

# Table of Contents

File 1992-0001 - File 1 of 2

Name: Replat of Independence Center Subdivision & ROW Vacation

**P** **S** 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.  
**r** **e** Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page.  
**s** **e** 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.  
**n** **e**  
**d** **t**

X	X	<b>Table of Contents</b>
		<b>Review Sheet Summary</b>
X	X	<b>Review Comments</b>
X		Application form
X	X	Review Sheets
X		Receipts for fees paid for anything
		<b>*Submittal checklist</b>
		<b>*General project report</b>
		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
		<b>*Final reports for drainage and soils (geotechnical reports)</b>
		Other bound or non-bound reports
		Traffic studies
		<b>*Petitioner's response to comments</b>
		<b>*Staff Reports</b>
		<b>*Planning Commission staff report and exhibits</b>
		<b>*City Council staff report and exhibits</b>
		<b>*Summary sheet of final conditions</b>

## DOCUMENT DESCRIPTION:

### **File 1**

X	X	Action Sheet - Approved 2/19/92	X	X	Release from Improvements Agreement /Guarantee-**
X		Revised Preliminary Drainage Report	X	X	Independence Ctr Sub dedication map-GIS Historical Files -also scanned file version
X	X	Planning Commission Minutes - ** - 2/4/92, 2/19/92	X		Replat of Independence Ctr Sub.
X		Letter of Credit from C & S Sovran Corporation to City of GJ - 11/12/91	X	X	Letter informing Sam's Club that there has not been a formal dedication of traffic signals - 7/27/99
X	X	Development Improvements Agreement - **	X		Over All Utility Plan
X		Treasurer's Certificates of Taxes Due - 12/30/91	X		Utility Composite
X		Notes to file	X		Preliminary Engineering & Site Plan
X	X	Correspondence	X		Certification of Plat - 2/18/93
X		Fax transmittals			
X	X	Planning Commission Agenda - 2/4/92. 2/19/92 - **			
X		Legal Ad - 2/12/92			
X		Approval letter from Utility Coordinating Committee - 2/12/92			
X	X	Ordinance No. 2565 - **			



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

**A** Receipt \_\_\_\_\_  
 Date \_\_\_\_\_  
 Rec'd By \_\_\_\_\_  
 File No. 1-92

We, the undersigned, being the owners of property situated in \_\_\_\_\_ 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 checked="" type="checkbox"/> Minor <input type="checkbox"/> Major <input type="checkbox"/> Resub	<u>24.5 acres</u>	<u>INDEPENDANT AVE &amp; HWY 6250</u>	<u>C-2</u>	<u>COMMERCIAL</u>
<input type="checkbox"/> Rezone				From: To:	
<input type="checkbox"/> Planned Development	<input type="checkbox"/> ODP <input type="checkbox"/> Prelim <input 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 checked="" type="checkbox"/> Vacation			<u>Portion of FAITH ST.</u>		<input checked="" type="checkbox"/> Right-of-Way <input type="checkbox"/> Easement

<input checked="" type="checkbox"/> PROPERTY OWNER	<input checked="" type="checkbox"/> DEVELOPER	<input checked="" type="checkbox"/> REPRESENTATIVE
Wal-Mart Stores, Inc.	Wal-Mart Stores, Inc.	Steven E. Wilson, President Colorado Land Consultants, Inc.
Name	Name	Name
701 S. Walton Blvd.	701 S. Walton Blvd.	8480 E. Orchard Rd., Suite 2000
Address Hwy. 71	Address Highway 71	Address
Bentonville, AR 72716	Bentonville, AR 72716	Englewood, CO 80111
City/State/Zip	City/State/Zip	City/State/Zip
(501) 273-4000	(501) 273-4000	(303) 770-5600
Business Phone No.	Business Phone No.	Business Phone No.

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

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all 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.

[Signature] \_\_\_\_\_ Date 12/18/91  
 Signature of Person Completing Application

[Signature] \_\_\_\_\_  
 \* Signature of Property Owner(s) - Attach Additional Sheets if Necessary

MAX A. KREY  
P. O. BOX 4305  
GRAND JUNCTION, CO 81502

JOSEPH WAKEEN  
9943 RADCLIFFE NW  
ALBUQUERQUE, NM 87114

DANIEL SCHMIDT, JR.  
1815 BASS STREET  
GRAND JUNCTION, CO 81505

JOHN & BONNIE HARRIS, JR.  
602 MEANDER AVENUE  
GRAND JUNCTION, CO 81505

W. R. HALL  
2522 B HIGHWAY 6 & 50  
GRAND JUNCTION, CO 81505

STEPHEN & LINDA LUDWIG  
1825 BASS STREET  
GRAND JUNCTION, CO 81505

UTE WATER CONSERVANCY DISTRICT  
560 25 ROAD  
GRAND JUNCTION, CO 81505

INDEPENDENT PLAZA LTD.  
1119 N. 1ST STREET  
GRAND JUNCTION, CO 81501

GARY & KATHLEEN GOE  
1801 BASS STREET  
GRAND JUNCTION, CO 81505

RAYMOND & GERALDINE PHIPPS  
P. O. BOX 3360  
GRAND JUNCTION, CO 81502

ROBERT WILSON, TRUSTEE FOR  
R. HOUCK  
P. O. BOX 604  
GRAND JUNCTION, CO 81502

TIMOTHY & JOAN PAINE  
1824 MINNOW DRIVE  
GRAND JUNCTION, CO 81505

HOLLY BROWNSON  
SHERRY VESSEY  
2660 SACOMA STREET  
GRAND JUNCTION, CO 81506

TRINITY ASSOCIATION  
C/O ROBERT WILSON  
P. O. BOX 604  
GRAND JUNCTION, CO 81502

BRETT & JENNIFER BLANEY  
1834 MINNOW DRIVE  
GRAND JUNCTION, CO 81505

GAMBLE ENTERPRISES, INC.  
P. O. BOX 2906  
GRAND JUNCTION, CO 81502

JOHN BAUMAN, JR.  
541 1/2 FAITH STREET  
GRAND JUNCTION, CO 81505

WEST LAKE PARTNERS  
830 INDEPENDENT AVENUE, #41  
GRAND JUNCTION, CO 81505

HNL COMPANY  
P. O. BOX 1239  
GRAND JUNCTION, CO 81502

PATRICIA FELIN  
545 25 1/2 ROAD  
GRAND JUNCTION, CO 81505

MARILYN JOHNSON  
1810 MINNOW DRIVE  
GRAND JUNCTION, CO 81505

JACK ELLIOTT  
3730 ELDERBERRY DRIVE  
GRAND JUNCTION, CO 81506

COLO GAME FISH AND PARKS DEPT.  
C/O DEPT. OF NATURAL RESOURCES  
6060 BROADWAY  
DENVER, CO 80216

GRAND JUNCTION DEVELOPMENT  
PARTNERS I  
c/o MARK GOLDBERG  
1777 S. HARRISON, SUITE 600  
DENVER, CO 80210

FRED & ROXY LIGRANI  
2526 RIVER ROAD  
GRAND JUNCTION, CO 81505

WEST LAKE PARTNERS  
830 INDEPENDENT AVENUE, #41  
GRAND JUNCTION, CO 81505

COLORADO LAND CONSULTANTS, INC.  
8480 EAST ORCHARD ROAD  
SUITE 2000  
ENGLEWOOD, CO 80111

FRED SCHMID REALTY ASSOC. II  
P. O. BOX 17809 TA  
DENVER, CO 80217

EDWARD JUNAK  
1835 BASS STREET  
GRAND JUNCTION, CO 81505

8480 E. Orchard Road  
Suite 2000  
Englewood, Colorado 80111  
(303) 770-5600  
FAX (303) 770-2349

Colorado  
Land  
Consultants, Inc.



Planning/Engineering/Land Surveying

December 23, 1991

Mr. Karl Metzner, Planner  
City of Grand Junction  
Community Development Department  
250 North 5th Street  
Grand Junction, CO 81501

Re: **"Project Statement"**  
Sam' Club  
Replat & Right-of-Way Vacation  
Independence Plaza Subdivision

Dear Karl:

Colorado Land Consultants, Inc. represents Wal-Mart Stores, Inc., the land owner and petitioner, in their request for a Minor Resubdivision & Right-of-Way Vacation on Independence Plaza Subdivision. This replat and right-of-way vacation request will divide Independent Plaza Subdivision into three lots and will vacate a small portion of Faith Street that extended in an easterly direction off of the culdesac at the north end of Faith Street.

Lot 1 of this replat is presently under construction and being developed as Sam's Club, Lots 2 and 3 at this time have no development planned on them.

The entire property is zoned C-2 and with the exception of a child day care center located at the northeast corner abutting our property, zoned C-1, all other adjacent property is zoned C-2.

The property to the north is undeveloped and boarded by a Grand Junction drainage canal, to the east across 25 1/2 Road is an existing trailer court, on the south and east is an industrial office park in Independent Plaza Subdivision and to the west is commercial and industrial uses and undeveloped lots in Grace Commercial Subdivision.

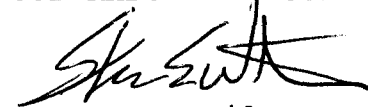
In conjunction with the development of the Sam's Club, detailed soils reports and drainage and grading plans and reports were prepared and approved, which included all of the property within this proposed replat.

Mr. Karl Metzner  
Page Two  
December 23, 1991

Additional information and details are provided in the overall application and submittal. Please don't hesitate to call should you have any questions or require any additional information.

Sincerely,

COLORADO LAND CONSULTANTS, INC.



Steven E. Wilson  
President

SEW:dlp

Enclosures

12-92

8480 E. Orchard Road  
Suite 2000  
Englewood, Colorado 80111  
(303) 770-5600  
FAX (303) 770-2349

Colorado  
Land  
Consultants, Inc.



Planning/Engineering/Land Surveys

December 31, 1991

City of Grand Junction  
Planning Department

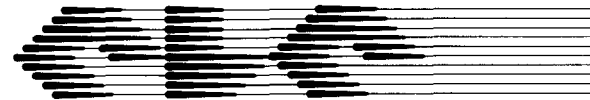
RECEIVED  
CITY OF GRAND JUNCTION  
PLANNING DEPARTMENT  
DEC 31 1991

The updated title work associated with this letter will be completed on Friday, January 3, 1992, and will be forwarded to your office.

Thank you.

8480 E. Orchard Road  
Suite 2000  
Englewood, Colorado 80111  
(303) 770-5600  
FAX (303) 770-2349

Colorado  
Land  
Consultants, Inc.



Planning/Engineering/Land Surveying

January 29, 1992

Mr. Karl Metzner  
City of Grand Junction  
Community Development Department  
250 North 5th Street  
Grand Junction, CO 81501

Re: Replat of Independence Center Subdivision  
and Right-of-Way Vacation #1-92

Dear Mr. Metzner:

In the absence of Steven Wilson, I have reviewed the City comments for the above project. In general, we take no exception to any of the comments presented and we offer the following responses:

1. It is typical that Wal-Mart will dedicate the right to access, to adjoining parcels, across all paved areas. We will modify the replat dedication with the appropriate language.
2. Street improvement plans are presently being completed and will be forwarded to the City.
3. The easements requested by Public Service Company are acceptable.

If you have any questions or comments, please feel free to contact me. We appreciate your assistance.

Sincerely,

COLORADO LAND CONSULTANTS, INC.

Kurt D. Mahnken, P.E.  
Vice President  
Director of Engineering

KDM:dlp

**REVIEW COMMENTS**

(Page 1 of 3)

**FILE NO. #1-92**

**TITLE HEADING: Replat & ROW Vacation**

**ACTIVITY: Replat of Independence Center Subdivision and a Right-of-Way Vacation**

**PETITIONER: Wal-Mart Stores, Inc. (Sam's Club)**

**REPRESENTATIVE: Steven E. Wilson, Colorado Land Consultants**

**LOCATION: Independent Avenue and Highway 6 & 50**

**PHASE: Final**

**ACRES:**

**PETITIONER'S ADDRESS: 701 S. Walton Blvd, Hwy 71  
Bentonville, AR 72716**

**STAFF REPRESENTATIVE: Karl Metzner**

-----  
**NOTE: WRITTEN RESPONSE BY THE PETITIONER TO THE REVIEW COMMENTS  
IS REQUIRED ON OR BEFORE 5:00 P.M., JANUARY 31, 1992.**  
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**CITY ENGINEER 01/20/92**  
**J. Don Newton 244-1559**

An easement should be dedicated for access to Lots 2 and 3 from Lot 1. Access to these lots from 25 1/2 Road and Independent Avenue may be restricted due to poor sight distance or proximity to Lot 1 entrances.

