25	0.35	A-1	65	1.0	0.19	12.3	10.9				
	Paved & Roofs	0.46	0.90	0.95	A-2	540	0.6	1.50	6.0	6.0				
	Total/Average	0.93	0.57	0.65					18.3	16.9	1.17	3.07	0.62	1.85
F	Landscaped	1.09	0.25	0.35	A-1	40	1.0	0.24	9.7	8.5				
	Paved & Roofs	0.63	0.90	0.95	A-2	400	0.6	3.00	2.2	2.2				
	Total/Average	1.72	0.49	0.57					11.9	10.8	1.41	3.66	1.18	3.59
										<b>Sub-Total:</b>		<b>4.86</b>	<b>14.80</b>	
										<b>Off site drainage:</b>		<b>0.00</b>	<b>0.00</b>	
<b>Total Ac./weighted C</b>		<b>8.01</b>	<b>0.51</b>	<b>0.62</b>				<b>MAX. Tc</b>	<b>23.7</b>	<b>21.6</b>	<b>TOTAL Q:</b>		<b>4.86</b>	<b>14.80</b>

<b>Historic (Area - Intensity - Discharge)</b>															
BASIN	AREA		RUNOFF COEF. C2	RUNOFF COEF. C100	REACH	LENGTH FEET	SLOPE (S) %	VELOCITY FT./SEC.	2-Yr	100-Yr	INTENSITY Inches/Hour		DISCHARGE CFS (Q=CIA)		
	SURFACE TYPE	Ac.							TIME	TIME	2-Yr	100-Yr	2-Yr	100-Yr	
									MIN.	MIN.					
A	Native grass & scattered trees	8.01	0.32	0.38	A-1	1 100	0.8	0.05	50.2	46.3					
	Total/Average	8.01	0.32	0.38					50.2	46.3	0.66	1.76	1.69	5.36	
									MAX. Tc	50.2	46.3	TOTAL Qh:		1.69	5.36
											INCREASE:		3.17	9.45	

**STREET FLOW DEPTH AT THE GUTTER FOR CRITICAL SECTIONS**

**Flow Through Street, Curb & Gutter**

Discharge quantity is calculated by the following formula:

$$Q=0.56*(Z/n)*S^{.5}*d^{2.67}$$

Where:

Q = Discharge in CFS (Cubic Feet per Second)

Z = Inverse pavement cross slope

n = Manning roughness coefficient

S = Longitudinal slope of the street or gutter

d = Depth of gutter flow in feet

**Capacity For Storm Drain Inlets**

curb opening length = grate length

$$\text{Ponding } Q = .6 A (2gH)^{.5}$$

H2 = 0.5 Ft.      H100 = 1.0 Ft.

**Solving for maximum depth at gutter**

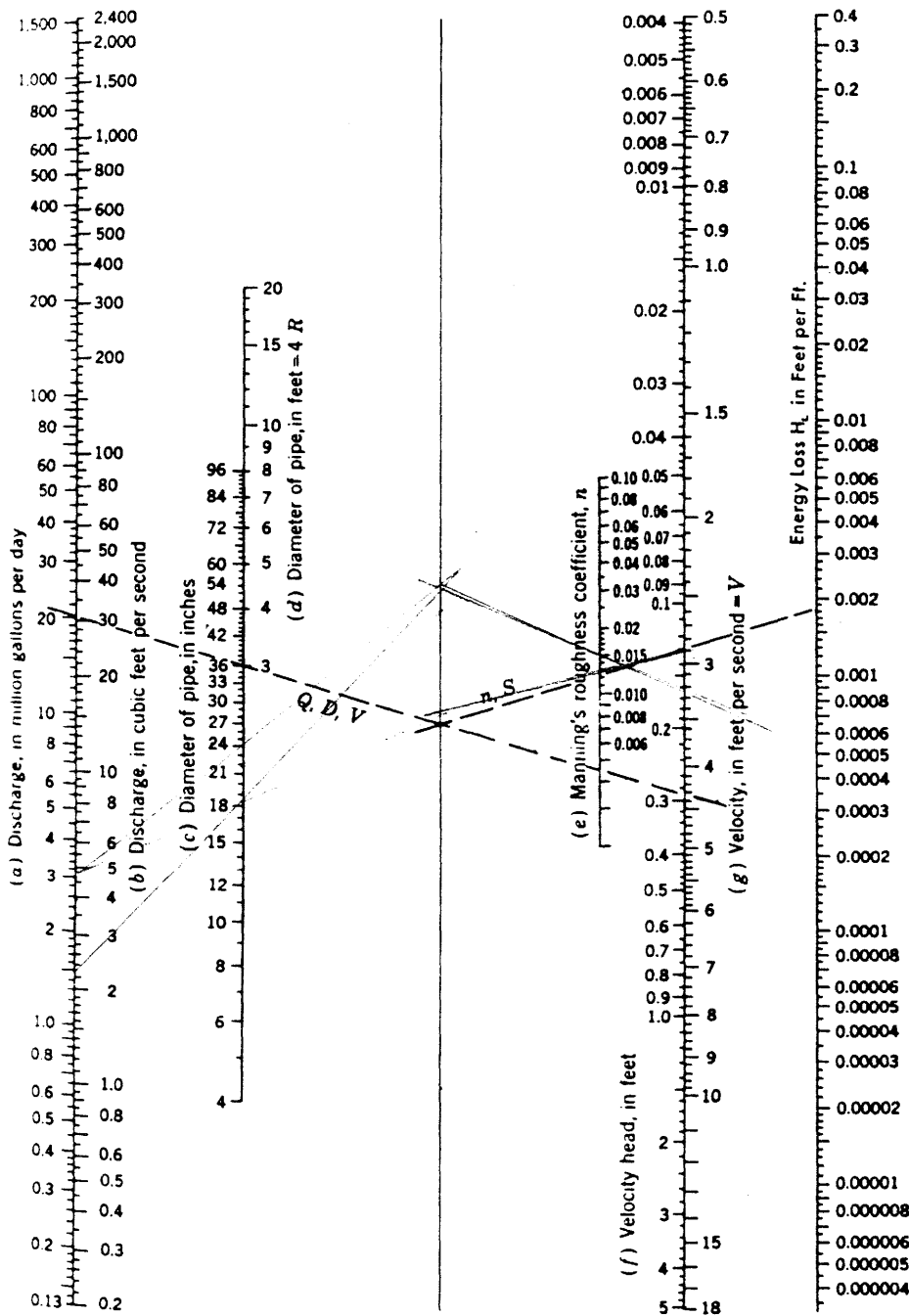
Manning Roughness Coefficient= 0.016

BASIN OUTFALL	Side of street	Inverse Pave. x slope 1/ft/ft	Min. Long. Slope S ft/ft	Required 2 Year Capacity Q CFS	2 year Water Depth d Ft.	Required 100 Yr Capacity Q CFS	Water Depth d Ft.	Grate Type NEENAH	Open Area Sq. Ft.	Capacity 2 Yr CFS	Required 2 Yr CFS	Capacity 100 Yr CFS	Required 100 Yr CFS
A	south	66.67	0.0052	0.82	0.14	2.54	0.21			0.00	0.82	0.00	2.54
B	south	66.67	0.0052	1.63	0.18	5.05	0.27			0.00	1.63	0.00	5.05
C	south	66.67	0.0052	2.53	0.21	7.82	0.32	R-3246 C	1.70	5.79	2.53	8.19	7.82
D	north	66.67	0.0052	0.52	0.12	1.56	0.17			0.00	0.00	0.00	1.56
E	north	66.67	0.0052	1.15	0.15	3.40	0.23	R-3246 C	1.70	5.79	2.08	8.19	3.40
F	west	66.67	0.0052	1.18	0.16	3.59	0.24	R-3246 C	1.70	5.79	1.18	8.19	3.59