Detailed plans for required improvements on 25 1/2 Road and Independent Avenue have not been received or reviewed by this office.

**U.S. WEST 01/09/92**  
**Leon Peach, Engineer 244-4964**

No comments at this time.

**STATE HIGHWAY DEPARTMENT 01/16/92**  
**Chuck Dunn, Dist. ROW Engineer 248-7232**

Access permits have been issued. CDOT has no additional comments at this time.



**CITY FIRE DEPARTMENT**      01/14/92  
**George Bennett**      244-1400

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We do not have a problem with this.

**CITY UTILITIES ENGINEER**      01/20/92  
**Bill Cheney**      244-1590

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Sewer - Available immediately south of Lot 3 and on Independent Avenue. Sewer across property, Lot 3, has not been accepted by the City for operation and maintenance. Sewer is presently private and belongs to the owner or owners of the three proposed lots.

Water - City water will be available on the north side of Lot 3 and east side of Lot 2. Flow rate to a six inch hydrant is approximately 3,000 g.p.m. at a residual pressure of 30 p.s.i.

Additional information related to sanitary sewer, storm sewer, water service and drainage required prior to review and approval of site plans.

**COMMUNITY DEVELOPMENT DEPARTMENT**      01/21/92  
**Karl Metzner**      244-1439

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Technical details and requirements were reviewed and resolved during the initial platting of this subdivision. Final plans must be submitted to City Engineer as requested. I agree with the common access easements for Lots 2 & 3. No objection to the R.O.W. vacation.

**PUBLIC SERVICE**      01/23/92  
**R. Miller by H. Ball**      244-2656

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PSCo: Request additional ten foot (10') easements as shown in red. Easements requested are from the transformer location west to Faith Street, and also going south and east to the existing sixty five foot (65') easement. Also request ten foot (10') utility easement on the north property line west corner then east 190' and a ten foot (10') easement going south of the old easement for the existing pole line.

**GRAND JUNCTION DRAINAGE**                      **01/23/92**  
**John L. Ballagh**                      **242-4343**

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Easement for the existing open drain has been granted and recorded as previously requested.

On site drainage review has been discussed with the City Engineer. Authority for review of the on site drainage plans rests with the City.

The developer/contractor must check with the Drainage District about any improvements or changes within the District's easement, right-of-way, or open drain. The District reserves the right to review, comment, inspect and approve or disapprove pipes coming into or across the drain.

**MISSING COMMENTS FROM:**

**City Attorney**



NW CORNER  
NE 1/4, SW 1/4  
SECTION 10  
T1S, R1W, U.M.

**Public Service**



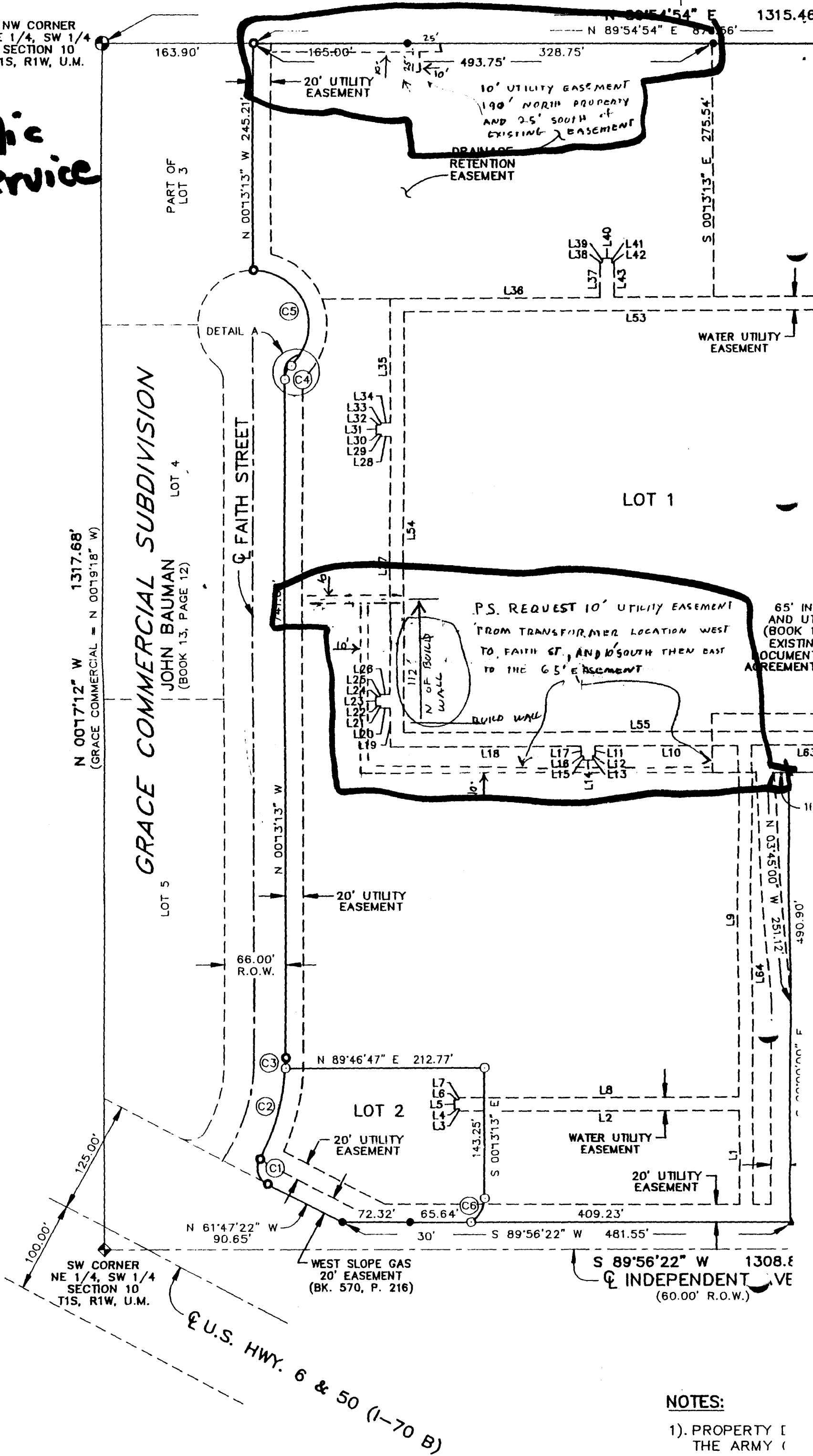
PIPE  
KEY MONUMENT  
(18469)  
L.S. 18469)  
L.S. 16413)  
L.S. 12901)  
L.S. 5837)

CHORD BEARING	CHORD DISTANCE
16°47'22" W	28.28
15°23'12" E	103.43
01°10'17" E	11.32
24°01'59" E	18.43
20°58'01" W	112.21
28°35'28" W	30.84

NEW PROPERTY LINE

TRAVERSE TABLE	
CHORD	DELTA
E 16.43'	48°30'25"
E 15.53'	14°52'11"
W 26.04'	81°13'48"

AREA SUMMARY		
LOT	SQ. FEET	ACRES



**NOTES:**

- 1). PROPERTY [ THE ARMY (
- 2). 18" PVC IRF MENT IN BC
- 3). 10" SANITAI LOT 1 SHAL



*Gene Metzner*



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

February 27, 1992

Mr. Steven Wilson  
Colorado Land Consultants  
Suite 2000  
Englewood, Colorado 80111  
Re: Sam's Club Plan Review

Dear Mr. Wilson:

I have reviewed your plans (received February 19, 1992) for signalization and intersection improvements at Highway 6&50 and Independent Avenue and have the following comments:

**SHEET 2 OF 5**

1. Show and label property lines and/or right-of-way line on U.S. Highway 6&50 and Independent Avenue.
2. Provide street cross-sections at 50' maximum spacing showing match between existing pavement, new curb, gutter, and sidewalk and finished grade at back of sidewalk. Show details for filling, paving or grading necessary to match existing ground behind curbs.
3. Show horizontal control including stationing or coordinates to be used for layout of street improvements at intersection and on south side of Independent Avenue.
4. Show west side of intersection at Frontage Road and Faith Street including a new and existing pavement edges.
5. Angle point in curb, gutter, and sidewalk between Faith Street and entrance to Sam's Club will require horizontal curve. It appears that additional right-of-way will need to be dedicated to accommodate this curve.

6. How will surface runoff drain from the area that currently goes into a culvert which is designated for removal by construction note 10?
7. Width of roadway between Independent Avenue and U.S. Highway 6&50 will need to be increased from 36' (proposed) to 44' minimum to accommodate right turn lanes in each direction.
8. Show center line stationing and widths of all street intersections and access driveways from Independent Avenue and the Frontage Road.
9. Show curb radii at entrances to Sam's Club and at Faith Street intersections.
10. Label Faith Street on the plan.
11. Show detail for curb tapers at end of all curb and gutter sections (Construction note 3 and at Northeast corner of east entrance to Sam's Club).
12. What happens to drainage from north side of Independent Avenue when it reaches Faith Street?
13. Is existing culvert to be removed at northeast corner of Faith Street and Frontage Road?
14. Why do sidewalks end at handicap ramps of entrances to Sam's club" These sidewalks should be extended to parking lot as shown on site plan.
15. Show sidewalk drain crossing that is called out on plan sheet No. C-7 on Frontage Road east of Faith Street. On detail Section C-C for sidewalk crossing, the minimum width of the drain should be increased from 6" to 12".
16. Show bench mark for vertical elevation control.
17. All handicap ramps shall meet current ADA Standards.

**SHEET 3 OF 5**

18. Show traffic signal phasing on plan.
19. Show right turn lanes and 44' min. width flow line to flow line on roadway between Independent Avenue and U.S. 6&50.

## **PLAN SHEET NO C14**

20. Please contact Richard Scariano, Independent Plaza LTD., 303-245-7571 for coordination of improvements on the north side of Independent Avenue. The proposed pavement taper for the east entrance to Sam's Club is in front of the east entrance to Independent Plaza.
21. Provide roadway cross-sections showing fills, slopes and right-of-way lines for proposed widening at the intersection of 25 1/2 Road and Independent Avenue. It appears that the proposed widening will not fit within existing right-of-way.

After your plans have been revised and approved by this office, please plan to hold pre-construction conference to include all parties involved in construction of the streets and other off-site improvements.

22. A street light and stop sign will be at the intersection of Faith Street and Frontage Road. Please show these on the Site plan, Sheet C6.
23. Street lighting will be required on Faith Street at entrances to Sam's Club (3 locations) and at entrances on Independent Avenue (2 locations).

## **PLAN SHEET NO C13**

24. Show proposed pavement and road base thickness to Faith Street on Section A-A.

Following are the comments made by Dave Tontoli, our Traffic Engineer.

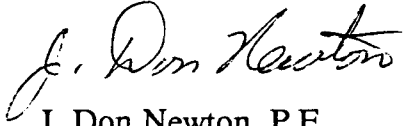
1. A phasing diagram to be shown on signal plan.
2. One signal cabinet (P Type) housing all electrical components.
3. Signal installations to include 3M opticom.
4. Pull boxes are to be 18"x24" precast molded Thermoplastic type, located within (5) feet of traffic signal mast arm pole.
5. Conduits shall cross streets perpendicular to street center lines.
6. Conduit runs shall consist of three, two inch and one, two inch at stubouts for loops.
7. All traffic loops to be Quadrapole type.
8. An example signal plan is enclosed for reference.



Thank you for your continued cooperation in the development of this project.

Please call if you have any questions or wish to discuss these comments.

Sincerely,

A handwritten signature in cursive script that reads "J. Don Newton".

J. Don Newton, P.E.  
City Engineer

xc: Mark Relph, Public Works Manager  
Karl Metzner, Community Development  
Jim Shanks, Director of Public Works

file\dn\sam's.rev

WAL-MART STORES INC.  
SIGN SHOP  
P.O. BOX 116  
BENTONVILLE, AR. 72716-0672  
501-273-4589

TO: CITY OF GRAND JUNCTION, CO.  
CARL METZNER.

FROM: DEBBY PUTTHOFF.

SUBJECT: PROPOSED SIGNAGE FOR: SAM'S #6360. 1040 INDEPENDENT AVE.

DATE: APRIL 9, 1992.

Per our telephone conversation I am submitting the store front elevation and drawings of the proposed signage for the Sam's Club #6360 in Grand Junction.

The square footages are as follows:

ON THE BUILDING: ALL ARE PAINTED SIGNS;  
ON THE FRONT: SAM'S CLUB, MEMBERS ONLY, A DIVISION OF WAL\*MART STORES, INC. = 680.91 SQUARE FEET.  
LEFT ELEVATION: SAM'S CLUB = 435.33 SQUARE FEET.

ROADSIGNS: ONE LOCATED ON 25 1/2 ROAD. THE OTHER ON THE CORNER OF INDEPENDENT AND FAITH. BOTH SIGNS WILL BE THE SAME SIZE.  
SAM'S CLUB MEMBERS ONLY 9' X 15' = 135 SQUARE FEET

The wording SAM'S  
CLUB  
MEMBERS ONLY  
A DIVISION OF WAL\*MART STORES, INC.  
or any portion of this wording is considered our corporate logo.

A local sign company will be installing the road signs. If you have any questions or need any thing else please don't hesitate to contact me at (501)273-4589.

Thank you for all of your help with this project. I will call you Friday to see how we did.

Sincerely,

  
Debby Putthoff

LAW OFFICES OF  
**ELDER & PHILLIPS, P.C.**  
562 WHITE AVENUE  
GRAND JUNCTION, COLORADO 81501-2690  
FACSIMILE (303) 243-8743  
TELEPHONE (303) 243-0946

WALTER J. PHILLIPS  
W. BRUCE PHILLIPS  
KEITH BOUGHTON  
MARY FRANCES McCracken

VICTOR J. DANIEL  
(1946 - 1986)  
OF COUNSEL  
TOM E. ELDER

April 15, 1992

*Karl*  
Mr. Bennett Boeschstein  
Community Development  
250 N. 5th  
Grand Junction, CO 81501

Re: John Bauman Property / Sam's Club

Dear Mr. Boeschstein:

This office represents John Bauman, the owner of the Faith Street property (lots 4 and 5, Grace Commercial Subdivision), directly west of the Sam's Club development area. On October 22, 1992, I attended a Grand Junction planning board meeting on Petition 68-91, requesting a minor subdivision northwest of 25 Road to Independent Avenue. Petition 68-91 was filed by Sam's Club (Wal-Mart) requesting that the three parcels of land northwest of 25 Road to Independent Avenue be merged into one subdivision. Apparently, two parcels were already subdivided with subdivision improvement agreements with which there had not been compliance. Sam's Club proposed \$300,000 in public improvements for vacating the two prior subdivision improvement agreements. Of particular interest to Mr. Bauman, Sam's Club proposed improving the east side of Faith Street with curb, gutter and sidewalk as well as paving 50% or more of Faith Street. It is my understanding that Faith Street is to be used as a truck route for Sam's Club.

In their presentation in support of Petition 68-91, the representatives of Sam's Club indicated that they were aware of the drainage problems inherent in this particular parcel of property and the possible negative impact on Mr. Bauman's property. Their plan to facilitate drainage included implementing two impound ponds on the property, one in the northwest corner and one in the southwest corner.

In response to the specific concerns raised regarding the drainage problems, Jim Shenks, the City Engineer, indicated that any water discharged off the property must be limited to the historic undeveloped ten year discharge. Also, it is my understanding that the developers would be required to accommodate the 100 year flow. In short, the City Engineer, as well as the representatives of Sam's Club indicated that Mr. Bauman's property could not be left any worse off in respect to drainage issues as a result of the planned development than they were with the property undeveloped.

Mr. Bennett Boeschstein  
April 15, 1992  
Page Two.

Petition 68-91 dealt solely with the issue of merging three parcels into one subdivision. At that time, no building permits had been issued. Any development of the subdivision was to be contingent upon city approval of a drainage plan. The drainage issues were to be discussed further, and in much more detail, at the site plan review stage. Building permits were not to be issued until there had been compliance with the site plan, and the site plan was necessarily to include a drainage plan. The motion for approval of Petition 68-91 was carried subject to complete drainage plan analysis.

The Sam's Club development is now well past the site plan review stage and building is progressing. I have a copy of the site plan. There appears to be no drainage plan whatsoever. In any event, the drainage plan is inadequate as Mr. Bauman's property is experiencing significant water ponding and drainage problems as a result of runoff from the Sam's Club property, which building site was elevated at least four feet above the existing and surrounding grade. The fact that only the east one-half of Faith Street is to be paved will only exacerbate the already severe drainage and water problems on the west side of Faith Street. Contrary to Jim Shenk's assertions at the October 22, 1991, planning board meeting, there has been a significant negative impact on the Sam's Club development.

On March 23, 1992, Mr. Bauman and Harry Mavrakis met with you and another member of your board to discuss these problems. At that meeting you were surprised to learn that there are no storm sewers west of 25-1/2 Road, nor any utilities. In fact, I don't believe any member of the planning board has visited the Sam's Club development and the Bauman property to assess the drainage issues.

March 23, 1992, you agreed to contact a representative of Sam's Club to discuss what could be done to alleviate the drainage problems, including the possibility of extending the sewer lines and utilities across Faith Street prior to black-topping Sam's Club's parking area.

Steps must be taken now to prevent further water problems in the future. The city must abide by the representations it made at the October 22, 1991 planning board meeting. An adequate drainage plan has not been developed. The recent area rain storms have made that more than clear. To date, no representative of the city or of Sam's Club has even attempted to address Mr. Bauman's

Mr. Bennett Boeschenstein  
April 15, 1992  
Page Three.

legitimate concerns.

At this point there are two possible solutions to the drainage / water problems caused on John Bauman's property by the Sam's Club development. An adequate drainage plan, including the placement of water lines, sewer lines and storm sewers across Faith Street to Mr. Bauman's property must be accomplished. Paving the west, as well as the east, side of Faith Street, including curb and gutter would also likely accomodate the drainage flow problems.

As work on the Sam's Club project is quickly progressing, I would appreciate hearing from you as soon as possible.

Yours very truly,

ELDER & PHILLIPS, P.C.



M. Frances McCracken

MFM/nz

Copy: John Bauman



Public Works Department

April 20, 1992

M. Frances McCracken  
Elder & Phillips, P.C.  
562 White Ave.  
Grand Junction, Co. 81501

Dear Ms. McCracken:

Bennett Boeschstein has asked me to respond to your April 15, 1992 letter regarding the John Bauman Property / Sam's Club. I have checked into the matters referenced in your letter and am able to provide you with the following information. The developers of the Sam's Club project have an approved drainage plan filed with the City Engineer, Mr. Jerry D. Newton. According to Mr. Newton this plan will accommodate all drainage in excess of historic run-off generated by the Sam's Club site. This includes additional run off caused by the paving of Faith Street. Since all the improvements to the site are not yet completed (paving, catch basins, curbing, etc.) the drainage system is not yet completely operational. At the rapid pace with which development is occurring the full drainage system should be operational in the very near future. City Public Works staff, including the City Engineer are monitoring the development to ensure that facilities are constructed as approved. If you or Mr. Bauman would like to review the drainage plan please call Mr. Newton at 244-1559.

Please let me know if you require any additional information.

Sincerely

A handwritten signature in black ink, appearing to read "Karl G. Metzner", is written over a horizontal line.

Karl G. Metzner  
Senior Planner

June 10, 1992



Mr. Tom Sharkey  
Colorado Structures, Inc.  
4720 Forge Road, Suite 106  
Colorado Springs, Colorado 80907

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

Re: Sam's Club: Final Inspection of Street and Drainage Improvements

At your request, a final inspection of the public streets and drainage improvements was held on June 10, 1992 at 10:30 a.m. Present during the inspection were you, me, Walt Hoyt, City Inspector and Karl Metzner, City Planner.

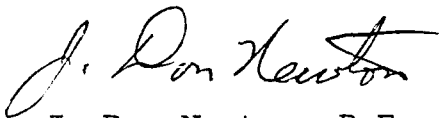
As a result of this inspection the following items were noted:

1. A safety lid is needed over the top of the inlet structure where the storm water enters the detention pond to keep kids and debris from entering through the grate. The lid should be elevated approximately 6 inches above the grate so that it does not restrict flow out of the structure.
2. A lid is needed on the concrete box outlet from the detention pond.
3. Ends of 6 inch vertical concrete curbs need to be beveled or tapered at no less than 45 degrees at the 25.5 Road entrance and at the west side of the cul-de-sac on Faith Street.
4. Expansion joint material in sidewalks on Faith Street needs to be trimmed flush with the sidewalk surface.
5. A right turn arrow need to be painted in the right turn lane on the frontage Road at Faith Street.
6. Directional arrows need to be painted at the north end of the three south bound lanes that exit onto Independence Ave at the traffic signal
7. At the north east corner of the intersection of the frontage road and Faith Street, irrigation water has eroded a hole under the sidewalk where water is flowing during irrigation of the landscape. This hole should be excavated and backfilled with material that will allow water to penetrate.
8. The new pavement taper at the north end of the right turn lane on 25.5 Road at Independence Ave is cracked and breaking up along the edge. If the asphalt is 5 inches thick per plan, this should not be happening. This area will need to be repaired and the pavement thickness verified.

The public street and drainage improvements on 25.5 Road, Independent Avenue and Faith Street will be accepted by the City for future operation and maintenance upon completion of items 1. through 8. above, submittal of record drawings of the public improvements on full size reproducible mylar sheets and submittal of the results of all materials testing required during construction.

Thank you for your continued cooperation and communication with us throughout the construction of this project.

Sincerely,

A handwritten signature in cursive script that reads "J. Don Newton".

J. Don Newton, P.E.

xc: Steve Wilson, Colorado Land Consultants  
Walt Hoyt, Construction Inspector  
✓ Karl Metzner, Community Development Department  
Mark Relph, Public Works Manager



MESA COUNTY SURVEYING  
FRED A. WEBER  
P.O. BOX 20000.5026  
GRAND JUNCTION, CO 81502  
PH 244-1822

NOVEMBER 18, 1992

## SUBDIVISION REVIEW.

SUBDIVISION NO SB-15-92

SURVEYOR: RICHARD MASON  
WESTERN ENGINEERS  
2150 HWY 6 & 50  
GRD JCT, CO 81505  
PH 242-5202

THE FOLLOWING ISSUES NEED TO BE CLARIFIED PRIOR TO  
RECORDING THE PLAT:

1. DEDICATION:
  - a. DISTANCES AND CURVE DATA SHOWN IN THE DEDICATION DO NOT AGREE WITH THE SAME INFORMATION SHOWN ON THE GRAPHIC PORTION OF THE PLAT AND IN THE DATA TABLES.
2. STATE STATUTES REQUIRE A STATEMENT OF SCALE IN ADDITION TO THE BAR SCALE.
3. A MONUMENT RECORD IS NEEDED FOR THE CTR. 1/4 CORNER.
4. THE AREA ON THE EASTERLY SIDE OF FAITH STREET, WHICH IS BEING VACATED, SHOULD BE SHOWN AND NOTED AS BEING "VACATED HEREON." ALSO, A DETAIL SIMILAR TO "DETAIL A" ON THE NORTHERLY SIDE OF THE CUL-DE-SAC WOULD BETTER DEFINE THE CHANGES BEING MADE TO THE RIGHT-OF-WAY. "DETAIL A" WAS GREAT.
5. THE DISTANCES OF 72.32', 65.64' 68.86' AND 409.23' ALONG THE SOUTHERLY LINES OF LOTS 1 & 2 APPEAR CONFUSING. CONSIDER REPLACING 409.23' WITH 274.73' IF THIS IS THE APPROPRIATE DISTANCE.

PLEASE, CALL IF WE CAN BE OF ASSISTANCE.

SINCERELY,  
FRED WEBER *K.S.*  
COUNTY SURVEYOR

cc:CITY OF GJ DEPT OF COMMUNITY DEVELOPMENT



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

January 28, 1993

Mr. Steven E. Wilson, President  
Colorado Land Consultants, Inc.  
8480 E. Orchard Road, Suite 2000  
Englewood, Co. 80111

Re: Independence Center Sub. Replat

Dear Mr. Wilson:

In doing our 1992 end of year recaps I find that the replat of Independence Center Subdivision has still not been recorded and has been in the County Surveyor's office awaiting additional modifications to the plat. The County Surveyor sent notice of the deficiencies to Western Engineers, since their surveyor signed the plat, unaware that Western is no longer involved with this project. I have attached a copy of the County Surveyor's comments. Please let me know how you would like to handle this.

It also appears, from our records that the Parks and Open Space fee (\$19,750) required by the plat approval was never paid. If our records are in error please send me a copy of the receipt, canceled check, or other documentation you may have. If the fee has not been paid we will require that payment before we can record this plat.

Please let me know how you want to handle this.

Sincerely

A handwritten signature in black ink, appearing to read "Karl G. Metzner", with a long horizontal line extending to the right.