**Capacity For Pipe Storm Drainage**

Storm Drain Location	Pipe Diameter Inches	Slope Feet/Feet	Rough. Coeff. n	Capacity Q CFS	Required Q CFS	2 year V fps
G1 to G3	18	0.005	0.012	8.1	7.8	2.6
G2 to G3	12	0.005	0.012	2.7	3.6	2.5
G3 to MH 9	24	0.005	0.012	17.5	14.8	2.5
MH 9 to 8+17	18	0.150	0.013	40.7	14.8	NA
8+ 17 to Outfall	12	0.583	0.013	27.2	14.8	NA

Although the friction slope  $S_f$  appears as a second order term in the expression for 'C' the resulting discharge is not sensitive to this term. Table 4.11 shows the difference (%) in discharge computed using the Kutter equation compared with that obtained by Manning. The table gives the relationship between the diameter (D) and the hydraulic radius (R) assuming full flow in a circular pipe. The values in Table 4.11 are also valid for noncircular pipes flowing partially full.



Alignment chart for energy loss in pipes, for Manning's formula. Note: Use chart for flow computations,  $H_L = S$

Figure 4.8 Nomograph for solution of Manning's formula.

78 in./Larger  
0.027  
0.023

78 in./Larger  
0.025  
0.022

ft.

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MICHAEL'S VILLAGE

ERIC C. MARQUEZ

PROJ 3205

28 FEB 1995

GIVEN:

FIND  $S_{min}$

$$V_{min} = 2.5 \text{ FPS}$$

$$Q_2 = 4.86 \text{ FPS}$$

$$D = 2'$$

SOLUTION:

$$Q = VA, \quad A = \frac{Q}{V} = 1.95 \text{ f} \quad , \quad \frac{A}{D^2} = \frac{1.9}{2^2} = 0.486$$

$$\text{FROM TABLE GIVEN } \frac{A}{D^2} \Rightarrow \frac{Y}{D} = 0.509$$

$$\text{GIVEN } \frac{Y}{D} \Rightarrow \frac{R}{D} = 0.275$$

$$\therefore Z = 2(0.275) = 0.550$$

$$V = \frac{1.49}{n} R^{2/3} S^{1/2}$$

$$S = \left[ \frac{V_n}{1.49 R^{2/3}} \right]^2 = \left[ \frac{(2.5)(0.011)}{(1.49)(0.550)^{2/3}} \right]^2 = 0.17_0$$

MICHAELAS VILLAGE

PROJ 3205

ERIC C. MARQUEZ

28 FEB 95

TYPICAL VELOCITY CALC.

GRATE 1 → MH 3

$$D = 18.0''$$

$$S = .005$$

$$Z_{full} = D/4 = 1.5/4 = 0.375$$

$$Q = \frac{1.49}{.012} \cdot \frac{\pi}{4} \cdot 1.5^2 \cdot (.005)^{1/2} (0.375)^{4/3} = 8.062 \text{ cfs}$$

$$\frac{Q_{act}}{Q_{full}} = \frac{2.53}{8.062} = 0.314$$

FROM HYDRAULIC ELEMENTS RELATIONSHIPS

$$V_{2/3} = 0.80 V_{full}$$

$$V_{2/3} = 3.2(8) = 2.56 \text{ cfs}$$

# REVIEW COMMENTS

Page 1 of 2

FILE #FPP-94-135.2

TITLE HEADING: Michaela's Village

LOCATION: 2692 UnawEEP Avenue

PETITIONER: Mary Lou Kennedy

PETITIONER'S ADDRESS/TELEPHONE: 2146 1/2 B Highway 6 & 50  
Grand Junction, CO 81503  
245-6693

PETITIONER'S REPRESENTATIVE: QED / Dan Brown

STAFF REPRESENTATIVE: Tom Dixon

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**NOTE: THE PETITIONER IS REQUIRED TO SUBMIT FOUR (4) COPIES OF WRITTEN RESPONSE AND REVISED DRAWINGS ADDRESSING ALL REVIEW COMMENTS ON OR BEFORE 5:00 P.M., MARCH 24, 1995.**

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CITY UTILITY MANAGER  
**Greg Trainor**

3/16/95  
244-1564

---

Please see Utility Engineer comments from 12/12/94 (below) on the proposed Michaela's Village Subdivision. We are indicating the City will be the water provider as the proposed subdivision is part of the City's West Orchard Mesa system and that fire protection can be best provided through the City's system.

CITY UTILITY ENGINEER  
**Bill Cheney**

3/9/95  
244-1590

---

1. Show detail for extension of 4" water line on west end of Michaela's Drive. Where does the reduction from 6" to 4" take place?
2. Shown "Inv.InW" for MH-3 on profile.

3. COMMENTS FROM 12/12/94 made to Greg Trainor, Utility Manager

A proposal is presently going through the City channels for a subdivision called Michaela's Village located north of UnawEEP, between Linden Avenue and 27 Road. The area is in a part of the Orchard Mesa Water District. An area north of the proposed subdivision, Lamp Lite Park consisting of approximately 52 homes, is presently being served by Ute Water and is also part of the Orchard Mesa Water District. The new development is proposing to use Ute Water for their supply as opposed to coming off lines in UnawEEP which are City lines being supplied with Ute Water. The question is "Who is the purveyor for the new subdivision"? Tap fees amount to \$37,000 for the City of \$118,400 to Ute. Ute has no way to loop the system as required by Ordinance 2497. The City, on the other hand, is on a dead end system fed through a master meter at Aspen. There are plenty of loops in the

Orchard Mesa Water District system but they all originate at the master meter. We also have a line at the master meter so we could put City water into the lines if Ute was shut down for whatever reasons.

**COMMUNITY DEVELOPMENT DEPARTMENT**

**3/15/95**

**Tom Dixon**

**244-1447**

---

See attached comments.

**CITY DEVELOPMENT ENGINEER**

**3/15/95**

**Jody Kliska**

**244-1591**

---

See attached comments and blue-lined drawings.



## **MICAELA'S VILLAGE - RESPONSE TO REVIEW COMMENTS**

**Response to review comments for:** Micaela's Village #135-94(2)  
**Type of review:** Final Plan & Plat  
**Response by:** Terry Nichols

**Review by: CITY UTILITY MANAGER - Greg Trainor**

The developer is willing to work with who ever is designated as the water provider.

**Review by: CITY UTILITY ENGINEER - Bill Cheney**

A detail will be added to the water line drawing for the 6" to 4" reduction and extension on the west end of Michaela's Court.

The "inv inW" elevation will be added for MH-3 on the sewer line profile.

**Review by: COMMUNITY DEVELOPMENT DEPARTMENT - Tom Dixon**

- 1) A "no access" restriction note will be added to the plat to prevent private drive way access to Unawweep.
- 3) The developer does not propose to fence the project boundaries.
- 4) See storm water response to Jody Kliska comments.
- 5) The streets have been renamed as required.

**Review by: CITY DEVELOPMENT ENGINEER- Jody Kliska**

**Plat**

Irrigation easements will be added to the plat.