Karl G. Metzner  
Senior Planner

*12/18/91 - paid  
see attached Treasurers  
rec'd.*

*35,112.00*





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

May 12, 1993

Mr. Steve Wilson  
Colorado Land Consultants, Inc.  
8480 E. Orchard Rd.  
Suite 2000  
Englewood, CO 80111

Dear Steve:

Public Service Company has informed me that they have not yet received payment authorizing the installation of the street light at the intersection of Faith Street and Highway 6&50 Frontage Road. This street light was required and shown on the construction plans for the Sams Club development.

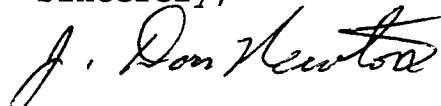
The price quoted of \$2301.00 for the street light will expire on June 1, 1993. After this date, a new application will have to be made with Public Service Company.

I believe that the only unresolved issues remaining on the Sam's Club project are the street light and payment of the Open Space fees. We would appreciate your making the necessary arrangements to finalize these items as soon as possible.

I have enclosed a copy of the City's form for Release From Improvements Agreement/Guarantee, which you requested.

Please call if you have any questions regarding this issue.

Sincerely,

  
J. Don Newton, P.E.

xc: Mark Relph, Public Works Manager  
Dan Wilson, City Attorney  
Karl Metzner, Senior Planner ✓

file:donn:wilson.sam

*Harry Timm  
Please handle.  
WFA 6/29/93  
c: Jim  
Roul*



WAL-MART STORES, INC. • 701 SOUTH WALTON BLVD. • BENTONVILLE, AR 72716 • 501-273-4000

June 23, 1993

**CERTIFIED MAIL**

City of Grand Junction  
Attn: Mark K. Achen  
City Manager  
250 North Fifth  
Grand Junction, CO 81501

Subject: Irrevocable Standby Letter of Credit #SA77977091

Dear Mr. Achen:

My records indicate Wal-Mart Stores, Inc., has an existing letter of credit with the City of Grand Junction. Please advise me as to the status of work covered by the letter of credit mentioned above for the Sam's Club in Grand Junction, Colorado.

If the required conditions have been met in accordance with the letter of credit please honor this request for the return of the original letter of credit to the NationsBank, Attn: Karen Harmson, 715 Peachtree Street, Second Floor, Atlanta, GA 30308 along with a letter acknowledging your agreement that the letter of credit can be cancelled and please copy me.

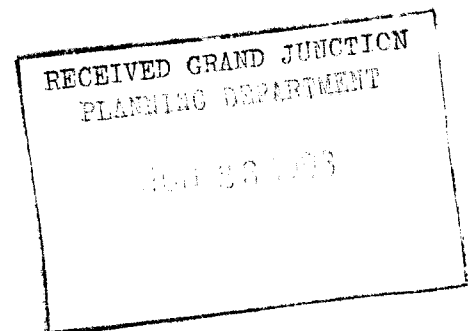
If these conditions have not been met in accordance with the letter of credit please advise me at the following address:

Wal-Mart Stores, Inc.  
Attn: Sharon R. Doyle  
701 South Walton Blvd.  
Bentonville, AR 72716  
Phone: (501) 273-4898

Thank you for your earliest attention to this request.

Sincerely,

Sharon R. Doyle  
Letter of Credit Coordinator





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

July 27, 1993

Nations Bank  
ATTN: Karen Harmson  
715 Peachtree Street, Second Floor  
Atlanta, GA. 30308

Re: Irrevocable Letter of Credit # SA 77977091

Dear Ms. Harmson:

Enclosed is the original letter of credit # SA 77977091 for the construction of public improvements in conjunction with the Sam's Club development. All improvements related to this letter of credit have been satisfactorily completed and this credit line can be canceled upon receipt of this letter. A release of improvements guarantee is being processed at this time and will be recorded with the Mesa County Clerk and Recorder. This will complete all requirements and conditions of this project.

Please let me know if you have any questions regarding this release.

Sincerely

A handwritten signature in cursive script, appearing to read "Karl G. Metzner", written in black ink.

Karl G. Metzner  
Senior Planner

xc: Sharon R. Doyle; Walmart Stores, Inc.  
Steve Wilson; Colorado Land Consultants, Inc.



City Of Grand Junction, Colorado  
Community Development Department  
250 North Fifth Street  
81501-2668

File # 1-92

- Finance's records for advanced reconstruction show that \$35,112.00 was paid for future improvements to 25 1/2 Rd. on Nov. 18, 1991 -  
as per Jody Romero.
- Parks & Open Space fees of \$19,750.00 paid on 12/18/91 ~~for~~ Treasurers report attached.
- Improvements Agreement Release Form, can be recorded if someone wants to pay the fee. KP 10/28/94

*Sams Club file*

# WAL ★ MART®

WAL-MART STORES, INC. \* 701 SOUTH WALTON BLVD. \* BENTONVILLE, AR 72716 -8710 \* 501-273-4000

Writer's Direct Dial No. 501/277-1348

Writer's Facsimile No.. 501/273-8119

Via Overnight Mail

June 29, 1995

Ms. Kathy Portner  
City Community Development  
250 N. 5th Street  
Grand Junction, Colorado 81501

RE: Release of Development Improvements Agreement

Dear Ms. Portner:

Enclosed please find a check in the amount of Six and no 00/100 Dollars (\$6.00) for payment of the filing fee for a Release of Development Improvements Agreement pursuant to our telephone conversation on June 29, 1995. Please file this Release and send me a filemarked copy of it at your earliest convenience.

Please contact me if you have any questions.

Sincerely,



J. Scott Greear  
Document Manager

enclosure



# CITY OF GRAND JUNCTION

250 North 5th Street

Grand Junction, CO 81501-2668

FAX: (970) 244-1599

## FACSIMILE

To: Scott Meier

Location: Wal-Mart - Developmental Div.

Telephone Number: 501/277-1348

FAX Number: 501/273-8119

From: Kathy Porter

Telephone Number: (970) 244-1446

Number of Pages Including Cover Sheet: 2

Special Instructions:

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If the telecopy you have received is incomplete or illegible, please call

Kathy at (970) 244-1446.





Grand Junction Community Development Department  
Planning • Zoning • Code Enforcement  
250 North Fifth Street  
Grand Junction, Colorado 81501-2668  
(970) 244-1430 FAX (970) 244-1599

July 3, 1995

To Whom It May Concern:

The recording fee for the Release from Improvements Agreement/Guarantee for the Sam's Club development in Grand Junction, CO (City Development File #1-92) is \$6.00. Please make the check payable to the Mesa County Clerk and Recorder.

Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Katherine M. Portner".

Katherine M. Portner  
Planning Supervisor



CORBETT JENNINGS  
Sam's Club 18-6360  
1040 Independent Ave.  
Grand Junction, CO 81505

JUL 29 1999

July, 27, 1999

Re: Traffic Signals installed at Wal-Mart Store No. 6360  
*SAM'S CLUB*

Dear MARK KELPH:

*SAM'S CLUB*  
As you may be aware, the Wal-Mart store located at 1040 INDEPENDENT AVE was suggested or required to install one or more traffic signals at the entrance(s)/exit(s) to the store property as a traffic safety measure or as a condition of approval of the development plan for Wal-Mart store. Pursuant to the approved development plan, these traffic lights were dedicated to public use.

It has come to our attention, through a review of our files, that the dedication of the traffic signal(s) installed at the intersection(s) listed below has not been formally accepted by THE CITY OF GRAND JT. Acceptance of this dedication is merely an administrative formality that may be accomplished by resolution at your next regularly scheduled public meeting.

Enclosed is a form of Deed of Dedication which can be used to complete the dedication. Please place the matter on the consent calendar for the next available meeting so that this dedication can be formally accepted on behalf of the public. In addition, please complete and return the Deed of Dedication form to the address above for Wal-Mart's signature. If you could also provide notice of the action by sending a copy of the approved resolution, it would be appreciated.

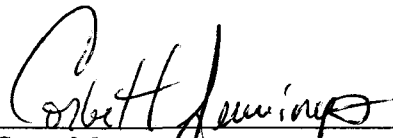
The traffic signal(s) for which acceptance of the dedication is necessary are located at the intersection(s) of:

1. INDEPENDENT AVE and HWY 6450
2. \_\_\_\_\_ and \_\_\_\_\_
3. \_\_\_\_\_ and \_\_\_\_\_

(  If checked, additional locations are listed on the back of this letter.)

Thank you for your cooperation in this matter.

Very truly yours,

  
\_\_\_\_\_  
Store Manager  
Wal-Mart Store No. 6360  
(970) 243-9212

RECORDING REQUESTED BY  
AND WHEN RECORDED RETURN TO:

NAME	[	<i>CORBETT JENNINGS</i>	]
ADDRESS		Sam's Club 18-6360	
CITY & STATE		1040 Independent Ave.	
ZIP	[	Grand Junction, CO 81505	]

SPACE ABOVE THIS LINE FOR RECORDER'S USE

### DEED OF DEDICATION

Wal-Mart Stores, Inc., a Delaware corporation ("Wal-Mart") hereby dedicates to \_\_\_\_\_, a \_\_\_\_\_ ("Public Entity") and the Public Entity hereby accepts, pursuant to resolution of its governing body, the dedication by Wal-Mart of legal title to the traffic signal(s) ("Dedicated Property") located at the intersection(s) listed below, situated within the jurisdictional limits of the Public Entity:

\_\_\_\_\_ and \_\_\_\_\_  
 \_\_\_\_\_ and \_\_\_\_\_  
 \_\_\_\_\_ and \_\_\_\_\_

The Public Entity hereby expressly represents that the undersigned signatory has been duly authorized by resolution of the governing body of the Public Entity to accept this dedication on behalf of the Public Entity, and that acceptance is made pursuant to all applicable laws.

The Public Entity hereby represents and agrees that, by accepting this dedication, the Public Entity accepts legal title to and ownership of the Dedicated Property as well as all maintenance obligations associated with the Dedicated Property.

Executed on \_\_\_\_\_, 1999.

#### WAL-MART

Wal-Mart Stores, Inc., a Delaware corporation

By: \_\_\_\_\_  
Its \_\_\_\_\_

#### PUBLIC ENTITY

\_\_\_\_\_

By: \_\_\_\_\_  
Its \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

On \_\_\_\_\_ before me, the undersigned, a Notary Public in and for said County and State, personally appeared \_\_\_\_\_, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he or she executed the same in his or her authorized capacities, and that by his or her signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
NOTARY PUBLIC

STATE OF \_\_\_\_\_ )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

On \_\_\_\_\_ before me, the undersigned, a Notary Public in and for said County and State, personally appeared \_\_\_\_\_, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he or she executed the same in his or her authorized capacities, and that by his or her signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
NOTARY PUBLIC

8480 E. Orchard Road  
Suite 2000  
Englewood, Colorado 80111  
(303) 770-5600  
FAX (303) 770-2349

Colorado  
Land  
Consultants, Inc.



Planning/Engineering/Land Surveying

**REVISED PRELIMINARY  
DRAINAGE REPORT**

**FOR**

**SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO**



*[Faint, illegible text, possibly a signature or additional stamp]*

REVISED PRELIMINARY  
DRAINAGE REPORT

FOR

SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO

October 21, 1991

Revised October 29, 1991

Prepared For:

GRAND JUNCTION DEVELOPMENT PARTNERS I  
c/o Mark Goldberg, Partner  
1777 S. Harrison Street  
Suite 600  
Denver, CO 80210

Prepared By:

COLORADO LAND CONSULTANTS, INC.  
8480 East Orchard Road  
Suite 2000  
Englewood, CO 80111

Job No. 638



REVISED PRELIMINARY  
DRAINAGE REPORT  
FOR  
SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO

Page 1

I. INTRODUCTION

This report was prepared for Grand Junction Development Partners I to analyze the storm water drainage condition of the 25.4 acre site.

This report analyzes the existent drainage condition, both on and off site. The effects of the anticipated commercial development are analyzed and plans outlined for the mitigation of stormwater effects of the planned development.

II. GENERAL LOCATION AND DESCRIPTION

The parcel is located within the corporate limits of Grand Junction, Mesa County, Colorado, within the Southwest Quarter of Section 10, Township 1 South, Range 1 West of the Ute Meridian. As shown on the accompanying site plan, the site is bounded by Independent Avenue and State Highway 6 and 50 on the south; (the undeveloped) Faith Street on the west, and Road 25 1/2 on the east. The site is separated on the north from the Grand Junction Drainage District ditch by a narrow private holding.

The terrain is extremely flat with slopes averaging one half percent (less than one half foot fall per 100 feet horizontally). The site's soils are a pervious silty sand, with an identified wetland in the northeast corner. Although extensive topographic mapping reveals a slight slope from east to northwest and southwest, our analysis indicates virtually no drainage to offsite in the present state.

Ground cover consists of natural dryland grasses and forbs, with emergent wetland species in the northeast corner. It is evident that the pre-agricultural drainage was toward the drainage ditch to the north. With the advent of an agricultural use, extensive fill was placed, with evidence of a blocked pipe drain in the northeast.

Immediate past development included several trailer pads (without utility service), and two abandoned small frame structures.

III. STORM DRAINAGE METHODOLOGY

This analysis was prepared using appropriate drainage criteria and incorporates sound engineering practice. Grand Junction regulations require analysis of the 100-year storm event with an allowed release at the 10-year historic rate. Improvements have been designed so that the total developed discharge does not exceed the allowed runoff from the site.

REVISED PRELIMINARY  
DRAINAGE REPORT  
FOR  
SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO

Page 2

The storm drainage system will be designed such that waters from the 100-year frequency storm will not cause property damage, inundate buildings, or allow runoff exceeding the 10-year historic flow rate.

The Rational Method was used to determine flows, based on the formula:

$Q = CIA$   
 Where:  $Q$  = 10 or 100 year runoff, cfs  
 $C$  = coefficient of runoff  
 $I$  = intensity, inches/hours, per 1-D-F curves for Grand Junction, Colorado  
 $A$  = area, acres

Time of Concentration: is defined as the initial overland flow time ( $t_i$ ) limited to the most uppermost 400-feet, followed by an (accelerated) travel time ( $t_t$ ). With the Rational Method, the peak intensity is chosen to equal the time to concentration.

$$t_c = t_i + t_t$$

The initial overland flow time ( $t_i$ ) is calculated by:

$$t_i = \frac{1.8 (1.1 - C) \sqrt{L}}{\sqrt[3]{S}}$$

Where:  $t_i$  = initial or overland flow time, minutes  
 $C$  = runoff coefficient  
 $L$  = length of overland flow, feet, limited to the first 400-feet of sheet runoff  
 $S$  = average basin slope, percent

The downstream "travel time" is determined by:

$$t = \frac{L}{60V}$$

Where:  $t$  = downslope travel time beyond the first 400-feet (minutes)  
 $L$  = travel length in feet  
 $V$  = velocity, feet/second

As shown in the calculations in the Appendix, two sub-basins exist. The "north basin" generates a 100-year historic runoff of only 2.1 cfs with a time to concentration of 61 minutes. The north basin's 10-year historic runoff is only 1.4 cfs.

The "south basin" produces only 1.6 cfs runoff under 100-year historic storm conditions. This basin's 10-year historic runoff is 1.0 cfs.

Under developed conditions, two basins also exist, although both are designed for the eventual build out for commercial structures and

REVISED PRELIMINARY  
DRAINAGE REPORT  
FOR  
SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO

Page 3

parking. Under these conditions, the "north basin" will generate 32.7 cfs at the 100-year storm, with a 12 minute time to concentration. The "south basin" will develop 34 cfs with a 7 minute time to concentration.

IV. DETENTION STORAGE DESIGN

The Modified Rational Method was used to determine runoff quantities and detention pond volumes. Per the requirements of Grand Junction, the 100-year event was calculated under fully developed conditions. That volume of stormwater is detained, but allowance was made for only a 10-year historic storm release rate. Following the Modified Rational Method, varying storm durations are tested beyond the developed site's time to concentration.

Calculations and hydrographs illustrating stormwater volume and release rates are outlined in the Technical Appendix. With the conservative release rate using the 10-year event, no peak detention volume develops within a one hour storm duration.

Initial design efforts focused on maintaining the latest runoff pattern (after the agricultural filling of the site). Two detention impoundments were calculated - one for each of the basins.

Detention for the "north basin", releasing into the Buthorn Ditch, presented no problem either in sizing or outfall. However, after preliminary design and discussion with CDOH, no existing outfall point south of the property was identified. Storm sewer would be required to be constructed in Independent Avenue to convey releases to the west tying back into the existing roadside ditch and culvert system. This would require lowering of a 10-inch high pressure gas line which could not be lowered until next summer.

The on-site detention pond would ultimately discharge into the existing road side swale system. This system extends 1750 feet northeast discharging into the same drainage ditch as on the north boundary pond as it swings southwest to pass under Highway 6 & 50. Thus the ultimate regional outfall is the same.

However, the 1750 feet of swale and culverts cannot be realistically improved. There is heavy siltation and clogging of the existing culverts, evidence of undrained stormwater at the front of Jerry's Outdoor Sports and in the roadside swales west of the site. Furthermore, the existing gradient in the potential outfall would not support an effective swale/culvert system for the increase in runoff from the subject property.

REVISED PRELIMINARY  
DRAINAGE REPORT  
FOR  
SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO

Page 4

Therefore, the proposed design is to divert the entire site's runoff to the north into a detention facility with outflow to the north.

As shown in the attached sketch plan, all storm runoff is collected in a single outfall pipe system leading to a 208,000 cubic foot detention pond on the north edge of the site.

The Modified Rational Method for determining detention did not result in a maximum volume after 60 minutes, due to the extremely small discharge permitted (i.e. 10-year historic rate). In essence, the actual volume required approaches that required for retention or no discharge. From a conservative standpoint, the pond volume is sized for a 24-hour 100-year precipitation depth of 3-inches as obtained from the U.S. Department of Commerce, Rainfall Frequency Atlas.

Due to site topographic constraints the invert of the outlet into the Buthorn Ditch is higher than the invert into the pond of the storm sewer system draining the area south of the building. As proposed, the storm sewer invert is elevation 41.0 at the pond. The runoff being conveyed in the storm sewer will be discharged into a "bubbler" structure until it reaches elevation 46.0 at which point it will flow out of the top of the structure and into the pond. The actual detention volume is provided between elevations 45.0 and 48.0 (see accompanying sketch).

A small pump (200± GPM) activated by float controllers will be utilized to drain the sump when the level in the detention pond recedes below the top of the "bubbler".

Although this design is somewhat uncustomary, it does provide some advantages:

1. Developed flows conveyed to the north maximizes protection of adjacent private property and public highways.
2. The ineffective swale system along Independent/Highway 6 & 50 is not subjected to site releases.
3. Conveying all storm waters to the north through a detention pond, and into the drainage ditch is the pre-agricultural historic pattern.
4. Due to the conservative release rate generating a retention facility, hydrocarbons and surface contaminants are settled in the pond before water release.

## V. CONCLUSIONS

As a result of our analysis and the preparation of this report, we conclude the following:

1. That no off-site generated storm waters traverse the site.

REVISED PRELIMINARY  
DRAINAGE REPORT  
FOR  
SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO

Page 5

2. Through the use of on-site detention ponding, the increased runoff which results from increased imperviousness will be attenuated.
3. Water leaving the site will be via historic channels at allowed rates of flow.
4. That the proposed development can be developed without a negative impact upon downstream property owners.

REVISED PRELIMINARY  
DRAINAGE REPORT  
FOR  
SAM'S WHOLESALE CLUB  
GRAND JUNCTION, COLORADO

REFERENCES

1. American Public Works Association, "Urban Stormwater Management", The Modified Rational Method.
2. Intensity - Duration - Frequency Curves, Grand Junction, Colorado.
3. National Oceanic and Atmospheric Administration, Maximum Probable Rainfall Charts
4. "Estimate of Average Flow Velocity for use with the Rational Method" (graph), "Urban Hydrology for Small Watersheds," Technical Release No. 55, USDA, Soil Conservation Service.

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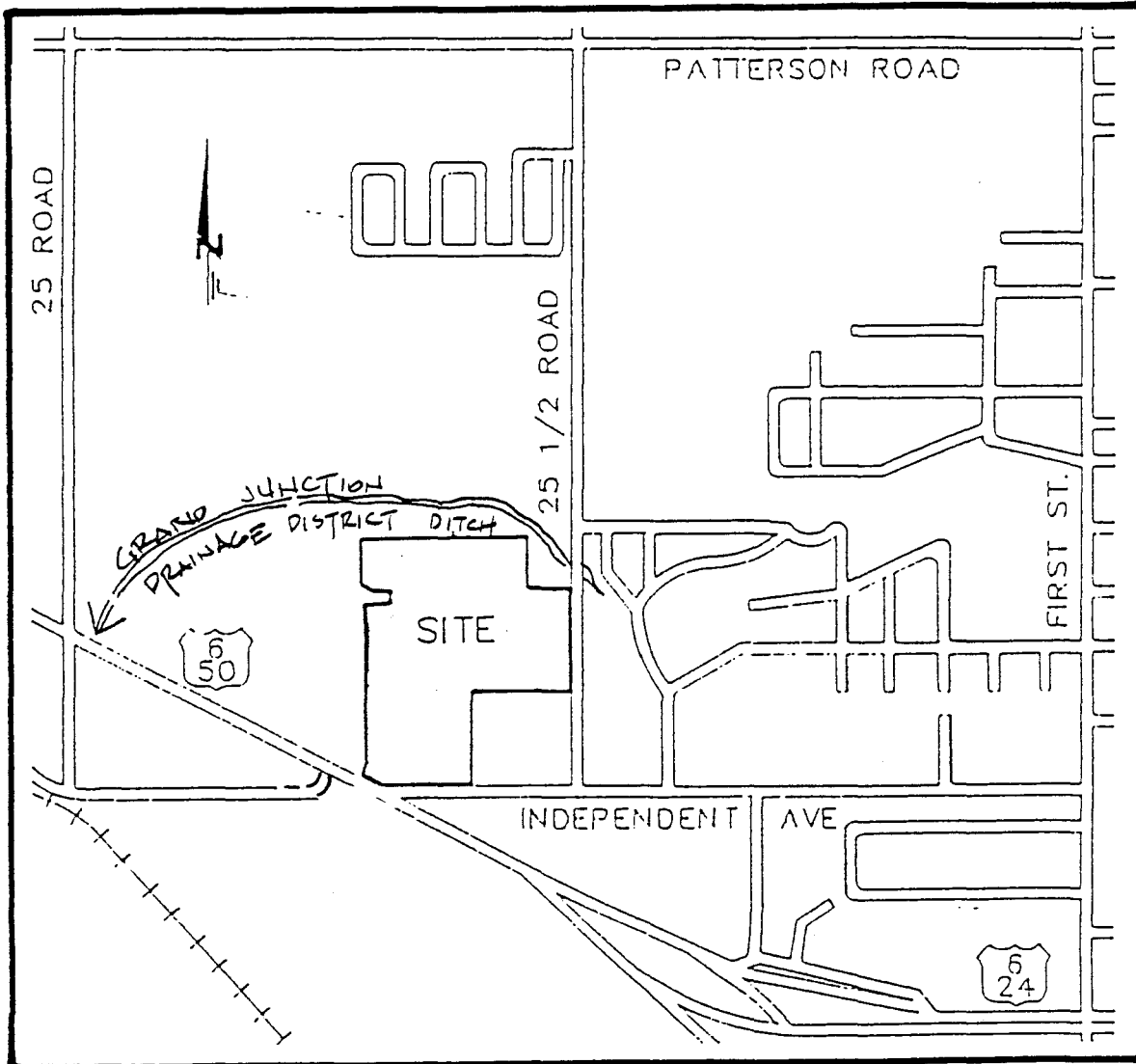
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REGIONAL CONTEXT

MAP

(NOT TO SCALE)

GRAND JUNCTION DRAINAGE DISTRICT DITCH

SEDIMENT-BLOCKED CULVERTS

WETLANDS (TYP.)

Abandoned Farm Ditch

NOTE: THESE SETBACKS USED TO OCCUPY BOTH SIDES OF ROAD. FENCES, UTILITY AND CONCRETE PAVE NOT SHOWN.

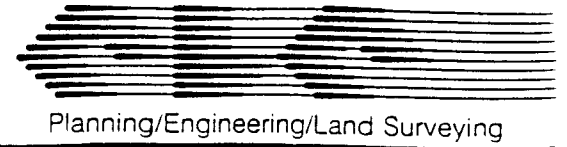


1" = 200' APPROX.

PREVAILING DRAINAGE PATTERNS.