The reference to detention/retention easements will be removed from the dedication as it will not be required.

A dedication will be added for the sewer ingress/egress easements.

A note will be added to the plat stating that - Access will not be allowed to Unawweep Avenue from any lots abutting Unawweep.

### **Utility Compost**

The existing sewer and telephone line will be added to the Utility Compost along the west side of Lamplight Subdivision.

### **Street Plans**

The street return radius for streets connecting to Unawweep will be changed to thirty feet.

Note 5 will be changed to reflect the correct specification.

Plans will be provided for the sidewalk and curb/gutter along Olson.

City engineer Don Newton has agreed that the City will provide box, inlet and pipe to drain Olson in to the Micaela,s Village system.

A note will be added to indicate that geotextile may be required and to require city inspection of street sub grades prior to placement of base material.

### **Drainage**

Nihols Associates engineers Terry Nichols and Eric Marquez meet with City Engineers Don Newton and Jody Kliska on 22 Mar-95 to discuss drainage for this project. It was decided that the drainage should be piped under Santa Clara to an existing surface channel extending to the Colorado river. This routing was previously approved. The City will provide a new

inlet grate and box to replace the existing box. The developer will provide other improvements to the existing drainage channel.

Special precautions will be taken when excavating near the existing house. shoring will be used if necessary.

**Other**

A development improvements agreement and a storm water management plan will be submitted.



March 29, 1995

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

Mr. Terry Nichols, P.E.  
Nichols & Associates  
751 Horizon Court  
Grand Junction, Colorado

RE: Micaela's Village Subdivision Drainage

Dear Mr. Nichols:

This letter is to confirm our discussion of the City's participation in drainage improvements in the vicinity of the Micaela's Village subdivision. As we discussed in our meeting on March 22, 1995, the City of Grand Junction is willing to pay for the following items to be included in the construction of the drainage improvements for the subdivision.

Olson Street - The City will pay for the installation of a single combination inlet on the north side of the street and the pipe to connect this inlet with an inlet on the south side of Olson. As part of the construction of curb, gutter, and sidewalk on the south side of Olson which is required of the developer, a single combination inlet and connection to the new storm sewer will be constructed at the developer's cost.

Santa Clara - The City will pay for the installation of a double combination inlet to replace the existing inlet structure located on the north side of Santa Clara at the River Circle intersection.

Please submit revised drawings for the drainage improvements for our review and approval. I will also need to review the cost of the City's share of the drainage improvements prior to construction.

Upon final inspection and acceptance of the drainage improvements, the developer may send a bill to my attention at the City of Grand Junction for the cost of the City's share of the improvements. Please call me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Jody Kliska".

Jody Kliska, P.E.  
Development Engineer

cc: Don Newton  
Tom Dixon

**STAFF REVIEW (Final)**

FILE: #135-94(2)

DATE: March 29, 1995

STAFF: Tom Dixon, AICP

REQUEST: Final Plan/Plat Review for Michaela's Village, a 38-lot Subdivision and a Rezone from PR 4.1 to PR 4.7

LOCATION: 2694 UnawEEP Avenue

APPLICANT: Mary Lou Kennedy

EXISTING LAND USE: Undeveloped

PROPOSED LAND USE: Single-family Residential

SURROUNDING LAND USE: Single-family Residential

EXISTING ZONING: PR 4.1

PROPOSED ZONING: PR 4.7

SURROUNDING ZONING:

NORTH: PR-8 (Planned Residential, 8 units per acre)

SOUTH: RMF-16 (Multi-Family Residential, 16 units per acre) and  
PB (Planned Residential)

EAST: RSF-8 (Single-Family Residential, 8 units per acre)

WEST: RMF-16

**RELATIONSHIP TO COMPREHENSIVE PLAN/POLICIES/GUIDELINES:** The UnawEEP Avenue (C Road) Corridor Guidelines apply to this proposal. These guidelines recognize UnawEEP Avenue as a collector street and they are intended to provide for safe pedestrian safety to schools and parks and to protect residential uses from non-residential uses.

**STAFF ANALYSIS:** This proposal is for final plan/plat of a 38-lot subdivision on a parcel containing 8.24-acres. The petitioner anticipates two phases of development, Phase I will include 18 lots on the western half of the site, Phase II would complete the 20 lots to the east. The lot sizes range from 5,416 square feet to 9,186 square feet in size. Access to the individual lots will occur from a looped public street, Michaela's Place, which will connect with the three cul-de-sacs. The three cul-de-sacs will serve about 20 lots. Two connections onto UnawEEP Avenue are provided from Michaela's Place via David and Kathy Lynn Streets. The two accesses onto UnawEEP were approved at the preliminary phase by the

Planning Commission at its September, 1994 meeting.

A 10-foot pedestrian and utility easement connection to Olson Avenue (to the north) is also proposed. This connection is in lieu of a direct street connection to Olson Avenue and the Lamp Lite Subdivision to the north. The pedestrian easement will be improved and will link with a sidewalk on the north side of the subdivision which in turn will connect with an existing pedestrian network extending through Lamp Lite to Columbus Elementary School to the west of Michaela's Village.

This site is presently zoned PR 4.1. Because the actual density proposed with this subdivision is nearly 4.7 units per acre, a rezone to PR 4.7 is requested.

Issues concerning the final plan/plat are as follows:

1) Two road connections onto Unawep Avenue with looped internal circulation and access for this subdivision was approved as a preliminary plan. Access onto Unawep and Olson Avenues is prohibited for individual lots. A "no access" restriction will apply to all lots with frontage on Unawep or Olson Avenues. A notation of this restriction must appear on the final plat to be recorded.

2) The setbacks previously approved for this proposal are as follows:

Front yard = 20 feet

Rear = 15 feet (25 feet along Unawep Avenue)

Side = 5 feet (25 feet along Unawep Avenue)

The height limit = 32 feet

3) The original proposed means of stormwater drainage from the site was to occur by routing stormwater to the northwest portion of the site, then northward through an easement to Santa Clara Avenue, under Santa Clara to an easement running through a property on the north side of Santa Clara, and down a steep embankment to the Colorado River. This manner of drainage will necessitate a surface pipe running down the hillside to its outfall near the river. Concerns about the visual prominence of this pipe and potential erosion and undercutting of the pipe at its outfall do not make this an optimal solution. The City would be required to maintain the drainage pipe and could assume some higher maintenance costs associated with this manner of drainage.

An alternative drainage route, now proposed by the petitioner, will be to run drainage along Santa Clara eastward to a drainage channel that begins where River Circle deadends and a nature drainageway flows northward toward the Colorado River. This drainage route will require an easement from School District #51 since it crosses their property between Santa Clara and the river.

The City's preferred drainage pattern would be to cross Unawep Avenue and direct stormwater flow to the south along David Street to an existing drainage ditch.

4) A Development Improvements Agreement (DIA) is required to ensure completion of public right-of-way improvements. The DIA shall be submitted for review and approval prior to the recording of the plat.

5) Parks and Open Space fees are \$225 per unit and are payable of the time of platting.

6) The pedestrian easement shall be improved with a minimum 8-foot wide concrete surface built to City standards.

7) Bacon Court needs to be renamed to avoid confusion with Bacon Street on the south side of Unawep Avenue.

**STAFF RECOMMENDATION:** Approval of the Final Plan/Plat for 38-lot subdivision with conditions 1 through 6, below.

Approval of the Rezone from PR 4.1 to PR 4.7.