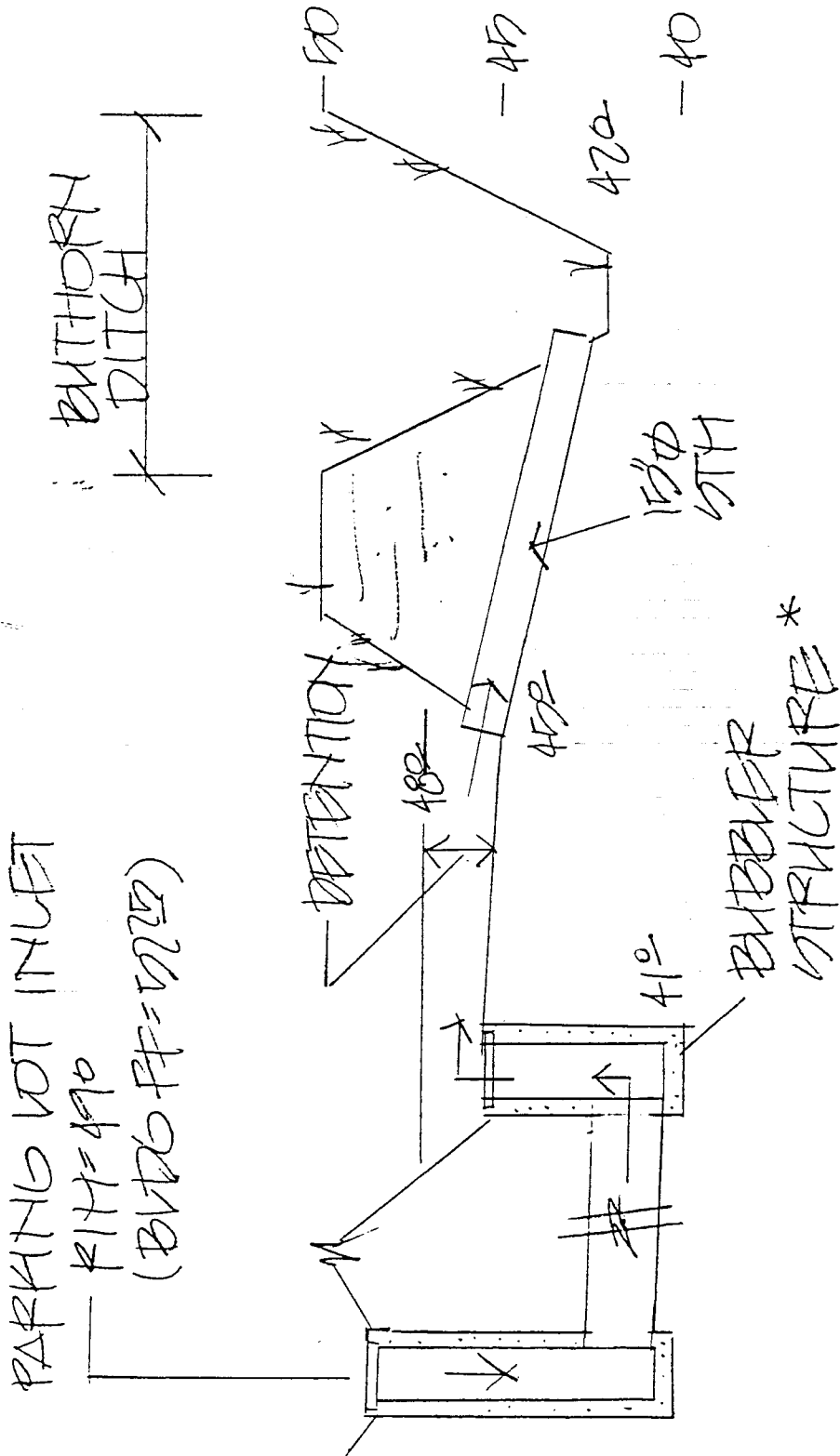
NOTE: NO OFFSITE STORM WATER FLOWS ACROSS THE SITE





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BUBBLER STRUCTURE

\* W/PUMP TO EMPTY WHEN POND DRAINING

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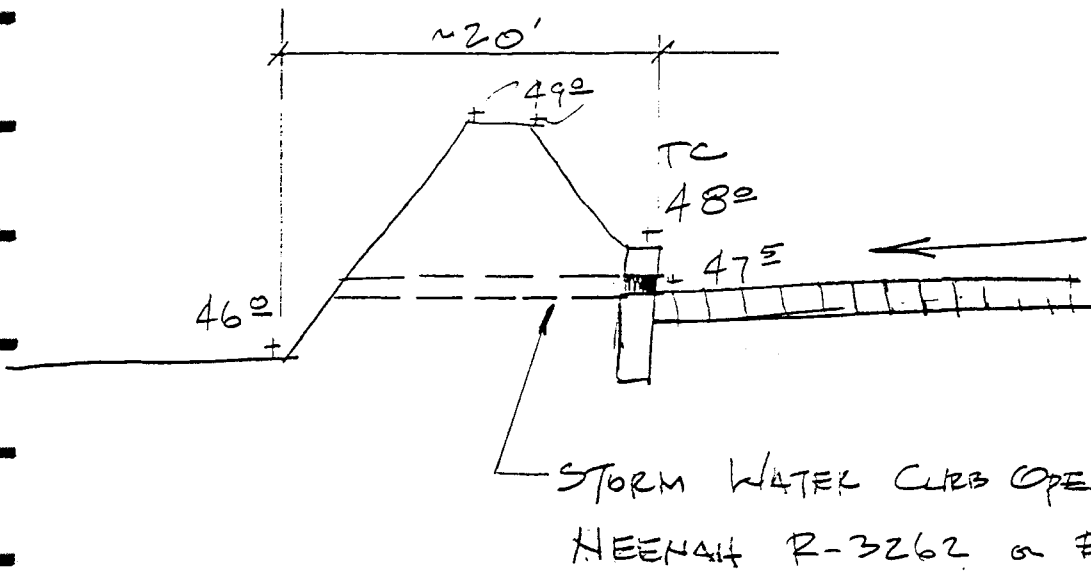
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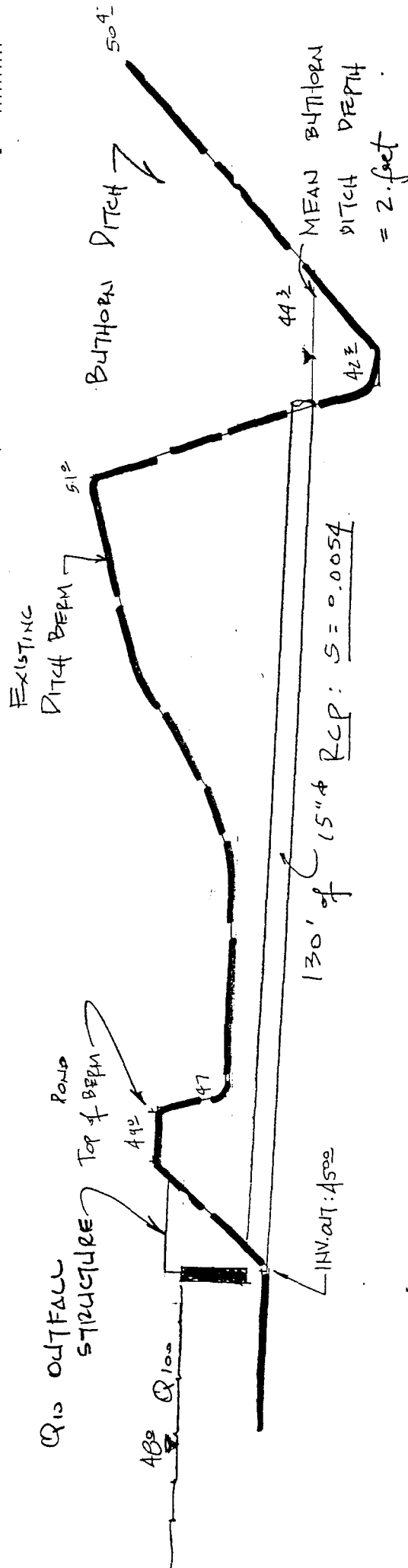
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(SECONDARY)  
FAITH STREET  
INLET  
o  
CUL DE SAC

Date: 10,29,91



SCHEMATIC SECTION: RETENTION POND  
INTO BUTTHORN DITCH

NTS

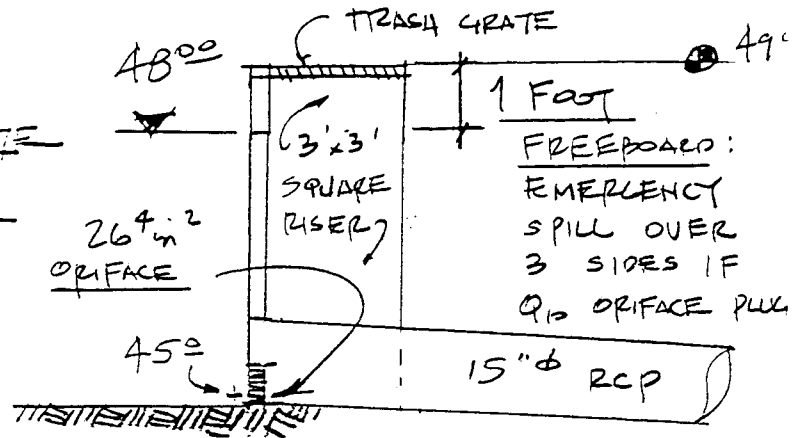


Project: GRAND JUNCTION WAL-MART

Date: 10.29.91

$Q_{10} = 2.5$  RELEASE RATE  
 for ALL STORMS

MAX. HEAD = 3.0 FEET



$$V = C_v \sqrt{2gh}$$

$$Q = C_v \sqrt{2gh} A$$

$$2.5 = 0.98 \sqrt{2(32.2)(3' \text{ head})} (A)$$

$$2.5 = 13.62 A$$

$$0.18 \text{ ft}^2 = A$$

$$26.43 \text{ in}^2 = \text{Area of Allowed } Q_{10} \text{ orifice}$$

OUTLET ORIFACE  
 for  $Q_{10}$

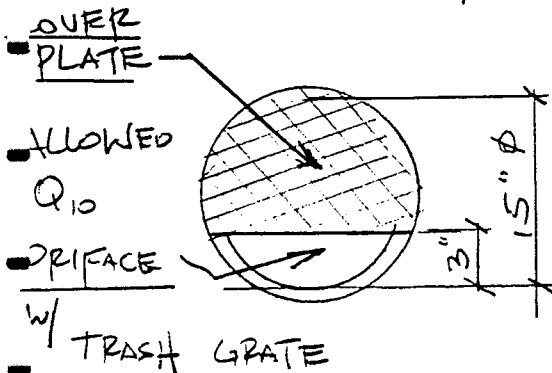
if  $A = 26.4 \text{ in}^2$   
 within a 15" pipe.

RATIO of  $\frac{A}{D^2} = \frac{26.4}{15^2} = 0.1173$

then, similar relationship of  $\frac{d}{D} = 0.20$

$$d = D \text{ of } 15" (0.20) = 3 \text{ INCHES}$$

ALLOWED HEIGHT  
 ORIFACE for  
 $Q_{10} = 2.5 \text{ cfs}$

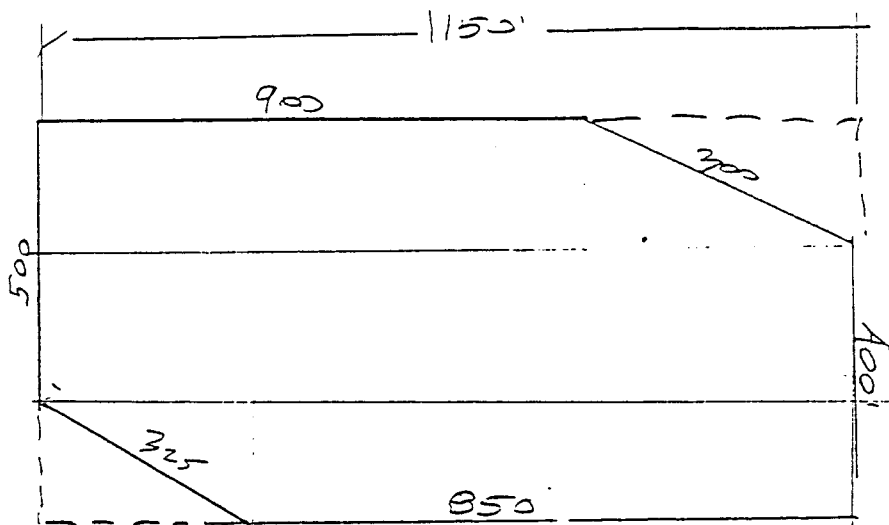


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HISTORIC FLOWS: Q<sub>10</sub>