1) A " no access" restriction will apply to all lots with frontage on Unawep or Olson Avenues. A notation of this restriction must appear on the final plat to be recorded.

2) A Development Improvements Agreement (DIA) is required to ensure completion of public right-of-way improvements. The DIA shall be submitted for review and approval prior to the recording of the plat.

3) Parks and Open Space fees are \$225 per unit and are payable of the time of platting.

4) The pedestrian easement shall be improved with a minimum 8-foot wide concrete surface built to City standards.

5) Bacon Court needs to be renamed to avoid confusion with Bacon Street on the south side of Unawep Avenue.

6) The means of stormwater drainage shall be reviewed and approved by the City Engineer if the proposed manner is not possible due to easement or other constraints.

**PLANNING COMMISSION MOTION:** Mr. Chairman, on item #135-94(2), I move that we approve the Final Plan/Plat for Michaela's Village Subdivision as recommended by staff and recommend to the City Council approval of the proposed Rezone from PR 4.1 to PR 4.7.

## **STAFF REPORT TO THE CITY COUNCIL**

**FILE: #135-94(2)**

**DATE: April 5, 1995**

**STAFF: Tom Dixon, AICP**

**PROPOSAL: Rezone from PR-4.1 to PR-4.7**

**LOCATION: 2694 Unawweep Avenue**

**APPLICANT: Mary Lou Kennedy**

**EXISTING LAND USE: Undeveloped**

**PROPOSED LAND USE: Single-family Residential**

**SURROUNDING LAND USE: Single-family Residential**

**EXISTING ZONING: PR 4.1**

**PROPOSED ZONING: PR 4.7**

**SURROUNDING ZONING:**

**NORTH: PR-8 (Planned Residential, 8 units per acre)**

**SOUTH: RMF-16 (Multi-Family Residential, 16 units per acre) and  
PB (Planned Residential)**

**EAST: RSF-8 (Single-Family Residential, 8 units per acre)**

**WEST: RMF-16**

**STAFF ANALYSIS:** Michaela's Village was granted final plan/plat for a 38-lot subdivision on a parcel containing 8.24-acres at the April 4, 1995 Planning Commission meeting. This site is presently zoned PR 4.1. Because the actual density proposed with this subdivision is nearly 4.7 units per acre, a rezone to PR 4.7 is requested. A rezone was considered by the Planning Commission and was recommended for approval in conjunction with the final plan/plat.

**STAFF RECOMMENDATION:** Approval of the Rezone from PR 4.1 to PR 4.7.

**PLANNING COMMISSION RECOMMENDATION:** Approval of the Rezone from PR-4.1 to PR-4.7.



CITY OF GRAND JUNCTION, COLORADO

Ordinance No. \_\_\_\_\_

REZONE FROM PR-4.1 TO PR-4.7  
FOR MICHAELA'S VILLAGE SUBDIVISION

Recitals.

The subject property is 8.24-acres in size and is undeveloped. The parcel was originally zoned in the City as RSF-8 when it was annexed into the City in December, 1973.

The existing PR-4.1 (Planned Residential, 4.1 units per acre) zoning designation was placed on this property in 1990 through an approval by the City Council of a concept plan for a subdivision for manufactured housing. This project was never platted and no subsequent proposals have occurred until the present 38-lot Michaela's Village.

The proposed PR-4.7 (Planned Residential, 4.7 units per acre) zoning designation is consistent with the 38 lots approved by the Planning Commission at its April 4, 1995 meeting as part of the final plan/plat for Michaela's Village.

After public notice and public hearing as required by the City of Grand Junction Zoning and Development Code, the Planning Commission recommended approval of the proposed Rezone from PR-4.1 to PR-4.7.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION:

That the site of Michaela's Subdivision, located between Olson and Unaweep Avenues on Orchard Mesa and described as:

Beginning 120 feet East of the Southwest corner of Lot 4 in Section 23, Township 1 South, Township 1 South, Range 1 West of the Ute Meridian; thence North 379.8 feet; thence East 1026 feet; thence South 379.8 feet; thence West 1026.8 feet to the place of beginning.

is hereby rezoned to PR-4.7.

INTRODUCED for FIRST READING and PUBLICATION this 19th day of April, 1995.

PASSED on SECOND READING this 3th day of May, 1995.

ATTEST:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
President of the Council

RECEIVED

# FAX TRANSMISSION

MESA COUNTY VALLEY SCHOOL DISTRICT #51

2115 GRAND AVENUE  
GRAND JUNCTION, CO 81501  
970-245-2422  
FAX: 970-245-2714

**To:** Jody Kliska, Development Engineer  
**Date:** June 20, 1995

**Fax #:** 244-1599  
**Pages:** 1, including this cover sheet.

**From:** Birney L. Cox

**Subject:** Micaela's Village Easement

**COMMENTS:**

Eric Marquez, the developer of Micaela's Village, located east of Columbus Elementary School, is requesting a drainage easement across the Columbus Outdoor Classroom site to the river for surface drainage. The request is being presented to the Board of Education at their July 11, 1995, Board Meeting. I am recommending that the Board grant the easement.

12

Should you need additional information, please call.

KATHY,  
NUMBERS LOOK  
OK.



file # 135-94(2)



June 22, 1995

Mr. Ryan Goodsell  
Atlantis Quality Construction & Development  
1009 Walnut Avenue  
Grand Junction, CO 81501

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

RE: Micaela's Village Subdivision

Dear Mr. Goodsell:

As you begin the construction phase outlined in the City of Grand Junction Submittal Standards for Improvements and Developments (SSID), there are several items which must be completed prior to construction. I have included a Construction Phase Submittal Chart, a Construction Approval and Progression Form, and Submittal Requirements for Final Acceptance of Improvements for your information.

Four sets of construction drawings have been submitted for approval and will be signed. One set will be returned to you upon recording the easement for drainage and recording of the Development Improvements Agreement/Guarantee.

A pre-construction notice as detailed in Section VII-3 of SSID is required and a meeting should be scheduled.

A City Permit for Construction of Facilities in the Right of Way is required for the storm sewer work in Santa Clara and for any work which will be done in the City streets such as utility connections. The permit can be obtained through the City Engineer's office. A traffic control plan is required with submittal of the permit.

Please contact me if I can answer any questions. My number is 244-1591.

Sincerely,

A handwritten signature in cursive script that reads "Jody Kliska".

Jody Kliska  
City Development Engineer

cc: Kathy Portner, Community Development

# CONSTRUCTION PHASE SUBMITTAL CHART

Location: UNAWEEP AVE.