1) NORTH

Basin:



$$600' \times 1150' = 690,000 \text{ sq ft}$$

$$\left. \begin{array}{l} - \left\{ \frac{1}{2} (120 \cdot 300) \right\} \\ - \left\{ \frac{1}{2} (200 \cdot 250) \right\} \end{array} \right\} = \underline{43,000 \text{ sq ft}}$$

$$647,000 \text{ sq ft} = 14.85 \text{ ACRES}$$

10 YEAR FREQUENCY - HISTORIC FLOW

"NORTH BASIN"  $Q_{10} = C i_T (A)$

A = 14.85 ACRES

$Q_{10} = (0.1) (i_T) (14.85)$

use: C<sub>10</sub> of 0.1

1) Time of CONCENTRATION (t<sub>c</sub>):

w/ prevailing slope of 0.007 (0.74%)

$$t_c = \frac{1.8 (1.1 - 0.1) \sqrt{400}}{\sqrt[3]{0.74}} \left\{ \begin{array}{l} \text{for upper} \\ 400' \text{ of basin} \end{array} \right.$$

= 39.8, or 40 MINUTES



Project: WAL-MART: GRAND JUNCTION, CO

Date: 10.16.91

2) Lower basin of 500 overland flow  
(per TR-55 chart (attached)) = 0.4 fps  
VELOCITY

$$\text{then: } t_t = \frac{L}{60V} = \frac{500'}{60(0.4 \text{ fps})} = 21 \text{ MINUTES}$$

TRAVEL TIME

$$3) \therefore \text{Total } t_c = t_i + t_t = 40 + 21 = \underline{61 \text{ MINUTES}}$$

$t_c$

4) Using GRAND JUNCTION I-D-F curves (attached)

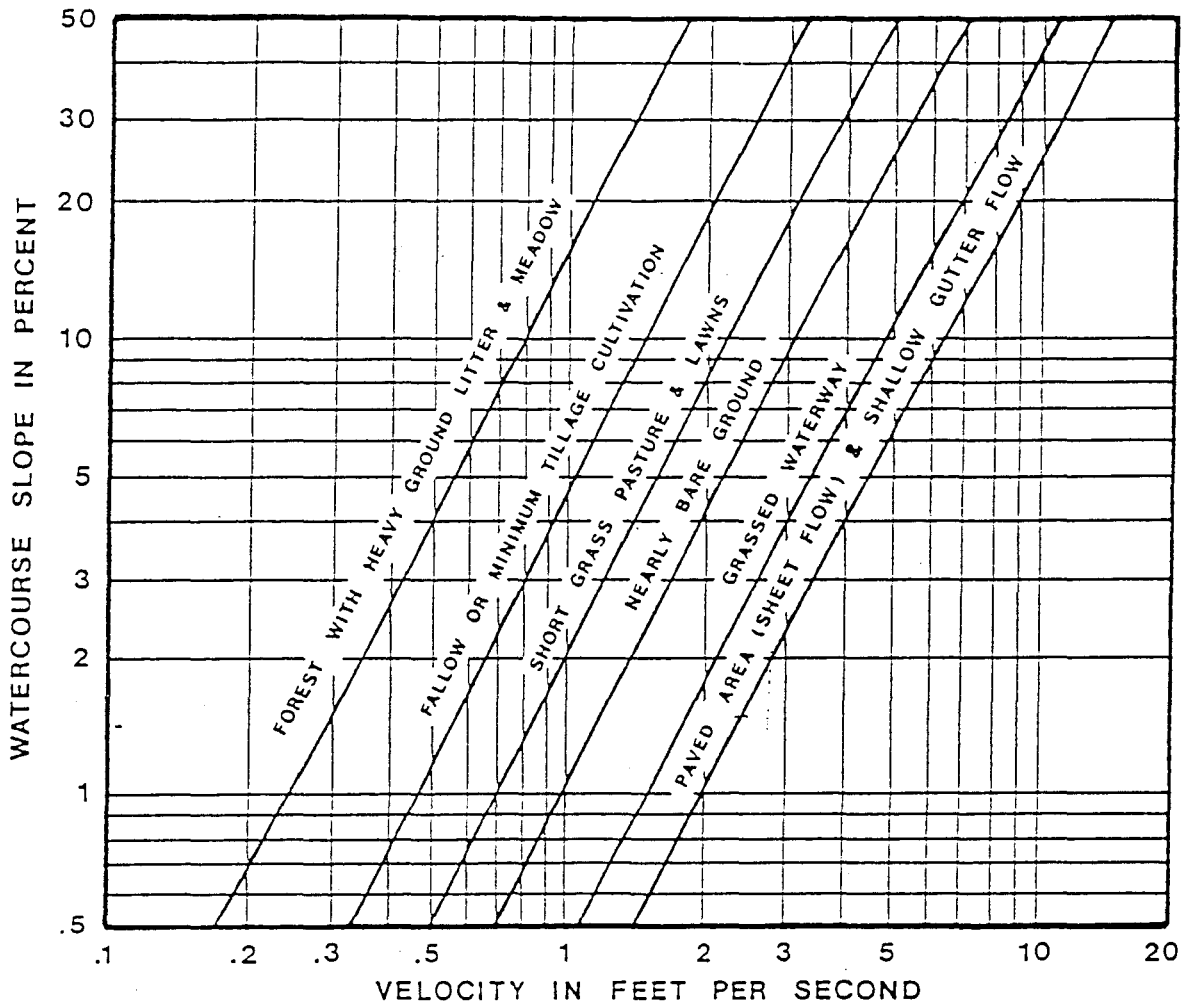
$\Rightarrow i$  for  $Q_{10} = \underline{0.95 \text{ inches per hour RAINFALL}}$   
INTENSITY

$$\therefore Q_{10 \text{ HISTORIC}} = C (i_T) A$$
$$= (0.1) 0.95 (14.85)$$

$$\longrightarrow Q_{10} = \underline{1.41 \text{ cfs HISTORIC NORTH BASIN}}$$

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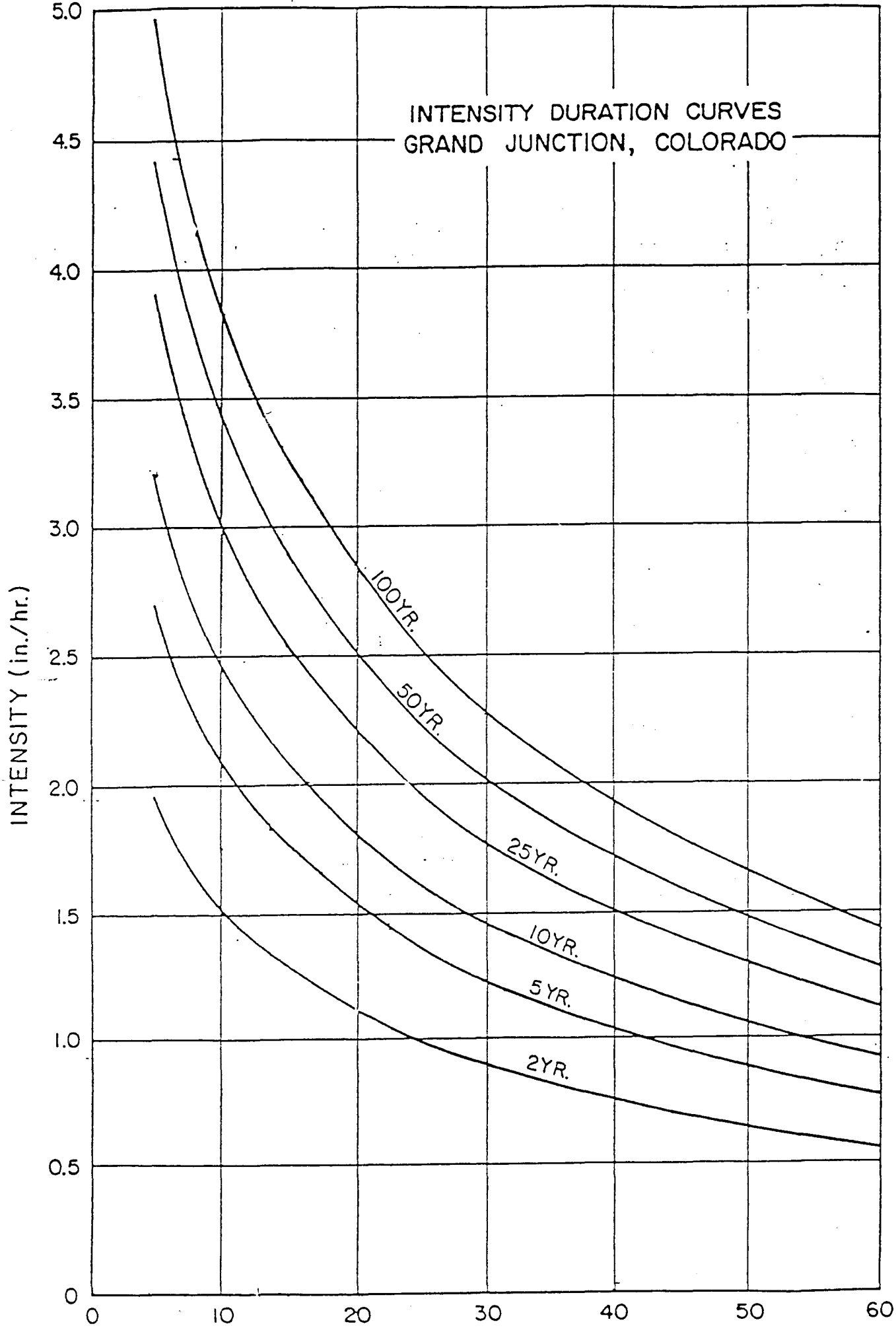
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ESTIMATE OF AVERAGE FLOW VELOCITY FOR  
USE WITH THE RATIONAL FORMULA.

REFERENCE: "Urban Hydrology For Small Watersheds" Technical  
Release No. 55, USDA, SCS Jan. 1975.

INTENSITY DURATION CURVES  
GRAND JUNCTION, COLORADO







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DEVELOPED FLOWS: Q<sub>100</sub>

NORTH BASIN

AREA = 10.54 ACRES

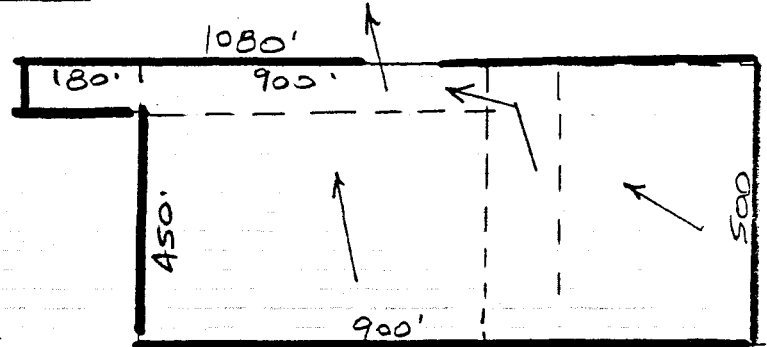
C = 0.90

find: *i* from TR-55 velocity

chart (attached): slope = 0.006 on PAVED SHEET FLOW:

$V = 1.4 \text{ fps}$  w/  $t_t = \frac{L}{60V} = \frac{1000'}{60(1.4)} = 11.9 \text{ min}$

12 MINUTES



Using GRAND JUNCTION I-D-F

CURVES:  $\Rightarrow 3.45 \text{ mph}$

$\therefore Q_{100 \text{ NORTH}} = A c v_T = (10.54) 0.9 (3.45)$   
 BASIN  
 DEVELOPED  
 $Q_{100} = 32.7 \text{ cfs}$

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NORTH BASIN Q<sub>100</sub> DEVELOPED FLOW W VARYING STORM  
DURATIONS

12 MIN (= t<sub>o peak</sub>) : i = 3.45 cph

$Q = (CA) i = (948) 3.45 = \underline{327 \text{ cfs}}$

20 MIN. DURATION :  
i = 2.85

$Q = (CA) i = (948) 2.85 = \underline{27.0 \text{ cfs}}$

30 MIN. DURATION :  
i = 2.27

$Q = (CA) i = (948) 2.27 = \underline{21.5 \text{ cfs}}$

40 MIN. DURATION :  
i = 1.95

$Q = (CA) i = (948) 1.95 = \underline{18.5 \text{ cfs}}$

50 MIN. DURATION  
i = 1.65

$Q = (CA) i = (948) 1.65 = \underline{15.6 \text{ cfs}}$

60 MIN DURATION i = 1.43

$Q = (CA) i = (948) 1.43 = \underline{13.6 \text{ cfs}}$

70 MIN DURATION i =

$Q = (CA) i = 948$

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HISTORIC FLOWS: Q<sub>100</sub>

2) SOUTH BASIN :

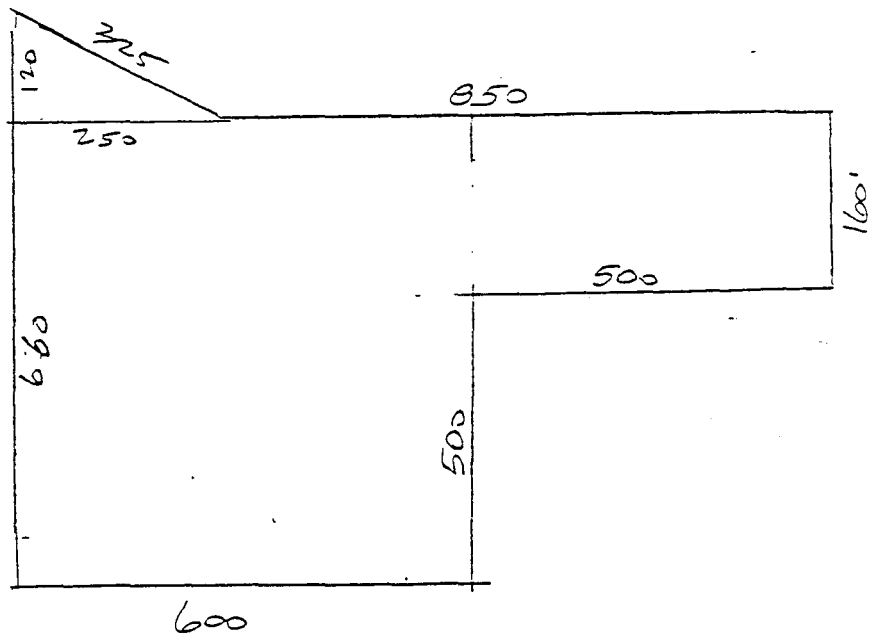
$$0.500 = 80,000 \text{ \#}$$

$$0.660 = 396,000$$

$$= (120 \cdot 250) = \underline{15,000}$$

$$= 491,000 \text{ sf}$$

$$= 11.27 \text{ ACRES}$$



10 YEAR FREQUENCY - HISTORIC FLOW

SOUTH BASIN:  $Q_{10} = c i_T A$

$A = 11.27 \text{ ACRES}$

$Q_{10} = (0.1)(i_T) 11.27$

use  $c_{10} = 0.1$

1) Time of Concentration: (t<sub>c</sub>)

w/ prevailing slope of 0.0064 (0.6%)

$$t_c = \frac{1.8 (1.1 - 0.1) \sqrt{400}}{\sqrt[3]{0.6}}$$

$$= 42.7, \text{ say } 43 \text{ MINUTES}$$



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2) lower basin of 700' Lf (per TR-55 chart, attached)  
= 0.35 fps VELOCITY

$$\text{then: } t_t = \frac{L}{60V} = \frac{700'}{60(0.35)} = 33\frac{1}{3} \text{ MINUTES}$$

$$3) \text{ Total } t_c = t_i + t_t = 43 + 33 = \underline{76 \text{ MINUTES}}$$

$t_c$

4) Using GRAND JUNCTION I-D-F curves:

w/  $t_c$  of 76 MINUTES  $\Rightarrow i$  for  $Q_{10}$  of 0.95 iph  
RAINFALL INTENSITY

$$\therefore Q_{10 \text{ HISTORIC}} = c (i_T) A$$
$$= (0.4) 0.95 (11.27)$$

$$\underline{\underline{Q_{10}}} = \underline{\underline{1.07 \text{ cfs}}} \text{ HISTORIC SOUTH BASIN}$$

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DEVELOPED FLOWS:  $Q_{100}$

SOUTH BASIN

AREA = 8.6 ACRES

$C = 0.90$

find  $i$  (from TP-55  
 chart:

slope = 0.006 over  
 PAVED

$V = 1.4$  fps

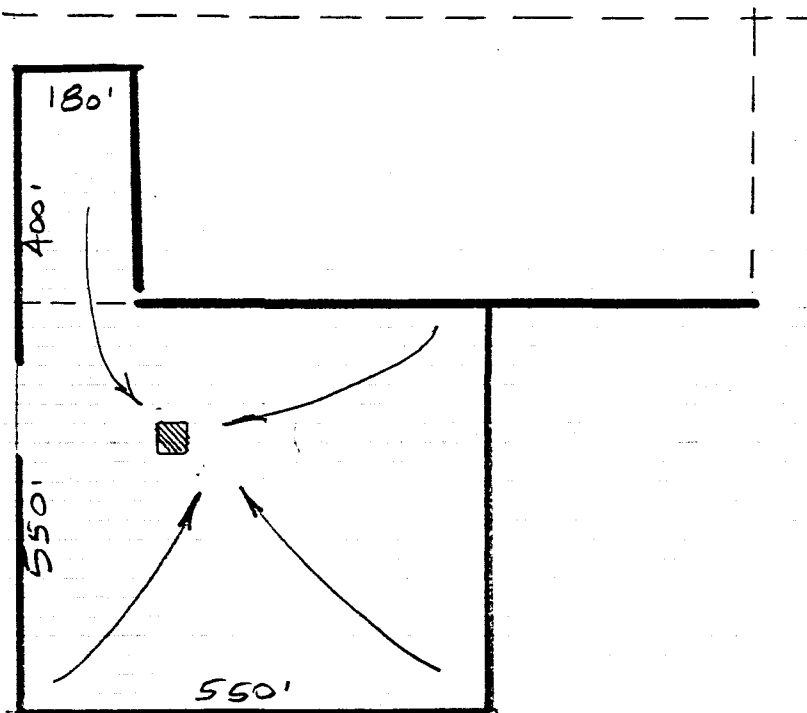
w/  $t_t = \frac{L}{60V}$

$= \frac{600'}{60(1.4)} = 7.14$ , say 7 MINUTES

Using GRAND JUNCTION I-D-F CURVES  $\Rightarrow 4.4$  iph

$\therefore Q_{100}$  SOUTH BASIN DEVELOPED =  $A c i_T = (8.6) 0.9(4.4)$

$Q_{100}$  = 34 cfs ←



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SOUTH BASIN Q<sub>100</sub> DEVELOPED FLOWs W VARYING STORM  
DURATIONS:

W: 7 MIN (= to peak):  $i = 4.4$  mph

$$Q = (CA) i = (7.74) 4.4 = \underline{34.1} \text{ cfs}$$

W: 10 MIN. DURATION:

$$i = 3.85$$

$$Q = (CA) i = (7.74) 3.85 = \underline{29.8} \text{ cfs}$$

W: 20 MIN. DURATION:

$$i = 2.85$$

$$Q = (CA) i = (7.74) (2.85) = \underline{22.1} \text{ cfs}$$

W: 30 MIN. DURATION:

$$i = 2.27$$

$$Q = (CA) i = (7.74) 2.27 = \underline{17.6} \text{ cfs}$$

W: 40 MIN. DURATION:

$$i = 1.95$$

$$Q = (CA) i = (7.74) 1.95 = \underline{15.1} \text{ cfs}$$

W: 50 MIN. DURATION:

$$i = 1.65$$

$$Q = (CA) i = (7.74) 1.65 = \underline{12.8} \text{ cfs}$$

W: 60 MIN. DURATION:  $i = 1.43$

$$Q = (CA) i = (7.74) 1.43 = \underline{11.1} \text{ cfs}$$

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COMBINED BASIN Q<sub>100</sub> FLOWS w VARYING STORM  
 $CA = (0.9)(19.1 \text{ Acres}) = 17.2$  DURATIONS:

w: 12 MIN (= to peak):  $i = 3.45$  mph

$$Q = (CA) i = (17.2)(3.45) = \underline{59.3 \text{ cfs}}$$

w: 20 MIN. DURATION:  $i = 2.85$

$$Q = (CA) i = (17.2)(2.85) = \underline{49.0 \text{ cfs}}$$

w: 30 MIN. DURATION:  $i = 2.27$

$$Q = (CA) i = (17.2)(2.27) = \underline{39.0 \text{ cfs}}$$

w: 40 MIN. DURATION:  $i = 1.95$

$$Q = (CA) i = (17.2)(1.95) = \underline{33.5 \text{ cfs}}$$

w: 50 MIN. DURATION:  $i = 1.65$

$$Q = (CA) i = (17.2)(1.65) = \underline{28.4 \text{ cfs}}$$

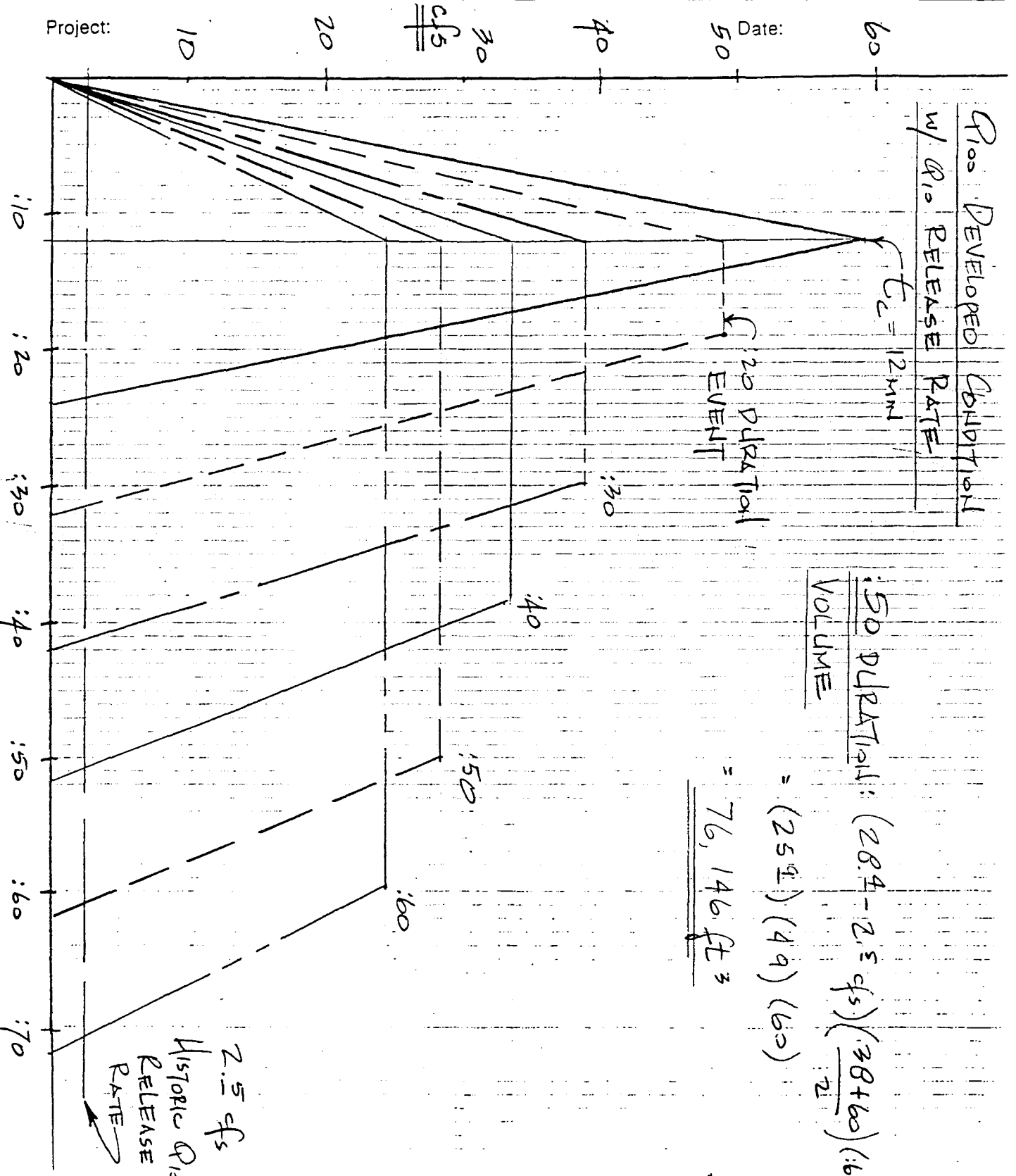
w: 60 MIN DURATION  $i = 1.43$

$$Q = (CA) i = (17.2)(1.43) = \underline{24.6 \text{ cfs}}$$

COMBINED HISTORIC Q<sub>10</sub> RUNOFF = 2.5 cfs } GRAND JUNCTION ALLOWED RELEASE RATE

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

Date: \_\_\_\_\_



Developed Condition  
 w/ Q10 Release Rate

$C_c = 12 \text{ MIN}$

20 DURATION  
 EVENT

DURATION: MINUTES

50 DURATION VOLUME:

$$= (28.4 - 2.5 \text{ cfs}) \left( \frac{30 + 60}{2} \right) (60)$$

$$= (25.9) (49) (60)$$

76,146 ft<sup>3</sup>

2.5 cfs  
 Historic Q10  
 Release Rate