Project Name: MICAZA'S VILLAGE

STEP	ACTIVITY	SUBMITTAL ITEMS	SSID REF.
1	None	<ul style="list-style-type: none"> <li>● City Approval of Construction Drawings</li> <li>● Pre-construction Notice</li> <li>● Work within Public ROW Permit</li> <li>○ NPDES Permit</li> <li>● Improvements Agreement/Guarantee</li> <li>○ _____</li> </ul>	<p>VII-3</p> <p>VII-3</p> <p>VII-4</p> <p>VII-4</p>
2	Grading Street Rough Cut Sanitary Sewer Water Irrigation Other Utilities Subgrade Base Course Concrete Placement	<ul style="list-style-type: none"> <li>● Construction Report: Grading and Pipeline Phase</li> <li>● As-built Grading Drawing</li> <li>● As-built Drainage Drawing</li> <li>● As-built Water &amp; Sewer Drawing</li> <li>○ _____</li> <li>● Construction Report: Concrete and Pavement Preparation</li> <li>○ Flowline Grade Sheets</li> <li>○ Revised Asphalt Design (if necessary)</li> <li>● Request City Lamping of Sewerline</li> </ul>	<p>X-4</p> <p>IX-6</p> <p>IX-5</p> <p>IX-9</p> <hr/> <p>X-3</p> <p>VII-4</p> <p>VII-4</p> <p>VII-4</p>
3	Asphalt Pavement Traffic Control Facilities Monumentation Permanent On-Site Benchmark (Subdivisions Only)	<ul style="list-style-type: none"> <li>● Construction Report: Concrete and Pavement Placement</li> <li>● Complete Set of As-Built Drawings</li> <li>● Request for City Initial Inspection</li> <li>○ _____</li> </ul>	<p>X-2</p> <p>IX-5 to IX-9</p> <p>VII-4</p>
4	Warranty Period	<ul style="list-style-type: none"> <li>● Request for City Final Inspection</li> </ul>	VII-4

- NOTES: 1. Only those submittal items which are preceded by a shaded-in circle are required for the project. At the time of construction drawing approval, City Engineering will submit to the developer one signed approved set of drawings and a copy of this form which has been completed for the specific project, and one completed copy of Form VI-4 and VI-5.
2. City Engineering approval of submittal items is required prior to commencement of subsequent steps. The City will make every effort to provide timely approvals in order to accommodate construction schedules. If information is submitted for Step 2 in a timely manner as construction proceeds, then City Engineering review of remaining items may be done within 1/2 working day.

**City of Grand Junction  
Construction Approval & Progress**

Project Name: MICHAELA'S VILLAGE SUBDIVISION  
Location: WAWAEE  
Developer: CIMARRON PROPERTIES  
Engineer: NICHOLS & ASSOC.

**A Licensed Professional Engineer is required to oversee construction of public improvements.**

Date Construction Plans Approved: \_\_\_\_\_

Submittal of four sets of prints is required for approval and signature. Distribution: Development Engineer, City Inspector, Community Development, Developer/Contractor.

Improvements Agreement in Place: \_\_\_\_\_

Construction Meeting: \_\_\_\_\_

1. Attendance by developer's engineer, contractor(s), testing lab, city engineering representative, city inspector is required.
2. Submit list of contractors and approximate starting dates.
3. Submit quality assurance plan for testing and inspection. A test location map will be required prior to final acceptance of work.
4. Notification of city inspector 24 hours prior to commencement of work is required.

Permit for Construction and Installation of Facilities in Public Right of Way required: \_\_\_\_\_

Date of Final Inspection : \_\_\_\_\_

Reinspections: \_\_\_\_\_

Final Acceptance: \_\_\_\_\_

Warranty Period Ends: \_\_\_\_\_

**Note: City inspection of work does not relieve developer or contractor of their duties regarding inspection, monitoring, and testing.**

## Submittal Requirements for Final Acceptance of Improvements

MICAELA'S VILLAGE

The following items must be submitted prior to the acceptance of streets, drainage, and utilities by the City of Grand Junction.

As-Built Drawings (Reference SSID IX-5,6,7,8,9)

- Sealed by a Professional Engineer
- Two Blue-line copies
- One Mylar Copy
- One 3 1/2" Floppy Disk with drawing files

Report (Reference SSID X-2,3,4)

- Testing Location Map
- Inspection Diaries
- Testing Reports

Certification of Detention/Retention Basin  
(Reference SSID IX-6)

- Sealed by a Professional Engineer

**Note: A one-year warranty period begins once public facilities are accepted by the City of Grand Junction. Any defects or deficiencies which occur during this period must be corrected by the developer. (Reference Zoning and Development Code 5-4-12, A-4)**

11. **Evidence of Title/Title Commitment**
- a. **ODP's, Major Subdivisions: Preliminary, and other Development Review:** An exact copy of a current certificate or commitment for a title insurance company opinion which shall: set forth the names of all owners of property included in the plan; and include a list of all persons who may have an interest via liens and encumbrances, including mortgages, judgments, easements, contracts, or agreements of record which shall affect the property covered by the plans.
  - b. **Minor Subdivisions and Major Subdivisions: Final** An exact copy of a current certificate of title which shall identify the names of each owner of all property included on the plat and each person who may have an interest via mortgages, judgments, liens, easements, contracts, and agreements of record which shall affect the property covered by the plat. If the title commitment discloses any of the above, the holders of such mortgages, judgments, liens, easements, contracts or agreements shall be required to approve the plat, in writing, signed and notarized, before the plat shall be recorded.
12. **Improvements Agreement/Guarantee**
- a. **Agreement** The agreement shall consist of a detailed and itemized listing of public improvements, as well as the approved landscaping, required for a development or land use with specific quantities and cost. This agreement shall be approved by City Engineering and Community Development. The agreement shall include a proposed date for completion of all improvements. The Improvements Agreement will be recorded with the plat and/or site plan or prior to issuance of a Planning Clearance or commencement of a use, whichever comes first. Recording fees are the developer's responsibility.
  - b. **Guarantee** The guarantee shall consist of one or more arrangements which secure the construction of such public improvements and/or landscaping as are shown on the Improvements Agreement. The type of acceptable guarantees generally consist of cash or a bank letter of credit.
13. **Legal Description** This refers to a typed legal description of all properties involved in the proposed development. This must be a separate document from that which may be provided on drawings.
14. **Names and Addresses** This refers to the names and addresses of all property owners within 200 feet of all boundaries of the property. The width of public rights-of-way, easements, canals or other waterways shall not be included when determining the 200 foot radius. The Mesa County Assessor's records must be used to determine all ownerships within the radius. The tax parcel number and name and mailing address of the owners of each property shall be typed in standard mailing matrix sheet format.
15. **Planning Clearance** A form is provided by the City. Fill in the top portion and sign and date at the bottom.
16. **Power of Attorney** A form is provided by the City. The developer's signature is required.
17. **Review Agency Cover Sheet** This form is provided by the City. The developer must provide the information requested in the two boxes at the top.
18. **Right-of-Way** A dedication and/or conveyance of land to the City of Grand Junction or other appropriate agency, for the use and/or ownership of said land for the construction, improvement and

maintenance of public roads, highways, accesses and other public installations and/or improvements. Right-of-Way may also mean and refer to any platted or designated public street, alley, lane, parkway, avenue, road or other public way, whether or not it is constructed or has been used as such.

19. **Submittal Checklist** This form is provided to the developer during the pre-application conference.

B. **MISCELLANEOUS ENGINEERING ITEMS** Engineering items that do not fall into either a drawing or report category are briefly discussed here.

1. **CDOT Access Permit** Proposed development which will require additional or modified access to a State Highway will require approval and a permit from CDOT. This applies to Highways 6, 6 Bypass (North Avenue), 24, 50, I-70, I-70 B, 141, and 340. The application and approval process is handled directly between the developer and CDOT.

At the time of Manual adoption, an "Application for Access Permit" may be obtained from the State Office Building at 222 S. 6th Street, or at 606 S. 9th Street. Once completed applications are submitted to CDOT, regulations allow a maximum of 45 days for CDOT to respond. This allows time for a site visit, recommendations to be made, and the issue to be considered for approval or denial by the Access Committee which meets every other Tuesday.

2. **404 Permit** Development that will impact waters of the United States or wetlands shall be submitted directly to the Army Corps of Engineers for approval, and a permit or acceptance letter obtained, a copy of which shall be submitted to the City.

At the time of Manual adoption, applications for a Department of Army 404 permit are available at the Army Corps of Engineers, 402 Rood Avenue, Room 142. Applications which fall under nationwide permits may be processed as quickly as one week, whereas individual permits may require from 7 to 90 days or more, depending upon the scope of the project. Utilities in wetlands areas, and also disturbances of less than one acre of wetlands generally fall under a nationwide permit; even so, the City requires submittal to the Corps for their determination of what may be required.

3. **Floodplain Permit** A form is provided by the City. The form must be completed by the developer, except the bottom portion which City staff will complete.
4. **Industrial Pretreatment Sign-off** Any facility that will be contributing sewage other than domestic waste to the sanitary sewer system must submit an application to the Persigo Wastewater Treatment Facility (244-1487). A permit may or may not be required. A sign-off from Persigo indicating that they have received an application must be submitted as part of the City review process.
5. **City Approval of Construction Drawings** Projects which have received approval by the appropriate governing agencies, and which are determined to be complete and acceptable by City staff, will be approved by signature on the plans, by letter, or both from City Engineering.
6. **Pre-construction Notice** Prior to the commencement of Construction, the developer shall submit the following information to the City Development Engineer:
  - a. Four copies of signed and sealed plans/specifications which City Engineering has indicated are acceptable for approval;
  - b. Project Construction Schedule;
  - c. List of Contractors to be used on the project and phone numbers;



- d. The name and phone number of the testing laboratory that will provide materials and other testing;
- e. The name and phone number of the developer's designated project manager and/or construction inspector; and
- f. The name and phone number of the developer's designated Quality Assurance Engineer (see Page V-1, Paragraph C).

If any of the above information changes during the course of the project, the developer shall promptly submit notice.

7. **Construction Schedules and Update** The construction schedule should be detailed enough to indicate the anticipated construction period for major phases of construction. If significant changes or delays occur, an update should be submitted to the City Development Engineer. These schedules will be used in City inspection and planning.

8. **NPDES Construction Activity Permit** In accordance with State and Federal regulations effective October 1, 1992, an NPDES (or CDPS) permit is required where construction activity for all phases of a project will disturb more than 5 acres of surface area. The application and approval process must be handled directly with the Colorado Department of Health Water Quality Control Division. A copy of the permit or approval or acceptance letter shall be submitted to the City.

At the time of Manual adoption, the application may be obtained from the Colorado Department of Health at the State Office Building at 222 South 6th Street, Room 232. General Permits require a maximum of 10 days to obtain (which will likely include most projects), and Individual Permits require 180 days.

9. **Work Within Public ROW Permit** Prior to commencement of work within a Public ROW where public facilities such as curb, gutter, sidewalk, or pavement exist, a permit must be obtained from the City Engineer.

10. **City Lamping of Sewerlines** Once the manholes and sewerline installations are complete, and subgrade and base course in roadway areas has been compacted preparatory to paving, the City will lamp the sewerline. Requests should be made by calling 244-1555.

11. **Flowline Grade Sheets** These consist of surveying grade sheets that identify the street name, with stationing consistent with design drawings, showing design and "as-built" grades for gutter flowlines. Grades should be obtained at all points that design grades are required on the approved drawings. Red-lined Roadway Plan and Profile sheets having the same information may be used in lieu of the grade sheets.

12. **Revised Asphalt Design** Roadway pavement must have a cross slope between 1% and 3%, except for areas of pavement warp due to matching existing pavement or at valley gutters.

13. **City Initial Inspection** An inspection performed by the City after all developer-installed improvements are complete. If found to be acceptable, the warranty period on the improvements will begin.

14. **City Final Inspection** An inspection performed by the City after the warranty period expires.

MEMORANDUM

TO: Mark Achen  
Ron Maupin

FROM: Kathy Portner *LP*

DATE: August 8, 1995

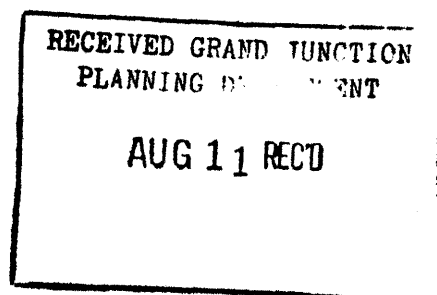
RE: Micaela's Village Plat

*ek SMS/8*

The attached plat for Micaela's Village has been reviewed and approved and is ready for signatures. Also attached are 4 copies of an easement agreement with the School District to allow this subdivision's drainage to go across School District property. Those documents have been reviewed by Dan Wilson and need to be signed by Mark only.

---

*Kathy -  
Please provide me  
w copy once recorded  
D. Mize*



For fence along Unawep

Minor Change - <sup>2 copies of everything</sup>

- Notice must be sent to  
Frank Green, 1151 Santa Clara
- Drawing of location, height &  
type of fence
- Fence must be uniform & installed  
by the developer
- Plan for planting and  
maintenance of area between  
fence and sidewalk.

discussed with Ryan on 9/7/95  
KP

Micaela's Village file  
PPP-94-135



June 28, 1996

City of Grand Junction, Colorado  
250 North Fifth Street  
81501-2668  
FAX: (970)244-1599

Mary Lou Kennedy  
Ed Kuechler  
2034 Broadway  
Grand Junction, CO 81503

RE: Micaela's Village Storm Drainage

Dear Ms. Kennedy and Mr. Kuechler:

Installation of the storm drainage facilities for the Micaela's Village subdivision has not been completed and is an outstanding item needing completion before August 11, 1996.

The improvements agreement for the public infrastructure was signed on August 11, 1995 and expires one year from that date. As you may be aware, the agreement allocates \$9,300 for the storm drain system; I have concerns if that estimate is realistic given the site constraints and the fact that a contractor today who visited me yesterday stated his estimate for the work was in excess of \$40,000 just to get from your subdivision to Santa Clara Street.

The purpose of this letter is to inform you of your responsibilities to complete all work as shown on your approved plans and to remind you of the upcoming expiration of the development improvements agreement. This responsibility continues even if the estimate reflected in the improvements agreement is insufficient to cover the actual costs.

Please supply me on or before July 6, 1996 with your construction schedule for construction of the storm drain improvements and evidence of sufficient funds in the disbursement account for completion of this work. An estimate from your contractor for the remaining storm sewer work must also be included.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jody Kliska".

Jody Kliska  
City Development Engineer

cc: Kathy Portner, City Community Development  
Thad Ritter, Norwest Bank

Michael's Village -

11/13/96 { Kristen Ashbeck  
Ronnie Edwards

Lots 8, 9, 10 & 11 of Block 1

10' pedestrian easement shall not be fenced until curb, gutter & sidewalk are in. At that time, fence permits shall be granted to run up to the sidewalk within the pedestrian easement.

*original was recorded*

## DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

This Declaration is made on the date hereinafter set forth by MARY LOU KENNEDY hereinafter referred to as "DECLARANT"

WITNESSETH:

WHEREAS, the Declarant is the owner of certain property in the county of Mesa, State of Colorado, which includes all lots included in MICAELA'S VILLAGE situated in the SE 1/4 SE 1/4 SECTION 23, T1S, R1W, U.M.

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

### ARTICLE I

#### DEFINITIONS

Section 1: "Owner" shall mean and refer to the record owner, whether one or more persons or entities, of a fee simple title to any lot which is a part of the properties, including contract sellers, but excluding those having such interest merely as security for the performances of an obligation.

Section 2: "Properties" shall mean and refer to that certain real property herein above described, and such additions thereto as may hereafter be brought within the jurisdiction of the development.

Section 3: "Lot" shall mean and refer to any plot of land shown upon any recorded subdivision map of the properties.

Section 4: "Declarant" shall mean and refer to Mary Lou Kennedy, her successors and assigns, if such successors or assigns should acquire more than one undeveloped lot from the Declarant for the purpose of development.

### ARTICLE II

#### BUILDING RESTRICTIONS

Section 1: The erection of more than one dwelling per lot is prohibited.

Section 2: All building setback lines are to be as follows:

Front = 20' From property line  
Rear = 15' From property line ( except where easements are larger )  
Side = 5' From property line  
Along UnawEEP = 25' From property line

Section 3: No trailer, camper, basement, tent, shack, garage, barn or any other outbuilding erected on any lot shall at anytime be used as a residence, temporarily or permanently, nor shall any structure of a temporary character be used as a residence. Exception: one trailer on lot 2 block 4 shall be used for security purpose.

Section 4: No dwelling shall be erected, altered, placed or permitted to remain on any lot other than one single-family dwelling of ranch style of not less than 1,200 square feet or if multistory not less than 1500 square feet plus a private garage for not more than three cars and any other building incidental to residential use of the tract or lot.

Section 5: Exterior paints shall be colors known to be earth shades (and subject to the approval of the homeowners association). No bright or garish colors shall be permitted on the exterior of any structure in the subdivision.

Section 6: Vehicle parking in driveways and on the streets in front of houses shall be limited to temporary parking of guest or resident vehicles in current use and currently licensed. Storing automobiles, trucks, campers, boats, snowmobiles, motorcycles, motor bikes or any other vehicle of any other description in the street, driveway, yards or residences, in front of the principle building set back lines is specifically prohibited. Such vehicles may be stored behind the privacy fencing within the boundaries of such lot. Vehicular maintenance or repair which renders the vehicle inoperable for more than seventy-two hours is prohibited on streets, driveways or in front of any privacy fencing of the residences. This provision shall not permit the commercial repair of any type of vehicle, such activity being expressly prohibited.

Section 7: No sign of any kind shall be displayed to the public view on any lot except one sign of not more than six (6) square feet advertising a property for resale.

Section 8: No fence, foliage, trees or hedge in the nature of a fence shall be planted, maintained, constructed or erected nearer than twenty (20) feet to the front Residential Building lot line or nearer than twenty (20) feet to the side street Residential building lot line. Fences and hedges in the nature of a fence not closer to the front Residential Building Lot Line than the minimum set back line shall not be higher than six (6) feet.

Section 9: No noxious or offensive trade or activity or unlawful activities shall be carried on upon any lot nor shall anything be done thereon which may be an annoyance or nuisance to the neighborhood.

Section 10: No animals, included but not limited to, horses, cows, pigs, goats, chickens, ducks, rabbits, or any other domesticated animals, except household pets, shall be maintained temporarily or permanently on any said lot.

Section 11: Landscaping, including but not limited to grass, sod, rock, shrubs, or any other plants, shall have been completed on the front and side yards of said Lot within one (1) year of transferring of the deed from the Declarant to the Owner. Lawns, trees, shrubs and such shall be watered, fertilized trimmed and maintained in such a manner as to keep all such vegetation green and attractive in looks

Section 12: Perimeter lots will be required to put up a five (5) foot wood fence of the same material and construction.

Section 13: Construction requirements. Exterior siding must consist of one of the following: brick, stucco, natural stone or natural wood. Use of not less than 10% brick is encouraged on the front exterior of the structure.

Section 14: Homeowner Association. A homeowners association will own and maintain the irrigation system.

### ARTICLE III

#### GENERAL PROVISIONS

Section 1: ENFORCEMENT. Any owner shall have the right to enforce, by any proceeding at law or in equity, all restrictions, conditions, covenants, reservations, liens, and charges not or hereafter imposed by the provisions of this Declaration. Failure by any owner to enforce any covenant or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter.

Section 2: SEVERABILITY. Invalidation of any one of these covenants or restrictions by judgment of Court Order shall in no way affect any other provision which shall remain in full force and effect.

Section 3: AMENDMENT. The covenants and restrictions of this Declaration shall run with and bind the land, for a term of twenty (20) years from the date this Declaration is recorded, after which time they shall be automatically extended for

successive period of ten (10) years. This Declaration may be amended during the first twenty (20) year period by an instrument signed by not less than ninety (75%) percent of the lot owners, and thereafter by an instrument signed by not less than seventy-five (75%) percent of the lot owners. Any amendment must be recorded.

Section 4: PUBLIC UTILITIES. All lots are subject to and bound by Public Service Company tariffs which are now and may be in the future filed with the Public Utilities Commission of the State of Colorado relating to street lighting in this subdivision, together with rates, rules, and regulations, therein provided and subject to all future amendments and changes thereto. The owner or owners shall pay as billed a portion of the cost of public street lighting in the subdivision according to Public Service Company rates, on file with the Public Utilities Commission of the State of Colorado.

Section 5: These Covenants specifically prohibit the discrimination against any person who is a prospective purchaser of a lot, due to racial, ethnic or religious reasons. It is the intention of the Covenants to insure that persons of varying racial, ethnic or religious background are made welcome as prospective purchasers and homeowners.

Dated this 9th day of August, 1995

By Mary Lou Kennedy  
Mary Lou Kennedy

State of Colorado

County of Mesa



TYPE LEGAL DESCRIPTION (SEE BELOW, USING ADDITIONAL SHEET AS NECESSARY. USE SINGLE SPACING WITH A ONE INCH MARGIN ON EACH SIDE.

\*\*\*\*\*

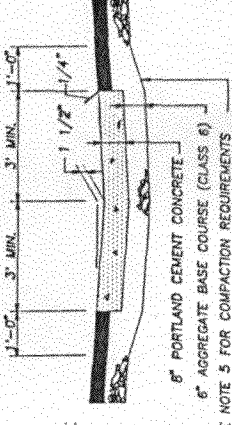
135 94 (2)

Land in the State of Colorado, County of Mesa, described as:

Beginning 120 feet East of the Southwest corner of Lot 4 in Section 23,  
Township 1 South, Range 1 West of the Ute Meridian;  
Thence North 379.8 feet;  
Thence East 1026.8 feet;  
Thence South 379.8 feet;  
Thence West 1026.8 feet to the place of beginning.

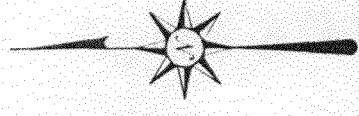
Original  
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from Office

5331  
2149

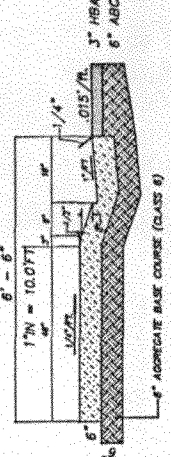


6" PORTLAND CEMENT CONCRETE  
6" AGGREGATE BASE COURSE (CLASS 6)  
SEE NOTE 5 FOR COMPACTION REQUIREMENTS

VALLEY PAN  
PER CITY OF GRAND JUNCTION SPECS  
(TYPICAL)  
SCALE: 1" = 2.0 FT



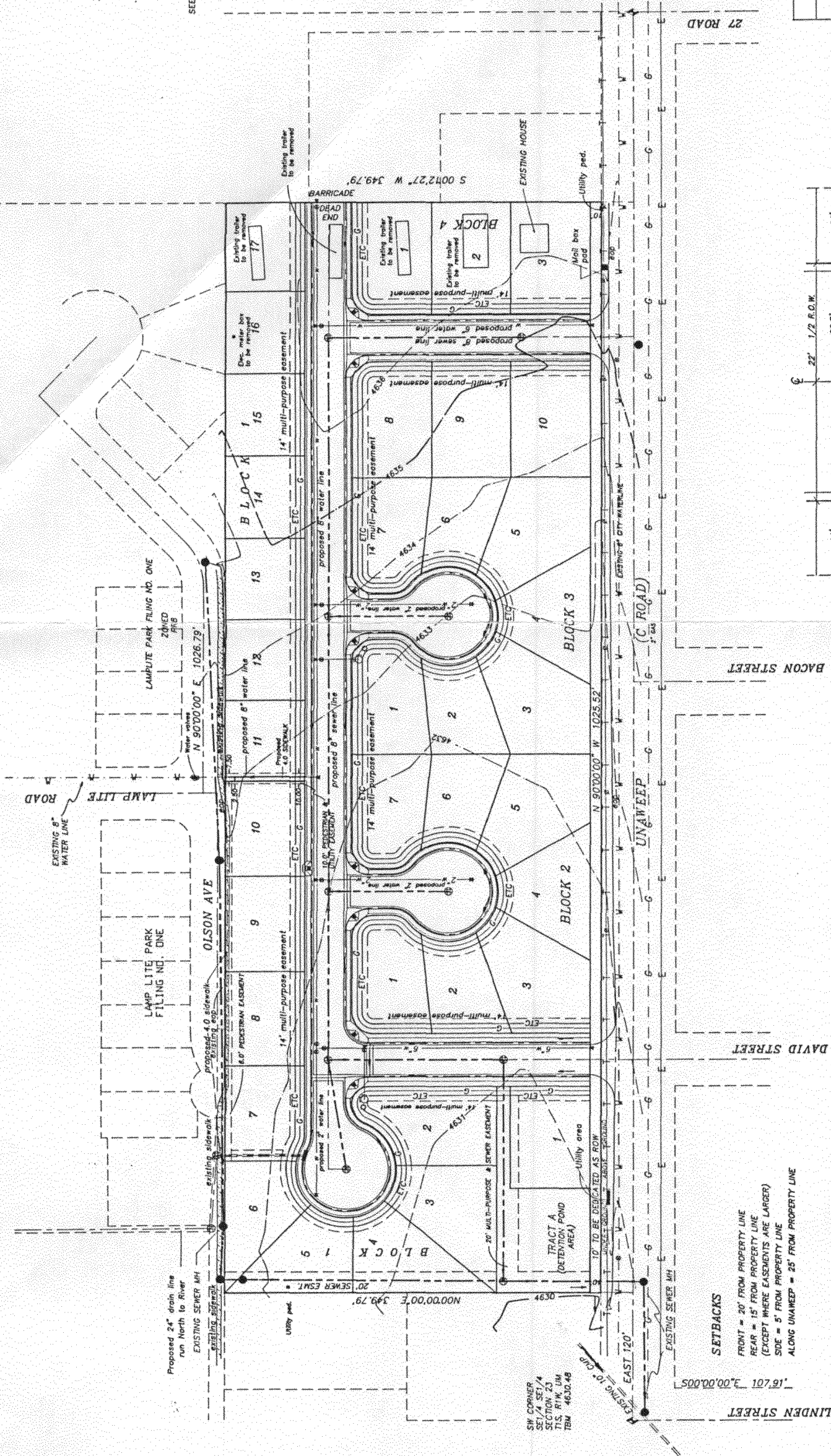
Original Remove  
From Office



DRIVE OVER CURB, GUTTER & SIDEWALK  
PER CITY OF GRAND JUNCTION SPECS  
(TYPICAL)  
SCALE: 1" = 2.0 FT

MICHAELA'S VILLAGE

SITUATED IN THE SE 1/4 SE 1/4 SECTION 23, T1S, R1W, U1M	
FOR: RODRIGUEZ	DATE: 11/29/94
SCALE: 1" = 50 FT	SHEET NO. 1 OF 1
SURVEYED BY: M. AM	
DRAWN BY: JAP	
ACAD ID: M/UTL	
O.E.D. SURVEYING SYSTEMS INC. 1018 COLO. AVE. GRAND JUNCTION, COLORADO 81501 (303) 241-2370 464-7868	
FILE: 94108	



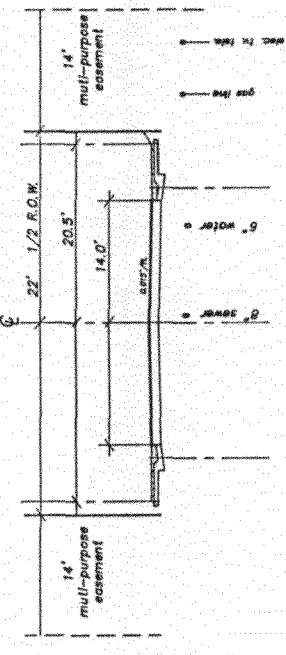
CONTOUR INTERVAL = 1'

LAND USE SUMMARY	(37 LOTS)
AREA IN LOTS:	5.84 ACRES 71%
AREA IN DEDICATED ROW:	2.17 ACRES 26%
AREA IN TRACT A:	0.23 ACRES 03%
TOTAL:	8.24 ACRES 100%

NOTE: THIS PROPERTY DOES NOT FALL WITHIN THE 100 YEAR FLOOD PLAIN.

- UTILITY VENDORS:  
WATER: UTE WATER  
SANITARY SEWER: PERISGO  
ELECTRIC, GAS: PUBLIC SERVICE
- SEWER MAINHOLE (PROPOSED UNLESS NOTED)
- S
  - W
  - V
  - V
  - T
  - T
  - G
  - E
  - ETC
  - C
- SETBACKS  
FRONT = 20' FROM PROPERTY LINE  
REAR = 15' FROM PROPERTY LINE  
(EXCEPT WHERE EASEMENTS ARE LARGER)  
SIDE = 5' FROM PROPERTY LINE  
ALONG UNAWEEEP = 25' FROM PROPERTY LINE
- FIRE HYDRANT
  - THRUST BLOCK
  - LIGHT
  - WATER VALVE
  - DIRECTION OF PROPOSED DRAINAGE
  - MANHOLE EXISTING

ROAD SECTION  
(TYPICAL)



SEWER MAINHOLE (PROPOSED UNLESS NOTED)

EXISTING WATER LINE

PROPOSED WATER LINE

EXISTING TELEPHONE LINE

EXISTING GAS LINE

EXISTING OVERHEAD ELECTRIC LINE

PROPOSED ELECTRICAL, TELEPHONE, & CABLE T.V.

PROPOSED GAS LINE

FIRE HYDRANT

THRUST BLOCK

LIGHT

WATER VALVE

DIRECTION OF PROPOSED DRAINAGE

MANHOLE EXISTING

